

# STRUCTURE NO. 00712

ROUTE 124  
over  
ROUTE 15  
NEW CANAAN

Routine Inspection  
on  
3/22/2011

Inspected by Team 6  
for Area 6

<b>TEAM:</b>	Forwarded to TE3	Jim Matulis	Date	4/5/2011
<b>TE3:</b>	Reviewed by TE3	Jim Matulis	Date	4/11/2011
	BMM Required	Yes		
	Town Bridge	NO		
	Rating <= 5 (Items 58, 59, 60 or 62)	Yes		
	Rating Change 2 or More Values	NO		
	Forwarded to Supervisor	S. Dumas	Date	4/11/2011
	Forwarded to "To Be Copied Drawer"	<input type="checkbox"/>	Date	
	Date BRI-19 Entered	4/11/2011		
<b>SUPERVISOR:</b>	Reviewed by Supervisor	S. Dumas	Date	4/14/11
<b>SUPPORT:</b>	Date Copies Made	4-14-11	BMM No	11-216
	Scanned By:		Date Scanned	
				PDF Box No

**NBI: Yes**

Structure No.  Town   
 Inspection Date  Inspectors

## **TABLE OF CONTENTS**

### **Loose Forms (not bound in report)**

Number of  
Sheets Enclosed

Maintenance Memo		<input type="text" value="0"/>	
Flagging Memos		<input type="text" value="0"/>	
PONTIS Element Data Collection Form		<input type="text" value="1"/>	
Plan Sheets	Already on File <input type="checkbox"/>	<input type="text" value="0"/>	

### **Bound Report Pages**

Title Cover Sheet		<input type="text" value="1"/>	
Table of Contents		<input type="text" value="1"/>	
Executive Summary		<input type="text" value="0"/>	
Field Notes		<input type="text" value="2"/>	
Calculations:	Load Rating Evaluation	<input type="text" value="0"/>	
	Quantities & Cost Estimate	<input type="text" value="0"/>	
Photo Sheets		<input type="text" value="8"/>	
Photo Images		<input type="text" value="16"/>	

### **Forms**

BRI-18 Bridge Inspection Report Form		<input type="text" value="7"/>	
BRI-19 Highway Bridge Inventory Form		<input type="text" value="2"/>	
BRI-25 Highway Bridge Under Entry Form		<input type="text" value="1"/>	

### **Comments:**

Bridge Number **00712**

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION  
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET 1 OF 13 (INSP. REPORT)

Inspected By: J. Jones & E. Rullo  
Sufficiency Rating **68.00**  
Previous Inspection Date **1/22/2009**  
BS&E Received  Data Entry By: Jing Mathu  
Copies Made  Data Entry Date: 2/11/2011

IDENTIFICATION

Bridge Name **NEW CANAAN** Town Code **50580**  
Town Name **NEW CANAAN**

Inventory Route: **1**  
A) Record Type **1** State Highway **3** D) Route Number **00124**  
B) Signing Prefix **3** Mainline **1** E) Directional Suffix **0** NA  
C) Level of Service **1**

Feature Intersected **ROUTE 15**  
7) Facility Carried: **ROUTE 124**  
**EXIT 37 ROUTE 15**

9) Location  
11) Milepoint **3.08** Miles  
16) Latitude **41deg 7 min .00 sec** **deg min sec**  
17) Longitude **73deg 28 min 54.00 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 **1** Concrete  B) Design Type **7** Frame (except frame culverts)   
44) Structure Type, Approach:  
A) Material **0** Other  B) Design Type **0** Other   
45) Number of Spans, Main Unit **1**  
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 **1** Built-up  
C) Type of Deck Protection **0** None

AGE AND SERVICE

27) Year Built **1937**  
42) Type of Service: **1** Highway  
A) On  B) Under   
28) Number of Lanes: **2**  
A) On  B) Under   
29) Average Daily Traffic **12100**  
109) Percent Truck **5%**  
30) Year of ADT **2007**  
19) Bypass, Detour Length **2.00** miles

GEOMETRIC DATA

48) Length of Max Span **68ft**  
49) Structure Length **79ft**  
50) Curb or Sidewalk Widths:  
A) Left **0.6ft**  
51) Brg Rdwy width, curb-curb **45.0ft**  
52) Deck Width, Out-Out **51.5ft**  
32) Approach Roadway Width **45ft**  
33) Bridge Median **0** No Median  
Deck Area **4068** sqft

34) Skew Angle **23deg**  
35) Structure Flared **0**  
10) Inv. Rte. Min. Vert Clearance **99ft**  
47) Log Inv. Rte. Total Horiz. Clr.: **45.0ft**  
47) RLog Inv. Rte. Total Horiz. Clr.: **0ft**  
53) Min Vert Clearance Over Bridge **99ft**  
54) Min Vert Under Clearance **99in**  
55) Min Lat Under Clearance on Right **13ft**  
56) Min Lat Under Clearance on Left **2.4ft**  
56) Min Lat Under Clearance on Left **2.7ft**

BRIDGE COMMENTS

90) Inspection Date **03/22/11** Inspection Team **606** 91) Frequency Class: **24** **02**  
Indepth Insp **1/22/2009** Deck Survey **1/1/1900 12:** Access **0** Flagman **0**  
CRITICAL FEATURE INSPECTIONS  
Type Frequency Team Date  
Fracture:      
Uwater:      
Special:      
**3/22/11**  
**RED FLAG**



BRIDGE NUMBER	TOWN NAME	NBIS BRG LGTH
00712	NEW CANAAN	Yes 79
FACILITY CARRIED	FEATURE CROSSED	
ROUTE 124	ROUTE 15	

INSPECTED BY: Jones

REVIEWED BY: Pulle DATE: 4/11/2011

STATE OF CONNECTICUT  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF BRIDGE SAFETY EVALUATION  
**INVENTORY ROUTE  
 UNDER STRUCTURE EVALUATION**  
 FORM BRI-25 REV 10/00

SHEET 3 OF 13 (INSP. REPORT)

DESCRIPTION: \_\_\_\_\_ IDENTIFICATION \_\_\_\_\_ CLASSIFICATION \_\_\_\_\_

5) INVENTORY ROUTE: \_\_\_\_\_

- A) RECORD TYPE  2
- B) ROUTE SIGNING PREFIX  3 State Highway
- C) DESIGNATED LEVEL OF SERVICE  1 Mainline
- D) ROUTE NO.  00015
- 11) MILE POINT (INV.RTE)  14.14

AGE & SERVICE \_\_\_\_\_

- + 28B) NUMBER OF INV.ROUTE LANES  4
- \* 29) ADT (INV. RTE)  69700
- \* 109) TRUCK ADT % (INV.RTE)  0
- \* 30) YEAR OF ADT (INV. RTE)  2007
- \* 41) INV ROUTE OPERATIONAL STATUS  R Posted for other load-ca
- 19) BYPASS DETOUR LENGTH  3 Miles

GEOMETRIC DATA \_\_\_\_\_

- + 10) INV. RTE. MIN. VERT. CLEARANCE  14 ft  5 in
- + 47) LOG INV. RTE. TOTAL HORIZ CLR.  28.9 ft
- + 47) RLOG INV. RTE. TOTAL HORIZ CLR.  28.7 ft
- + LOG MIN VERT CLR OVER INV ROUTE  13 ft  0 in
- + RLOG MIN VERT CLR OVER INV ROUTE  13 ft  1 in
- + 55) MIN LAT UNDERCLR ON RIGHT  H  2.4 ft
- + 56) MIN LAT UNDERCLR ON LEFT  2.7 ft

POSTED SIGNS \_\_\_\_\_

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

COMMENTS:

No Posted Vehicle Under Clearance Signs at this Bridge

\*\* 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

## Connecticut Department of Transportation

### Bridge Inspection Report BRI-18

**Bridge #: 00712**

**Inspection Date: 3/22/2011**

Inspection Type:	Routine	Previous Inspection Date:	1/22/2009	Snooper Required:	No
Inspection Performed By:	Team 6	Feature Carried:	ROUTE 124	Snooper Used:	No
Town:	NEW CANAAN	Feature Intersected:	ROUTE 15	Year Built:	1937
Location:	EXIT 37 ROUTE 15	Main Design:	Frame (except frame culverts)	Year Rebuilt:	1997
Main Material:	Concrete				

**Visits**

Visit Date:	Temp:	Start Time:	End Time:
3/22/2011	45	10:00:00 AM	1:00:00 PM

**Inspectors:**

Inspector:	Task:
E. Pucillo	Inspector
J. Jones	Lead Inspector
J. Matulis	Senior Engineer

**DECK:**

As per the CONNDOT Bridge Inspection Manual, where the approach pavement is carried across a rigid concrete frame on top of fill material, there is no deck and the overall deck rating will be "P". However, the condition of any deck element present (overlay, railings, etc.) should be rated accordingly.

**Overall Rating:** P

**Rating**

<b>OVERLAY:</b>	6	The bituminous concrete overlay exhibits random longitudinal and transverse cracks with some open up to 1/2" wide. Also there are some previously sealed cracks that have reopened.  Along the west shoulder there is a half moon sawcut shape bituminous patch. This area may have been from past concrete work done on the underside. (see photo #8)
<b>DECK-STR. CONDITION:</b>	N	-
<b>CURBS:</b>	7	The west and east curb reveal measurements were 3-1/2" and 3" respectively.
<b>MEDIAN:</b>	N	-
<b>SIDEWALKS:</b>	7	The safety walks show some vertical cracks on the face.
<b>PARAPET:</b>	6	Areas of the vertical face display random vertical hairline cracks. Transverse cracks with efflorescence .
<b>RAILING:</b>	N	-
<b>PAINT:</b>	N	-

FENCE:	N	-
DRAINS:	N	-
LIGHTING STANDARD:	N	-
UTILITIES TYPE/SIZE:	N	-
CONSTR JOINTS:	N	-
EXPANSION JOINTS:	7	Both expansion joints are sawed and sealed and display sealed cracks.

59. SUPERSTRUCTURE: The overall condition rating for the superstructure is poor.

Overall Rating: 4

Rating

BEARING DEVICES:	N	-
STRINGERS:	N	-
GIRDERS:	4	Reinforced Concrete Rigid Frame: Soffit: The soffit exhibits longitudinal and transverse cracks up to 18' long x 1/16" wide with and without efflorescence, areas of map cracking with and without efflorescence, isolated hollow areas up to 3' x 5' spalls up to 5' x 3' x 2" deep with and without exposed rebar. Some spalls have been previously repaired/coated. The heaviest concentration of deterioration is adjacent to the fascias.  Fascias: Both fascias exhibit horizontal and vertical hairline cracks up to 15' long with and without efflorescence. There are areas of map cracking up to 14' x 3' with light efflorescence.  The east underdiside edge is hollow in both spans approximately 50ft.L x 2ft.w with short longitudinal cracks some with efflo.
FLOOR BEAMS:	N	-
TRUSSES-GENERAL:	N	-
TRUSSES-PORTALS:	N	-
TRUSSES-BRACING:	N	-
PAINT:	N	-
RUST:	N	-
MACHINERY MOV SPAN:	N	-
RIVETS & BOLTS:	N	-
WELDS - CRACKS:	N	-
TIMBER DECAY:	N	-
CONCRETE CRACKING:	4	See item "Girders" above.
COLLISION DAMAGE:	7	There are random scrape marks located over the southbound lanes. See Field Note Sheet 5.
MEMBER ALIGNMENT:	8	-
DEFLECT. UNDER LOAD:	N	-
VIBRATION UNDER LOAD:	N	-
STAND PIPES:	N	-
BARREL LADDERS:	N	-

ARE BARREL LADDERS OSHA COMPLIANT? NA

60. SUBSTRUCTURE: The overall condition rating for the substructure is satisfactory. Overall Rating: 6

Rating

ABUTMENTS-STEM:	6	Borth frame legs exhibit vertical hairline cracks up to 8' long. Also, there are areas of light scale up to 5' x 4' and edge spalls up to 1' x 6" x 1-1/2 " deep.
ABUTMENTS-BACKWALL:	N	-
ABUTMENTS-FOOTINGS:	N	No visible.
ABUTMENTS-SETTLEMENT:	8	-
ABUTMENTS-WINGWALLS:	6	The wingwalls exhibit random horizontal and vertical hairline cracks up to 10' long some with efflorescence, areas of mapcracking and areas of light scale.
PIERS/BENTS-CAPS:	N	-
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	N	-
PIERS/BENTS-FOOTING:	N	-
PIERS/BENTS-SETTLMT:	N	-
EROSION-SCOUR:	8	-
CONCRETE CRACK-SPALL:	6	See items "Abutments-Stem" and Abutments-Wingwalls" above.
STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION DAMAGE:	8	-
DEBRIS:	8	-

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

62. CULVERTS & - N

RETAINING WALL:  Overall Rating:

65. APPROACH CONDITION  Overall Rating:

Rating

APPROACH SLAB:	N	-
RELIEF JOINTS:	N	-
APPROACH GUIDE RAIL:	7	The metal beam railing along both sides of the approaches displays only minor scrapes and dents. The transition rub rails do not connect to the parapets. The metal beam railing extends past the approach limits.
APPROACH PAVEMENT:	7	The bituminous approach pavement exhibits random cracks up to 1/2" wide. Also there are some sealed cracks.
APPROACH EMBANKMENT:	7	Southeast embankment has(2) trenches from roadway runoff exposing the lower end of the H-posts

TRAFFIC SAFETY FEATURES

Rating

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

66. LOAD POSTING

- Posted Loading -

SINGLE UNIT (TONS):	Last Inspection: - Current: -	-
---------------------	----------------------------------	---

<b>SEMI TRAILER (TONS):</b>	Last Inspection: - Current: -	-
<b>4 AXLE (TONS):</b>	Last Inspection: - Current: -	-
<b>3S2 (TONS):</b>	Last Inspection: - Current: -	-
<b>ADVANCE WARNING (Y/N):</b>	-	-
<b>LEGIBILITY:</b>	-	-
<b>VISIBILITY/LOCATION:</b>	-	-

**67. MISCELLANEOUS**

**Rating**

<b>MIN. VERT. UNDERCLEARANCE:</b>	Last Inspection: 13' 3" Current: -' -"	The previous clearance of 12'-3" was not found/verified at the time of inspection. See Field Note Sheet 2.
<b>POSTED CLR. UNDER BRIDGE:</b>	Last Inspection: -' -" Current: -' -"	-
<b>POSTED CLR. ON BRIDGE:</b>	Last Inspection: -' -" Current: -' -"	-
<b>ADVANCED WARNING (YES/NO):</b>	No	-
<b>SPEED LIMIT (IF ANY):</b>	Last Inspection: - Current: -	-
<b>CHARACTER OF TRAFIC:</b>		-

**ADDITIONAL NOTES:**

-
---

**ADDITIONAL COMMENTS:**

The bridge identification number is clear and legible. The bridge is logged from south to north which is consistent with the previous inspection report and bridge plans. A 35' bucket truck was used for this inspection.

Inspectors' Signatures:

1)

Date: 04/05/2011





BRIDGE NO: 00712

DATE: 3/22/2011

CREW: Team 6

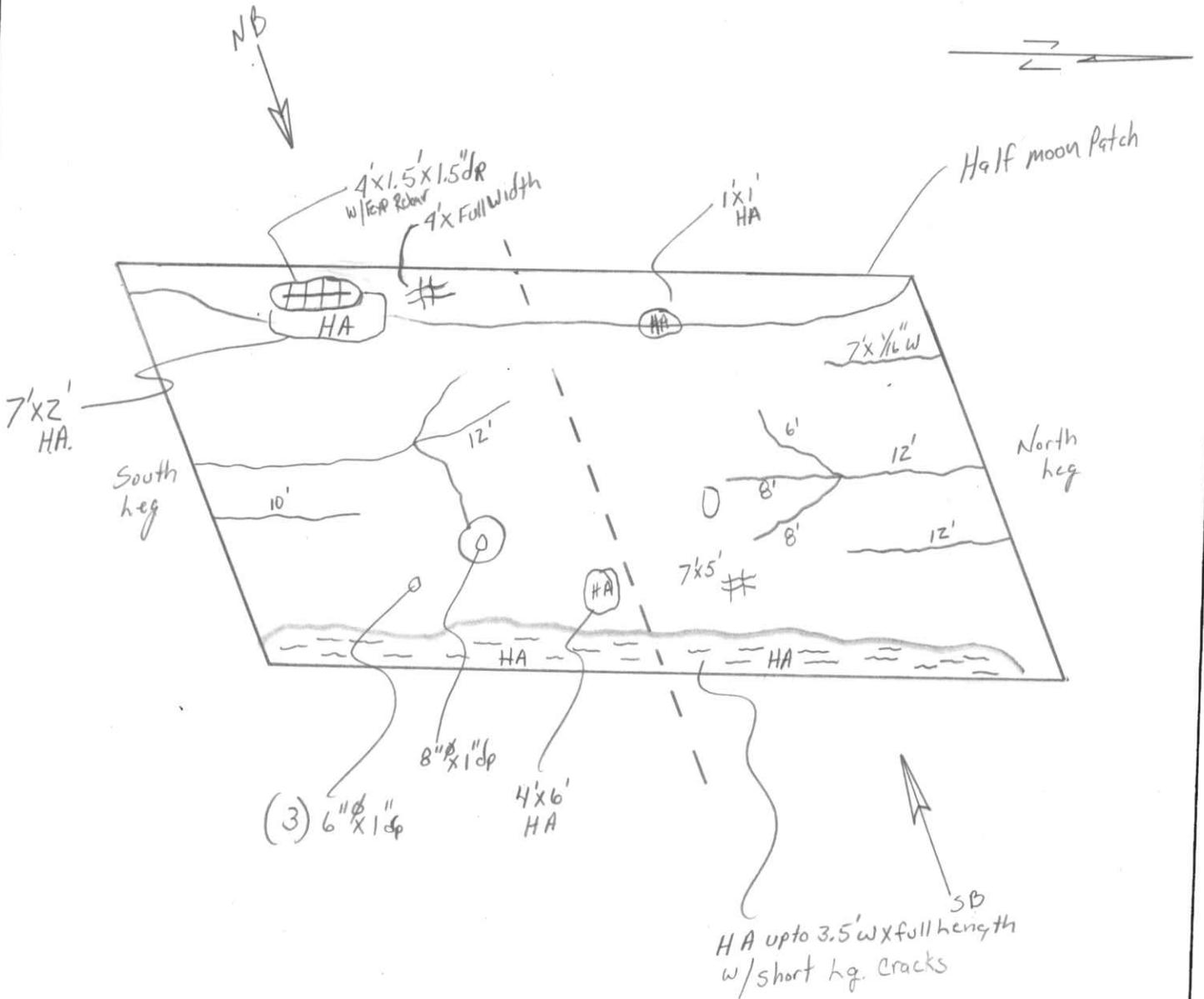
SHEET 11 of 13

Field Original

Transcribed By: \_\_\_\_\_

DESCRIPTION: *Uside OF DECK*

*Route 124 of Rte 15, New Canaan*



LEGEND

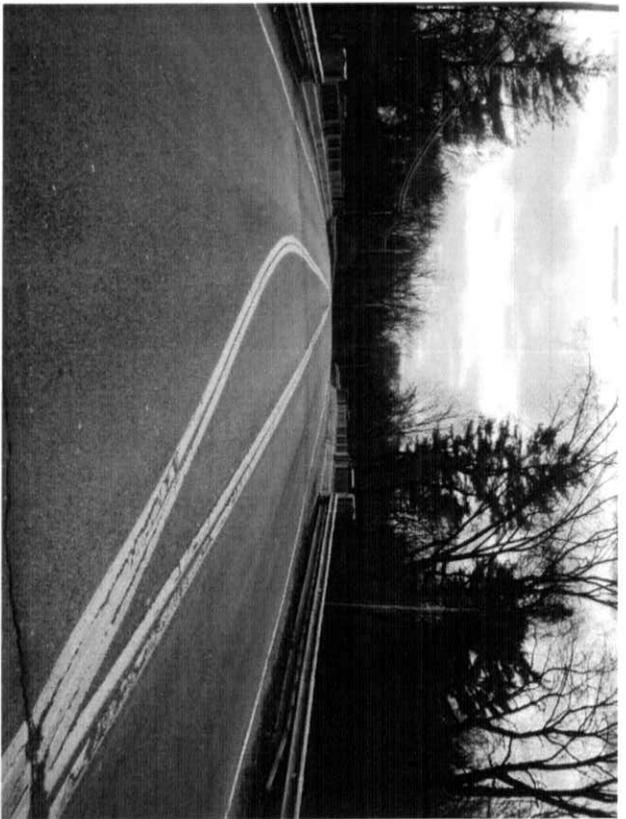
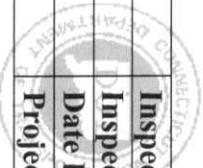
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVV, MED OR LT)
- WITH EFFLORESCENCE

REV. NO:	DATE:	COMPANY:	CREW:
△			
△			
△			
△			

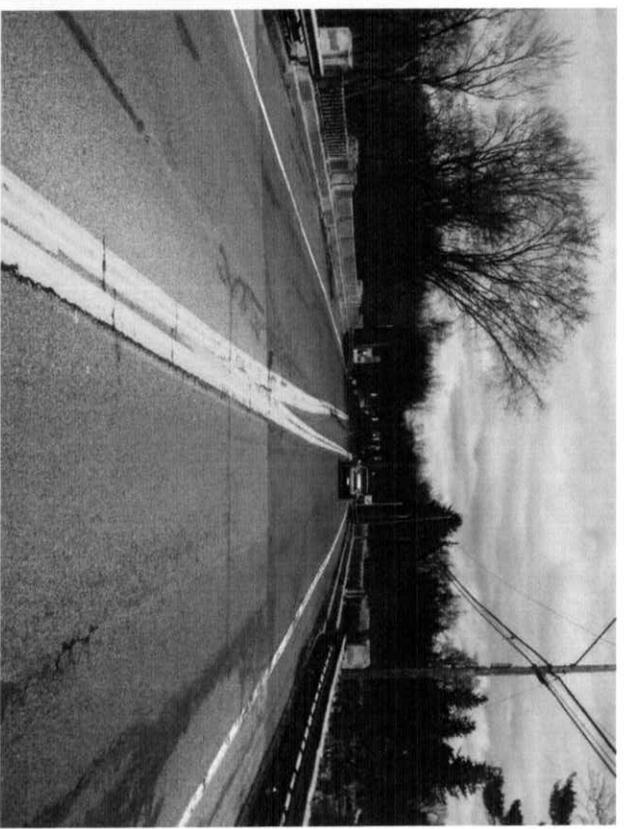




Bridge No.	00712	Inspected by:	JAMES JONES
Town:	New Canaan	Inspected by:	ED PUCILLO
Feature Carried:	Route 124	Date Inspected:	03/22/2011
Feature Crossed:	Route 15	Project No.:	

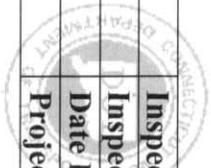


**Photo #1 :**  
**Looking south over structure**



**Photo #2 :**  
**Looking north over structure**

<b>Bridge No.:</b>	00712	<b>Inspected by:</b>	JAMES JONES
<b>Town:</b>	New Canaan	<b>Inspected by:</b>	ED PUCILLO
<b>Feature Carried:</b>	Route 124	<b>Date Inspected:</b>	03/22/2011
<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	

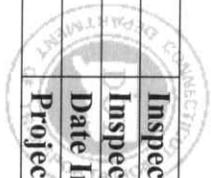


**Photo #3 :**  
General view wearing

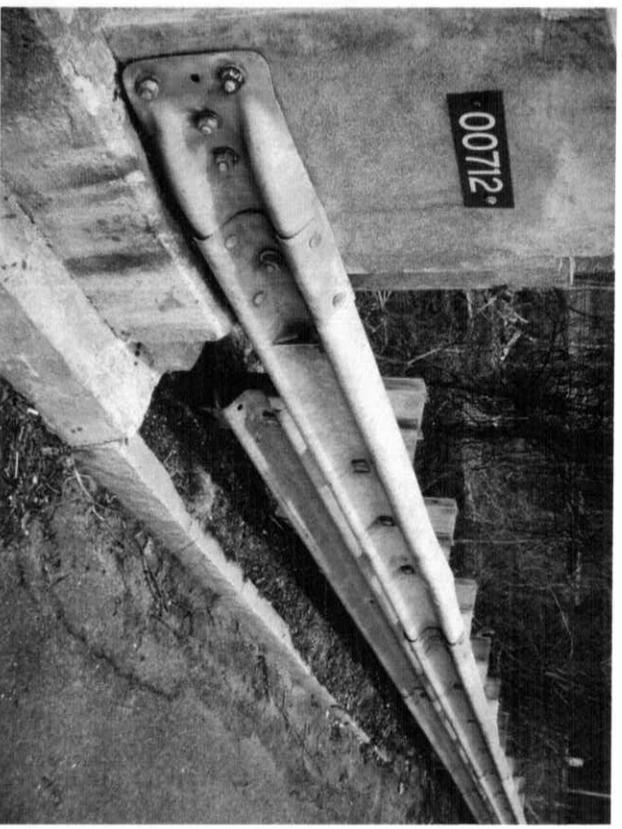


**Photo #4 :**  
Kerf cut joint over north leg

Bridge No.	00712	Inspected by:	JAMES JONES
Town:	New Canaan	Inspected by:	ED PUCILLO
Feature Carried:	Route 124	Date Inspected:	03/22/2011
Feature Crossed:	Route 15	Project No.:	

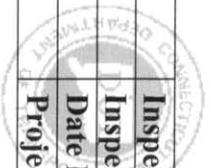


**Photo #5 :**  
2"x10" area of punky concrete east parapet



**Photo #6 :**  
M.B.R. transition to bridge at northwest approach

Bridge No.	00712	Inspected by:	JAMES JONES
Town:	New Canaan	Inspected by:	ED PUCILLO
Feature Carried:	Route 124	Date Inspected:	03/22/2011
Feature Crossed:	Route 15	Project No.:	



**Photo #7**

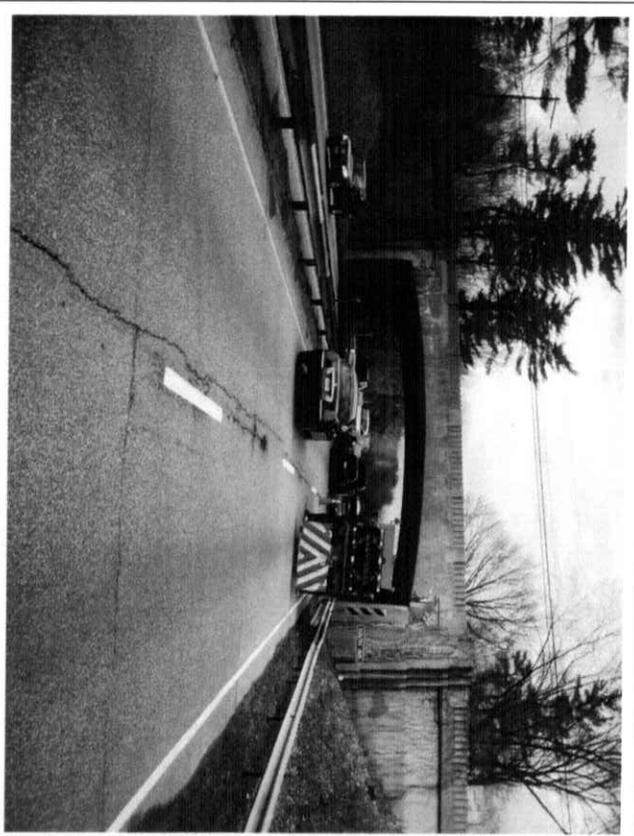
Damp area along east curb line



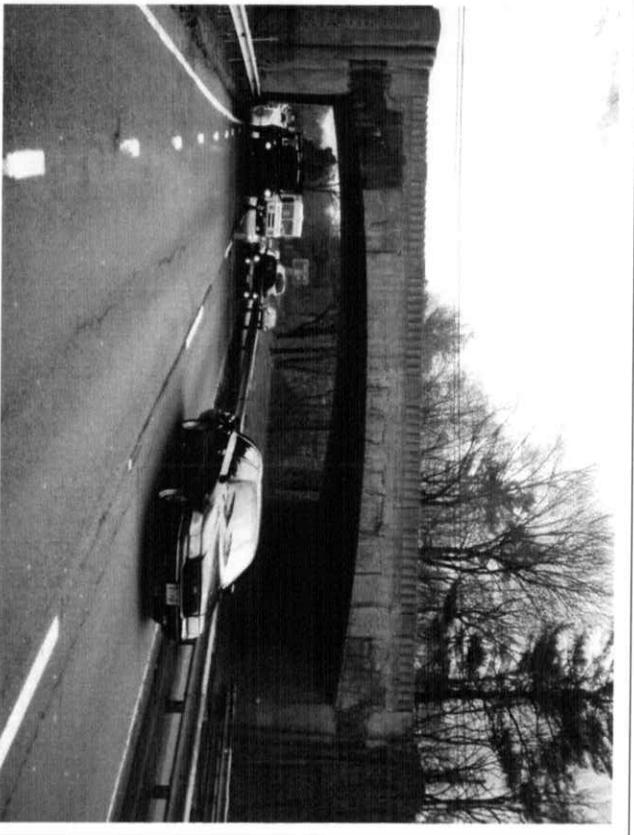
**Photo #8**

Saw cut not sealed mirrors patch underside

<b>Bridge No.:</b>	00712	<b>Inspected by:</b>	JAMES JONES
<b>Town:</b>	New Canaan	<b>Inspected by:</b>	ED PUCILLO
<b>Feature Carried:</b>	Route 124	<b>Date Inspected:</b>	03/22/2011
<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	

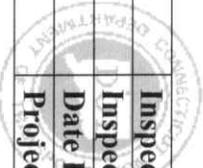


**Photo # 9**  
East elevation

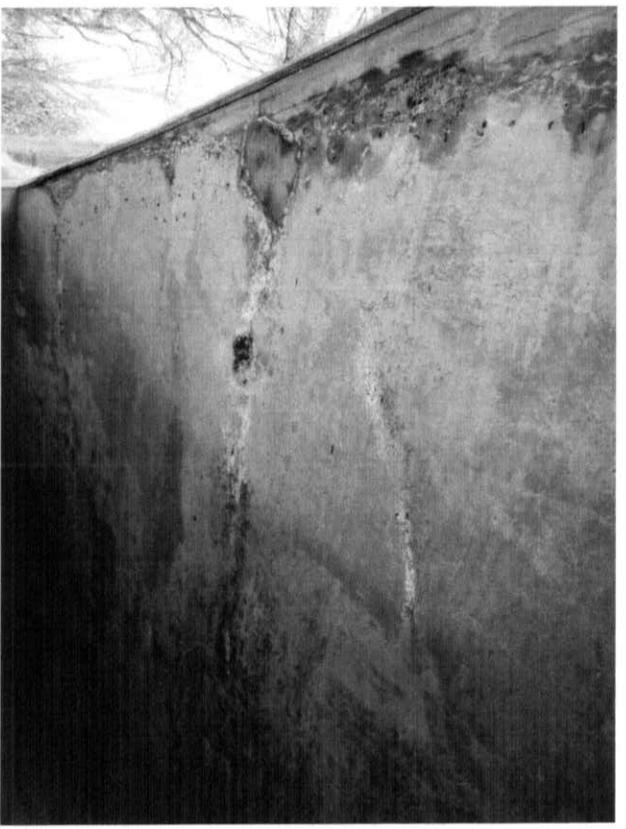


**Photo # 10**  
West elevation

<b>Bridge No.</b>	00712	<b>Inspected by:</b>	JAMES JONES
<b>Town:</b>	New Canaan	<b>Inspected by:</b>	ED PUCILLO
<b>Feature Carried:</b>	Route 124	<b>Date Inspected:</b>	03/22/2011
<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	

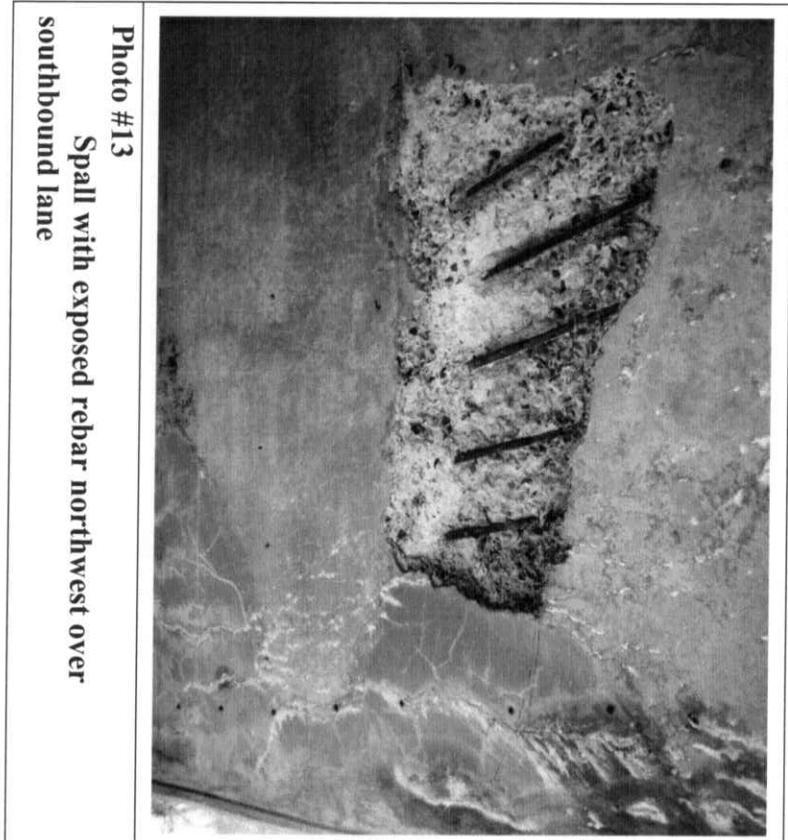
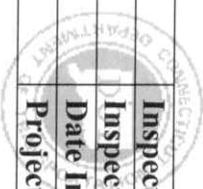


**Photo #11**  
**General condition of leg #2**

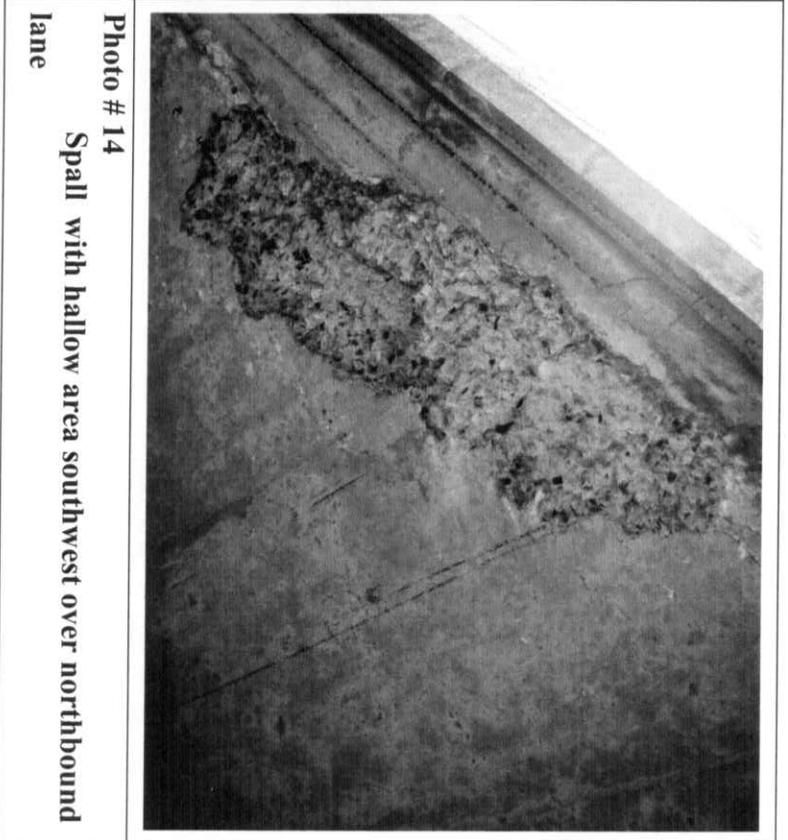


**Photo # 12**  
**General view of underside**

<b>Bridge No.</b>	00712	<b>Inspected by:</b>	JAMES JONES
<b>Town:</b>	New Canaan	<b>Inspected by:</b>	ED PUCILLO
<b>Feature Carried:</b>	Route 124	<b>Date Inspected:</b>	03/22/2011
<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	

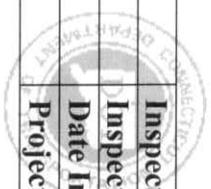


**Photo #13**  
**Spall with exposed rebar northwest over southbound lane**



**Photo # 14**  
**Spall with hallow area southwest over northbound lane**

Bridge No.	00712	Inspected by:	JAMES JONES
Town:	New Canaan	Inspected by:	ED PUCILLO
Feature Carried:	Route 124	Date Inspected:	03/22/2011
Feature Crossed:	Route 15	Project No.:	



**Photo # 15**  
3' wide hallow area east fascia over southbound lanes



**Photo # 16**  
Transverse cracks some with efflo. and some spalls have been repaired west fascia