BRIDGE SAFETY INSPECTION
STATE PROJECT NO. 170-3013

ConnDOT BRIDGE NO. 00700

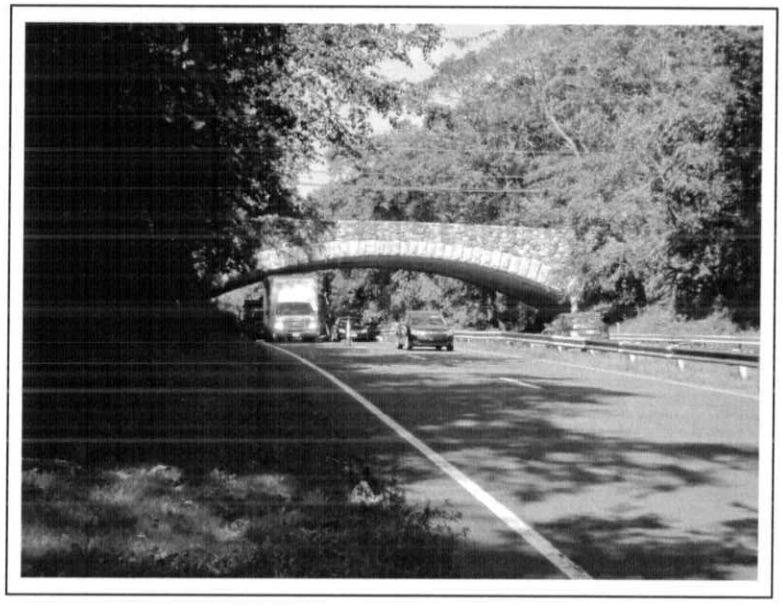
GUINEA ROAD
OVER
ROUTE 15 (MERRITT PARKWAY)
STAMFORD, CT

RECEIVED
SEP 29 2011
CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

Bridge Type: Reinforced Concrete Arch

Inspection Type: Routine

Inspection Date: August 1, 2011



Prepared By
TranSystems Corporation
76 Westbury Park Road
Watertown, CT 06795

STATE OF CONNECTICUT
J. BRIAN McGOVERN
No. 15522
LICENSED
PROFESSIONAL ENGINEER

TranSystems

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INSPECTION REPORT TRANSMITTAL FORM
Form BRI-27, Rev. 9/97

Structure No. 00700 Town Stamford

Inspectors Maxim Arefyev (TranSystems), Ricky Mears (TranSystems) Date 08/01/11

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EXECUTIVE SUMMARY
08/01/10

Bridge No. 00700 carries Guinea Road over Route 15 in Stamford, Connecticut. This 80-foot long reinforced concrete arch has a 30-foot curb to curb measurement and was constructed in 1937. According to information on file with Connecticut Department of Transportation, the Inventory rating for an AASHTO HS20 loading is 159 tons.

The bridge was found to be in serious condition this routine inspection (Overall Rating = 3). The deficiencies found on the bridge and the recommendations for repairs are as follows:

Deck (Rating – "N")

1. The bituminous concrete overlay exhibits random longitudinal and transverse cracks open up to 1/8" throughout; some sealed. There are areas of uneven breaking up bituminous patches up to 25'L x 5'W with depressions up to 1"D (south end of arch) and potholes up to 6" diameter x 2"D. There is up to 1/4" separation between the overlay and the curb at both curb-lines with vegetation growth along the curb to roadway interface. Consideration should be given to replacing the wearing surface over the arch (80 TONS).
2. Concrete curbs/parapet rail bases along both sides of the arch exhibit vertical hairline cracks up to full height, light to moderate scale at random locations up to 2'L x 3"W x 1/2"D and random spalls up to 1'L x 5"W x 3"D. Patch spalls (< 1 CY).
3. Stone masonry parapets along both sides of the arch exhibit hairline cracks in the mortar joints with up to 25% loss of mortar between stones and several cracked stones. Replace missing mortar in joints (< 1 CY).

Superstructure (Rating – 3 "Serious")

1. The intrados of the reinforced concrete arch exhibits transverse and longitudinal cracking open up to 50'L x 0.050"W, some with efflorescence. There are numerous areas of hairline map cracking with and with efflorescence. Seal cracks (250 LF)
2. There are hollow areas up to 7'W x near full span length (near spandrel wall and arch ring interface) at the underside of arch; two of which pose a threat to vehicular traffic over both northbound lanes. This deficiency was included as a Priority "B" BMM and is included with this report.
3. The underside of arch has spalls up to 5'-6"L x 3'W x 3.5"D with exposed heavily rusted rebar (up to 70% loss on random bars, 1/2" remaining). The concrete in the spalled areas adjacent to the spandrel walls is poorly consolidated (areas of missing concrete) with a sand-like consistency due to water/salt infiltration and layers of efflorescence. The water/salt infiltration is prevalent due to the condition of the wearing surface, and up to 1/4" separation of the overlay at the curb-lines. Clean and coat exposed rebar (50 LF), and patch spalls (< 2 CY). Also see deck item #1 above to inhibit further deterioration.
4. The spandrel walls exhibit areas of heavy efflorescence and stalactites between the ring and the arch intrados throughout. Two, approximately 2'L x 6"W x 2"D sections of the masonry spandrel wall were loose at the interface with the arch ring and were removed at the time of inspection. No recommended repairs at this time.

Substructure (Rating – 6 "Satisfactory")

1. The stone masonry wingwalls exhibit areas of minor cracking with random efflorescence along the mortar joints. No recommended repairs at this time.
2. There are areas of heavy vegetation growth covering up to 50% of the wingwall surfaces. The southeast wingwall has a full height vertical crack open up to 1/8" at the mortar joint of the spandrel wall. Seal crack in the mortar joint (15 LF).

Approach Condition (Rating – 6 "Satisfactory")

1. The bituminous concrete approach pavements exhibit longitudinal and transverse cracks open up to 1/8"W at random locations with moderate raveling. The south approach pavement has a FW x 15'L map crack area with cracks open to 1/8"W. Seal cracks (150 LF).

Connecticut Department of Transportation

Bridge Inspection Report BRI-18

Bridge #: 00700 **Inspection Date: 08/01/2011**

Inspection Type:	Routine	**Previous Inspection Date:**	6/9/2010	**Snooper Required:**	No
Inspection Performed By:	TranSystems	**Feature Carried:**	GUINEA ROAD	**Snooper Used:**	No
Town:	STAMFORD	**Feature Intersected:**	ROUTE 15	**Year Built:**	1937
Location:	1.4 MI S OF ROUTE 104	**Main Design:**	Arch - Deck	**Year Rebuilt:**	-
Main Material:	Concrete				

Visits

Visit Date:	Temp:	Start Time:	End Time:
8/1/2011	75	10:45:00 AM	12:30:00 PM
8/31/2011	80	8:30:00 AM	3:00:00 PM
9/1/2011	80	8:30:00 AM	2:30:00 PM

Inspectors:

Inspector:	Task:
M. Arefyev	Lead Inspector
R. Mears	Inspector

DECK: - **Overall Rating:** P

	Rating	
OVERLAY:	5	The bituminous concrete overlay exhibits random longitudinal and transverse cracks open up to 1/8" throughout; some sealed. There are areas of uneven breaking up bituminous patches up to 25'L x 5'W, with depressions up to 1"D (south end of arch) and potholes up to 6" diameter x 2"D. There is heavy debris buildup in shoulders at all (4) corners and up to 1/4" separation between the overlay and the curb at both curb-lines with vegetation growth along the curb to roadway interface. See photos 8 – 10 and field sheet 4.
DECK-STR. CONDITION:	N	-
CURBS:	6	Concrete curbs/parapet rail bases along both sides of the arch exhibit vertical hairline cracks up to full height, light to moderate scale at random locations up to 2'L x 3"W x 1/2"D and random spalls up to 1'L x 5"W x 3"D. See photo 10 and field sheet 4. Curb reveals range from 5" to 7" along both sides of the bridge. See photos 10-11 and field sheet 4.
MEDIAN:	N	-
SIDEWALKS:	N	-
PARAPET:	6	The stone masonry parapets along both sides of the arch exhibit hairline cracks in the mortar joints with up to 25% loss of mortar between stones and several cracked stones. Random locations between stones exhibit moderate vegetation growth. See photo 11 and field sheet 4.

RAILING:	N	-
PAINT:	N	-
FENCE:	N	-
DRAINS:	N	-
LIGHTING STANDARD:	N	-
UTILITIES TYPE/SIZE:	N	-
CONSTR JOINTS:	N	-
EXPANSION JOINTS:	N	Arch ends are paved over.

59. SUPERSTRUCTURE: -

Overall Rating: 3

	Rating	
BEARING DEVICES:	N	-
STRINGERS:	N	-
GIRDERS:	3	The intrados of the reinforced concrete arch exhibits transverse and longitudinal cracking up to approximately 50'L x 0.050" open, some with efflorescence. There are numerous areas of hairline map cracking with and with efflorescence, hollow areas up to 7'W x near full span length (near spandrel wall and arch ring interface), spalls up to 5'-6"L x 3'W x 3.5"D with exposed heavily rusted rebar (up to 70% loss on random bars, 1/2" remaining) and areas of moss growth. The underside of the arch exhibits light to moderate scaling throughout with evidence of leakage and areas of vehicular scrape marks over the slow speed lanes of both the north and south bound lanes. See photos 12-14 and field sheet 5. Additionally, there are three hollow areas up to 5'L x 2'W over the northbound lanes and median that pose a threat to vehicular traffic (Priority "B" BMM #11-458 was issued on 9/1/11). See photos 15-18 and field sheet 5. The concrete in the spalled areas adjacent to the spandrel walls is poorly consolidated (areas of missing concrete) with a sand-like consistency due to water infiltration and layers of efflorescence. The water/salt infiltration is prevalent due to the fair condition of the wearing surface, and up to 1/4" separation of the overlay at the curb-lines. See photos 19-20 and field sheet 5. Total underside deterioration is approximately 59%. Field sheet 6. The spandrel walls exhibit areas of heavy efflorescence and stalactites between the ring and the arch intrados throughout.Two, approximately 2'L x 6"W x 2"D sections of the masonry spandrel wall were loose at the interface with the arch ring and were removed at the time of inspection. There are minor cracks in the mortared joints and voids up to 2"Ø x 3"D. See photos 15-19 and field sheets 5 & 7.
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	3	See item "Girders" above.

CRACKING:		
COLLISION DAMAGE:	6	There are numerous minor scrapes on the intrados of the arch.
MEMBER ALIGNMENT:	8	-
DEFLECT. UNDER LOAD:	N	(N)-Normal (E)-Excessive
VIBRATION UNDER LOAD:	N	(N)-Normal (E)-Excessive
STAND PIPES:	N	-
BARREL LADDERS:	N	-

ARE BARREL LADDERS OSHA COMPLIANT? N/A

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60. SUBSTRUCTURE: - **Overall Rating:** 6

	Rating	
ABUTMENTS-STEM:	N	The concrete stems are buried and not visible. See photo 21.
ABUTMENTS-BACKWALL:	N	-
ABUTMENTS-FOOTINGS:	N	The footings are not visible.
ABUTMENTS-SETTLEMENT:	8	-
ABUTMENTS-WINGWALLS:	6	The stone masonry wingwalls exhibit areas of minor cracking with random efflorescence along the mortar joints. There are areas of heavy vegetation growth covering up to 50% of the wingwall surfaces. The southeast wingwall has a full height vertical crack open up to 1/8" at the mortar joint of the spandrel wall. See photos 22-23 and field sheet 7.
PIERS/BENTS-CAPS:	N	-
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	N	-
PIERS/BENTS-FOOTING:	N	-
PIERS/BENTS-SETTLMT:	N	-
EROSION-SCOUR:	8	Erosion rated : 8 Scour Rated: N
CONCRETE CRACK-SPALL:	6	See above item "Abutments-Wingwalls".
STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION		

DAMAGE:	8	-
DEBRIS:	8	-

61. CHANNEL & CHANNEL PROTECTION: -

Overall Rating: N

62. CULVERTS & RETAINING WALL: -

Overall Rating: N

65. APPROACH CONDITION -

Overall Rating: 6

	Rating	
APPROACH SLAB:	N	-
RELIEF JOINTS:	N	-
APPROACH GUIDE RAIL:	N	-
APPROACH PAVEMENT:	6	The bituminous concrete approach pavement exhibits longitudinal and transverse cracks open up to 1/8"W at random locations with moderate raveling. The south approach pavement has a FW x 15'L mapcrack area with cracks open to 1/8"W. See photos 24-25 and field sheet 4.
APPROACH EMBANKMENT:	8	-

TRAFFIC SAFETY FEATURES

	Rating	
BRIDGE RAILINGS:	Last Inspection: 0 Current: 0	Stone masonry parapets.
TRANSITIONS:	Last Inspection: 0 Current: 0	No approach guiderails.
APPROACH GUARDRAILS:	Last Inspection: 0 Current: 0	No approach guiderails.

APPR. GUARDRAIL ENDS:	Last Inspection: 0 Current: 0	No approach guiderails.

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):	-	-
LEGIBILITY:	-	-
VISIBILITY/LOCATION:	-	-

67. MISCELLANEOUS

	Rating	
MIN. VERT. UNDERCLEARANCE:	Last Inspection: 11' 6" Current: 10' 8"	The minimum vertical over Route 15 northbound is 10'-8" and 11'-2" for southbound.
POSTED CLR. UNDER BRIDGE:	Last Inspection: 10' 5" Current: 10' 5"	Route 15 northbound is posted at 10'-5" approximately 100 yards before the bridge. Route 15 southbound is posted at 10'-11" approximately 100 yards before the bridge, previously posted at 11'-5". See photo 26.
POSTED CLR. ON BRIDGE:	Last Inspection: -' -" Current: -' -"	-
ADVANCED WARNING (YES/NO):	No	-
SPEED LIMIT (IF ANY):	Last Inspection: - Current: -	-
CHARACTER OF		Light volume and mostly passengers cars on Guinea Road.

TRAFIC:

ADDITIONAL NOTES: The bridge is logged from south to north.

ADDITIONAL COMMENTS: There is a BMM associated with this bridge report. Additionally, there were areas of hollow concrete up to 7'W x near full span length at the underside of the arch over the travel lanes that were called in (Priority "B" BMM# 11-458 was issued on 9/1/11).

RECEIVED
SEP 29 2011
CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

Inspectors' Signatures:

1) Maxim Arefyev Date: 9/22/11

2) Date: 09/22/11

3) Date: ----/----/-----

4) Date: ----/----/-----

P.E. Signature: Date: 9/22/11

P.E. #: 15522 Date: ----/----/-----

Reviewed by: conndot Date: 9/30/11

① NOTE: The subject bridge now is rated 3 and it is on List 21 for project.

② NOTE, on 9/30/11 I checked on BMM # 11-458 (priority B issued 9/1/11) and Mary Mears informed me that the work is not done yet. I informed her that this area is over ET-15 and need to be repaired ASAP. D.T

This bridge is on project 135-304 for repair.

③ A copy of this inspection report was given to Mr Kevin Blasi (project # 135-304) project engineer to be share with contractor and construction engineer.

D.T
9/28/11

TranSystems	JOB NO. P-712100021	BRIDGE NO. 00700
	DATE: SEE BELOW	SHEET 1
TIME AT SITE	CREW: SEE BELOW	

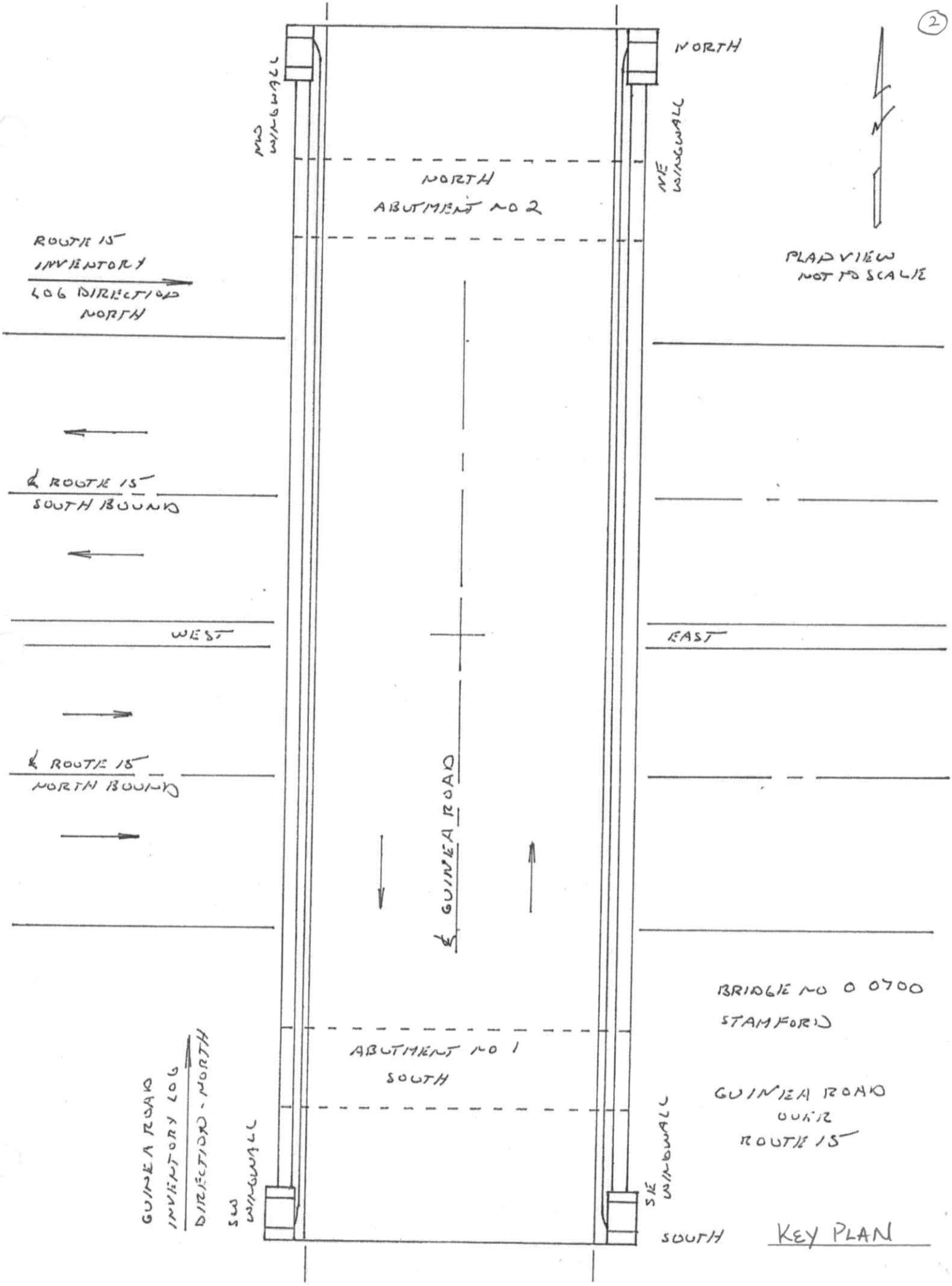
DATE: 08/1/11	CREW: KHI / RDM	
	EQUIPMENT USED: Van	
TIME: 10:45AM - 12:30PM	POLICE: (NAME/TIME) —	FLAGMAN: (NAME/TIME) —
WORK DONE: TOD INSP DONE (SHOULDER CLOSURE ON GUINEA ROAD).		

DATE: 08/31/11	CREW: MVA, RDM	
	EQUIPMENT USED: Cube, McClain 30' Vanlift (8:30 - 15:00)	
	McClain Crash (9:00 - 15:00)	
TIME: 8:30 - 15:00	POLICE: (NAME/TIME) No Show	FLAGMAN: (NAME/TIME) —
WORK DONE: N. half + sub, LL + RL closure on SB		

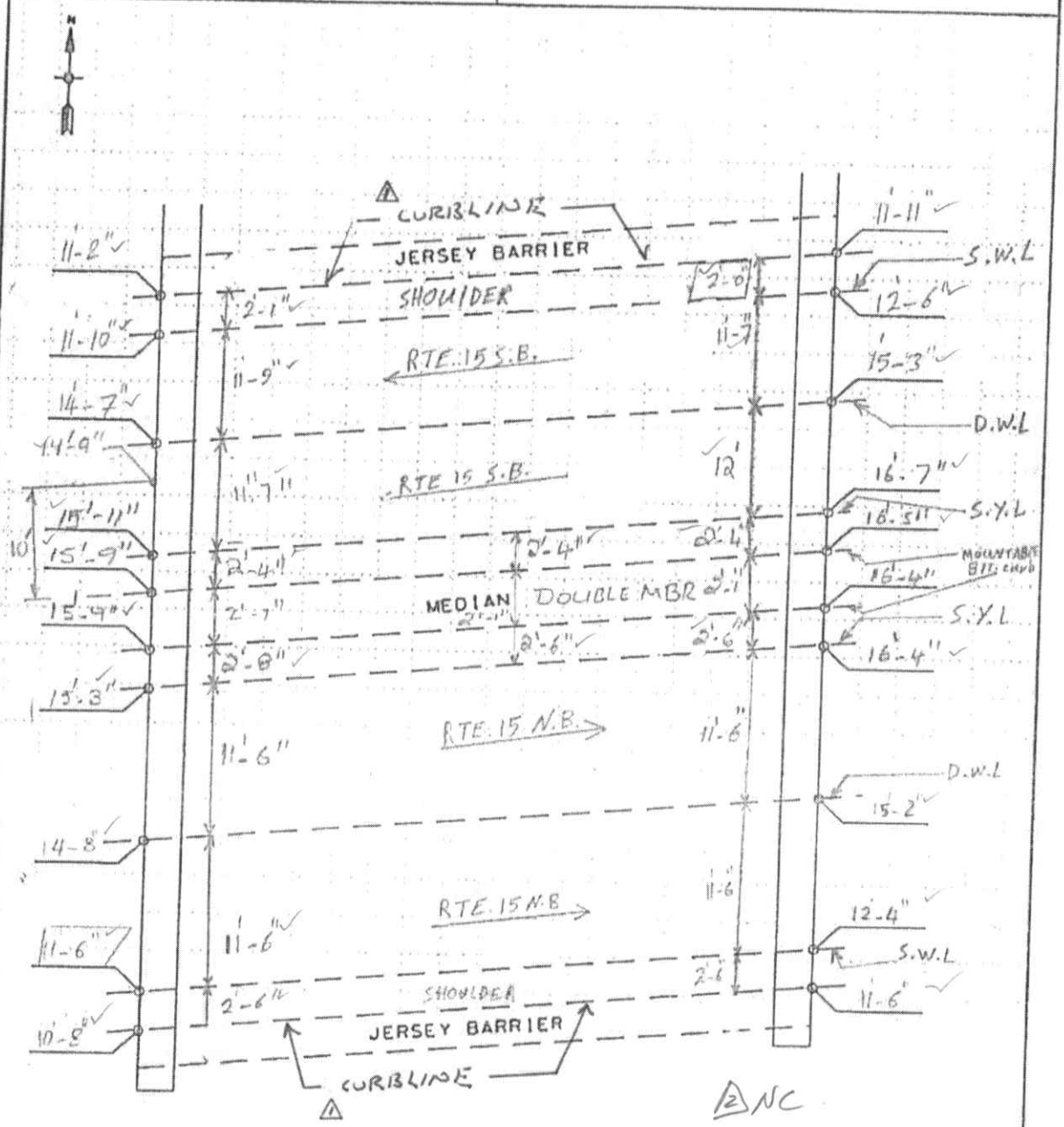
DATE: 9/1/11	CREW: MVA, RDM	
	EQUIPMENT USED: Cube, 30' Vanlift (McClain 8:30 - 14:30)	
TIME: 8:30 - 14:30	POLICE: Clowback (1430) (NAME/TIME) 8:30 - 14:30	FLAGMAN: (NAME/TIME) —
WORK DONE: S. half + sub, LL & RL closure on NB		
Completed		

DATE:	CREW:	
	EQUIPMENT USED:	
TIME:	POLICE: (NAME/TIME)	FLAGMAN: (NAME/TIME)
WORK DONE:		

DATE:	CREW:	
	EQUIPMENT USED:	
TIME:	POLICE: (NAME/TIME)	FLAGMAN: (NAME/TIME)
WORK DONE:		


NORTH
NW WINGWALL
NE WINGWALL
NORTH ABUTMENT NO 2
PLAN VIEW NOT TO SCALE
ROUTE 15 INVENTORY LOG DIRECTION NORTH
℄ ROUTE 15 SOUTH BOUND
WEST
EAST
℄ ROUTE 15 NORTH BOUND
℄ GUINEA ROAD
BRIDGE NO 0 0700 STAMFORD
ABUTMENT NO 1 SOUTH
GUINEA ROAD OVER ROUTE 15
GUINEA ROAD INVENTORY LOG DIRECTION - NORTH
SW WINGWALL
SE WINGWALL
SOUTH
KEY PLAN

AI Engineers, Inc.	JOB NO. 170-2729	BRIDGE NO: 00700
	DATE: 5/14/08	SHEET A 3 OF
FIELD NOTES	CREW: ZRI - BNS - KS	
DESCRIPTION: CLEARANCE DIAGRAM		



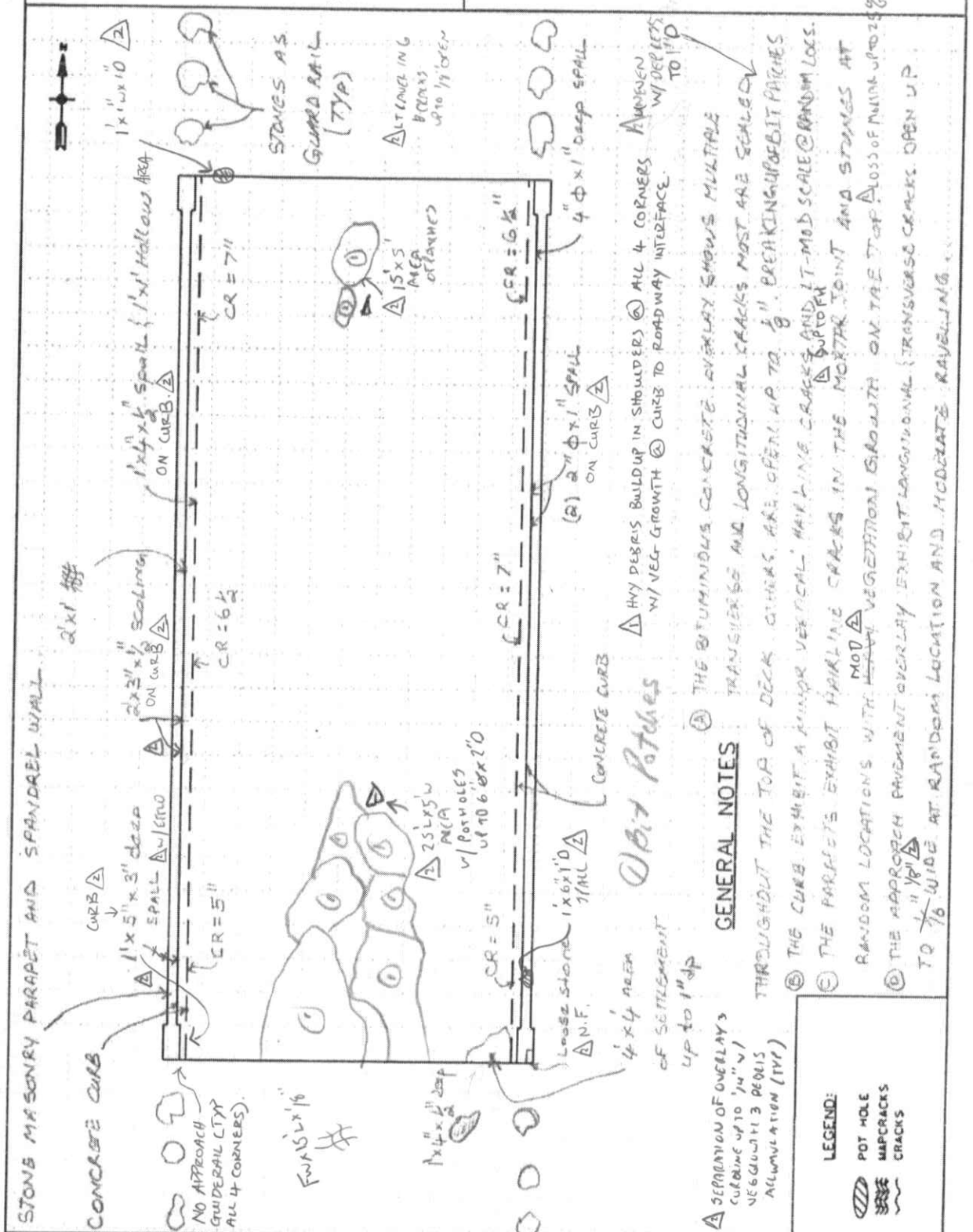
GENERAL NOTES

* Measurements double checked.

- THERE IS 10'-05" POSTED CLEARANCE SIGN AT ROUTE 15 NORTHBOUND BEFORE THE BRIDGE.
- " " 11'-~~05~~ 10'-11" " " " " " " SOUTH BOUND " " " .

Revision	Date	Crew	Company	Revision	Date	Crew	Company
1	6.9.10	TM NO 8	CTDOT	3			
2	9/1/11	ZOM MVA	TSC	4			

AI Engineers, Inc.	JOB NO. 170-2729	BRIDGE NO: 00700
	DATE: 05/14/08	SHEET ~~1 OF 1~~ △4
FIELD NOTES	CREW: KS. BNS. ZRI	
DESCRIPTION: TOP OF DECK		



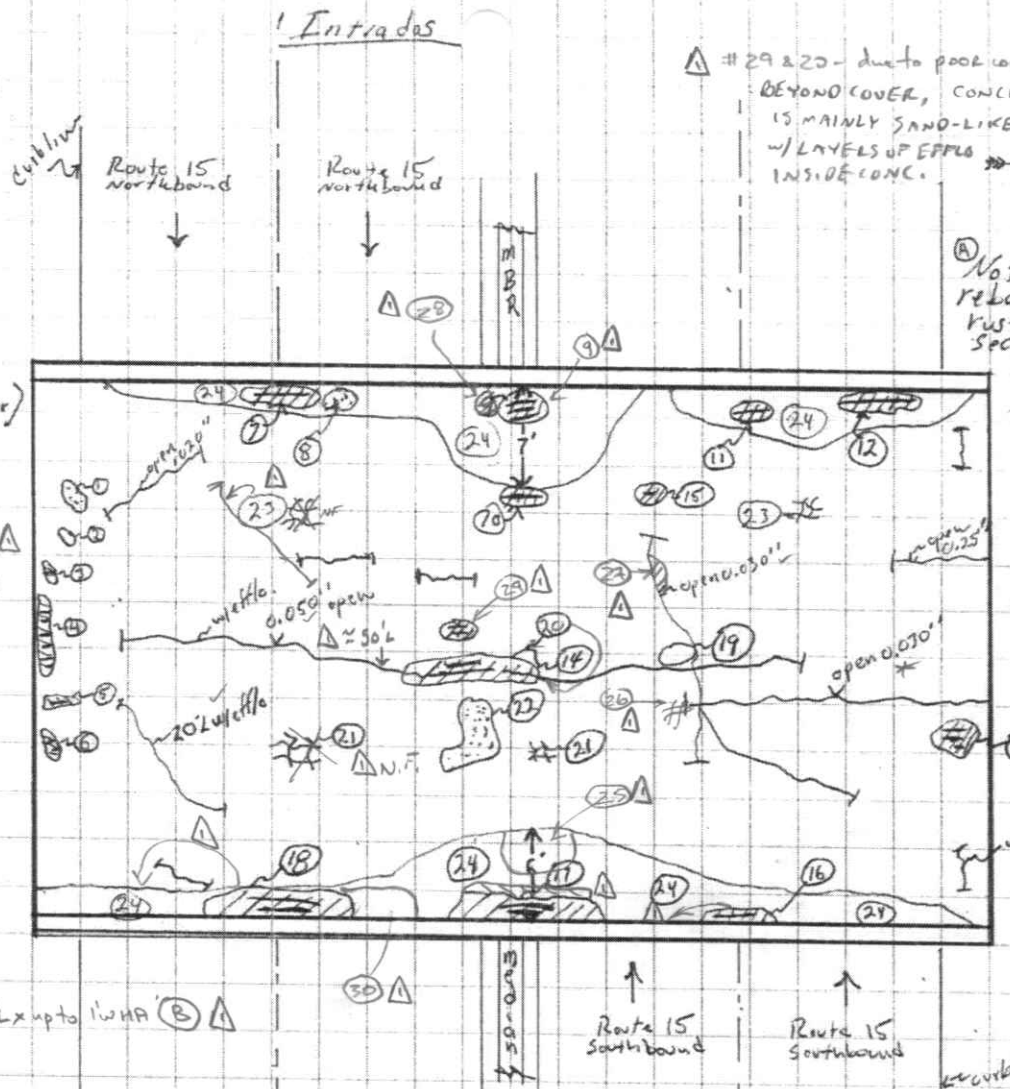
Revision	Date	Crew	Company	Revision	Date	Crew	Company
△1	6-9-10	See △1		△3			
△2	8/1/1	RDM, KHI	(TSC)	△4			

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

Notes:

1: 3'x3' MSC
2: 1'Ø HA
3: 1'Ø w/rusted rebars x2"dp △1
4: 6'x30"x3"D w exp. rebars. ½" remain (rebar)
5: 1'x2'x2.5"D w/exp. rebars
6: 24"x30"x2"D w/exp. rebars
7: 6'x2'x4"D w/exp. rebars + efflo + HA's △1
8: 16"x30" MSC w/ active leakage. A-1
9: 3'Ø w/exp. rebars x 3"dp △1
10: 1'Ø w/exp. rebars x1.5"dp △1
11: 40"x24"x3"D w/exp. rebars
12: 66"x36"x3.5"D w/exp. rebars
13: 53"x32"x3"D w/exp. rebars
14: 8'x27"x3"D w/exp. rebars
15: 1'Ø x2"D w/exp. rebars
16: 64"x22"x3"D w/exp. rebars
17: 9'x33"x8"D w/exp. rebars + 9'L x up to 1'w HA (B) △1
18: 9'x22"x3"D w/exp. rebars
19: 1'Ø HA
20: ~~1.5 cm HA~~ 6"Ø (monitor) x2ea △1
NF 21: 6'w x 16'L hairline Map w/wo efflo.
22: 9SF. MSC
23: ~~Hairline Map cracking 8'w x 15'L~~ 1 HLC
24: Hollow concrete w/ Braided intermittent longitudinal cracking w/efflo. Adjacent to Arch ring stones typically full span length. Total +/- 480 SF. (severe efflo + active leak) △1

△1 #29 & 20 - due to poor cons. conc. BEYOND COVER, CONCRETE IS MAINLY SAND-LIKE w/ LAYERS OF EFFLO INSIDE CONC.



(A) Note: All exposed rebars exhibit heavy rust with up to 70% section loss. (½" remain)

(B) Numerous scrape marks located NB & SB over the slow speed lanes.

A-2

(C) Typically transverse & longitudinal cracks are open 0.020" unless marked otherwise.

(D) Start & stop points of cracks have been marked w/ Keel.

(E) +/- 1380 SF of map/longitudinal cracking

△1 (25) 4'x4' HA w/ cracks w/ efflo (monitor)
△1 (26) 3'x5'w # w/o *
△1 (27) 7'L x 28"w x 1"dp
△1 (28) 1.5'x2' HA w/efflo (monitor)
△1 (29) 28"L x 22"w x 3" dp w/ 2 bar
△1 (30) 5'L x 2'w HA over both lanes

△1 SCATTERED AREAS OF MOSS GROWTH

△1 - MVA, RDM (TSC) - 8/31/11

NTS

Printed on Recycled or Recovered Paper

△1 8/31/11 MVA, RDM (TSC)
DATE PREPARED
6-9-2010
DATE CHECKED

PREPARED BY
Team 8
CHECKED BY

State of Connecticut
Department of Transportation
Bureau of Engineering & Highway Operations
DES-003 REV 1-93
(302-06-0225)
COMPUTATION SHEET

ORGANIZATION UNIT NO.

WORK ORDER NO.

SHEET NO. △1 5

SUBJECT:
NR # 00700 Guinea Road - on Route 15, Stamford

Bridge Number: 00700 Date: 8/1/2011 Prepared by: RDM Checked by: MVA

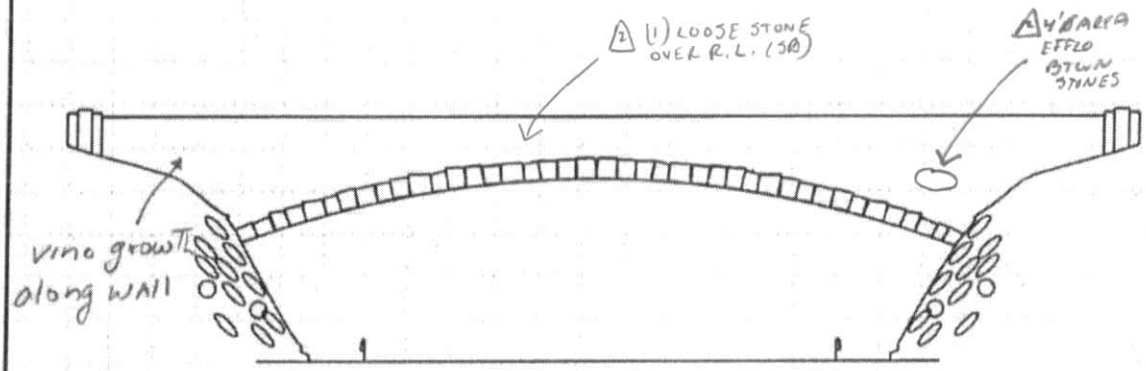
CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

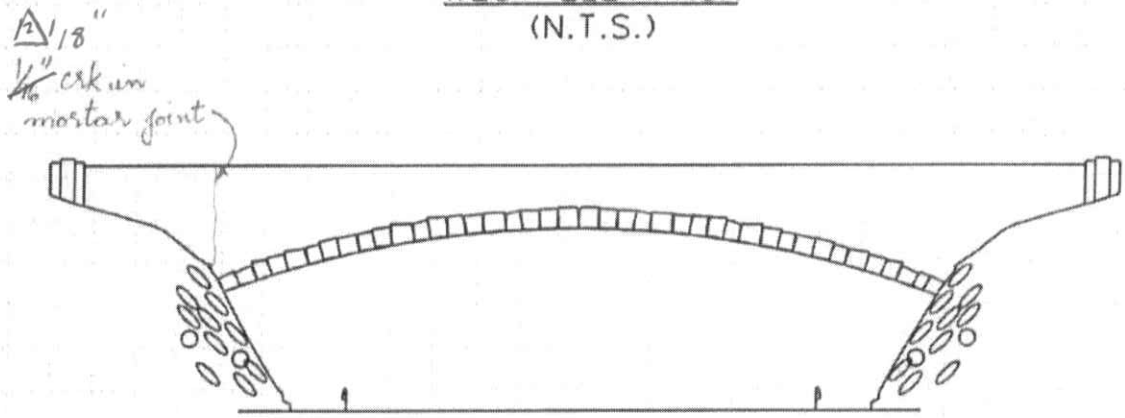
	Deterioration by Span-Square Feet										
	Span Number										
Deterioration Type	1	2	3	4	5	6	7	8	9	10	Total
Spalled and Delaminated areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot: 668	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 668
Scale (moderate to severe only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks with Efflo. (use 6in. wide x length)	Bot: 87.5	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 87.5
Cracks without Efflo (use 3in wide x length)	Bot: 10	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 10
Map Cracking with Efflo. (use full area)	Bot: 900	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 900
Map Cracking with/out Efflo. (use 50% of area)	Bot: 58	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 58
Honey combed	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Total Deterioration	1724	0	0	0	0	0	0	0	0	0	1723.5
Total Span Area (sq. Ft)	2946										2946.4
% spalled and delminated Top	0.0%										0.0%
% Deterioration on bottom	58.5%										58.5%

Notes: 1. Superficial mapcracking not included in deterioration sheet according to chapter 10 in inspection manual.

AI Engineers, Inc.	JOB NO. 170-2729	BRIDGE NO: 00700
	DATE: 05/14/08	SHEET ~~1 OF 1~~
FIELD NOTES	CREW: KS, BNS, ZRI △2 7	
DESCRIPTION: ARCH		



WEST ELEVATION
(N.T.S.)



EAST ELEVATION
(N.T.S.)

GENERAL NOTES △4 TWO ≈ 2'L PORTIONS OF THE HANDRAIL WALL WAS LOOSE & REMOVED @ T.O.I, OVER BOTH THE NB & SB LANES. (6"W)

LEGEND:
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA w/ EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- E EFFLORESCENCE
- HONEYCOMB AREA
- SCALE AREA

- 50% of The EAST spandrell wall is Covered w/ Hvy vine growth
- Masonry spandrel wall and arch ring stones show areas of active leakage w/ hvy efflow stalactites
- Minor crks w/ efflo @ mortar jts of wingwalls.

△5 Spandrel walls w/ minor mortar voids up to 2"Ø & 3" Deep

Revision	Date	Crew	Company	Revision	Date	Crew	Company
△1	6-9-10	See △1		△3			
△2	8/31/11	RDM	MVA (TSC)	△4			

PHOTO LOG

Form BRI-13, Rev. 9/97

(8)

Bridge Information System

Image Inventory

TranSystems

Bridge No.	00700	Date:	08/1/11
Town	STAMFORD, CT	Photographer:	KHI
Carried / Crossed:	GUINEA RD / RT 15		

Photo #	Image Description
(23) 1	BR ID (W. CURB)
2	BR FR N. APP
3	N. APP FR. BR.
4.	TOD (N. END).
5.	N. APP PAVT. LK NE.
6.	TOD (MIDSPAN AREA) LK SE.
7.	TOD (S. END). LK E.
8.	TOD @ S. LEG. LK E. (JOINT)
9.	S. APP FR. BR.
10.	BR FROM S. APP.
11.	E. PPT LK NE
12	W PP LK NW.
13	S. APP PAVT LK SE.
14	SPALLS ON W. PPT/CURB MIDSPAN AREA
15	TOD @ N. LEG LK E (JOINT)
16	SPALL @ S. END OF W. CONC. CURB.
17	TOD @ SE CORNER → SETTLEMENT
18	TOD, S. END @ UNEVEN. PATCHED → TYP POTHOLE.
19.	SAME AS 18 → CLOSE-UP.
8/31/11 (1) 20	TYP MISSING MORTAR ON PPT.
21	WEST ELEVATION
22	NW WW
23	STONE PROTECTION @ N. ABUT SPRINGLINE
24	SPALL/EFFLO @ WFASCIA @ INTERFACE W/ SPANDREL WALL (SB)

PHOTO LOG

Form BRI-13, Rev. 9/97

(9)

Bridge Information System

Image Inventory

Bridge No. 00700 Date 8/31/11

Town: STAMFORD, CT Photographer: RDM

Carried / Crossed: GUINEA RD / RT 15

Film Frame #	Image Description
5 25	TYPICAL U/S OF ARCH 26) BRIDGE. ID
27	MARKETING
28	SPALL @ N. END NEAR EAST FASCIA
29	EAST FASCIA @ INTERFACE BTWN ARCH RING & SPANDREL WALL (N. END) SB
10 30	SAME AS "28" BUT N.B W/ SPALLS, EXPOSED REINFORCING
31	EAST FASCIA
32	NEWW
13 33	# 11 look S
14 34	# 12 look N
35	MA @ Σ intrados, ℄ span
9/1/11 1 36	EAST ELEVATION
37	10'-11" CLEARANCE MARKER SB, RIGHT LANE
38	SE WW W/ HEAVY VEG
39	U/S ARCH SOUTH EAST PORTION
5 40	SOUTH ABUT STONE EMBANKMENT
41	EAST FASCIA SOUTH 1/2 @ ARCH / SPANDREL U/S ARCH
42	SPALL W/ EXP RUSTED REBAR (SL'S) @ S. ABUT NEAR M.D
43	WEST FASCIA SOUTH 1/2 @ ARCH / SPANDREL U/S ARCH
44	SW WW
10 45	WEST ELEVATION
46	10'-5" NB CLEARANCE POSTING
47	1/8" crk @ SE arch face @ springline
48	efflo @ stones
49	# 7

PHOTO LOG

Form BRI-13, Rev. 9/97

(10)

Bridge Information System

Image Inventory

Bridge No. 00700 Date 9/1/4

Town: Stamford Photographer: MVA

Carried / Crossed: Guinea Rd / Rt 15

Film Frame #	Image Description
15 50	SW corner w/ severe efflo
51	#18
52	spalling @ JB @ S. springline
53	#29 w/ poor consolid
54	#30 "B"
20 55	#17 no concrete
56	#17 general
57	#17 w/ HA "B" over LL & median NB
58	#30 "B" over LL & RL NB
24 59	#28 "B" over LL in NB
60	u. side, S. half w/ algae

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 1: **Bridge ID.**

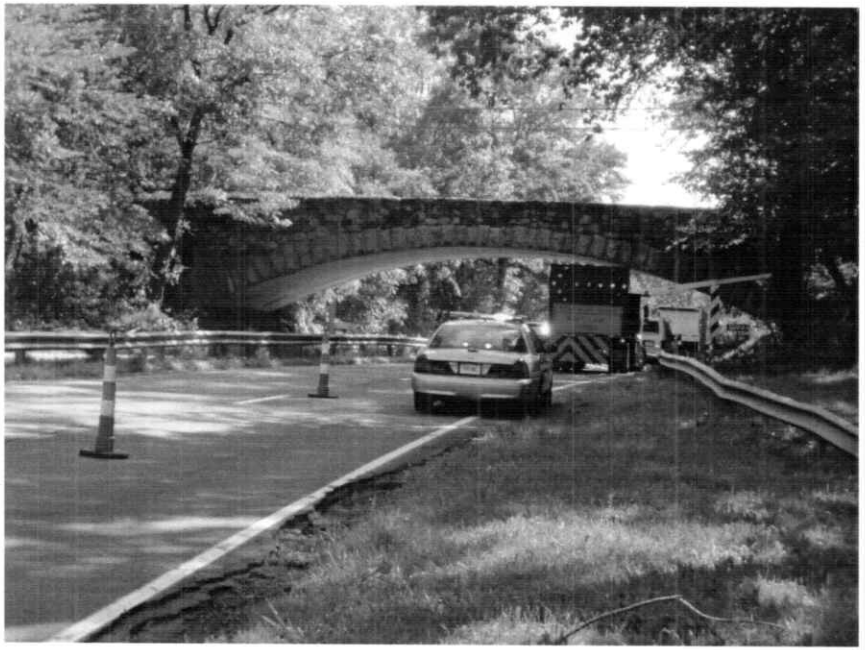


Photo 2: **West elevation.**

Prepared by TranSystems

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

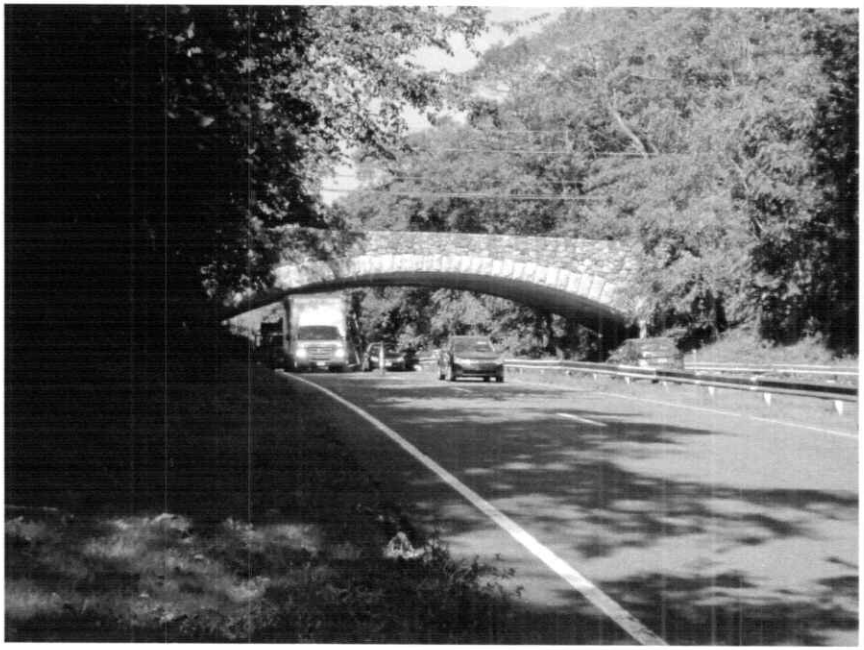


Photo 3: **East elevation.**

Photo 4: **Bridge from north approach.**

Prepared by TranSystems

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 5: **North approach from bridge.**

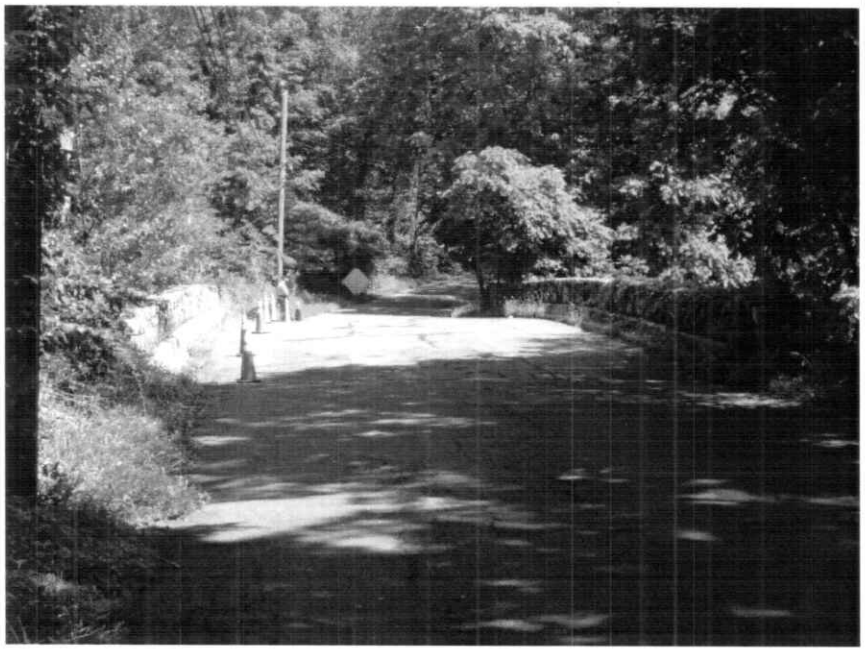


Photo 6: **Bridge from south approach.**

Prepared by TranSystems

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 7: **South approach from bridge.**

Photo 8: **Bituminous concrete overlay at arch midspan. Note: longitudinal and transverse cracks open up to 1/8" throughout with some sealed cracks.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

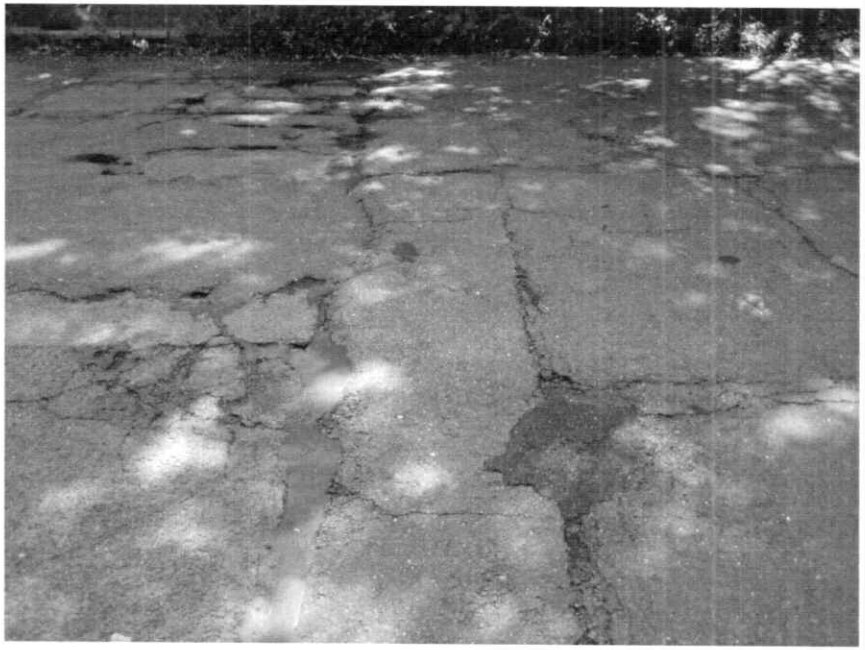


Photo 9: **Bituminous concrete overlay at the south arch end. Note: 25'L x 5'W area with uneven breaking up bituminous patches with depressions up to 1"D and potholes up to 6" diameter x 2"D.**

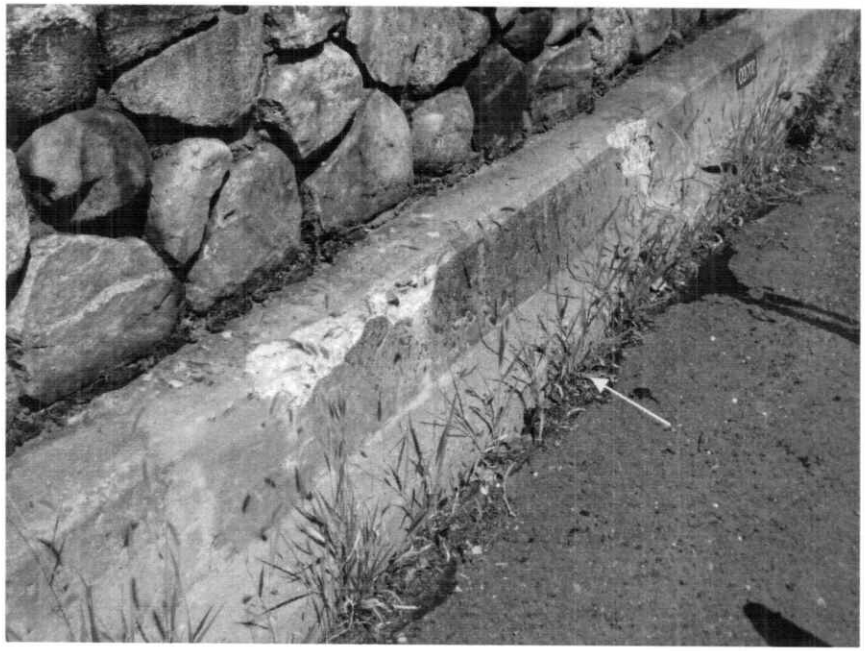


Photo 10: **Up to 1/4" separation between the overlay and the curb at both curb-lines with debris accumulation and vegetation growth.**

Prepared by TranSystems

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 11: **General view of east stone masonry parapet and curb; looking northeast. Note: moderate vegetation growth between stones and along the curb.**

Photo 12: **Typical underside of arch.**

Prepared by TranSystems

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 13: **Longitudinal crack approximately 50'L x 0.050" open at the south end of the arch with moss growth.**

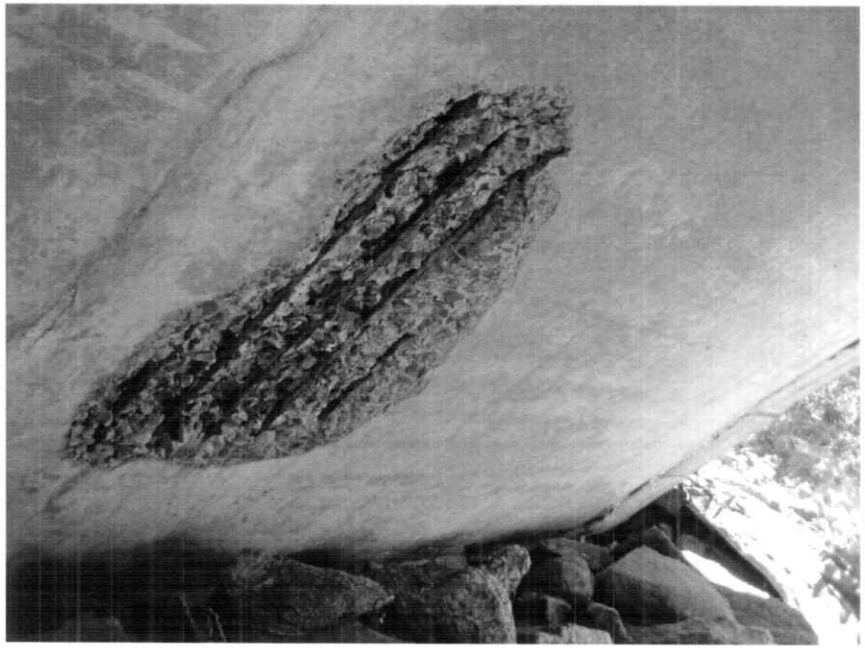


Photo 14: **4'-5"L x 2'-8"H x 3"D spall with exposed heavily rusted rebar at the underside of the arch at the north end near the east fascia.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

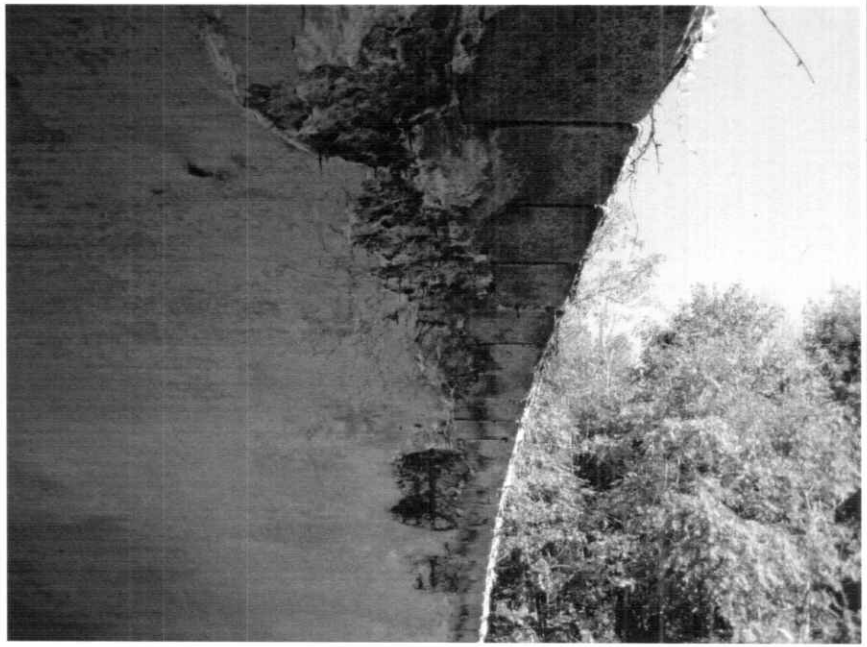


Photo 15: **East fascia, south half, underside of arch, at the spandrel wall/arch ring interface. Note: heavy efflorescence, spalling and exposed rebar.**

Photo 16: **5'L x 2'W hollow area over both northbound lanes with efflorescence build up at the east fascia.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

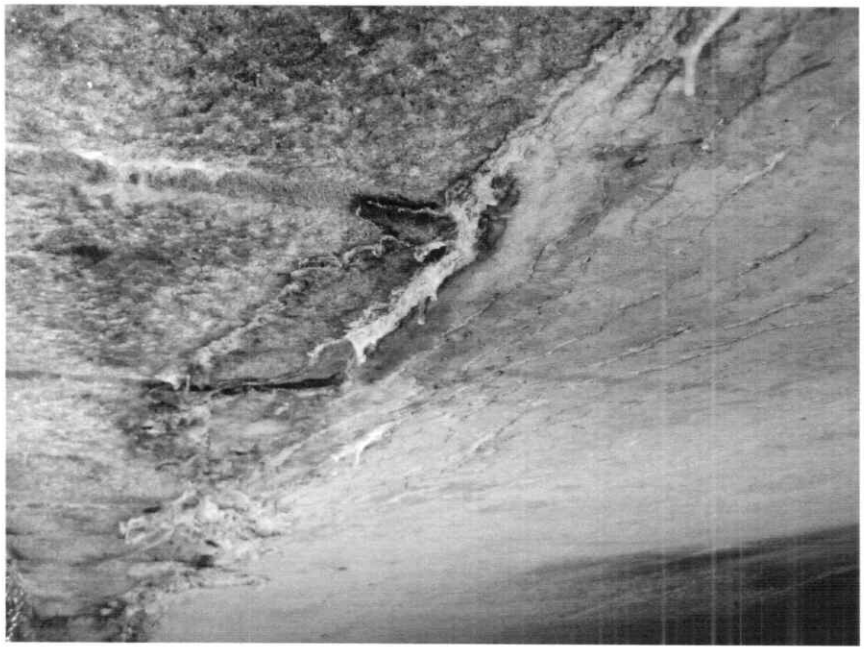


Photo 17: **Close up of photo 16. Note: efflorescence and evidence of leakage.**

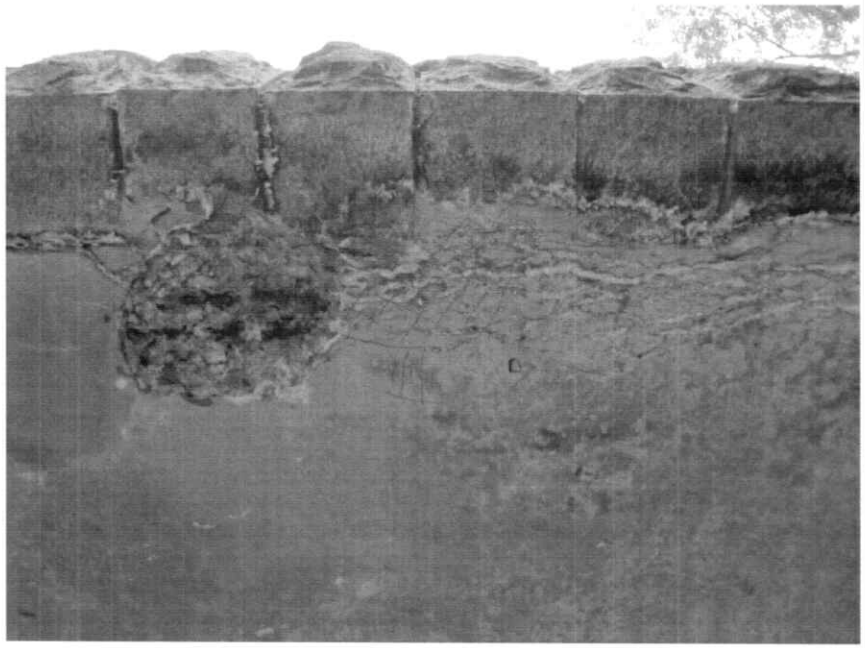


Photo 18: **1.5'L x 2'W hollow area with efflorescence and adjacent 3'Ø spall x 3"D with exposed rebar over the left lane at the west end of underside, northbound roadway.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

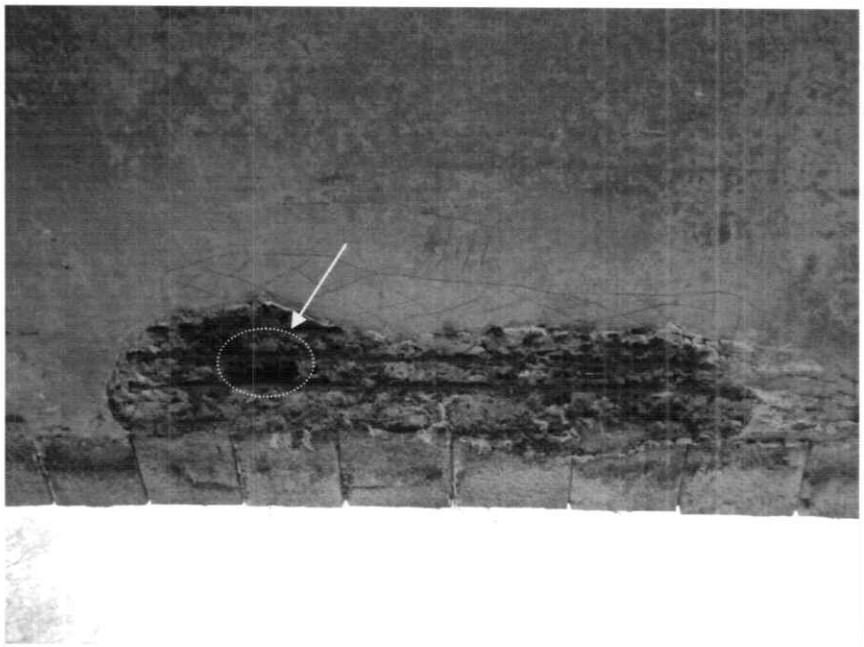


Photo 19: **9'L x 2'-9"W x up to 8"D spall with exposed rusted bar and an adjacent 9'L x up to 1'W hollow area over the left lane and median at the east end of underside, northbound roadway. See Photo 20 for close up of highlighted area.**

Photo 20: **Close up of Photo 19. Note: poorly consolidated concrete.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

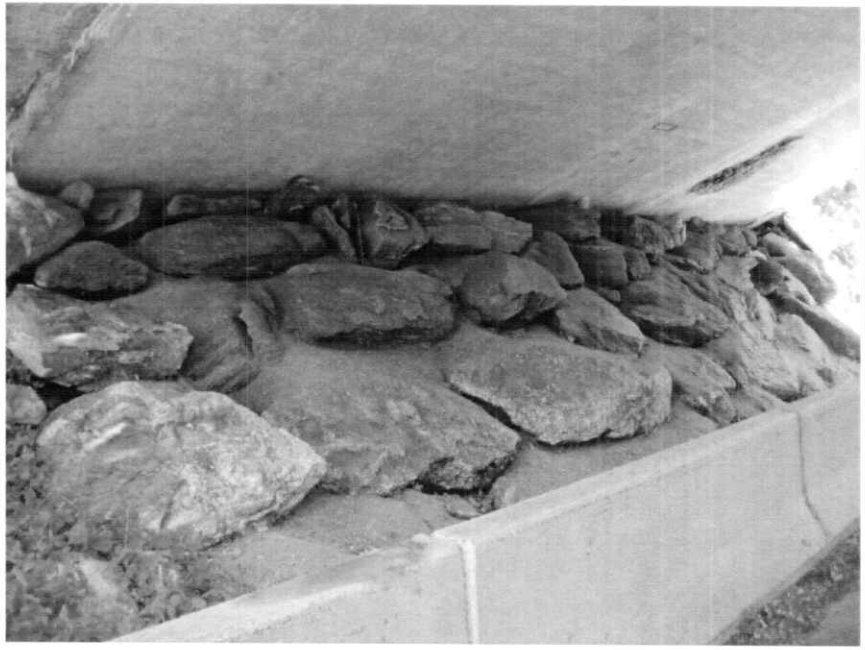


Photo 21: **North end of arch. Note: abutment is buried and not visible.**

Photo 22: **Heavy vegetation growth covering up to 50% of the wingwall surfaces, southeast wingwall shown.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

Photo 23: **Southwest wingwall with a 4'Ø area of efflorescence between the stones.**

Photo 24: **North approach pavement, longitudinal and transverse cracks open up to 1/8"W at random locations with moderate raveling.**

Bridge No.	00700	**Inspected by 1:**	Maxim Arefyev
Town:	Stamford, CT	**Inspected by 2:**	Ricky Mears
Feature Carried:	Guinea Road	**Date Inspected:**	8/1/2011
Feature Crossed:	Route 15 (Merritt Parkway)	**Project No.:**	170-3013

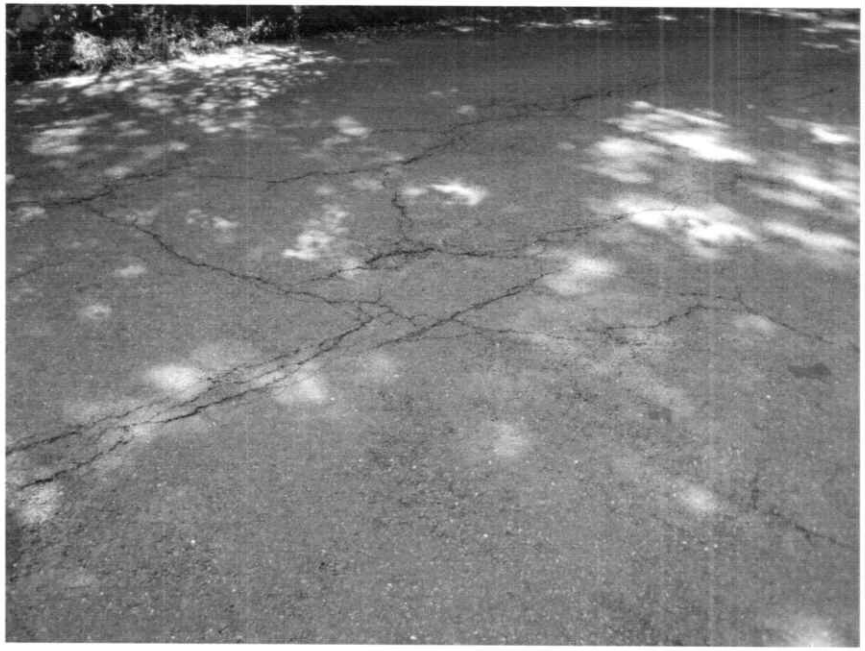


Photo 25: **South approach pavement. Note: FW x 15'L map crack area with cracks open to 1/8"W.**

Photo 26: **Southbound advance vertical clearance warning marker. Note: during previous inspection, sign was labeled at an 11'-5" clearance.**

Prepared by TranSystems

Bridge Number **00700**

Inspected By: M. ARCFYEV & R. MEARS

Sufficiency Rating 45.32

Previous Inspection Date 6/9/2010

BS&E Received ☑ Data Entry By: D.T

Copies Made ☑ Data Entry Date: 9/30/11

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET 1 OF 2 FORM BRI-19 REV 10/00

SHEET 1 OF 1

90) Inspection Date	Inspection Team	91) Frequency	Class:
08011	21 2 1	12	02
Indepth Insp	**Deck Survey**	**Access**	**Flagman**
5/18/2008	1/1/1900	0	

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:				
Uwater:				
Special:	Z	12	8	8/1/11

RED FLAG

IDENTIFICATION

Bridge Name

Town Name STAMFORD Town Code 73070

5) Inventory Route:

A) Record Type 1 D) Route Number 00000

B) Signing Prefix 5 City Street E) Directional Suffix 0 NA

C) Level of Service 0 None of the bel

6) Feature Intersected ROUTE 15

7) Facility Carried: GUINEA ROAD

9) Location 1.4 MI S OF ROUTE 104

11) Milepoint 0.72 Miles

16) Latitude 41deg 6 min .00 sec deg min sec

17) Longitude 73deg 35 min 30.00 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 11 Arch - Deck

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 N Not Applicable

108) Wearing Surface/Protective System:

A) Type of Wearing Surface N Not Applicable

B) Type of Membrane N Not Applicable

C) Type of Deck Protection N Not Applicable

AGE AND SERVICE

27) Year Built 1937 106) Year Reconstructed

42) Type of Service:

A) On 1 Highway B) Under 1 HIGHWAY

28) Number of Lanes:

A) On 2 B) Under 4

29) Average Daily Traffic 2288 2311 Half ADT?: No N

109) Percent Truck 4% 04

30) Year of ADT 2010 2011

19) Bypass, Detour Length 2miles

GEOMETRIC DATA

48) Length of Max Span 80ft

49) Structure Length 80ft

50) Curb or Sidewalk Widths:

A) Left 1.5ft B) Right 1.5ft ft

51) Brg Rdwy width,curb-curb 30.0ft ft

52) Deck Width, Out-Out 36.8ft ft

32) Approach Roadway Width 23ft ft

33) Bridge Median 0 No Median

Deck Area 2946 sqft sqft

34) Skew Angle 0deg

35) Structure Flared 0

10)Inv. Rte. Min. Vert Clearance 99ft 99in ft in

47) Log Inv. Rte. Total Horiz Clr.: 30.0ft ft

47) RLog Inv. Rte. Total Horiz. Clr.: 0ft ft

53) Min Vert Clearance Over Bridge 99ft 99in ft in

54) Min Vert Under Clearance H Ref 11ft 6in Ref ft in

55) Min Lat Under Clearance on Right H Ref 2.0ft Ref ft

56) Min Lat Under Clearance on Left 99.9ft ft

BRIDGE COMMENTS

ASSUME ADT OF 1% INCREASE PER YEAR

STRUCTURE EVALUATION

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

SHEET 2 OF 2

Bridge Number	00700	NBIS Length
Town Name	STAMFORD	Yes 80
Facility Carried	GUINEA ROAD	
Feature Crossed	ROUTE 15	

Inspected By: M. ARLEFYEV & R. MEARS

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	0	Off System
26) Functional Class	19	Urban Local
100) Defense Highway	0	Route is not a 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	0	Not 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	1	On 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. 21	Project No.	Advertised	

POSTED SIGNS & UTILITIES

Other Posted Signs 1					
Other Posted Signs 2	8	Other warning signs			
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	10 ft	5 in		ft	In
Posted Speed Limit	25 mph				mph
Utility					
Utility	4	Telephone			

LOAD RATING AND POSTING

31) Design Load	4	Evaluation Code	L	
63) Operating Rating Type	1	Year of Evaluation	2001	
64) Operating Rating	262.6	70) Bridge Posting	5	
65) Inventory Rating Type	1	41) Structure Status	A	
66) Inventory Rating	158.8			

CONDITION

		Rating	By
58) Deck	N	N	ROM
59) Superstructure	3	3	ROM
60) Substructure	6	6	ROM
61) Channel & Chan. Protection	N	N	ROM
62) Culverts	N	N	ROM

APPRAISALS

		Rating	By
67) Structure Evaluation	3	3	[illegible]
68) Deck Geometry	4	4	ROM
69) Under Clear Vert & Horiz	2	2	ROM
71) Waterway Adequacy	N	N	ROM
72) Approach Rdwy Alignment	6	6	ROM
113) Scour Critical			

Items 58 Thru 72 Checked By:

36) Traffic Safety Features:

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

OTHER FEATURES

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

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2018
Senior	Ron Jantzen
Supervisor	Joseph Kozlowsk

REVIEWED BY: [signature] PE Date 9/22/11

BRIDGE NUMBER	TOWN NAME	NBIS BRG LGTH	
00700	STAMFORD	True	80
FACILITY CARRIED	FEATURE CROSSED		
GUINEA ROAD	ROUTE 15		

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
DIVISION OF BRIDGE SAFETY EVALUATION

INVENTORY ROUTE UNDER STRUCTURE EVALUATION

FORM BRI-25 REV 10/00

INSPECTED BY: M. AREFYEV
R. MEARS

REVIEWED BY: J B Mc PE DATE: 9/22/11

SHEET 1 OF 1 (INSP. REPORT)

IDENTIFICATION

DESCRIPTION:

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)	8.11	

AGE & SERVICE

+ 28B) NUMBER OF INV.ROUTE LANES	4	
* 29) ADT (INV. RTE)	55300	55900
* 109) TRUCK ADT % (INV.RTE)	1	01
* 30) YEAR OF ADT (INV. RTE)	2008	2009
* 41) INV ROUTE OPERATIONAL STATUS	R	Posted for other load-ca R
19) BYPASS DETOUR LENGTH	3	Miles

GEOMETRIC DATA

+ 10) INV. RTE. MIN. VERT. CLEARANCE	14 ft 9 in	ft in
+ 47) LOG INV. RTE. TOTAL HORIZ CLR.	29.3 ft	. ft
+ 47) RLOG INV. RTE. TOTAL HORIZ CLR.	29 ft	. ft
+ LOG MIN VERT CLR OVER INV ROUTE	10 ft 8 in	ft in
+ RLOG MIN VERT CLR OVER INV ROUTE	11 ft 2 in	ft in
+ 55) MIN LAT UNDERCLR ON RIGHT	H 2 ft	. ft
+ 56) MIN LAT UNDERCLR ON LEFT	99.9 ft	. ft

CLASSIFICATION

26) INV. RTE. FUNCT CLASSIFICATION	12	Urban Principal Arterial -
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	1	On national network

POSTED SIGNS

+ POSTED VERT. CLR UNDER BRIDGE 10ft 5in ft in

COMMENTS:

Route 15 NB - Posted Vertical Clearance - 10 feet 5 inches..
Route 15 SB - Posted Vertical Clearance - 11 feet 5 inches..
↳ SB POSTED VERTICAL CLEARANCE HAS CHANGED TO 10'-11" SINCE LAST INSPECTION

* 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

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 00700 | Agency ID: 00700 | Sufficiency Rating: 45.3

IDENTIFICATION

State 1: 09 Connecticut | Struc Num 8: 00700
Facility Carried 7: GUINEA ROAD | Location 9: 1.4 MI S OF ROUTE 104
Rte.(On/Under)5A: Route On Structure | Rte. Signing Prefix 5B: 5 City Street
Level of Service 5C: 0 None of the below | Rte. Number 5D: 00000
Directional Suffix 5E: 0 N/A (NBI) | % Responsibility : 0
SHD District 2: 03 | County Code 3: Fairfield
Place Code 4: STAMFORD | Mile Post 11: 0.720 mi
Feature Intersected 6: ROUTE 15
Latitude 16: 41d 06' 00" | Longitude 17: 073d 35' 30"
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: 1
Main Span Material/Design 43A/B:
1 Concrete | 11 Arch-Deck

Deck Type 107: N N/A (NBI)
Wearing Surface 108A: N N/A (no deck (NBI))
Membrane 108B: N N/A (no deck (NBI))
Deck Protection 108C: N N/A (no deck (NBI))

AGE AND SERVICE

Year Built 27: 1937 | Year Reconstructed 106: Unknown
Type of Service on 42A: 1 Highway
Type of Service under 42B: 1 Highway
Lanes on 28A: 2 | Lanes Under 28B: 4 | Detour Length 19: 2.0 mi
ADT 29: 2,311 | Truck ADT 109: 4 % | Year of ADT 30: 2011

GEOMETRIC DATA

Length Max Span 48: 80.0 ft | Structure Length 49: 80.0 ft
Curb/Sdwlk Wdth L 50A: 1.5 ft | Curb/Sidewalk Width R 50B: 1.5 ft
Width Curb to Curb 51: 30.0 ft | Width Out to Out 52: 36.8 ft
Approach Roadway Width 32: 23.0 ft (w/ shoulders) | Median 33: 0 No median
Deck Area: 2,949.3 sq. ft
Skew 34: 0.00 ° | Structure Flared 35: 0 No flare
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct
Minimum Vertical Underclearance 54B: 11.5 ft
Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct
Minimum Lateral Undrclearance R 55: 2.0 ft
Minimum Lateral Undrclearance L 56: 327.8 ft

INSPECTION

Frequency 91: 24 months | Inspection Date 90: 8/1/2011 | Next Inspection: 08/01/2013
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 Inspection Date: 08/01/2011 | Next Elem. Insp. Due: 08/01/2013

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy | Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic | Temporary Structure 103: Unknown (NBI)
Highway System 104: 0 Not on NHS | NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road | Functional Class 26: 19 Urban Local
Historical Significance 37: 1 Br on Natl Reg Hist Pl
Owner 22: 01 State Highway Agency
Custodian 21: 01 State Highway Agency

CONDITION

Deck 58: N N/A (NBI) | Super 59: 3 Serious | Sub 60: 6 Satisfactory
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: HS88.2 | Operating Rating 64: HS145.9
Design Load 31: 4 M 18 (H 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: 0 Substandard
Str. Evaluation 67: 3 | Deck Geometry 68: 4 Tolerable
Underclearance, Vertical and Horizontal 69: 3 Intolerable - Correct
Waterway Adequacy 71: N Not applicable | Approach Alignment 72: 6 Equal Min Criteria
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 Improvment 76: 0.3 ft
Total Cost 96: $ 2,000 | Future ADT 114: 950
Year of Cost Estimate 97: 2000 | Year of Future ADT 115: 2019

NAVIGATION DATA

Navigation Control 38: N NA-no waterway
Vertical Clearance 39: 0.0 ft | Horizontal Clearance 40: 0.0 ft
Pier Protection 111: Unknown (NBI) | Lift Bridge Vertical Clearance 116:

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
0	144/3	R/Conc Arch	(LF)	37	5 %	2	14 %	5	68 %	25	14 %	5	0 %	0
0	215/3	R/Conc Abutment	(LF)	74	100 %	74	0 %	0	0 %	0	0 %	0	0 %	0
0	333/3	Other Bridge Railing	(LF)	246	98 %	241	2 %	5	0 %	0	0 %	0	0 %	0
0	359/3	Soffit Smart Flag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0

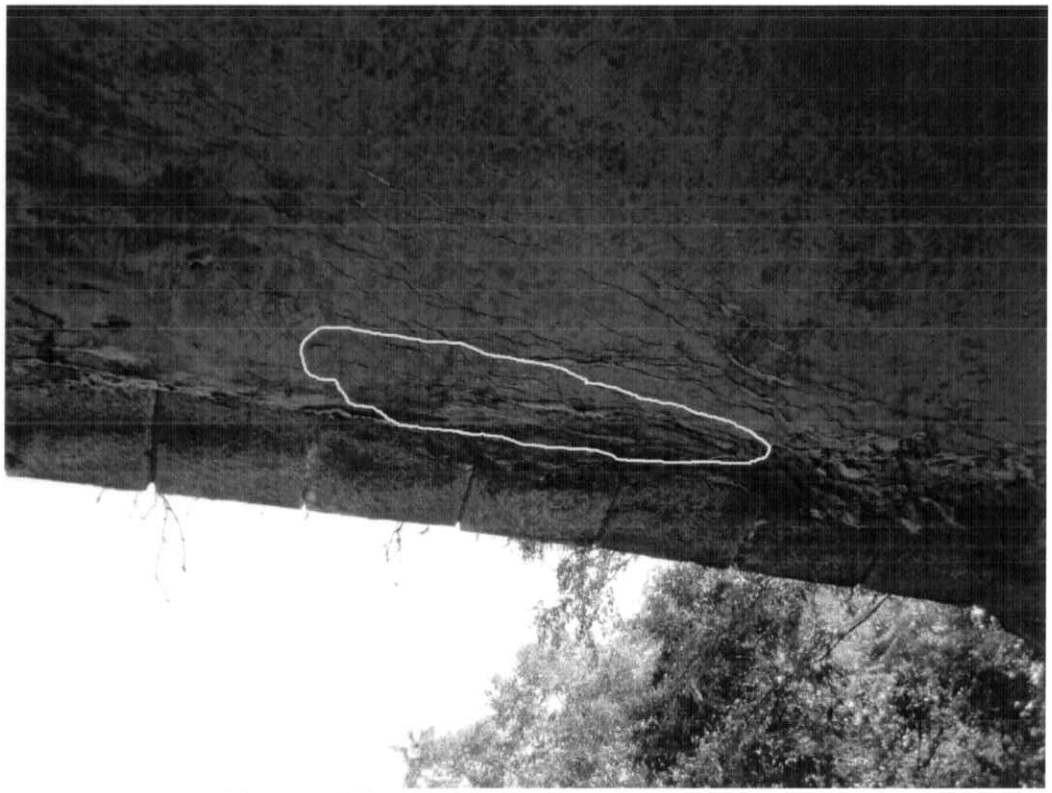


Photo 1: 5 feet long by 2 feet wide hollow area.

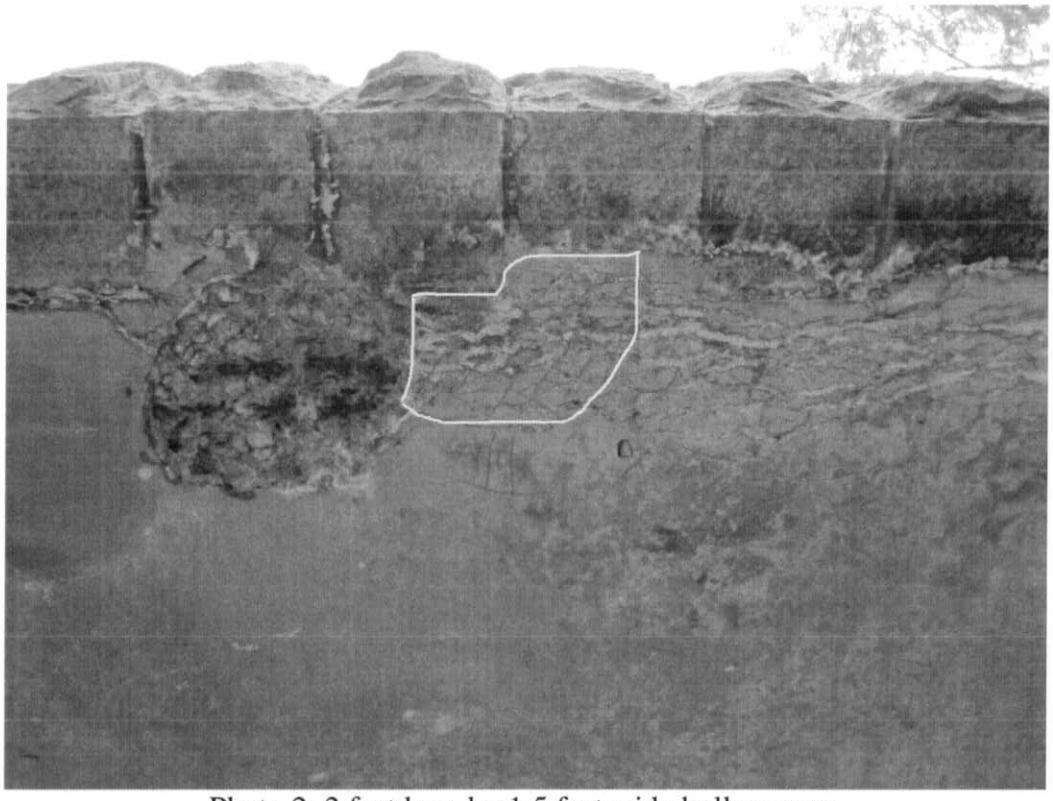


Photo 2: 2 feet long by 1.5 feet wide hollow area.

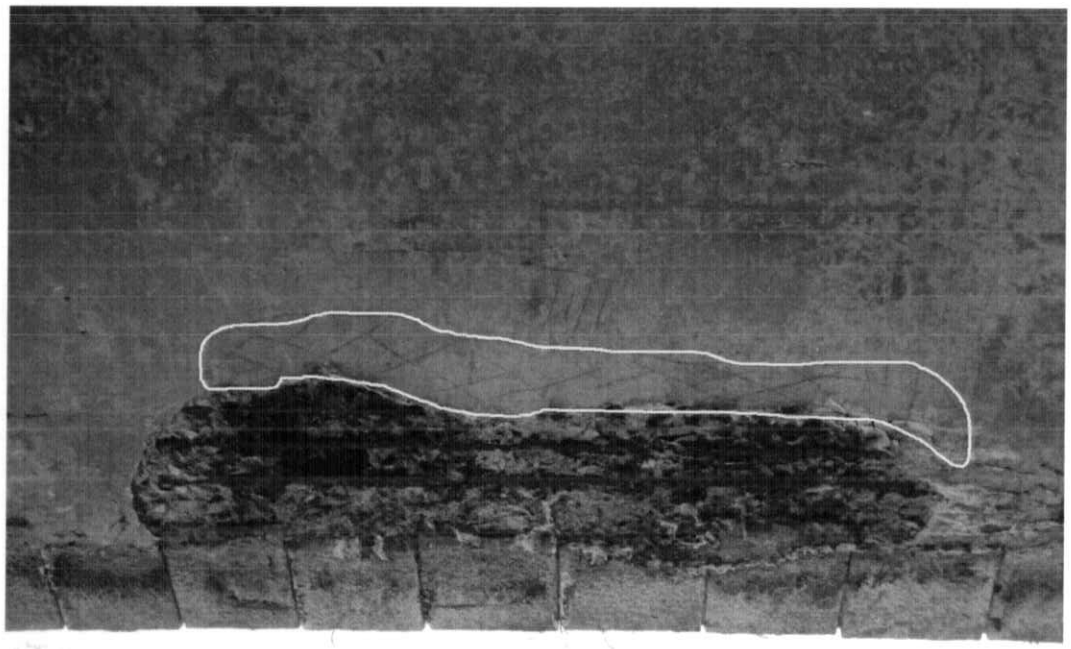


Photo 3: 7 feet long by up to 1 foot wide hollow area.

WT-Maxim Arefyev

From: Tassavor, David R. [David.Tassavor@ct.gov]
Sent: Friday, September 02, 2011 8:46 AM
To: WT-Maxim Arefyev
Subject: FW: BMM priority-B Guinea road/Rt. 15 Stamford bridge No. 00700 -

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From: Tassavor, David R.
Sent: Friday, September 02, 2011 8:44 AM
To: jbmcgovern@transystems.com; kvdonohue@transystems.com; 'rjbruno@transystems.com'
Subject: FW: BMM priority-B Guinea road/Rt. 15 Stamford bridge No. 00700 -

For yesterday's BMM issued by Max

From: Tassavor, David R.
Sent: Thursday, September 01, 2011 2:29 PM
To: Mears, Mary J
Cc: Van Allen, Richard C.; Hiscox, David; Zaffetti, Robert P
Subject: BMM priority-B Guinea road/Rt. 15 Stamford bridge No. 00700 -

BMM No.	priority No.	Bridge No.	location
11-458	B	00700	Guinea road/Rt. 15 Stamford

Condition:
1. There are various hollow areas in the underside of the deck directly over the Route 15.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

MEMORANDUM

subject: **BMM No. 11-458**
Bridge No. 00700
Guinea Road over Route 15
Stamford

date: 09/01/11

to: Mr. Robert P. Mongillo
Transportation Maintenance Administrator
Bureau of Highway Operations

from: Robert P. Zaffetti
Manager of Bridge Safety and Evaluation
Bureau of Engineering and Construction

This memorandum is a follow-up to a telephone conversation on (Month Day, Year) between, (Maintenance Staff) of your staff and (Bridge Safety Staff), of this office, concerning the following deficiency and recommendation for the subject structure:

1. There are three hollow areas over northbound travelway. 5 feet long by 2 feet wide over both lanes and 7 feet long by up to 1 foot wide over left lane and median on east end of underside. 2 feet long by 1.5 feet wide over left lane on west end of underside. The areas are marked with red keel.

Please direct persons under your jurisdiction to:

1. Remove hollow areas. (<1/4 CY).

All repairs shall be performed utilizing appropriate approved materials and tried and proven methods unless otherwise specified.

This item should be considered **Priority B**. Additional items may be forwarded with the final inspection report.

If you have any questions concerning this matter, please contact Mr. Ralph A. Phillips, at ext. 3159. Please contact me when this work has been completed.

Attachment (2 pages)

Maxim V. Arefyev/mva

cc: Thomas A. Harley – James H. Norman - Rabih M. Barakat
Scott A. Hill - Robert P. Zaffetti – Ralph A. Phillips – David R. Tassavor
Ted Aldieri, FHWA
TranSystems Corporation