Structure No. 0 0196

Interstate-95 {Govern Lodge Turnpike}

over

US Route 1 {East Main Street}

Branford

Interstate-95 - Mile Point 55.18

Routine Inspection
on
26-Jan-12

Inspected By Team No. 7 - CTDOT - Bridge Safety

For Area No. 7

TEAM:	Forwarded to T.E. 3: D PAWLIKOWSKI	Date: 2/10/12
TE. 3:	Reviewed By T.E. 3: D PAWLIKOWSKI	Date: 2/14/12
	BMM Required	YES PRIORITY "B" 10-405 Reissue
	Town Structure	NO SPAN NO 2 - DECK
	Rating <= 5 {Item Nos. 58, 59, 60, 61 or 62}	YES UNDERSIDE - REMOVE HOLLOW AREAS
	Forwarded to Supervisor: S DUMAS	Date: 2/14/12
	Forwarded to "To Be Copied Drawer"	Date:
	Date BRI-19 Entered 2/14/12	
SUPERVISOR:	Reviewed By Supervisor SDumas	Date: 2/16/12
Support:	Date Copies Made: 2-18-12	BMM No. Reissue of 10-405 (2/1/12)
	Scanned By: LG	Date: 2-18-12 PDF Box No.:

NBIS: Yes

Last Inspection Date: February 12, 2010

State of Connecticut - Department of Transportation
Bureau of Engineering & Construction - Bridge Safety & Evaluation

Bridge No.: 0 0196 **Town:** Branford

Location: Intersate-95 {Govern Lodge Turnpike} over US Route 1 {East Main Street}

Inspection Date: January 26, 2012

TABLE OF CONTENTS

Bound Report Pages	Number of Sheets Enclosed
Title Cover Sheet	1
Table of Contents	1
Sketches	23
Additional Sheets	2
Photo Sheets	13
Photo Images	26
Forms	
BRI-18 Bridge Inspection Report Form	10
BRI-19 Structure Evaluation Form	2
BRI-25 Inventory Route Under Structure Form	1
Pontis Form	2
Fracture Critical\Fatigue Prone Detail Sheets	2
Vertical Clearance Diagram	1

Bridge Number **00196**

Inspected By: Ferrara & Jones

Sufficiency Rating 85.39
Previous Inspection Date 2/12/2010

BS&E Received ☐ Data Entry By: DP
Copies Made ☐ Data Entry Date: 2/4/2

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET_____ OF_____ (INSP. REPORT)

90) Inspection Date	Inspection Team	91) Frequency	Class:
01/26/12	707	24	02
Indepth Insp	Deck Survey	Access	Flagman
2/12/2010	1/1/1900 12:	0	0

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:				
Uwater:				
Special:				

RED FLAG

IDENTIFICATION

Bridge Name
Town Name BRANFORD Town Code 7310
5) Inventory Route:
A) Record Type 1 D) Route Number 00095
B) Signing Prefix 1 Interstate High E) Directional Suffix 0 NA
C) Level of Service 1 Mainline
6) Feature Intersected US ROUTE 1
7) Facility Carried: INTERSTATE-95
9) Location AT I-95 EXIT NO. 55
11) Milepoint 55.18 Miles
16) Latitude 41deg 17 min 36.00 sec deg min sec
17) Longitude 72deg 47 min .00 sec deg min sec
98) Border Bridge:
A) State Code B) Percent Responsibility %
C) Border Town Name
99) Border Bridge Structure No

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:
A) Material 3 Steel B) Design Type 2 Stringer/Multi-beam or Girder
44) Structure Type, Approach:
A) Material 0 Other B) Design Type 0 Other
45) Number of Spans, Main Unit 3
46) Number of Approach Spans 0
107) Deck Structure Type 1 Concrete Cast-in-Place
108) Wearing Surface/Protective System:
A) Type of Wearing Surface 6 Bituminous
B) Type of Membrane 2 Preformed Fabric SHEET
C) Type of Deck Protection 0 None

AGE AND SERVICE

27) Year Built 1958 106) Year Reconstructed
42) Type of Service:
A) On 1 Highway B) Under 1 HIGHWAY
28) Number of Lanes:
A) On 4 B) Under 3
29) Average Daily Traffic 84000 85200 Half ADT?: No
109) Percent Truck 9%
30) Year of ADT 2008 2016
19) Bypass, Detour Length 1miles

GEOMETRIC DATA

48) Length of Max Span 53ft 53.33 FT
49) Structure Length 136ft 135.58 FT
50) Curb or Sidewalk Widths: 0.03 FT 0.03 FT
A) Left 0.0ft B) Right 0.0ft
51) Brg Rdwy width,curb-curb 95.3ft 95.33 FT
52) Deck Width, Out-Out 103.7ft 103.667 FT
32) Approach Roadway Width 95ft
33) Bridge Median 3 Closed Median w/barrier
135.58 FT x 103.67 FT Deck Area 14055 sqft 14,055.2 SF
34) Skew Angle 26deg 25°-37'-10"
35) Structure Flared 0
10) Inv. Rte. Min. Vert Clearance 99ft 99in
47) Log Inv. Rte. Total Horiz Clr.: 47.7ft 47.67 FT
47) RLog Inv. Rte. Total Horiz. Clr.: 47.7ft 47.67 FT
53) Min Vert Clearance Over Bridge 99ft 99in
54) Min Vert Under Clearance H Ref 14ft 5in ☒ Ref 14ft 06in
55) Min Lat Under Clearance on Right H Ref 3.6ft ☐ Ref
56) Min Lat Under Clearance on Left 0.0ft

BRIDGE COMMENTS

STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRI-19 REV 10/00

SHEET_____ OF_____

Bridge Number	00196	NBIS Length
Town Name	BRANFORD	Yes 136
Facility Carried	INTERSTATE-95	
Feature Crossed	US ROUTE 1	

Inspected By: Ferrara & Jones

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	1	On System
26) Functional Class	11	Urban Principal Arterial - Interstate
100) Defense Highway	1	Route is on a Interstate STRAHNET Route
101) Parallel Structure	N	No parallel structure exists
102) Direction of Traffic	2	2-way traffic
103) Temporary Structure		
110) Designated National Network	1	On national network
20) Toll	3	On Free Road
21) Maintain	1	State Highway Agency
22) Owner	1	State Highway Agency
Report Class	S	STATE
37) Historical Significance	5	Bridge is not eligible for National Register

WATERWAY

DrainageBasinCode			
38) Navigation Control			
39) Navigation Vert Clr.		40) Navigation Horiz Clr.	
116) Vert-Lift Brg Nav Min			
111) Pier Abutment Protection			

PROPOSED IMPROVEMENTS

75A) Type of Work Proposed			
75B) Work Done By			
76) Length of Struct. Improvement	ft		ft
94) Bridge Improvement Cost	$		
95) Roadway Improvement Cost	$		
96) Total Project Cost	$		
97) Year of Improvement Cost Est.			
114) Future ADT		115) Year Future ADT	
List No.	Project No.	Advertised	

POSTED SIGNS & UTILITIES

Other Posted Signs 1	0	Blank			
Other Posted Signs 2	0	Blank			
Actual P.L. Single Unit Truck	tons		Actual P.L. 4Axle Truck	tons	
Rec. P.L. Single Unit Truck	tons		Rec. P.L. 4Axle Truck	tons	
Actual P.L. Semi-TrailerTruck	tons		Actual P.L. 3S2 Truck	tons	
Rec. P.L. Semi-TrailerTruck	tons		Rec. P.L. 3S2 Truck	tons	
Rec. P.L. All Vehicles	tons		Actual P.L. All Vehicles	tons	
Posted Vert Clearance On Bridge	ft	in		ft	In
Posted Vert UnderClearance	ft	in		ft	In
Posted Speed Limit	65	mph			mph
Utility					
Utility	3	Electric			
Utility	4	Telephone			
Utility	F	Fibre Optics			

LOAD RATING AND POSTING

31) Design Load	5		Evaluation Code	L
63) Operating Rating Type	1		Year of Evaluation	1998
64) Operating Rating	96.1		70) Bridge Posting	5
65) Inventory Rating Type	1		41) Structure Status	A
66) Inventory Rating	57.6		Open, no restriction	

CONDITION

		Rating	By
58) Deck	6	4	AF
59) Superstructure	7	7	AF
60) Substructure	6	6	AF
61) Channel & Chan. Protection	N	N	
62) Culverts	N	N	

APPRAISALS

		Rating	By
67) Structure Evaluation	6	5	[illegible]
68) Deck Geometry	9	9	✓
69) Under Clear Vert & Horiz	3	3	✓
71) Waterway Adequacy	N	N	✓
72) Approach Rdwy Alignment	8	8	✓
113) Scour Critical			

Items 58 Thru 72 Checked By: [signature]

36) Traffic Safety Features:

A) Bridge Railings	0
B) Transitions	0
C) Approach Guardrail	0
D) Approach Guardrail End	1

OTHER FEATURES

Fence Required	No		Barrel Ladder	No
Fence Present	No		Stand Pipes	Yes
Fence Height	0.0 ft	ft	Cat Walks	No
Fence Type			Movable Inspection System	No
Fence Material			Loose Concrete Checked?	No ✓
Fence Top Type				

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2020
Senior	David Pawlikows
Supervisor	Sandra Dumas

REVIEWED BY: [signature] Date 2/4/10

LT [illegible]

BRIDGE NUMBER	TOWN NAME	NBIS BRG LGTH	
00196	BRANFORD	Yes	136
FACILITY CARRIED	FEATURE CROSSED		
INTERSTATE-95	US ROUTE 1		

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
DIVISION OF BRIDGE SAFETY EVALUATION

INVENTORY ROUTE UNDER STRUCTURE EVALUATION

FORM BRI-25 REV 10/00

INSPECTED BY: Ferrara, Jones
01-26-2012

REVIEWED BY: DP DATE: 2/4/12

SHEET_____ OF_____ (INSP. REPORT)

IDENTIFICATION

DESCRIPTION:

5) INVENTORY ROUTE:

A) RECORD TYPE	2	
B) ROUTE SIGNING PREFIX	2	U.S. Numbered Highway
C) DESIGNATED LEVEL OF SERVICE	1	Mainline
D) ROUTE NO.	00001	
11) MILE POINT (INV.RTE)	56.82	

AGE & SERVICE

+ 28B) NUMBER OF INV.ROUTE LANES	3	
* 29) ADT (INV. RTE)	19300	18900
* 109) TRUCK ADT % (INV.RTE)	1	
* 30) YEAR OF ADT (INV. RTE)	2008	2018
* 41) INV ROUTE OPERATIONAL STATUS	A	Open, no restriction A
19) BYPASS DETOUR LENGTH	3	Miles 01

GEOMETRIC DATA

+ 10) INV. RTE. MIN. VERT. CLEARANCE	15 ft 1 in	ft in ROUTE 1 SB
+ 47) LOG INV. RTE. TOTAL HORIZ CLR.	45.8 ft 46.0 SB	46.1 ft
+ 47) RLOG INV. RTE. TOTAL HORIZ CLR.	0 ft	ft
+ LOG MIN VERT CLR OVER INV ROUTE	14 ft 5 in	ft in US ROUTE 1 NB
+ RLOG MIN VERT CLR OVER INV ROUTE	14 ft 9 in	14 ft 08 in US ROUTE 1 SB
+ 55) MIN LAT UNDERCLR ON RIGHT	H 3.6 ft	ft US ROUTE 1 SB
+ 56) MIN LAT UNDERCLR ON LEFT	0 ft	ft

CLASSIFICATION

26) INV. RTE. FUNCT CLASSIFICATION	14	Urban Other Principal Art
100) DEFENSE HIGHWAY DESIGNATION	0	Route is not a STRAHNE
** 102) DIRECTION OF TRAFFIC	2	2-way traffic
104) HIGHWAY SYSTEM OF INV. ROUTE	1	On System
110) DESIGNATED NATIONAL NETWORK	0	Not on national network

POSTED SIGNS

+ POSTED VERT. CLR UNDER BRIDGE 0ft 0in ft in

COMMENTS:

* FILL OUT ON EVERY INSPECTION 29, 109, 30, 41

\+ VERIFY EVERY INSPECTION 28B, 10, 47, 53, 55, 56 & POSTED VERT CLEARANCE UNDER THE BRIDGE

** MUST BE FILLED OUT OR VERIFIED ON THE FIRST INSPECTION MADE BASED ON THE NEW FHWA GUIDE 102

Abutment Stem Work Sheet

Bridge No.: 0 0196
Town: Branford
Facility Carried\Feature Intersected: Interstate-95 over US Route 1 {East Main Street}

Abutment Stem No. or Nos.: Abutment Nos. 1 & 2

Abutment Stem Design Type: Stub Abutments

Abutment Stem Material Type: Concrete

Abutment Stem Foundation Type: Pile Supported - Steel BP Piles

Item No. 113 Scour Critical: - N - Bridge Not Over Waterway

Tidal: Yes or No **Rip Rap:** Yes or No

Exposed Footing: Yes or No

Footing Undermining: Yes or No

Sheet Piles - Timber or Steel: Yes or No

Bed Rock: Yes or No **Concrete Apron:** Yes or No

Abutment Stem - In Water or Out of Water - At Normal Stage:

Normal Stage - The water stage prevailing during the greater part of the year.

Comments: Bridge Plans - Project No. 319 - 01 - Year 1955
Abutment & Wingwall Footing Height - 3 feet 00 inch - per plans
Abutment Footing Width - 7 feet 00 inch - per plans
Wingwall Footing Width - 6 feet 00 inch - per plans

Prepared By: David Pawlikowski, P.E.
CTDOT - Bridge Safety

Date: February 10, 2012

Pier Work Sheet

Bridge No.: 0 0196
Town: Stamford
Facility Carried\Feature Intersected: Interstate-95 over US Route 1 {East Main Street}

Pier No. or Nos.: Pier Nos. 1 & 2

Pier Design Type: Column Bent

Pier Material Type: Concrete

Pier Foundation Type: Spread Footings Founded on Rock

Item No. 113 Scour Critical: - N - Bridge Not Over Waterway

Tidal: Yes or No **Rip Rap:** Yes or No

Exposed Footing: Yes or No

Footing Undermining: Yes or No

Sheet Piles - Timber or Steel: Yes or No or Unknown

Bed Rock: Yes or No or Unknown **Concrete Apron:** Yes or No

Pier - In Water or Out Off Water - At Normal Stage:

Normal Stage - The water stage prevailing during the greater part of the year.

Comments: Bridge Plans - Project No. 319 - 01 - Year 1955
Pier Footing Height - 3 feet 00 inch - per plans
Pier Footing Width & Length - 6 feet 6 inches {width} by 6 feet 6 inches {length} - per column

---

Prepared By: David Pawlikowski, P.E.
CTDOT - Bridge Safety

Date: February 10, 2012

Connecticut Department of Transportation

Bridge Inspection Report BRI-18

Bridge #: 00196 **Inspection Date: 01/26/2012**

Inspection Type:	Routine	**Previous Inspection Date:**	2/9/2010	**Snooper Required:**	No
Inspection Performed By:	Team 7	**Feature Carried:**	INTERSTATE-95	**Snooper Used:**	No
Town:	BRANFORD	**Feature Intersected:**	US ROUTE 1	**Year Built:**	1958
Location:	AT I-95 EXIT NO. 55	**Main Design:**	Stringer/Multi-beam or Girder	**Year Rebuilt:**	-
Main Material:	Steel				

Visits

Visit Date:	Temp:	Start Time:	End Time:
1/26/2012	38	1:00:00 PM	3:00:00 PM
1/31/2012	42	10:00:00 AM	3:10:00 PM
2/1/2012	56	1:00:00 PM	1:30:00 PM

Inspectors:

Inspector:	Task:
A. Ferrara	Lead Inspector
J. Jones	Lead Inspector

DECK: Reinforced Concrete with Bituminous Concrete and Waterproofing Membrane

Structure inspected west to east.

Route 1 "feature crossed" logged south to north.

Overall Rating: 4

	Rating	
OVERLAY:	8	Bituminous overlay exhibits: Paving seam down the centerline, north and southbound. Northbound exhibits a 2' long transverse crack over span # 1.
DECK-STR. CONDITION:	4 Need BRI-10 next insp. Ed	Deck underside exhibits: Span # 1: Numerous transverse hairline cracks with and without efflorescence. Areas of map hairline cracking with and without efflorescence up to 50% per bay. Several small spalls/jack hammer punch throughs. Spalled deck end haunches over pier # 1 in bays 11 through 13. Random areas of light to heavy surface scale. Span # 2: (10) Hollow areas totaling 256 sf. Worst areas are in bay's 1, 12 and 13

	SPAN NO 2 APPROX 40% to 50% DECK UNDERSIDE DELTIRI SKRATTO OP 2012	located over the travel lanes of Route 1. Several large areas of moderate to heavy surface scale with efflorescence totaling 154 sf. Numerous spalls/jack hammer punch throughs. Several large spalls up to 3 sf x +4" deep (above the second mat). Areas of hairline map cracking with efflorescence up to 96 sf. Several transverse hairline cracks with and without efflorescence. Deck end haunch spalls over the piers in bays 1, 2, 3, 4 and 13. Span # 3: Transverse hairline cracks with and without efflorescence. Random areas of light to heavy surface scale. Several small spalls/jack hammer punch throughs. Areas of map hairline cracking with light efflorescence up to 70% per bay. All spans exhibit random sized full depth concrete patches.
CURBS:	7	Sloped curbs exhibit: Random vertical hairline cracks. Minor chipping and scrapes. Average curb reveal along the south side are 2.5" and 1.75" along the north side.
MEDIAN:	7	Reinforced concrete Jersey barrier exhibits: A large spall, 2' x 8" x 7 1/2" over the west abutment. The longitudinal seal is cracked broken or missing for the full length.
SIDEWALKS:	N	-
PARAPET:	7	Parapets exhibit: Areas of light to moderate surface scale on caps. Scattered vertical hairline cracks. Previously reported areas of severe scale have been repaired.
RAILING:	7	Single pipe extruded aluminum rail exhibits: A small crack on the 'turn down' at the east end of the south rail. One damaged post and 1' of broken rail at the west end of the north rail. There are other minor scrapes throughout.
PAINT:	N	-
FENCE:	N	-
DRAINS:	5	There is one missing weep pipe in Bay 7 of Span 1 and three in bay 7 of Span 3. They all drain onto the steel below.
LIGHTING STANDARD:	8	Under bridge illumination. Not on at time of inspection.
UTILITIES TYPE/SIZE:	8	Span 2 on the west elevation of Pier 2: Cable and telecom.

		Electric is underground near Pier 2. On the exterior of the south parapet is a 4 1/2" fiber optic conduit.
CONSTR JOINTS:	7	Construction joints in bays 5 and 8 between the new deck and the original deck exhibits: Small edge spalls. Isolated light efflorescence. A 2 sf hollow area in an overpour in span 2 near pier 2.
EXPANSION JOINTS:	N	Joints have been paved over. Northbound: A-1: Braided transverse cracking full width. Pier # 1: Braided transverse cracking full width. Pier # 2: Braided transverse cracking full width. A-2: No deficiencies in bituminous. Southbound: A-1: Braided transverse cracking full width. Pier # 1: Partial width transverse crack. Pier # 2: Braided transverse cracking full width. A-2: No deficiencies in bituminous. Transverse cracking is open up to ½".

59. SUPERSTRUCTURE:	Rolled Steel Girders	Overall Rating:	7

	Rating	
BEARING DEVICES:	7	The elastomeric bearings pads A-1 (west) and Pier # 2 are in a slightly contracted position at 42 degrees. The top plates of the bearings of G-12 at Pier 2 (Spans 2 and 3) are only 1/2" apart. There are areas of heavy rust with moderate laminar build up on Bearings 1, 7, 8 and 14 under the leaking parapet and a median joints on pier # 2. Isolated bearing pads overhang the pedestal at Pier 2 up to 1/2". Bearing # 3 on pier # 2 in span # 2 is undermined 1" x 1" on the northwest corner due to a spalled pedestal. The fixed bearings on Pier # 1 and A-2 (East) have heavy rust on Bearings 1, 7, 8 and 14 under the leaking parapet and a median joints and isolated impacted rust between the sole plates and masonry plates.
STRINGERS:	N	-
GIRDERS:	7	Girders exhibit: Areas of light to moderate rust throughout. Areas of heavy rust on the bottom flanges at random locations. Below the leaking joints at the parapets and median there is heavy rust. G-14 over pier # 1 exhibits heavy rust conditions with negligible section loss on the top and bottom flanges at the beam end. Bearing plate # 8 (girder to soul plate connection) over pier # 2 in span # 2 exhibits 100% section loss to most nuts and +/- 80% loss to the bolts located below the soul plate. G-14 over pier # 2 in span # 2 exhibits heavy laminar rust conditions 42" long from the bearing stiffener west on the south and north sides of the top and bottom flanges full width and up to 6" high on the web. Section loss on both sides of the web +/- 1/8" and bottom flange down to 5/8" remain full width (original 7/8"). Typical rust and section loss conditions on the full length coverplate. There are three areas of impact damage on G13 and G14 in Span 2 over the northbound lanes. Old condition.
FLOOR BEAMS:	N	-
TRUSSES-GENERAL:	N	-
TRUSSES-PORTALS:	N	-
TRUSSES-BRACING:	N	-
PAINT:	5	The original paint is chalky and there are areas light to heavy rust throughout. The ends of the girders (±3' long) have been more recently paint. The paint in

		these areas is good.
RUST:	6	See above items.
MACHINERY MOV SPAN:	N	-
RIVETS & BOLTS:	N	-
WELDS - CRACKS:	7	Past collision damage areas on the diaphragms were repaired in the past. Random interior vertical stiffeners exhibit cracked tack welds to the bottom flanges.
TIMBER DECAY:	N	-
CONCRETE CRACKING:	N	-
COLLISION DAMAGE:	7	There are three gouges in the bottom flanges of G13 and G14 over the northbound lane that have been ground smooth and spot painted. There are numerous other light scrapes on the bottom of the bottom flanges throughout.
MEMBER ALIGNMENT:	8	-
DEFLECT. UNDER LOAD:	N	Normal.
VIBRATION UNDER LOAD:	N	Normal.
STAND PIPES:	8	-
BARREL LADDERS:	N	-

ARE BARREL LADDERS OSHA COMPLIANT? NA

---

60. SUBSTRUCTURE: Reinforced Concrete Abutments and Piers **Overall Rating:** 5

	Rating	
ABUTMENTS-STEM:	7	Abutments exhibit: There are random repaired cracks and patches throughout. There is one small hollow area (9" x 5") on Pedestal 3 at the east abutment. Random isolated vertical hairline cracks, some full height.
ABUTMENTS-BACKWALL:	7	Backwalls exhibit: Areas of active leakage at both abutments. Isolated vertical hairline cracks.
ABUTMENTS-FOOTINGS:	N	Not visible.
ABUTMENTS-SETTLEMENT:	8	No evidence of settlement.
ABUTMENTS-WINGWALLS:	7	Wingwalls exhibit: There is vegetation at all four wingwalls and an area of severe scale on top of the northwest wingwall parapet 4' x 10" x 3". Random small popouts.

PIERS/BENTS-CAPS:	5	Pier caps exhibit: The piers have patches, cracks, spalls and hollow areas throughout. Pier 1 west elevation exhibits: (6) Hollow areas totaling 52 sf. Spalls with and with out exposed rebars totaling +/- 14 sf. Old repairs with minor cracking and pour lines with efflorescence. Horizontal and vertical hairline cracks with and without efflorescence. Pedestal 1 and 5 on the south face exhibits a full height vertical crack open up to 1/16" in line with the anchor bolts. Pier 1 east elevation exhibits: (3) Hollow areas totaling 12 sf. Random horizontal and vertical cracks with and without efflorescence up to 4' long. Pedestal 1 and 5 on the south face exhibits a full height vertical crack open up to 1/16" in line with the anchor bolts. A 10 sf area of heavy surface scale at the north end. Pier 2 west elevation exhibits: (8) Hollow areas totaling 94 sf. A 12" x 6" corner spall on the northwest corner of pedestal # 3 undermining the elastomeric bearing pad 1" x 1". A full height x 6" wide x 3" deep spall on pedestal # 12. Random horizontal cracks up to 4' long with and without efflorescence. Pier 2 east elevation exhibits: (5) Hollow areas totaling 33 sf. Pedestal # 10 has a 6" diameter spall. Horizontal and vertical cracks with and without efflorescence up to 8' long. Areas of light to moderate scale. 6 sf. of map cracking in bay 2 on the underside of the cap.
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	7	Pier columns exhibit: Hollow areas up to 4 sf. Vertical cracks up to 8' long x up to 1/16" open. 9 sf. of map cracking open 1/16" (pier 2, column 8 south face) Areas of light surface scale.
PIERS/BENTS-FOOTING:	N	Not visible.
PIERS/BENTS-SETTLMT:	8	No evidence of settlement.
EROSION-SCOUR:	7	Very minor erosion at the south end of both abutments and near the middle of the east abutment below the discharge of now removed drainage pipes.

CONCRETE CRACK-SPALL:	6	See above items.
STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION DAMAGE:	8	-
DEBRIS:	6	Small amounts of pigeon debris on the piers and sand and silt on the west abutment seat. There are chunks of concrete, and sand and silt on the pier caps.

---

61. CHANNEL & CHANNEL PROTECTION:	-	**Overall Rating:**	N

---

62. CULVERTS & RETAINING WALL:	-	**Overall Rating:**	N

---

65. APPROACH CONDITION	-	**Overall Rating:**	7

	Rating	
APPROACH SLAB:	N	-
RELIEF JOINTS:	N	-
APPROACH GUIDE RAIL:	7	There is metal beam rail at the southwest, northwest and northeast, and three-cable rail at the southeast. The cables are slightly loose. There is minor impact damage at the southwest and northeast metal beam rails. The end anchorage of the southwest metal beam rail is above ground.
APPROACH PAVEMENT:	8	The bituminous overlay exhibits: Slightly open paving seam down the centerline.
APPROACH EMBANKMENT:	8	-

TRAFFIC SAFETY

FEATURES

	Rating	
BRIDGE RAILINGS:	Last Inspection: 0 Current: 0	-
TRANSITIONS:	Last Inspection: 0 Current: 0	-
APPROACH GUARDRAILS:	Last Inspection: 0 Current: 0	-
APPR. GUARDRAIL ENDS:	Last Inspection: 1 Current: 1	-

66. LOAD POSTING

	- Posted Loading -	
SINGLE UNIT (TONS):	Last Inspection: - Current: -	-
SEMI TRAILER (TONS):	Last Inspection: - Current: -	-
4 AXLE (TONS):	Last Inspection: - Current: -	-
3S2 (TONS):	Last Inspection: - Current: -	-
ADVANCE WARNING (Y/N):	N	-
LEGIBILITY:	N	-
VISIBILITY/LOCATION:	N	-

67. MISCELLANEOUS

	Rating	
MIN. VERT. UNDERCLEARANCE:	Last Inspection: 14' 5" Current: 14' 5"	-

POSTED CLR. UNDER BRIDGE:	Last Inspection: -' -" Current: -' -"	-
POSTED CLR. ON BRIDGE:	Last Inspection: -' -" Current: -' -"	-
ADVANCED WARNING (YES/NO):	No	-
SPEED LIMIT (IF ANY):	Last Inspection: 65 Current: -	-
CHARACTER OF TRAFIC:		Mixed weights and heavy volumes.

ADDITIONAL NOTES:	Branford maintenance was used for traffic control. Structure logged west to east.
ADDITIONAL COMMENTS:	The Bridge ID is clear and legible.

Inspectors' Signatures:

1) Andrew Ferran — Date: 2/3/12

2) James [illegible] — Date: 02/03/2012

3) — Date: ----/----/-----

4) — Date: ----/----/-----

P.E. Signature: [signature] — Date: ----/----/-----

P.E. #: 20844 — Date: 2/14/12

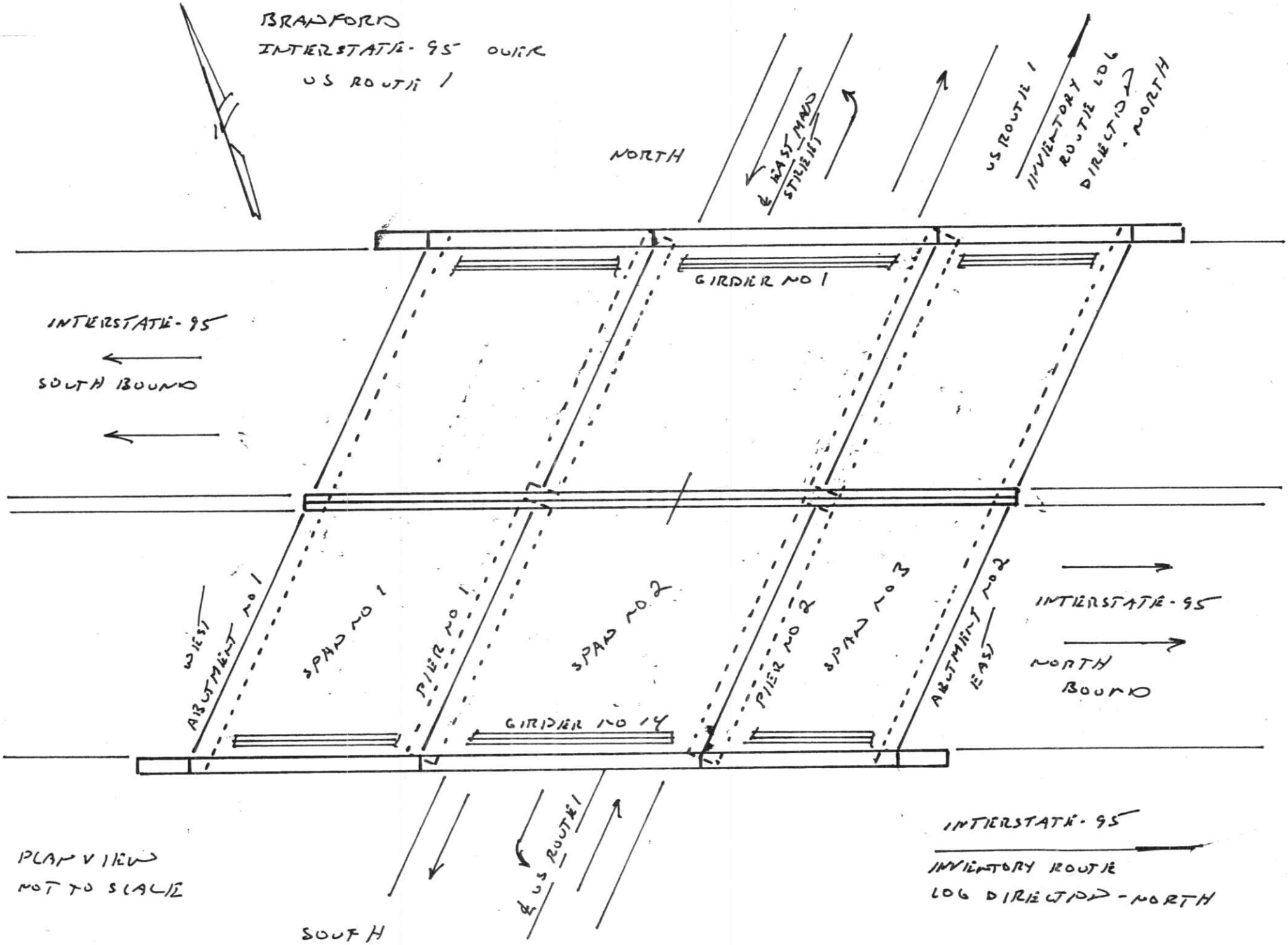
Reviewed by: [signature] conndot — Date: 2/14/12

BRIDGE NO 00 186

BRADFORD

INTERSTATE - 95 OVER

US ROUTE 1



PLAN VIEW

NOT TO SCALE

Baker

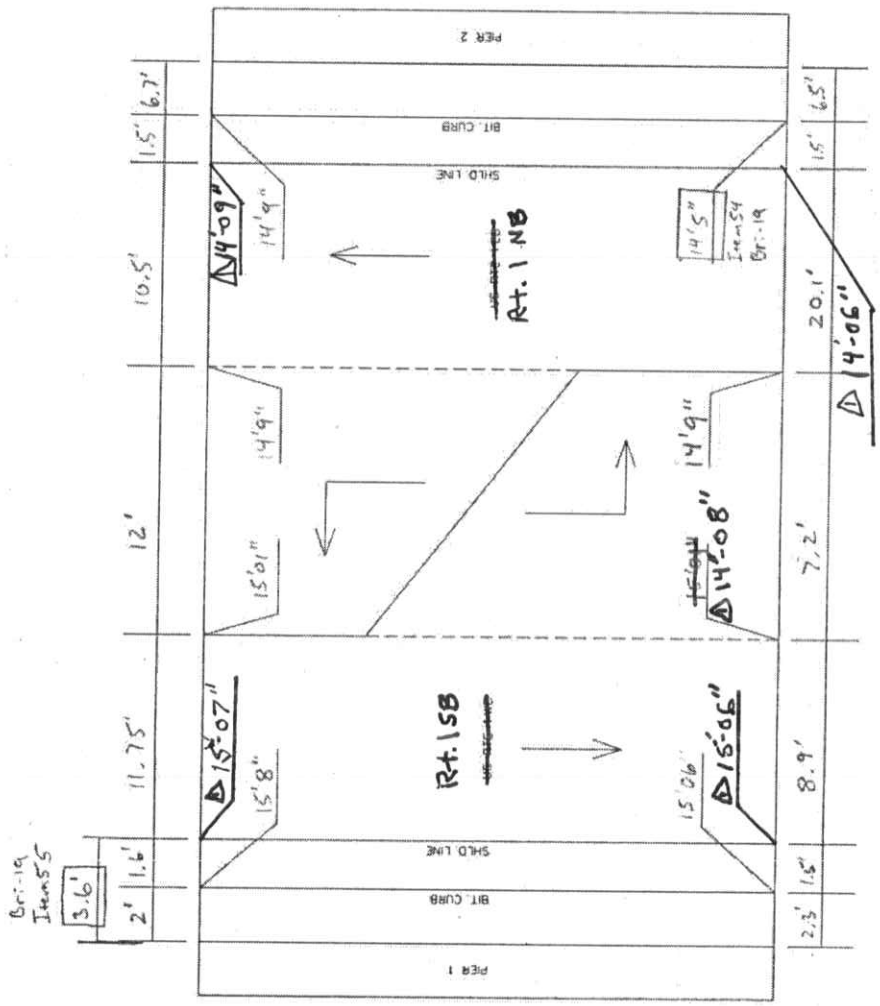
SUPPLEMENTAL SHEET

☐ FIELD ORIGINAL ☒ TRANSCRIBED BY: JW

BRIDGE NO. 00196	DATE: 2/12/2010
CREW: JM, JW	SHEET ~~13/60~~

DESCRIPTION: Clearance Diagram

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See 1	



Clearance Diagram

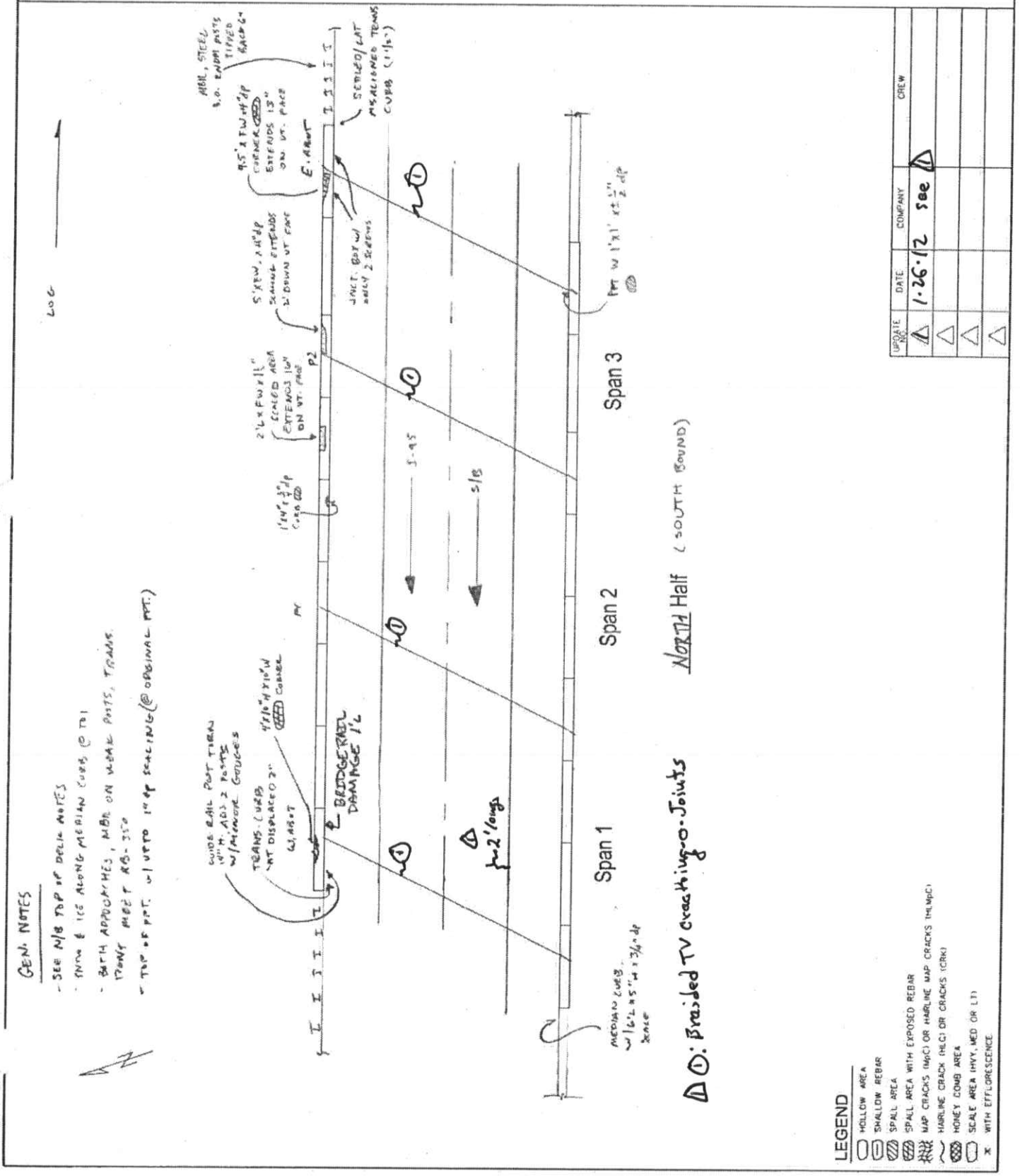
Baker

SUPPLEMENTAL SHEET

☑ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/9/10
CREW: MJO, JAC	SHEET ~~15/60~~

DESCRIPTION: Top of Deck



Baker

SUPPLEMENTAL SHEET

☑ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

DESCRIPTION: Top of Deck

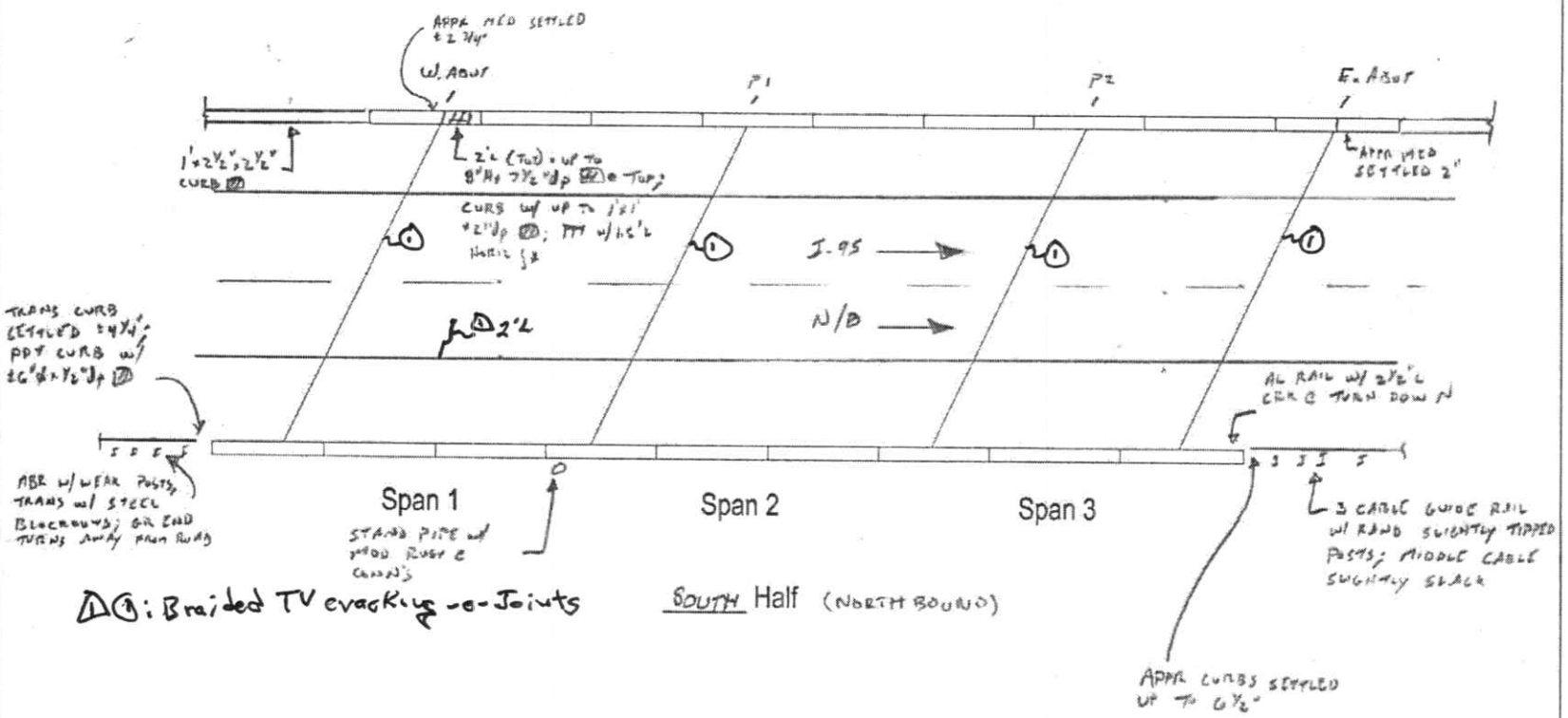
BRIDGE NO. 00196

DATE: 2/5/10

CREW: MJO, JAC

SHEET ~~16/60~~

GEN.
- MBR & SW w/ RAND TILTED POSTS + MINOR BENDS @ RAIL
- APPR + BR OVERLAY w/ NEW RIT; NO SIG DEFIC
- CONC JERSEY SHAPE IN FRONT OF ORIG PPT w/ FH VT ∫#, LT SCALE, UP TO ½" dp CHIPPING @ VT + HORIZ EDGES + RAND SCRAPES. TOP OF OLD PPT w/ LT. MOD SCALE + RAND POPOUTS @ PATCHES FOR PREV AB'S. SEALANT ALONG PPTS IS DRYING OUT; AREAS OF MISSING SEALANT @ PPT JT.
- SINGLE ALUM RAIL w/ RAND SCRAPES
- JOINTS PAVED OVER (NO DET @ OVERLAY ABOVE PAVED-JOINTS
- APPR MEDIANS TYP w/ LT ⊡, UP TO 1" VT/LAT MISALIGNMT; SCRAPES, UP TO ½" DP CHIPPING @ CURB AREAS, ISOL ⊡'S (LG'L)
- BR MEDIAN w/ UP TO ½" DP ⊡ + CHIPPING @ CURB, DET SEALANT ALONG LONG'L JT @ TOP, + RAND ⊠'D RUB COAT



△1 ①: Braided TV cracking -o- Joints

SOUTH Half (NORTH BOUND)

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE

UPDATE NO.	DATE	COMPANY	CREW
△1	1.26.12 ; See △1		
△			
△			
△			

Baker

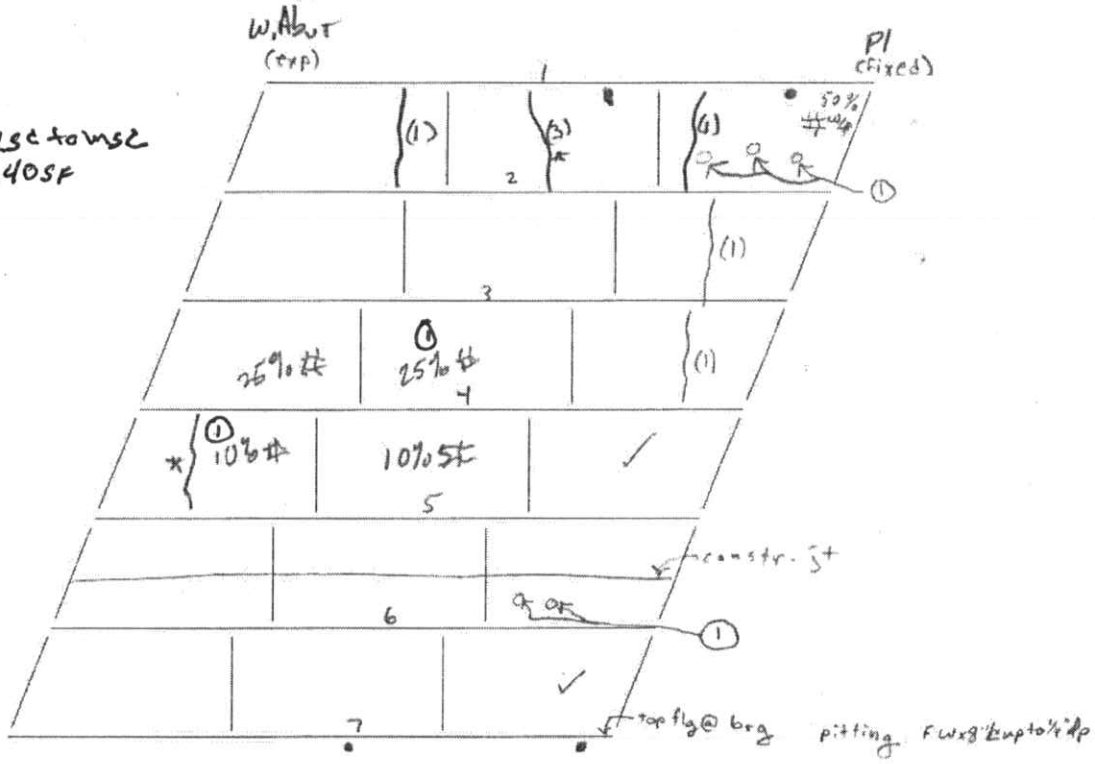
SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~17/60~~

DESCRIPTION: Superstructure

△1 ①: Areas of 1SC to MSC totaling +/- 40SF



Span 1, NORTH Half

General Notes
- up to 1/4" Imp. Rust @ fix brg btwn plates
- Random Spall thru-out haunch @ diaphram top flg.
- Diaphram top flg w/up to 1/16" SL.

① = up to 1'ø patch'd spall, solid sounding w/minor spalling around o.d.

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE

● = weep

UPDATE NO.	DATE	COMPANY	CREW
△1	1-26-12	See △1	
△			
△			
△			

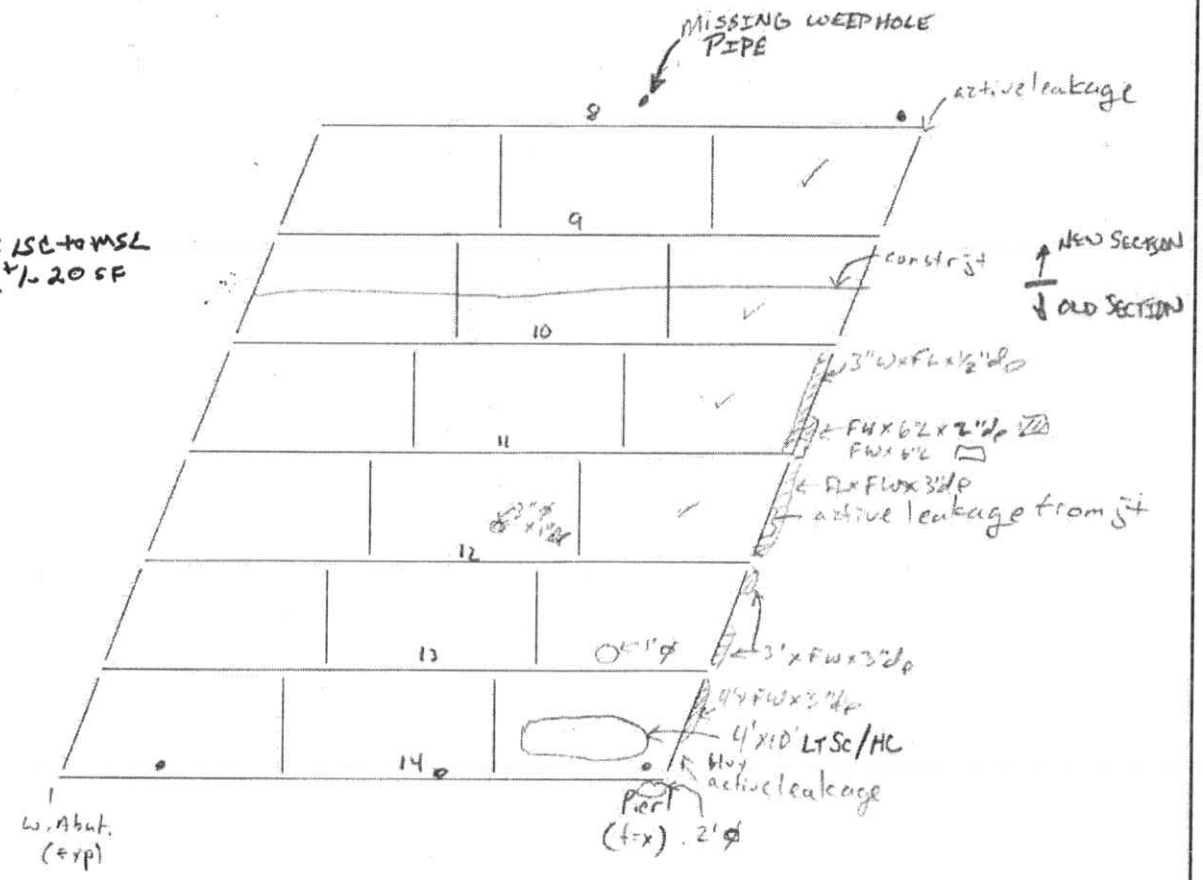
Baker

SUPPLEMENTAL SHEET

☐ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/16/10
CREW: JM, JW	SHEET ~~18/60~~

DESCRIPTION: Superstructure



⚠ Areas of LSC to MSC totaling +/- 20 SF

Span 1, SOUTH Half

Notes
- lt-mod rust of brg plates & up to 1/8" impact rust
- Beam ends painted over
- Rand. areas of spill plug jt material onto brg
- Rand. conc patches in u/s w/ minor spalling at edge
- Rand. conc. patches are hollow sounding, but solid.
- Rand. sloppy welds @ diaphragm conn.

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE

weep

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See 1	
△			
△			
△			

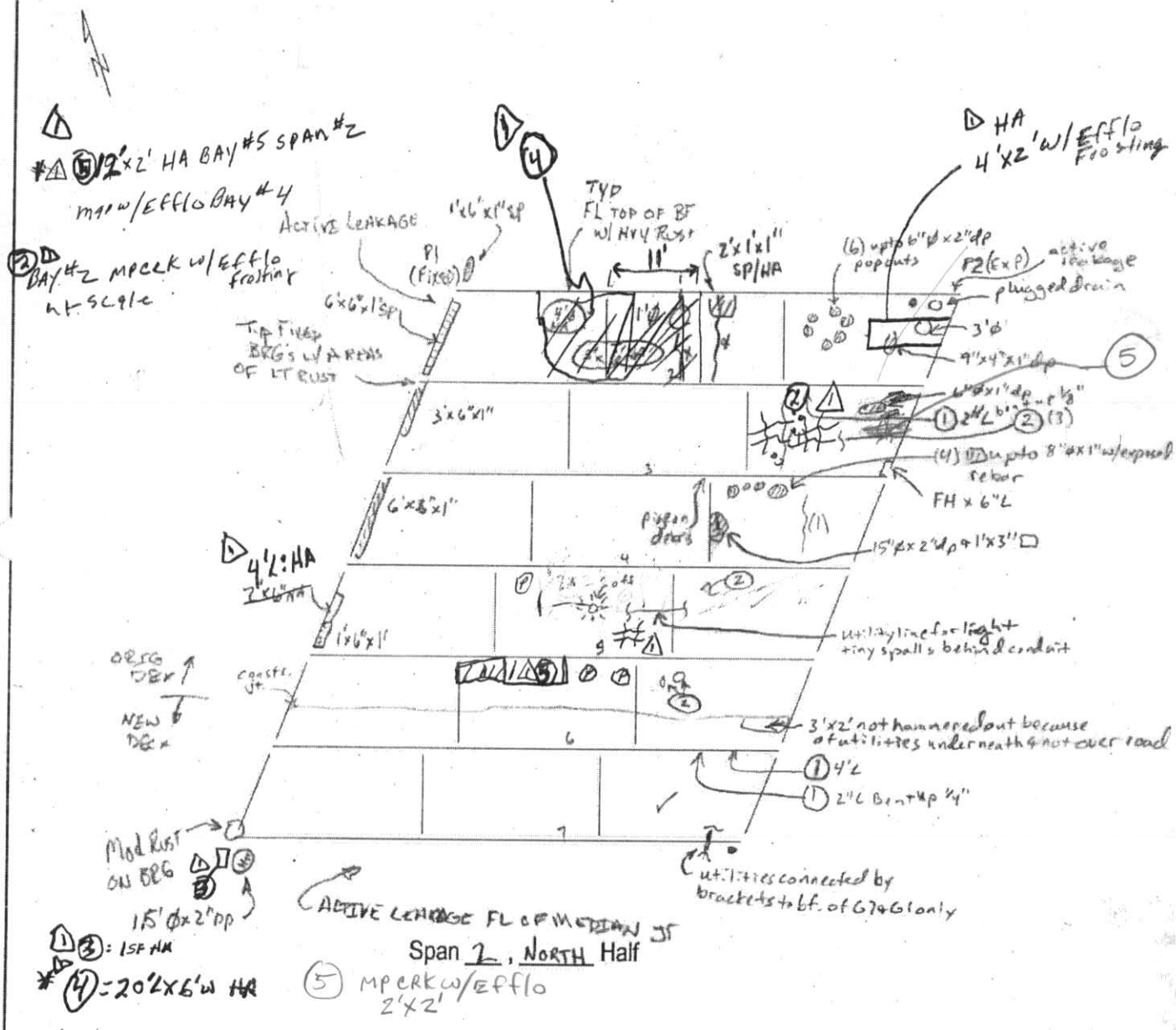
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~19/60~~

DESCRIPTION: Superstructure



GEN. NOTES:
- 3' BEAM END PAINTED, FASCIAS HAVE LT RUST
- STEEL WEBS OF PEELING PAINT AND MOD RUST
- RANDOM AREAS OF MED HC AT GIRDER HAUNCHES
- DECK END HAUNCHES w/ CR's, SP's AND HA's THRU OUT OLD SECTION
- G5-G7 VERY LT SCRAPES ON BF OVER TRAFFIC LANE due to impact damage
- All Girders have scrapes on bf of web & cmpl't

(1) scrape/gouge in bf of girder due to impact damage
(2) up to 1'Ø patch, hammer'd sounds solid.

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MaC) OR HAIRLINE MAP CRACKS (HLMaC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE • + weep ☼ = slight

UPDATE NO	DATE	COMPANY	CREW
1	1-26-12: See 1		
△			
△			
△			

Baker

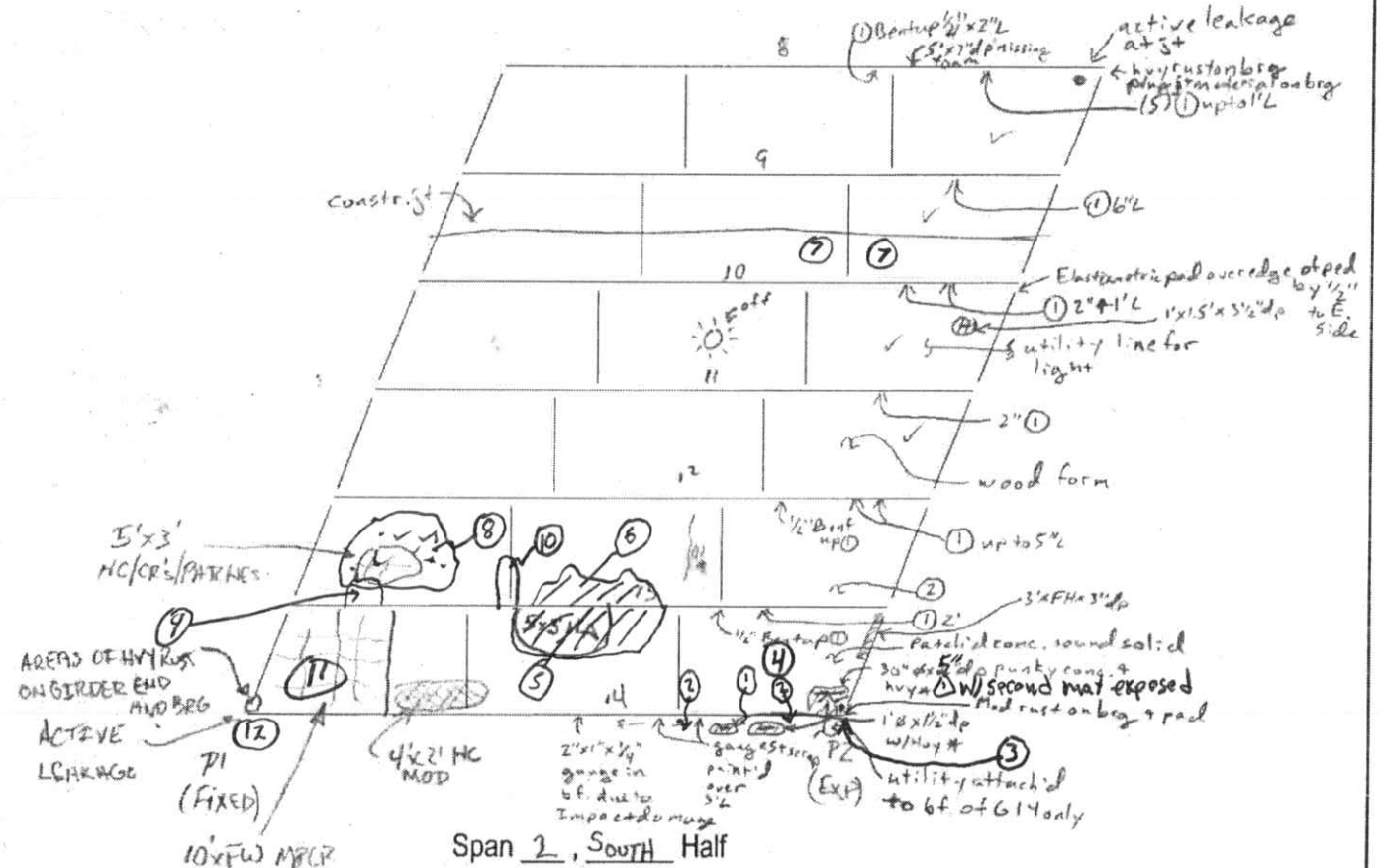
SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~20/60~~

DESCRIPTION: Superstructure

- G8 & G9 LT Scrapes over WB Lane



Span 2, South Half

① ① = 2SF HA (Fascia)
② = 34SF MSC (Fascia)
③ = 6SF HA (Fascia)
④ = 11SF MSC
*⑤ 9'x5' HA
*⑥ = 8'x3' HA
⑦ = 8SF LSC/MSC
⑧ 25SF MSC w/ efflo
⑨ = 3'x2' HA
*⑩ = 4'x2' HA
⑪ = 10SF, HSC w/ efflo
6'x12', Efflo, map, LSC
⑫ = 3SF LSP'S w/ rusted rebars
6SF HSC w/ efflo, 25F HA'S

① scrape/gauge in bf
② Patch conc. sound solid

General note
- Lam. rust of bf, at outside Girders
- All Girders at bot of cover plt on bf have scrapes due to impact damage

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- * WITH EFFLORESCENCE

• = weep
☼ = light

UPDATE NO.	DATE	COMPANY	CREW
1	1·26·12	See 1	
△			
△			
△			

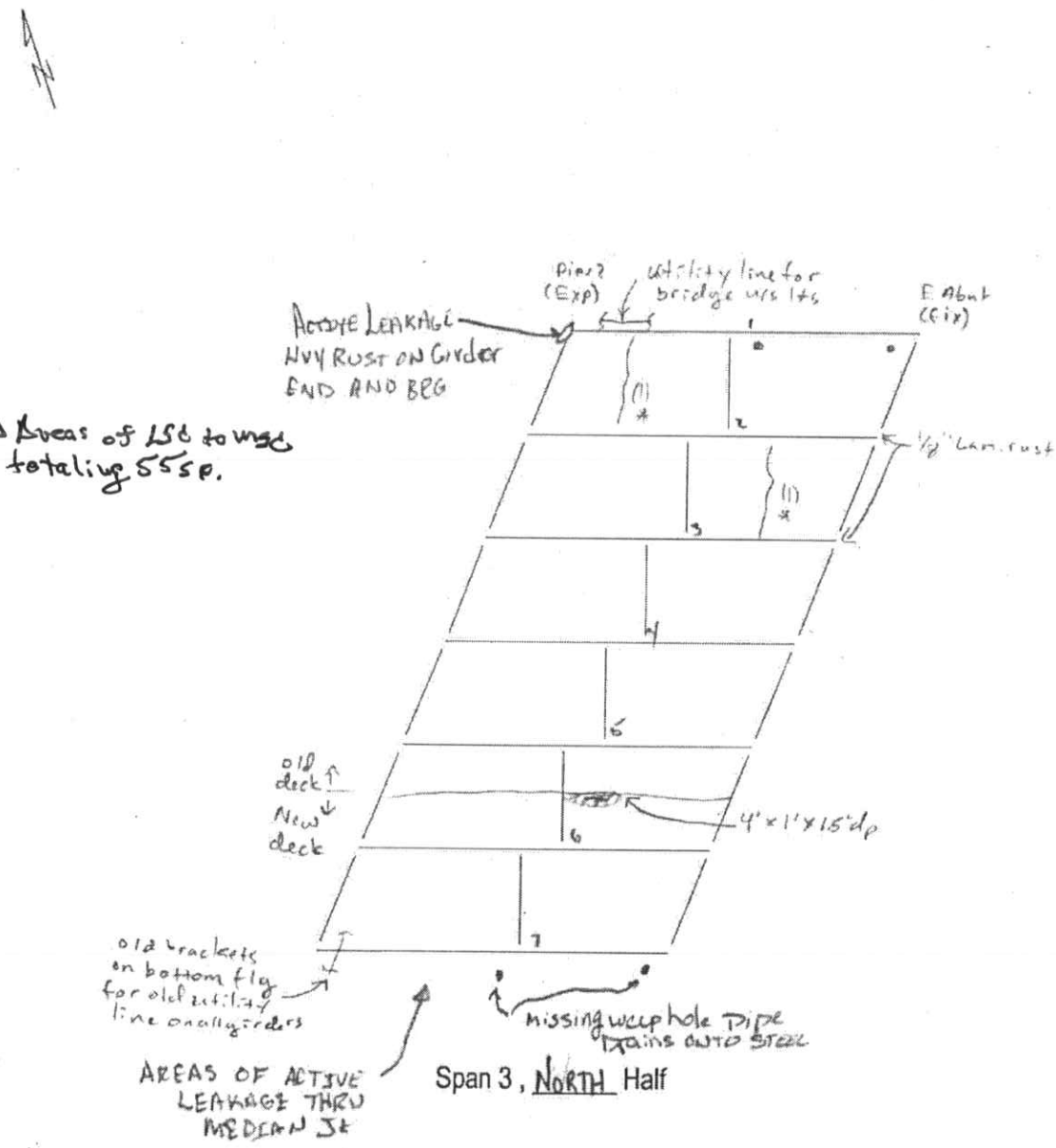
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~21/60~~

DESCRIPTION: Superstructure



Span 3, NORTH Half

Notes
- Rnd. Scrapes of paint in web & flg of girders & peeling paint
- Painted over beam ends & diaphram conn.

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE • = weep

UPDATE NO	DATE	COMPANY	CREW
△1	1·26·12: See △1		
△			
△			
△			

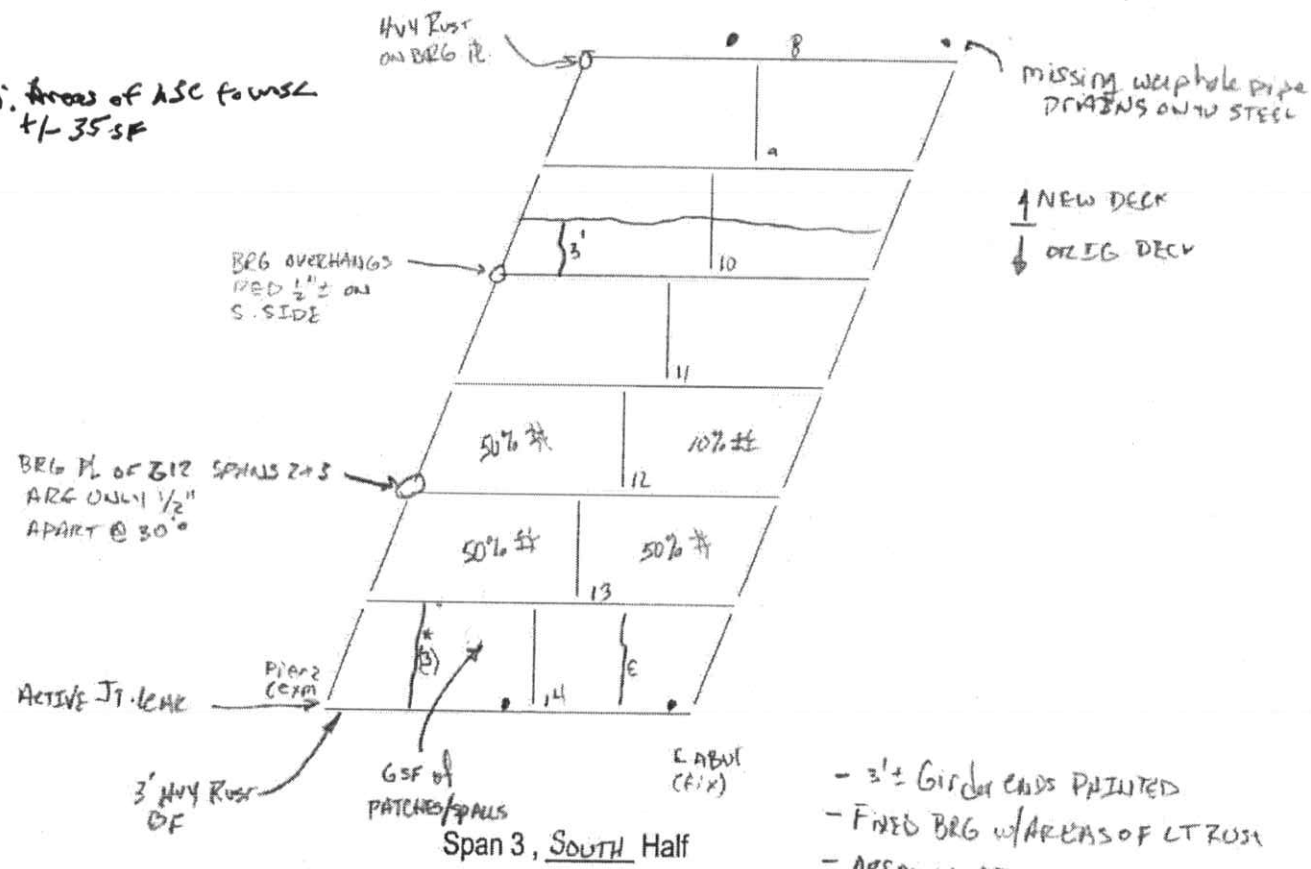
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~22/60~~

DESCRIPTION: Superstructure



Span 3, SOUTH Half

- 3'± Girder ends PAINTED
- FIXED BRG w/AREAS OF LT RUST
- AREAS OF LT - MOD RUST THRU OUT

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE

UPDATE NO.	DATE	COMPANY	CREW
Δ	1-26-12	See Δ	
Δ			
Δ			
Δ			

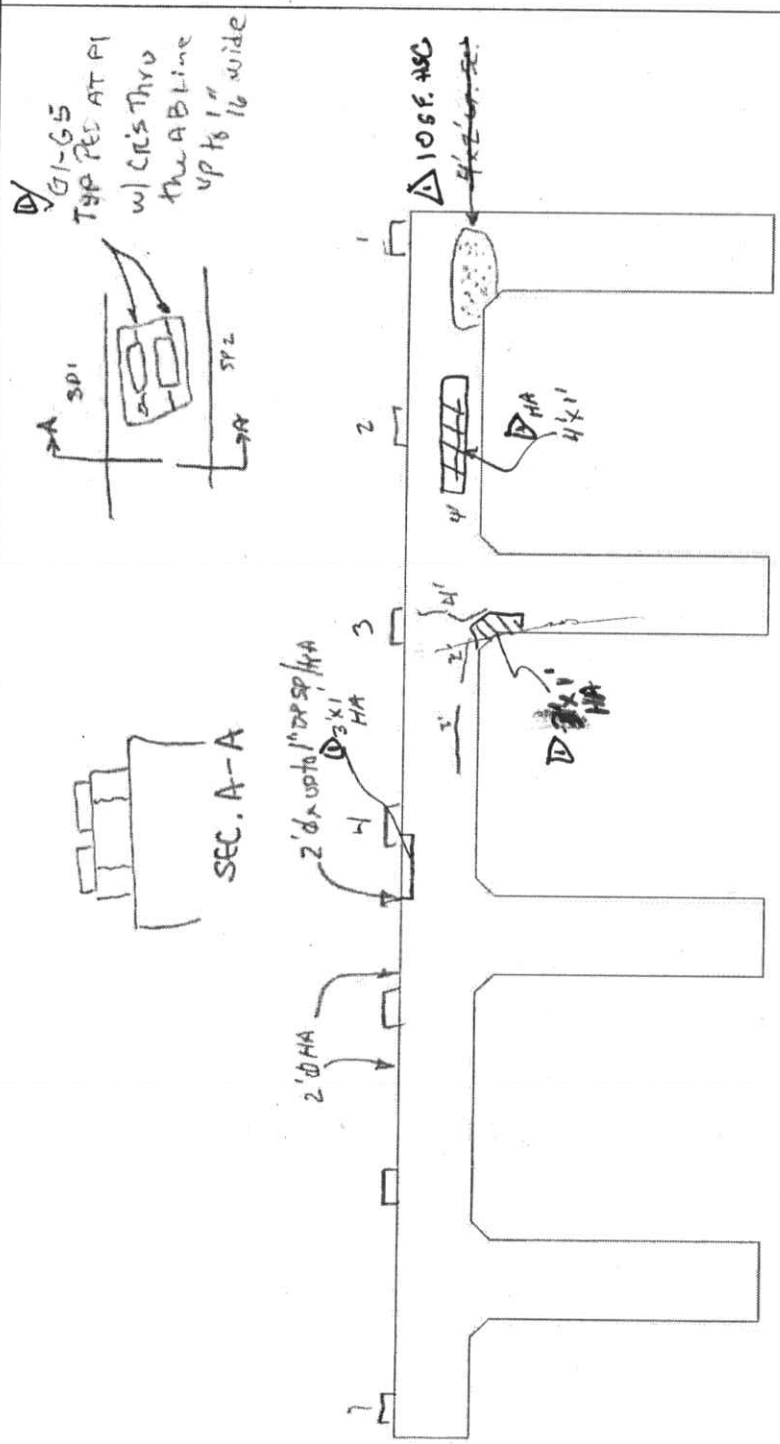
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/2010
CREW: JM, JW	SHEET ~~32 of 60~~

DESCRIPTION: Substructure



Pier 1, EAST Elevation, ~~North~~ Half

- Random Areas of Debris on CAP
- PATCHES NOT NOTED

UPDATE NO.	DATE	COMPANY	CREW
1	1·26·12	See 1	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE

Baker

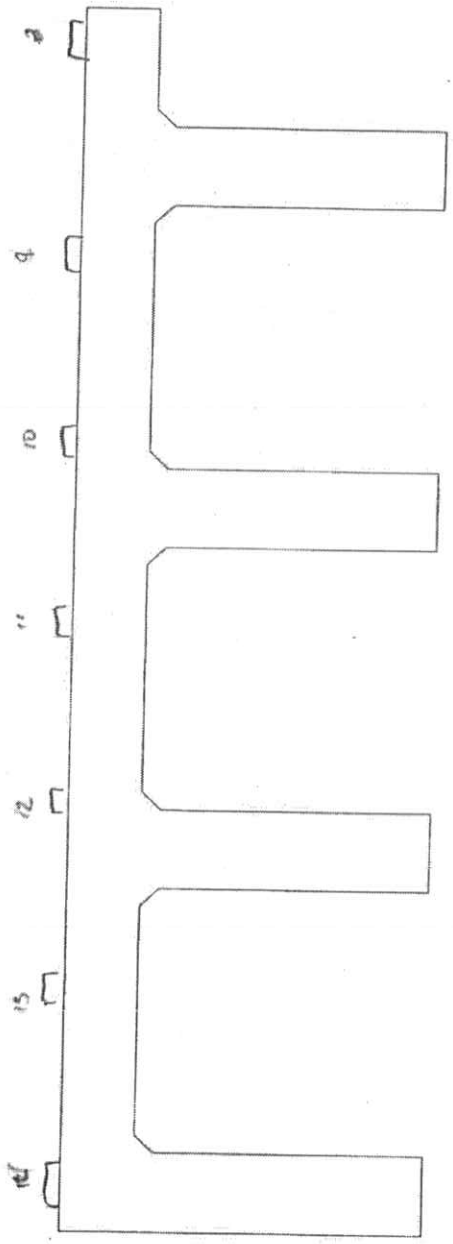
SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/2010
CREW: JM, JW	SHEET ~~33/60~~

DESCRIPTION: Substructure

TYP HLCR'S IN PED G10-14
SEE SKETCH ON
PREVIOUS SHEET



EVID. OF PAST JT LEAKAGE
BTWN G1-G4

Pier 1, East Elevation, South Half

- RANDOM AREAS OF DEBRIS ON CAP
- PATCHES NOT NOTED

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	No Change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

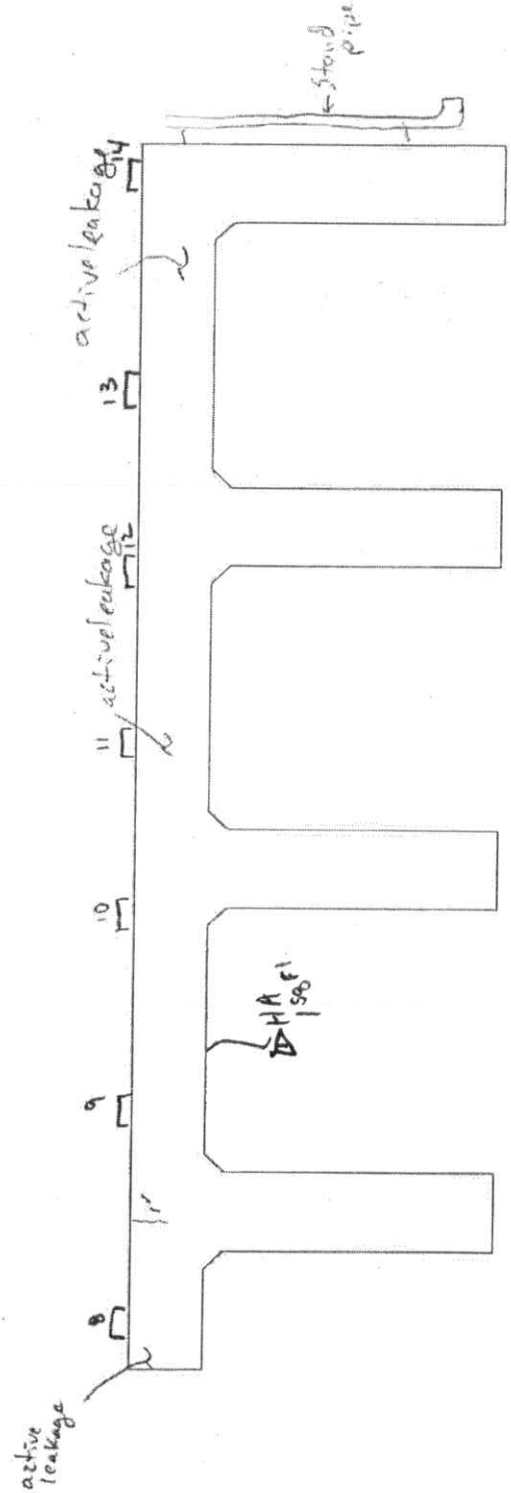
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/16/10
CREW: JM, JW	SHEET ~~31/60~~

DESCRIPTION: Substructure



Pier 1, West Elevation, South Half

Notes
- Lt pigeon debris on seat
- Mod dirt & sand on face of pier
- Core patch have rand. HLC

UPDATE NO	DATE	COMPANY	CREW
△	1·26·12	See △	
△			
△			
△			

LEGEND
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE

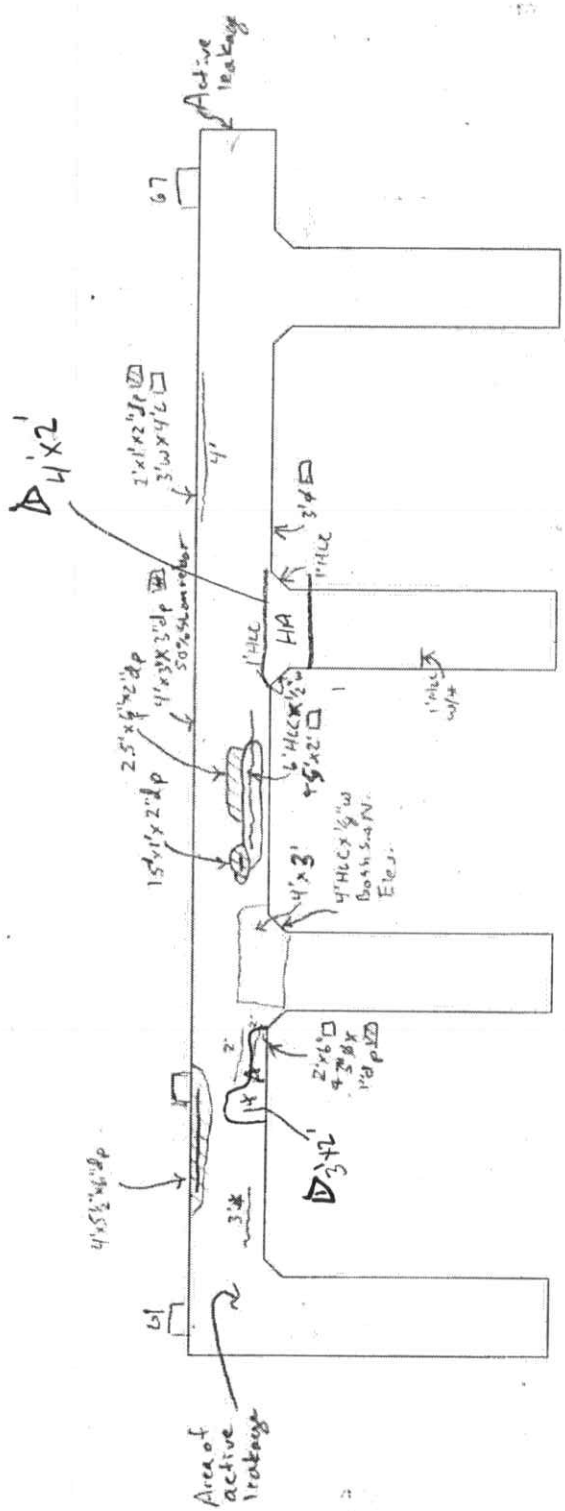
Baker

SUPPLEMENTAL SHEET

☑ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/09
CREW: JM, JW	SHEET ~~30/60~~

DESCRIPTION: Substructure



Pier 1, West Elevation, North Half

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See D	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE

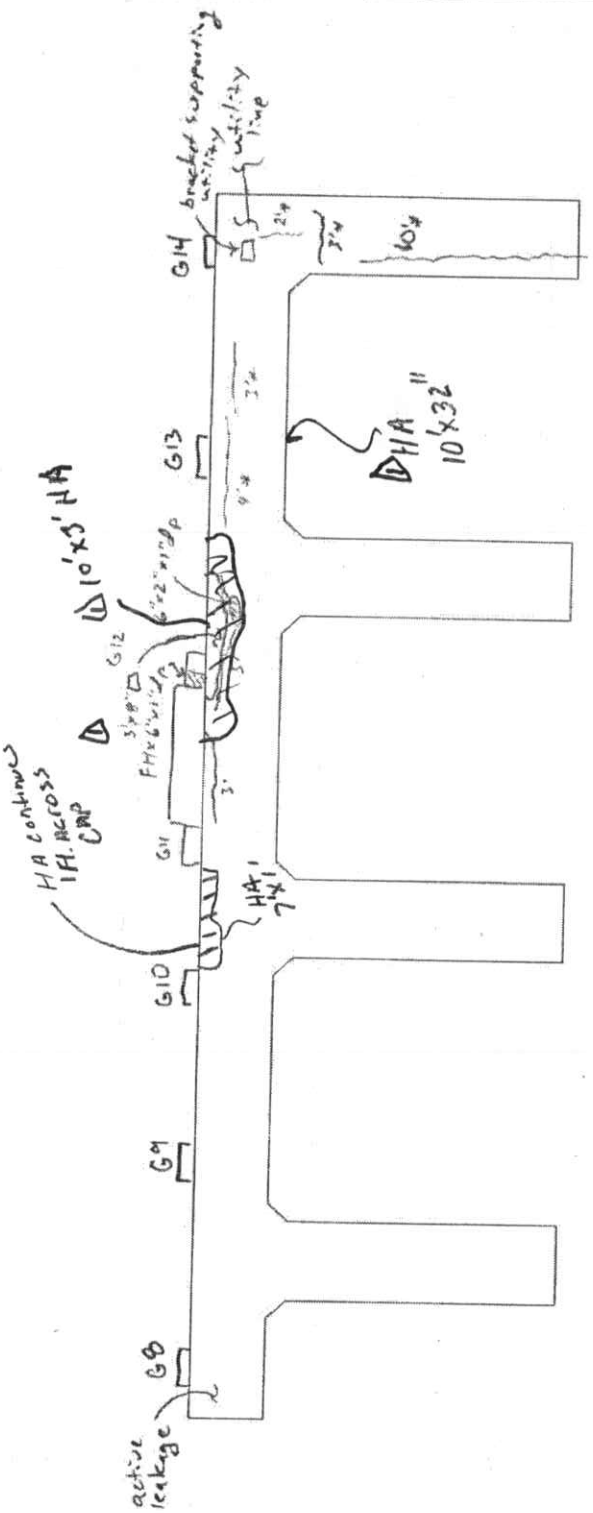
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~35/160~~

DESCRIPTION: Substructure



Pier 2, West Elevation, South Half

General Notes

- Letters on seat

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See D	
2			
3			
4			

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

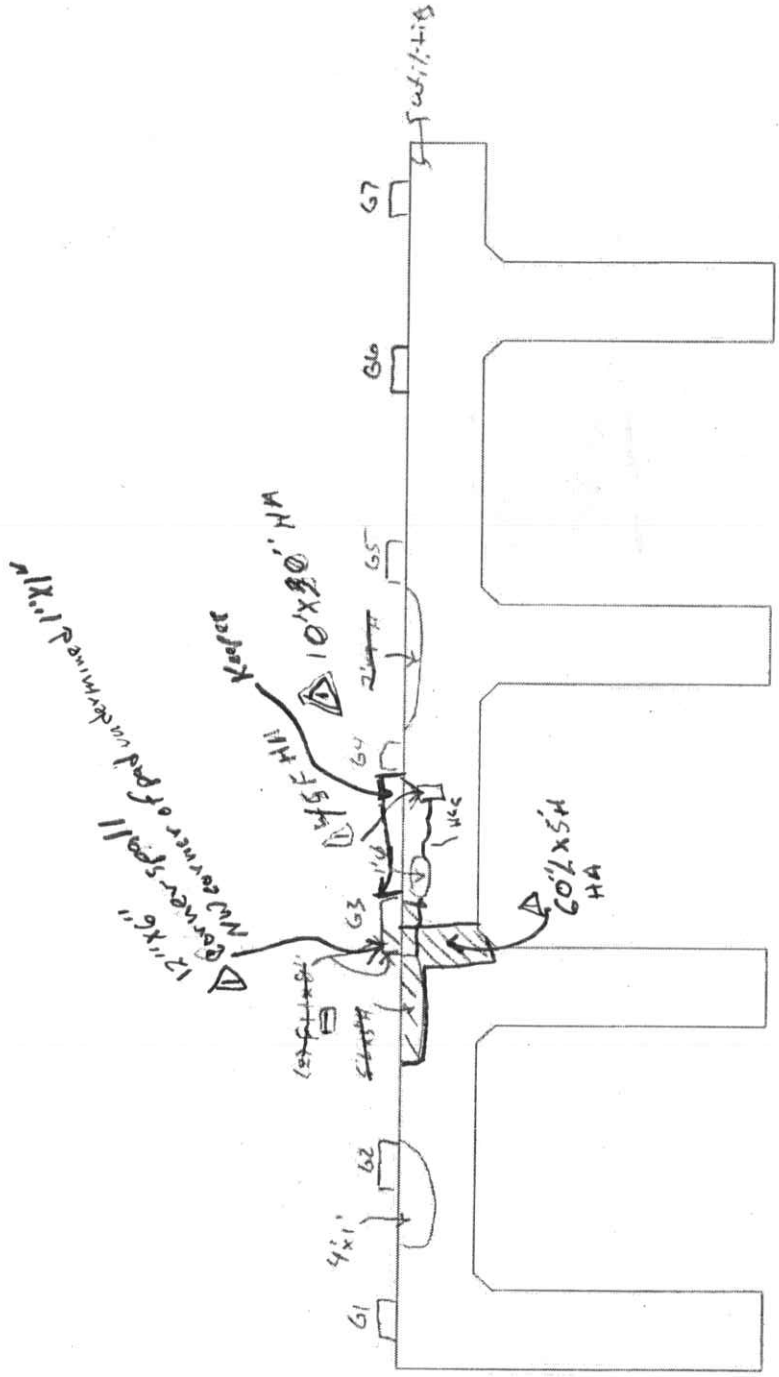
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~34~~ /60

DESCRIPTION: Substructure



Pier 2, West Elevation, North Half

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See 1	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

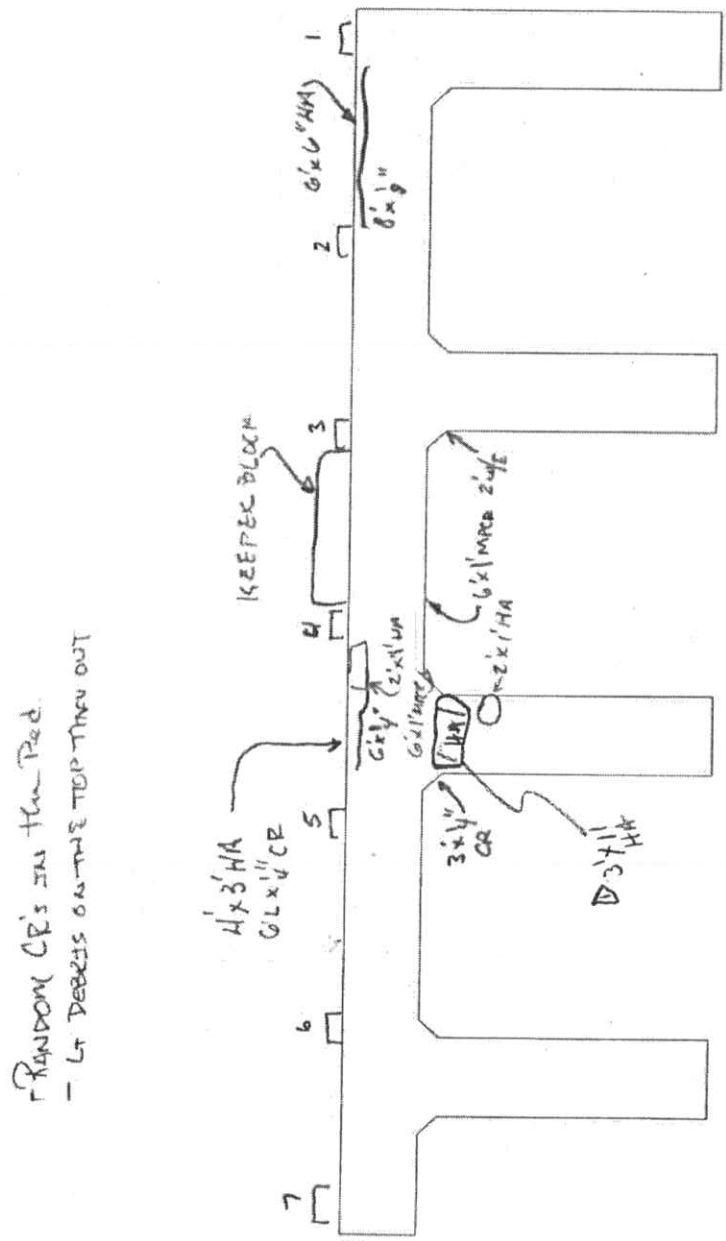
Baker

SUPPLEMENTAL SHEET

☑ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~36/60~~

DESCRIPTION: Substructure



Random CR's in the Bed
- Lt Debris on the top than out

Pier 2, East Elevation, North Half

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	See	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE

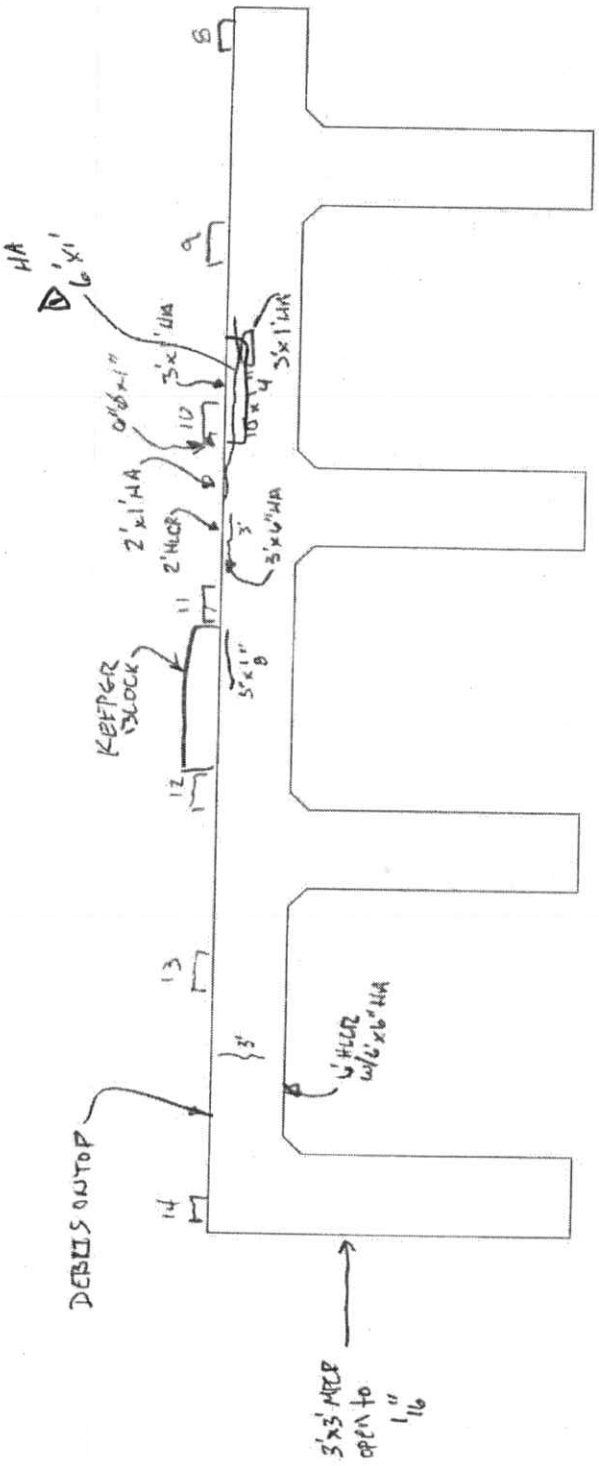
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~37/60~~

DESCRIPTION: Substructure



Pier 2, EAST Elevation, SOUTH Half

- AREAS OF LT-MOD HC THRU OUT
- PATCHES NOT SHOWN

UPDATE NO.	DATE	COMPANY	CREW
1	1·26·12	See 1	
2			
3			
4			

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MbC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- WITH EFFLORESCENCE

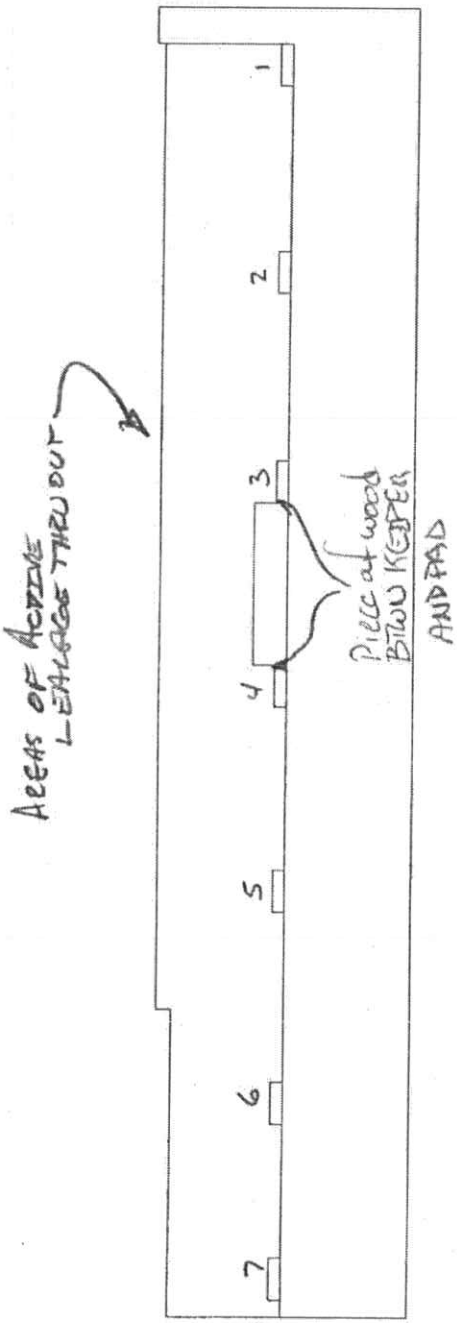
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/16/10
CREW: JM, JW	SHEET ~~24/60~~

DESCRIPTION: Substructure



West Abutment, North Half

- PATCHES AND REPAIRED CRACKS NOT NOTED

UPDATE NO.	DATE	COMPANY	CREW
1	1·26·12:	Basically No Change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- x WITH EFFLORESCENCE

Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY: ____

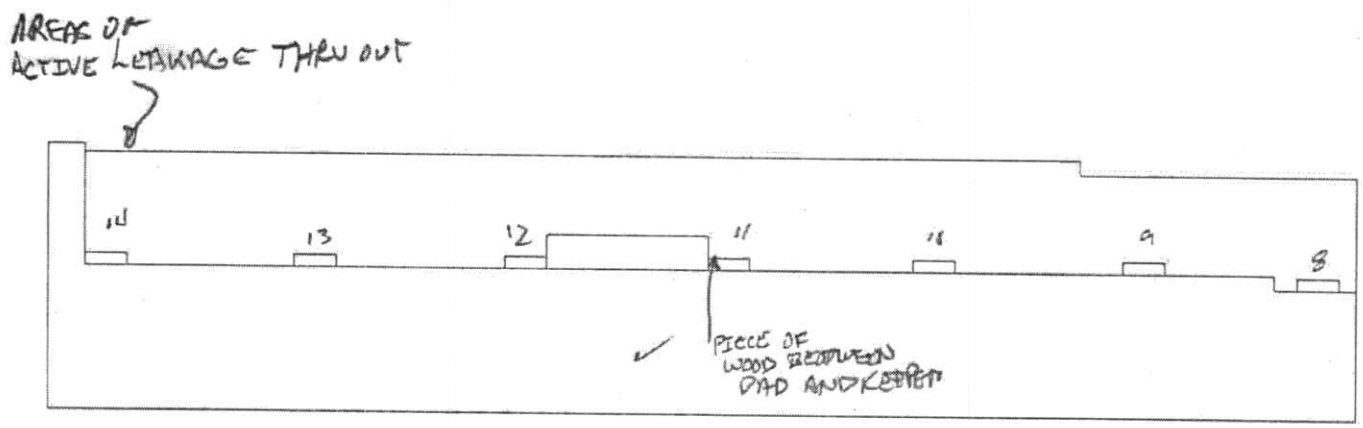
DESCRIPTION: Substructure

BRIDGE NO. 00196

CREW: JM, JW

DATE: 2/16/10

SHEET 25/60



West Abutment, South Half

- PATCHES AND REPAIRED CRACKS NOT NOTED

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

UPDATE NO.	DATE	COMPANY	CREW
△	1·26·12	Basically No Change	
△			
△			
△			

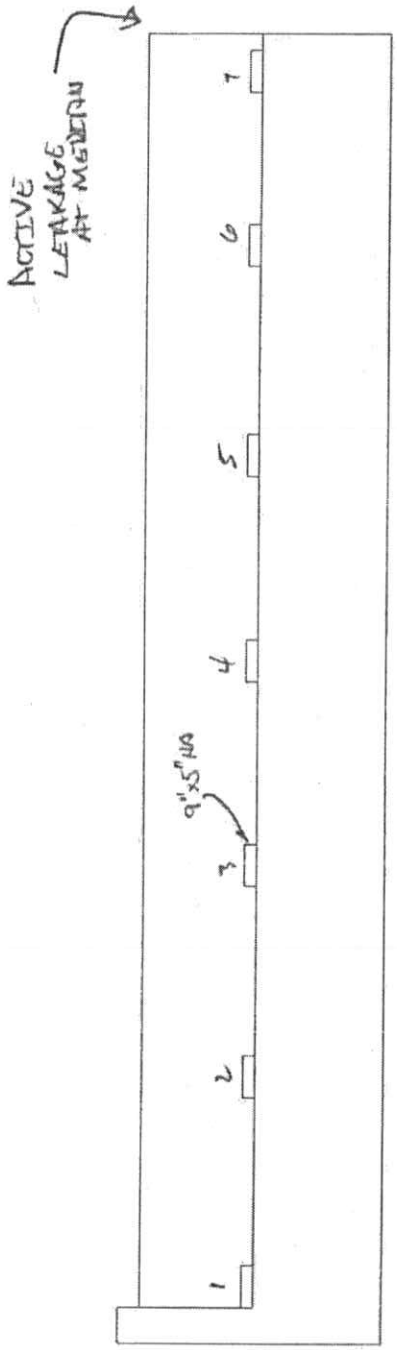
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~27/60~~

DESCRIPTION: Substructure



East Abutment, North Half

- Patches and repaired Cracks Not Noted
- Minor debris on Seat

UPDATE NO.	DATE	COMPANY	CREW
1	1.26.12	No change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

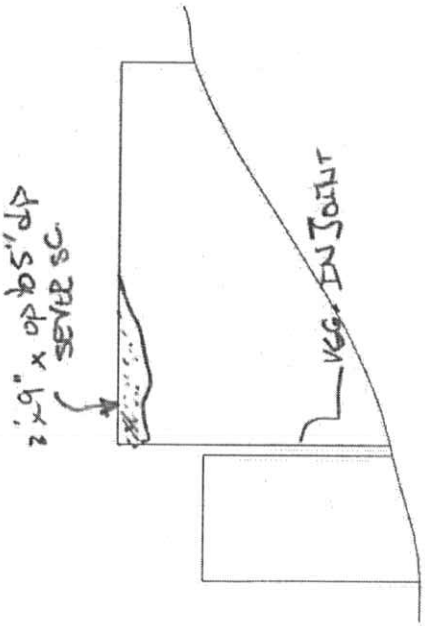
Baker

SUPPLEMENTAL SHEET

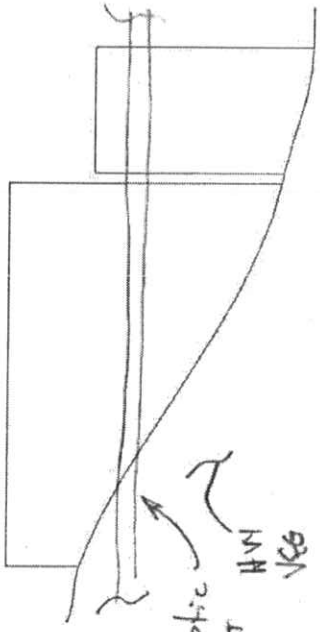
☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/16/10
CREW: JM, JW	SHEET ~~26/60~~

DESCRIPTION: Substructure



NW WW



SW WW

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	Basically No Change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

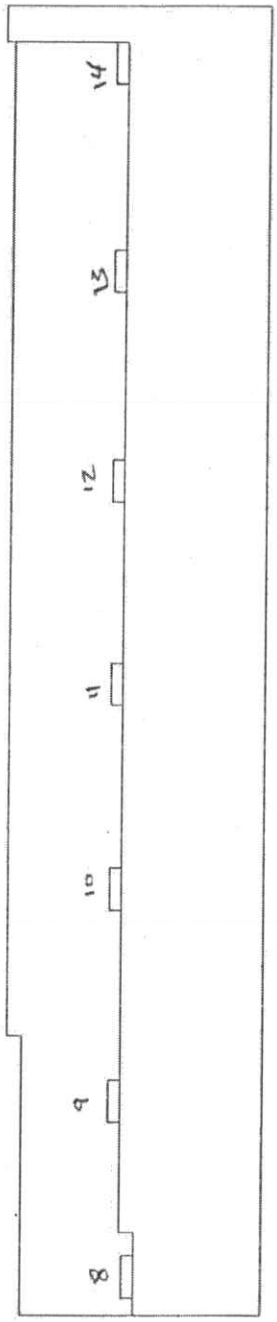
Baker

SUPPLEMENTAL SHEET

☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~28/60~~

DESCRIPTION: Substructure



East Abutment, South Half

- Patches and Repaired Cracks NOT NOTED
- MINOR DEBRIS ON SEAT

UPDATE NO.	DATE	COMPANY	CREW
1	1·26·12	No change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY, MED OR LT)
- X WITH EFFLORESCENCE

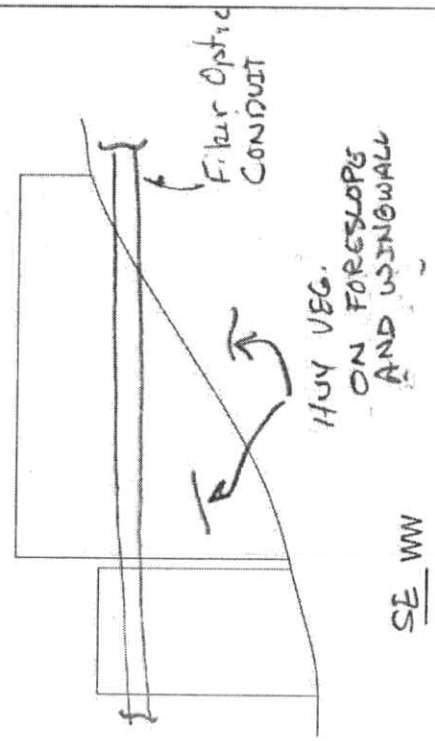
Baker

SUPPLEMENTAL SHEET

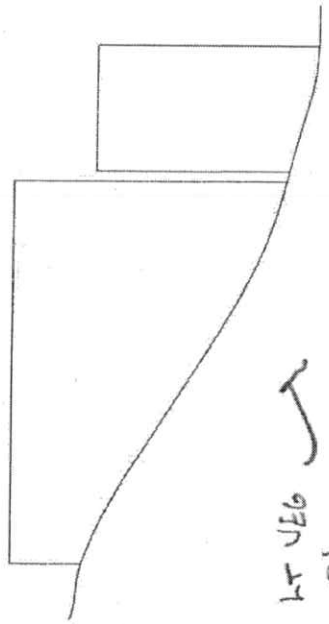
☒ FIELD ORIGINAL ☐ TRANSCRIBED BY:_____

BRIDGE NO. 00196	DATE: 2/12/10
CREW: JM, JW	SHEET ~~29/60~~

DESCRIPTION: Substructure



SE WW



NE WW

UPDATE NO.	DATE	COMPANY	CREW
1	1-26-12	NO Change	

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MpC) OR HAIRLINE MAP CRACKS (HLMpC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVY., MED OR LT)
- x WITH EFFLORESCENCE

Connecticut Department of Transportation
Fracture Critical Members/Fatigue Prone Details
Inspection Data Sheet

Bridge No. 0 0196

Town: Branford

Facility Carried: Interstate-95 {Govern Lodge Turnpike}

Feature Intersected: US Route 1 {East Main Street}

Fracture Critical Inspection Date:

Fracture Critical Inspection Frequency: months

Fracture Critical Type Code:

Reference to Bridge Plans: Project No. 319 - 01 - Year 1955

Member/Detail Type Code: H - Highly Fatigue Prone Details in Tension Areas

Fracture Critical: No

Fatigue Prone: Yes

Fatigue Category: E'

Steel Type: ASTM A373

Description: Rounded Corner Length Welded Cover Plates - Fillet Weld - Span No. 2 Fascia Stringer Nos. 1 & 14 - Flange Thickness W30 by 132 {1.000 inch} 1 inch -

Connecticut Department of Transportation
Fracture Critical Members/Fatigue Prone Details
Inspection Data Sheet

Member/Detail Type Code: H - Highly Fatigue Prone Details in Tension Areas

Fracture Critical: No

Fatigue Prone: Yes

Fatigue Category: E

Steel Type: ASTM A373

Description: Rounded Corner Over Sized Full Length Cover Plates with End Weld - Fillet Weld - Span No. 2 Stringer Nos. 2 thru 13 - Flange Thickness W30 by 108 {0.760 inch} 3/4 inch -

Member/Detail Type Code: H - Highly Fatigue Prone Details in Tension Areas

Fracture Critical: No

Fatigue Prone: Yes

Fatigue Category: C & C'

Steel Type: ASTM A373

Description: Diaphragm\Stringer Web & Flange Connection Plates - Fillet Weld -

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 00196 Agency ID: 00196 SR: 69.9 SD/FO: SD

IDENTIFICATION

State 1:	09 Connecticut	Struc Num 8:	00196
Facility Carried 7:	INTERSTATE-95	Location 9:	AT I-95 EXIT NO. 55
Rte.(On/Under) 5A:	Route On Structure	Rte. Signing Prefix 5B:	1 Interstate Hwy
Level of Service 5C:	1 Mainline	Route Number 5D:	00095
Directional Suffix 5E:	0 N/A (NBI)	% Responsibility:	0.00
SHD District 2:	03	County Code 3:	New Haven
Place Code 4:	BRANFORD	Mile Post 11:	55.180 mi
Feature Intersected 6:	US ROUTE 1		
Latitude 16:	41° 11' 36"	Longitude 17:	072° 47' 00"
Border Bridge Code 98:	Unknown (P)		
Border Bridge Number 99:	NA		

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46:	0	Number of Spans Main Unit 45:	3
3 Steel		02 Stringer/Girder	
Deck Type 107:	1 Concrete-Cast-in-Place		
Wearing Surface 108A:	6 Bituminous		
Membrane 108B:	2 Preformed Fabric		
Deck protection 108C:	None		

AGE AND SERVICE

Year Built 27:	1958	Year Reconstructed 106:	-1		
Type of Service on 42A:	1 Highway				
Type of Service under 42B:	1 Highway				
Lanes on 28A:	4	Lanes under 28B:	3	Detour Length 19:	1.0 mi
ADT 29:	85,200	Truck ADT 109:	9%	Year of ADT 30:	2010

GEOMETRIC DATA

Length Max Span 48:	53.33 ft	Structure Length 49:	135.58 ft
Curb/Sdwlk Width L 50A:	0.00 ft	Curb/Sidewalk Width R 50B:	0.00 ft
Width Curb to Curb 51:	95.33 ft	Width Out to Out 52:	103.67 ft
Approach Roadway width 32: (w/ shoulders)	95.33 ft	Median 33:	3 Closed Med
Deck Area:	14,055.00 sq. ft		
Skew 34:	26.00°	Structure Flared 35:	0 No flare
Vertical Clearance 10:	99.90 ft	Horizontal Clearance 47:	47.67 ft
Minimum Vertical Clearance Over Bridge 53:		328.05 ft	
Minimum Vertical Underclearance Reference 54A:		H Hwy beneath struct	
Minimum Vertical Underclearance 54B:		14.50 ft	
Minimum Lateral Underclearance Reference R 55A:		H Hwy beneath struct	
Minimum Lateral Underclearance R 55:		3.60 ft	
Minimum Lateral Underclearance L 56:		0.00 ft	

INSPECTION

Frequency 91:	24 months	Inspection Date 90:	1/26/2012	Next Inspection:	1/26/2014
FC Frequency 92A:	NA	FC Inspection Date 93A:	NA	Next FC Inspection:	NA
UW Frequency 92B:	NA	UW Inspection Date 93B:	NA	Next UW Inspection:	NA
SI Frequency 92C:	NA	SI Date 93C:	NA	Next SI:	NA
Element Frequency:	24 months	Element Insp. Date:	2/9/2010	Next Elem. Insp.:	1/26/2014

CLASSIFICATION

Defense Highway 100:	1 STRAHNET hwy	Parallel Structure 101:	No || bridge exists
Direction of Traffic 102:	2 2-way traffic	Temporary Structure 103:	Not Applicable (P)
Highway System 104:	1 On the NHS	NBIS Length 112:	Long Enough
Toll Facility 20:	3 On free road	Functional Class 26:	11 Urban Interstate
Defense Hwy 110:	1 STRAHNET hwy	Historical Significance 37:	5 Not eligible for NRHP
Owner 22:	01 State Highway Agency		
Custodian 21:	01 State Highway Agency		

CONDITION

Deck 58:	4 Poor	Super 59:	7 Good	Sub 60:	5 Fair
Culvert 62:	N N/A (NBI)	Channel/Channel Protection 61:		N N/A (NBI)	

LOAD RATING AND POSTING

Inventory Rating Method 65:	1 LF Load Factor	Operating Rating Method 63:	1 LF Load Factor
Inventory Rating 66:	HS32.0	Operating Rating 64:	HS53.3
Design Load 31:	5 MS 18 (HS 20)	Posting 70:	5 At/Above Legal Loads
Posting Status 41:	A Open, no restriction		

APPRAISAL

Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	0 Substandard
Transition 36B:	0 Substandard	Approach Rail Ends 36D:	1 Meets Standards
Str Evaluation 67:	5 Above Min Tolerable	Deck Geometry 68:	9 Above Desirable Crit
Underclearance, Vertical and Horizontal 69:		3 Intolerable - Correct	
Waterway Adequacy 71:	N Not applicable	Approach Alignment 72:	8 Equal Desirable Crit
Scour Critical 113:	N Not Over Waterway		

PROPOSED IMPROVEMENTS

Bridge Cost 94:	$1,000	Type of Work 75:	38 Other Structural
Roadway Cost 95:	$1,000	Length of Improvement 76:	0.3 ft
Total Cost 96:	$2,000	Future ADT 114:	42,000
Year of Cost Estimate 9:	2000	Year of Future ADT 115:	2029

NAVIGATION DATA

Navigation Control 38:	NA-no waterway		
Vertical Clearance 39:	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 111:	Not Applicable (P)	Lift Bridge Vertical Clearance 116:	0.0 ft

Structure Inventory and Appraisal Sheet (English Units)

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT0	14/3	P Conc Deck/AC Ovly	(SF)	14,055	0%	0	100%	14,055	0%	0	0%	0	0%	0
UNIT0	107/3	Paint Stl Opn Girder	(LF)	1,839	100%	1,839	0%	0	0%	0	0%	0	0%	0
UNIT0	205/3	R/Conc Column	(EA)	16	75%	12	25%	4	0%	0	0%	0	0%	0
UNIT0	212/3	Reinforced Conc wing	(LF)	40	100%	40	0%	0	0%	0	0%	0	0%	0
UNIT0	215/3	R/Conc Abutment	(LF)	234	89%	209	11%	25	0%	0	0%	0	0%	0
UNIT0	234/3	R/Conc Cap	(LF)	223	63%	140	34%	75	4%	8	0%	0	0%	0
UNIT0	305/3	Asphaltic Plug Joint	(LF)	423	100%	423	0%	0	0%	0	0%	0	0%	0
UNIT0	310/3	Elastomeric Bearing	(EA)	42	100%	42	0%	0	0%	0	0%	0	0%	0
UNIT0	313/3	Fixed Bearing	(EA)	42	100%	42	0%	0	0%	0	0%	0	0%	0
UNIT0	321/3	R/Conc Approach Slab	(EA)	2	100%	2	0%	0	0%	0	0%	0	0%	0
UNIT0	330/3	Metal Rail Uncoated	(LF)	264	100%	264	0%	0	0%	0	0%	0	0%	0
UNIT0	331/3	Conc Bridge Railing	(LF)	311	100%	311	0%	0	0%	0	0%	0	0%	0
UNIT0	359/3	Soffit Smart Flag	(EA)	1	100%	1	0%	0	0%	0	0%	0	0%	0

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

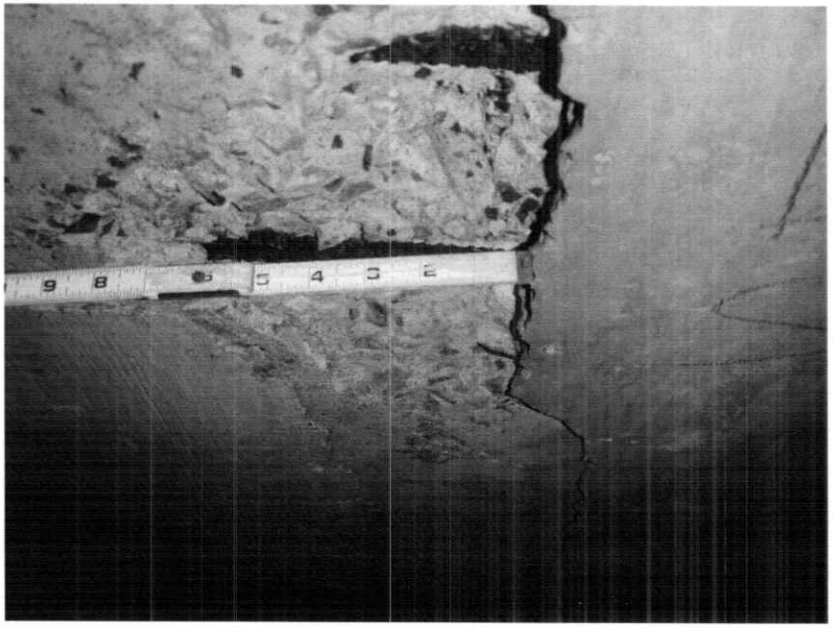


Photo # 1: BAY # 9, SPAN # 3 SMALL SPALL 1 SQFT. WITH EXPOSED REBAR ALONG CONSTRUCTION JOINT

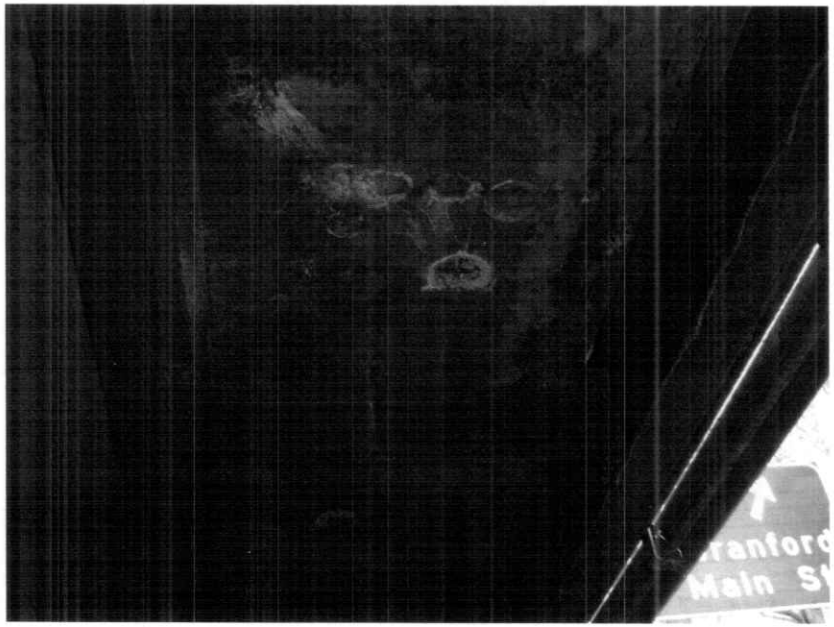


Photo # 2: SPAN #3, BAY #13 SEVRAL SMALL JACK HAMMER SPALL

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

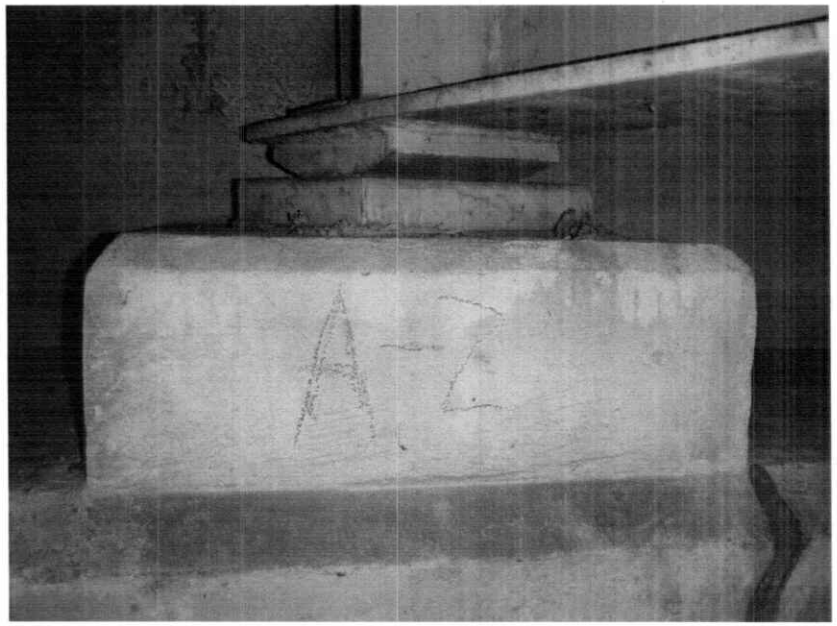


Photo # 3: FIXED BEARING AT ABUTMENT # 2

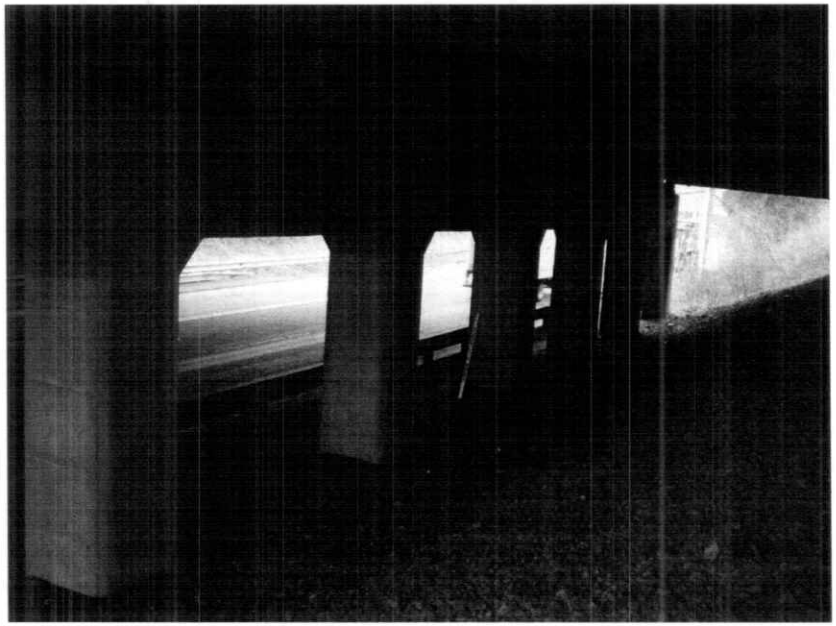
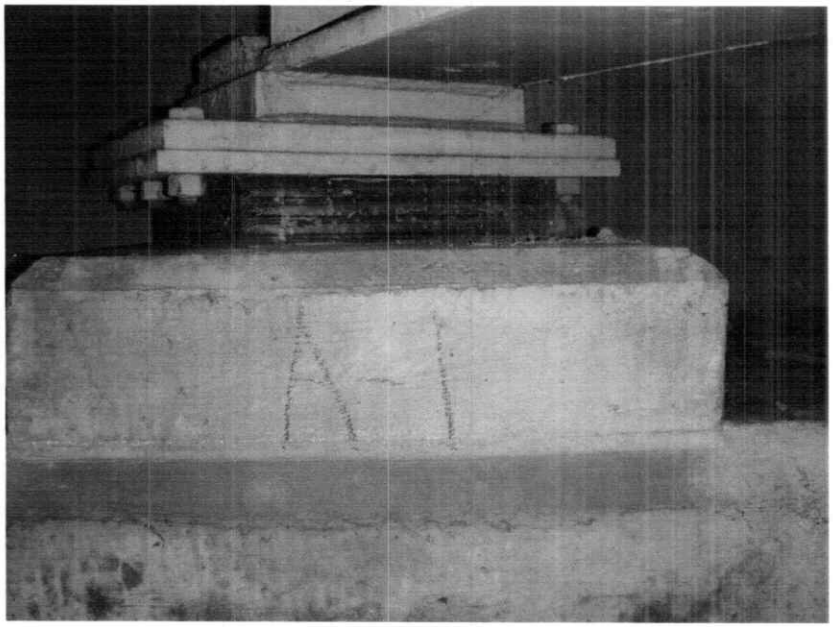


Photo # 4: EAST FASCIA OF PIER # 2

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

	**Click here to insert picture**
Photo # 5: ELASTOMERIC BEARING AT ABUTMENT #1	**Photo # :**

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

Photo # 7 :SOUTH ELEVATION

Photo # 8 :NORTH ELEVATION

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

Photo #9 : SOUTH FASCIA GIRDER #14, SPAN #2, OVER PIER #2 HEAVY LAMINAR RUST WITH SECTION LOSS

Photo # 10 : CLOSE UP OF PHOTO #9

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

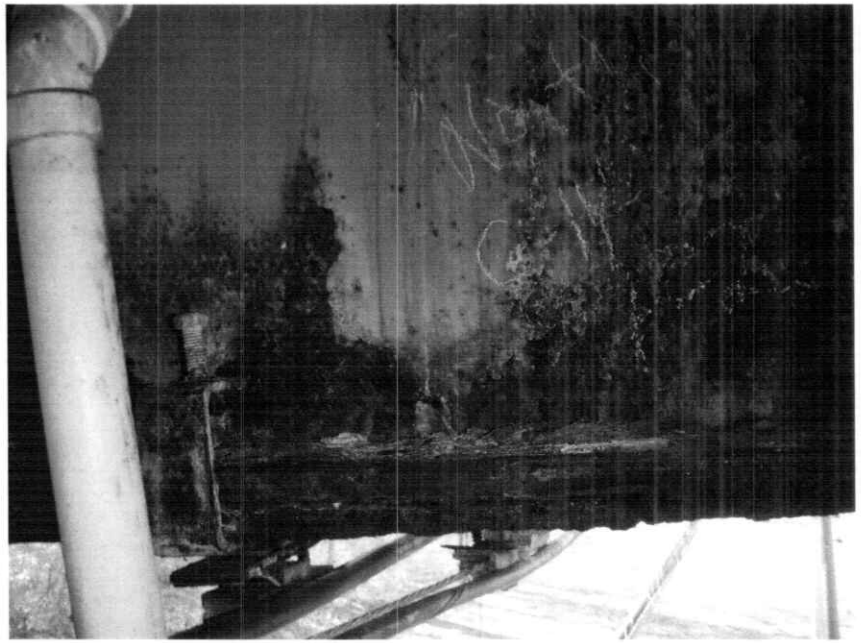


Photo # 11: GIRDER #14, SPAN #2, OVER PIER #2 HEAVY LAMINAR RUST WITH INSID FASCIA

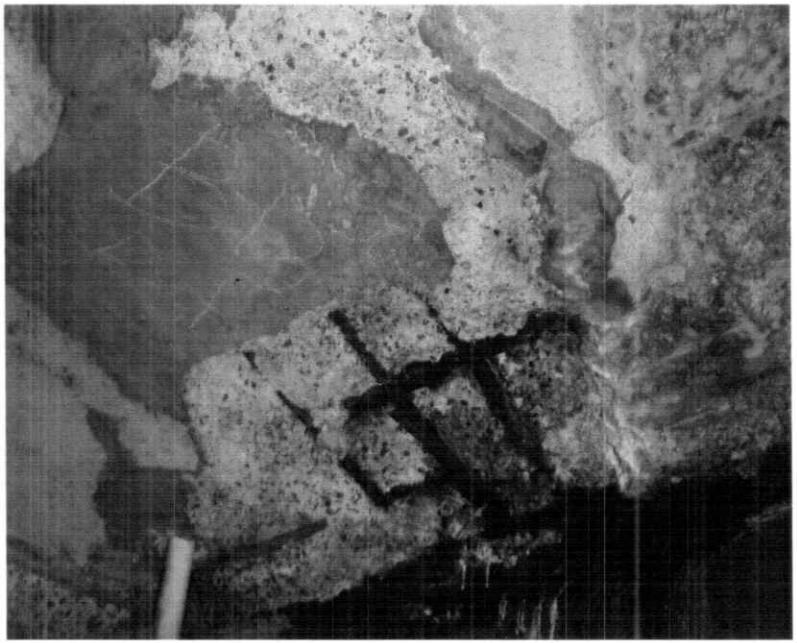


Photo #12 :

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

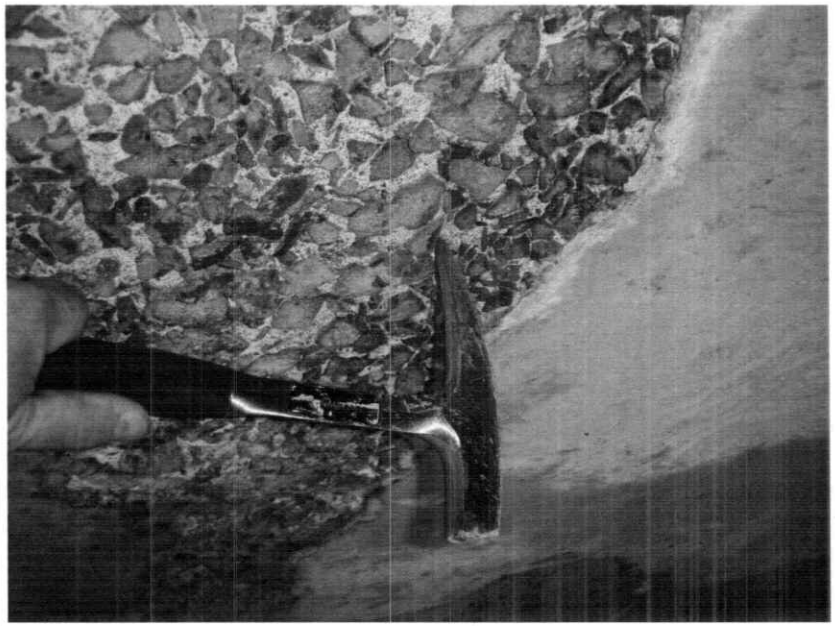


Photo 13 # :TYPICAL SCALE UNDERSIDE OF DECK

Photo #14 :
PIER # 2 ELASTOMERIC BEARINGS

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

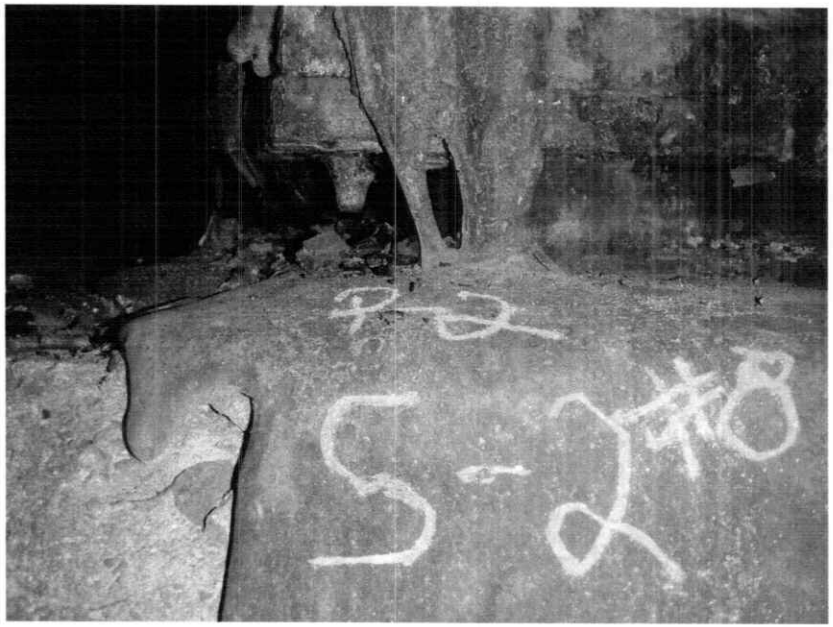


Photo # 15: PIER #2 SPAN #2 BEARING # 8 TAR COVERING BEARING

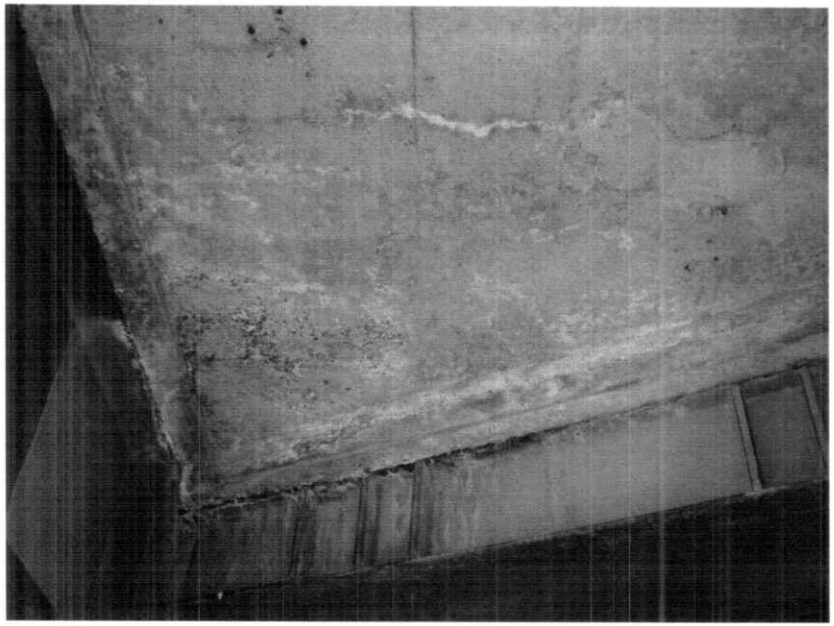


Photo # 16 :SPAN # 2 BAY # 2 FINE MAP CRACKING WITH EFFLO FROSTING

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

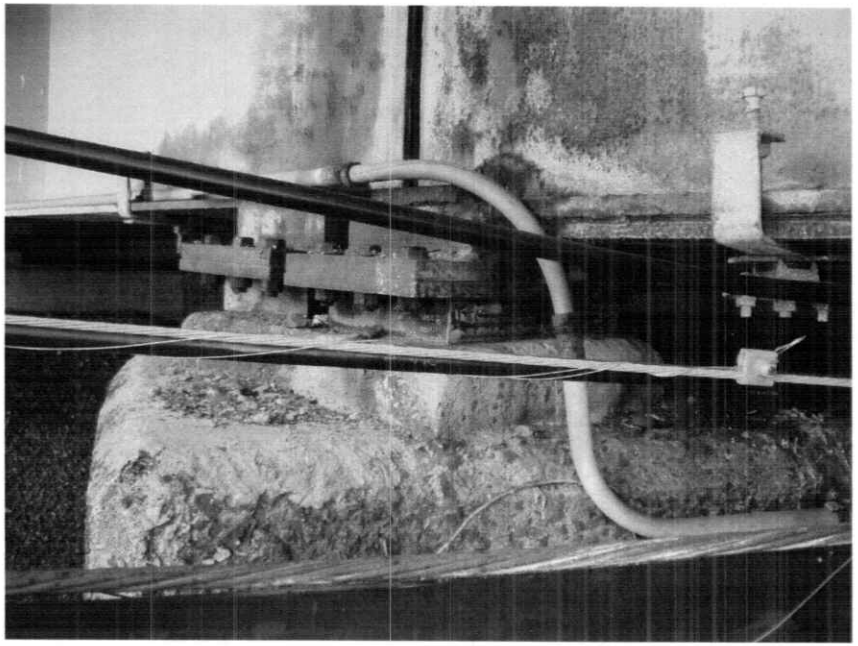


Photo #17 : NORTH FASCIA BEARINGS AT PIER #2

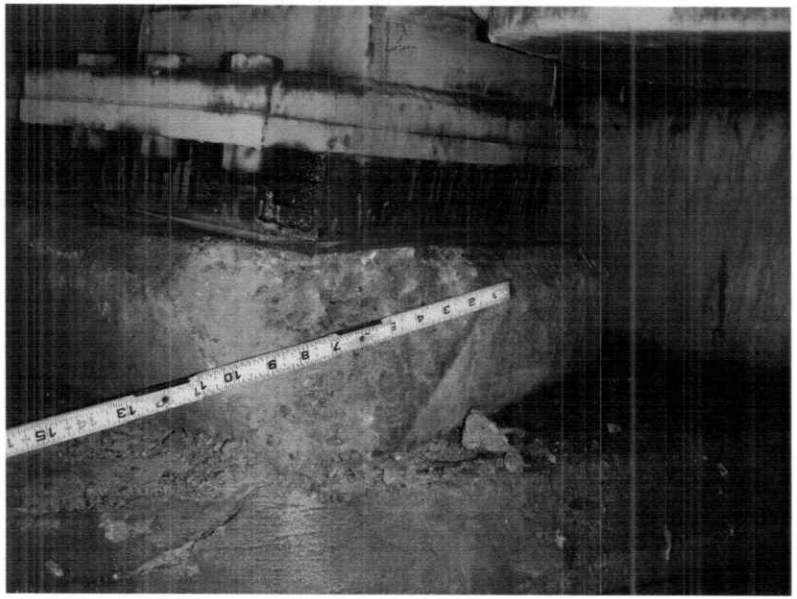


Photo # 18: CORNER SPALL AT PIER #2, PAD #3, SPAN #2

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

Photo # 19:

MARKED OUT HOLLOW

Photo #20 :
AREAS IN SPAN # 2 BAYS 13 & 14

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

Photo # 21 :
M.B.R. CONNECTION TO PARAPET

Photo # 22 :
AND THE BACKSIDE NO BOTTOM RAIL

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

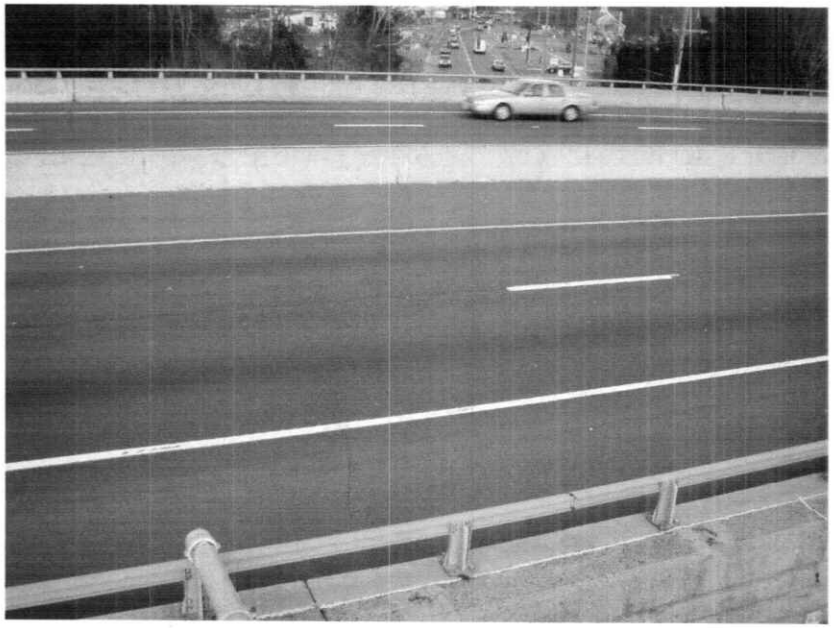


Photo #23 : OVERLAY NORTHBOUND

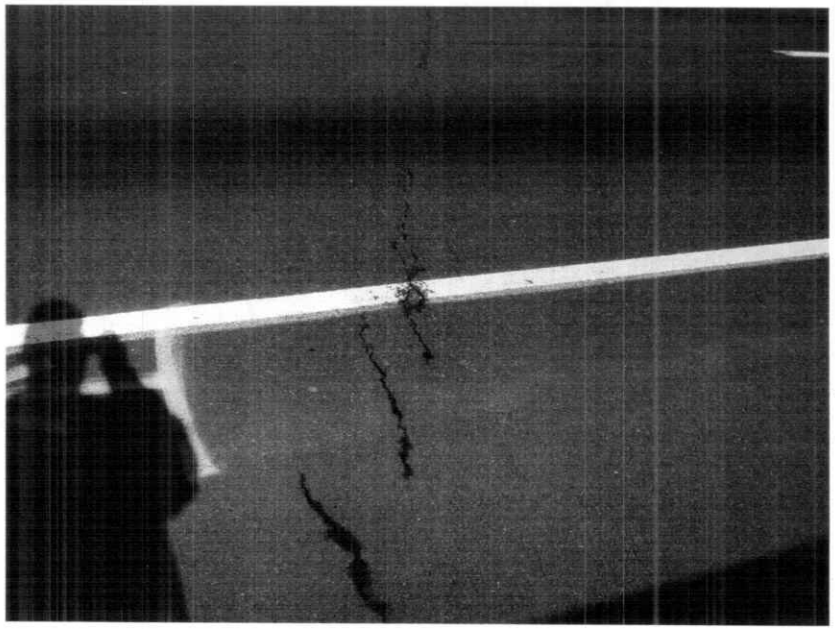


Photo #24: JOINTS PAVED OVER WITH CRACKING ABUTMENT # 1 NORTHBOUND

Bridge No.	00196	**Inspected by:**	JAMES JONES
Town:	BRANDFORD	**Inspected by:**	ANDREW FERRARA
Feature Carried:	INTERSTATE – 91	**Date Inspected:**	1/26/2012
Feature Crossed:	US ROUTE 1	**Project No.:**	

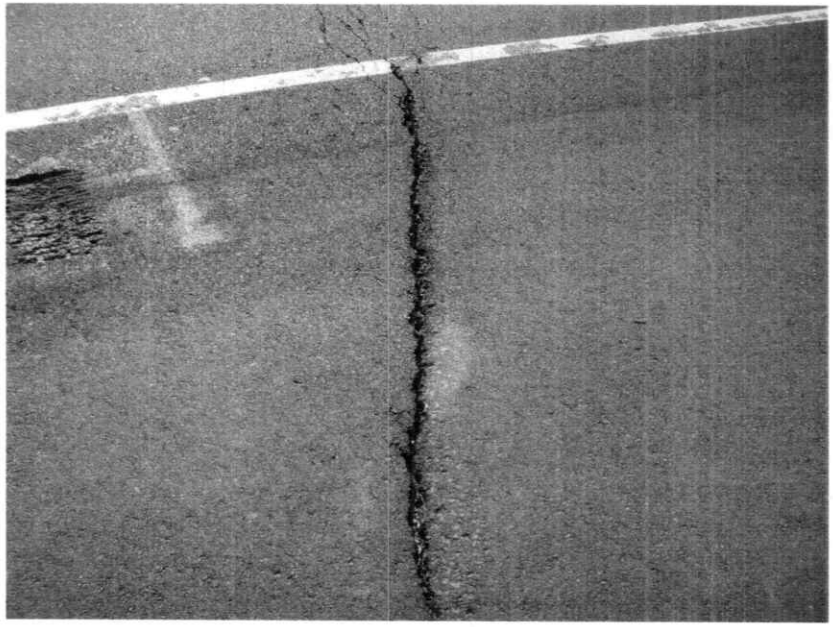


Photo # 25 : PIER # 1 SOUTHBOUND PARTIAL CRACK

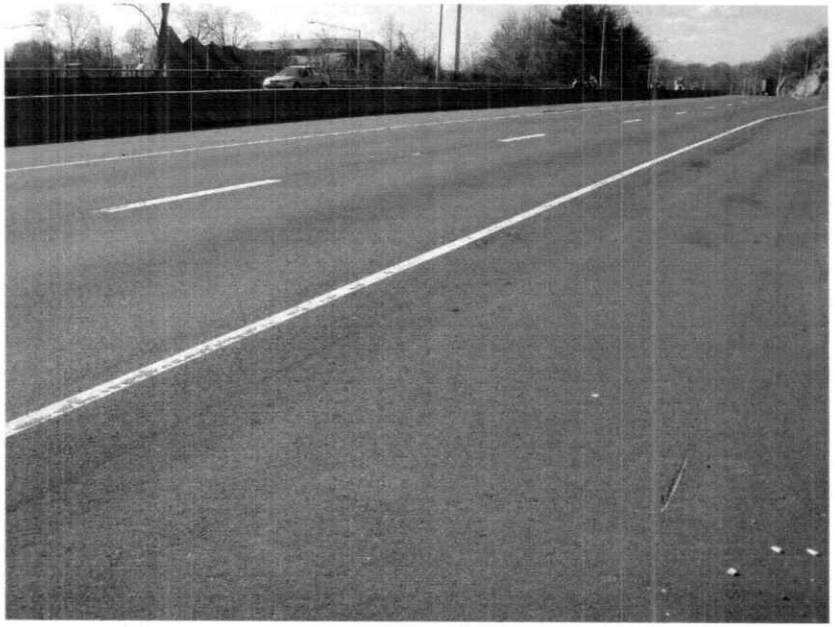


Photo # 26: OVERLAY SOUTHBOUND