CONNECTICUT LOCAL BRIDGE PROGRAM

Fiscal Year 2002

PRELIMINARY APPLICATION

VINEYARD ROAD over

BURLINGTON BROOK

Federal

Burlington, CT

ConnDOT Bridge No. 05916

Prepared for the
Connecticut Department of Transportation
Local Bridge Program
Newington, Connecticut

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

James F Sullivan, Commissioner

PRELIMINARY APPLICATION FOR THE LOCAL BRIDGE PROGRAM

Preliminary application is hereby made by the Town/City/Borough of Burlington for possible inclusion in the Local Bridge Program (C.G.S. Sections 13a - 175p through 13a- 175w) for Fiscal Year 2002 for the following structure:

Bridge Location: Vineyard Road over Burlington Brook

Bridge Number: 05916 Length of Span: 52 feet

Sufficiency Rating: ~~65.65~~% 52.84 Priority Rating: ~~65.43~~% 52.69

Evaluation & Rating Data Accomplished by State Forces: Yes X No ____

Evaluation & Rating Data Accomplished by Others: Yes ____ No ____

(Professional Certification Required)

If Others, Name of Professional Engineer: ____

Connecticut Professional Engineers License Number: ____

Engineer's Address: ____

Description of Existing Condition of Structure: (attach description)

Description of Scope of Project: (attachment - Include 2 copies of preliminary plans and specifications).

Name of Municipal Official to Contact: Theodore C. Scheidel

Mailing Address: 200 Spielman Highway, Burlington, CT 06013

Telephone: (860) 673-6789 FAX: ____

E-mail: ____

Preliminary Cost Figure :

Preliminary Engineering Fees (Include Breakdown of Fees) *(Not to Exceed 15% of Construction Costs)*	$ 176,284
Rights-of-Way Cost (If Applicable)	$ N/A
Municipally Owned Utility Relocation Cost	$ N/A
Estimated Construction Costs (Include Detailed Estimate)	$ 1,175,227
Construction Engineering (Inspection, Materials Testing) *(Not to Exceed 15% of Construction Cost)*	$ 176,284
Contingencies *(10% of Construction Costs Only)*	$ 117,522
Total Estimated Project Cost	$ ~~1,539,547~~ 1,645,317.06

Financial Aid Data:

Federal Reimbursement: *(Limited to qualifying bridges – See Appendix 1)*
Total Estimated Project Cost multiplied by 80%:

Project Reimbursement Request $ ~~1,231,637~~ 1,316,253.60

State Local Bridge Project Grant: *(Cannot be Combined with federal reimbursement)*

Allowable Grant Percentage 30.90% of Total Cost.

Project Grant Request $ _____

State Local Bridge Project Loan: *(maximum 50% of total project cost)*

Project Loan Request $ _____

Schedule: **(Anticipated Dates)**

Design Completion:	Fall 2003
Property Acquisition Completion:	Spring 2004
Utilities Coordination Completion,	Fall 2003
Construction Advertising:	Fall 2003
Supplemental Application Submission:	Spring 2004
Start of Construction:	Spring 2004
Completion of Construction:	Fall 2004

I hereby certify that the above is accurate and true, to the best of my knowledge and belief.

Signature: _____
(Chief Elected Official, Town Manager, or other Officer Duly Authorized)

Date: 5/15/01

Return completed applications to:

Mr. Stanley C. Juber
Administrator of the Local Bridge Program
Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, Connecticut 06131-7546

2. Description / Existing Condition

The bridge carrying Vineyard Road over the Burlington Brook is a simple span composed of a reinforced concrete deck on rolled steel beams located 300' west of Route 4. The original structure was built in 1954. The existing bridge travelway width is approximately 22' and is referenced as ConnDOT Bridge No. 05916. The structure has a clear span of 52' and is eligible for State and Federal funding under the Local Bridge Program for the fiscal year 2002.

Deck

According to the ConnDOT bridge inspection report, dated 11/6/00, the deck is in good condition (rating = 7) with large areas of discoloration and map cracking. There are random small areas of minor cracking with rust and efflorescent staining. There are isolated signs of active leakage along the top flanges of the fascia beams with efflorescence and short stalactites.

Superstructure

According to the ConnDOT bridge inspection report, dated 11/6/00, the overall superstructure is poor (rating = 4). All bearings show areas of paint pitting and light to medium rust. The stringers show areas of paint pitting and flaking with light to medium rust and isolated areas of heavy rust. The south fascia girder shows an area at mid span of laminar rust and pitting with section loss of up to 3/8 inch on the inside of the flange and web due to deck leakage. The north fascia beam shows laminar rust and section loss due to deck leakage about 16 feet from abutment #1.

Substructure

According to the ConnDOT bridge inspection report, dated 11/6/000, the substructure is in fair condition (rating=5). The abutments have random full length vertical cracks extending across the bridge seat and numerous map hairline cracks. Abutment #2 has two isolated horizontal cracks of 36 and 50 inches open 1/8 to ¼ inch. The wingwalls show vertical, horizontal and map cracks with discoloration and efflorescence.

Channel and Channel Protection

The overall channel protection rating is 6, with embankment erosion both up and down stream exposing tree roots.

Approaches

The approach guide rail is two wire rope on wood posts. Some posts are split and the cable, which is integral with the bridge rail, is loose.

3. Proposed Condition

The substructure of the bridge is in generally good condition and requires only repairs to extend its service life. The poor (rating = 3) deck geometry warrants a deck replacement with a widening of the travelway to meet current standards. The deck replacement and widening would involve the following:

1) Remove the existing deck and bridge seats.
2) Widen and repair the existing abutments to accommodate a new deck with a 28' travelway.
3) Install a new prestressed concrete deck with a 26' travelway.
4) Install a new bridge rail system on new reinforced concrete parapets.
5) Place membrane waterproofing over the entire structure.
6) Install new guide railing and approaches.

Estimated construction cost for the work is $1,175,227.00. A detailed estimate is provided on the following pages.

Town of Burlington

Vineyard Road over Burlington Brook

Bridge No. 05916

Federal Local Bridge Program

Preliminary Cost O

Item No	Description	Unit	Est Qu		
Structure Items					
1A	Bituminous Concrete Class 1	Ton	17	$51.71	$888
1B	Bituminous Concrete Class 2	Ton	9	$51.71	$465
2	Membrane Waterproofing	S.Y.	203	$43.48	$8,837
3	Remove Existing Structure	L.S.	1	$134,400.00	$134,400
4	Class "A" Concrete	C.Y.	755	$500.00	$377,267
6	Deformed Steel Bars	LBS.	34713	$0.96	$33,325
7	Elastomeric Bearing Pads	Ea.	32	$100.00	$3,200
8	Prestressed Concrete Deck Units	L.F.	432	$200.00	$86,400
10	Metal Bridge Rail	L.F.	108	$151.79	$16,393
11	Structure Excavation	C.Y.	2202	$18.35	$40,400
12	Pervious Structural Backfill	C.Y.	1670	$22.94	$38,300
				Structure Subtotal:	$738,988
				20% Contingency:	$147,798
				Structure Total	***$886,785***
Highway & Stream Channel					
1	Unsuitable Excavation	C.Y.	152	$22.17	$3,377
2	Borrow	C.Y.	441	$12.23	$5,392
3	Maintenance and Protection of Traffic	L.S.	1	$10,000.00	$10,000
6	Roadway Excavation	C.Y.	441	$13.76	$6,066
7	Subbase	C.Y.	1439	$15.29	$21,995
8	Formation of Subgrade	S.Y.	1883	$1.67	$3,145
9	Bituminous Concrete	TON	939	$51.71	$48,566
10	Mobilization	L.S.	1	$63,500.00	$63,500
12	Barricade Warning Lights	EA./DAY	1337	$0.90	$1,204
13	Temporary Precast Concrete Barrier C	L.F.	157	$11.28	$1,767
14	Signs	S.F.	120	$15.79	$1,895
15	Metal Beam Rail (Type R-B)	L.F.	320	$11.89	$3,810
16	Guide Rail Anchors	EA.	4	$575.00	$2,300
18	Water Pollution Control	Est	1	$10,000.00	$10,000
19	Erosion and Sedimentation Control	L.F.	1447	$5.49	$7,944
20	Construction Staking	L.S.	1	$11,650.00	$11,650
21	Riprap	C.Y.	4	$74.16	$273
22	Catch Basins	EA..	4	$1,500.00	$6,000
24	Granite Stone Transition Curbing	L.F.	100	$30.00	$3,000
25	Turf Establishment / Topsoil	S.Y.	2222	$8.86	$19,684
26	Construction Trailer	Mo.	8	$1,100.00	$8,800
				Highway & Stream Channel Subtotal:	$240,368
				20% Contingency:	$48,074
				Highway & Stream Channel Subtotal	***$288,442***
				Estimated Total Construction Cost:	***$1,175,227***

STRUCTURE NO. 05916

VINEYARD ROAD
over
BURLINGTON BROOK
BURLINGTON

Routine Inspection
on
1/3/2006

Inspected by Team 5
for Area 5

TEAM:	Forwarded to Senior Sandra Dumas	Date	3/8/2007
SENIOR:	Reviewed by Senior Sandra Dumas	Date	3/18/2007
	BMM Required	No	
	Town Bridge	Yes	
	Rating <= 5 (Items 58,59,60 or 62)	Yes	
	Forwarded to Supervisor Sandra Dumas	Date	3/19/2007
	Forwarded to "To Be Copied Drawer" ☐	Date	
	Date BRI-19 Entered	3/19/2007	
SUPERVISOR:	Reviewed by Supervisor	Date	
SUPPORT:	Date Copies Made 4-5-07	BMM No	town

NBI: Yes

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INSPECTION REPORT TRANSMITTAL FORM
Form BRI-27, Rev. 6/00

Structure No.	05916	**Town**	BURLINGTON
Inspection Date	1/3/2007	**Inspectors**	Team 5

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Loose Forms (not bound in report)

		Number of Sheets Enclosed
Maintenance Memo		0
Flagging Memos		0
PONTIS Element Data Collection Form		1
Plan Sheets	Already on file ☐	0

Bound Report Pages

Title Cover Sheet		1
Table of Contents		1
Executive Summary		0
Field Notes		0
Calculations:	Load Rating Evaluation	0
	Quantities & Cost Estimate	0
Photo Sheets		8
Photo Images		16

Forms

BRI-10, Concrete Deterioration Worksheet	1
BRI-18, Bridge Inspection Form	5
BRI-19, Highway Bridge Inventory Form	2

Comments:

(1) Attached sheet.

Bridge Number **05916**

Inspected By: P. Talmont & K. Weic

Sufficiency Rating 52.84

Previous Inspection Date 1/24/2005

BS&E Received ☐ Data Entry By: Dcl

Copies Made ☐ Data Entry Date: 3/19/07

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
STRUCTURE EVALUATION

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

SHEET 3 OF 11 (INSP. REPORT)

90) Inspection Date: 01/03/07 Inspection Team: 505 91) Frequency: 24 Class: 01

Indepth Insp: 11/6/2000 Deck Survey: Access: 0 Flagman: 0

RED FLAG ☐

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:				
Uwater:				
Special:				

IDENTIFICATION

Bridge Name

Town Name: BURLINGTON Town Code: 10100

5) Inventory Route:
- A) Record Type: 1
- B) Signing Prefix: 5 City Street
- C) Level of Service: 0 None of the bel
- D) Route Number: 00000
- E) Directional Suffix: 0 NA

6) Feature Intersected: BURLINGTON BROOK

7) Facility Carried: VINEYARD ROAD

9) Location: 300' WEST OF RTE 4

11) Milepoint: 36.63 Miles

16) Latitude: 41 deg 46 min 30.00 sec

17) Longitude: 72 deg 56 min 12.00 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

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: 0 None
- C) Type of Deck Protection: 0 None

AGE AND SERVICE

27) Year Built: 1954

106) Year Reconstructed: 0000

42) Type of Service:
- A) On: 1 Highway
- B) Under: 5 WATERWAY

28) Number of Lanes:
- A) On: 2
- B) Under: 0

29) Average Daily Traffic: 1000 00117160 Half ADT?: No

109) Percent Truck: 7%

30) Year of ADT: 1992 2007

19) Bypass, Detour Length: 1 miles

GEOMETRIC DATA

48) Length of Max Span: 52 ft

49) Structure Length: 58 ft

50) Curb or Sidewalk Widths:
- A) Left: 0.7 ft
- B) Right: 0.7 ft

51) Brg Rdwy width,curb-curb: 22.1 ft

52) Deck Width, Out-Out: 25.5 ft

32) Approach Roadway Width: 22 ft

33) Bridge Median: 0 No Median

Deck Area: 1480 sqft

34) Skew Angle: 0 deg

35) Structure Flared: 0

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

47) Log Inv. Rte. Total Horiz Clr.: 22.1 ft

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

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

54) Min Vert Under Clearance: N Ref 0 ft 0 in Ref

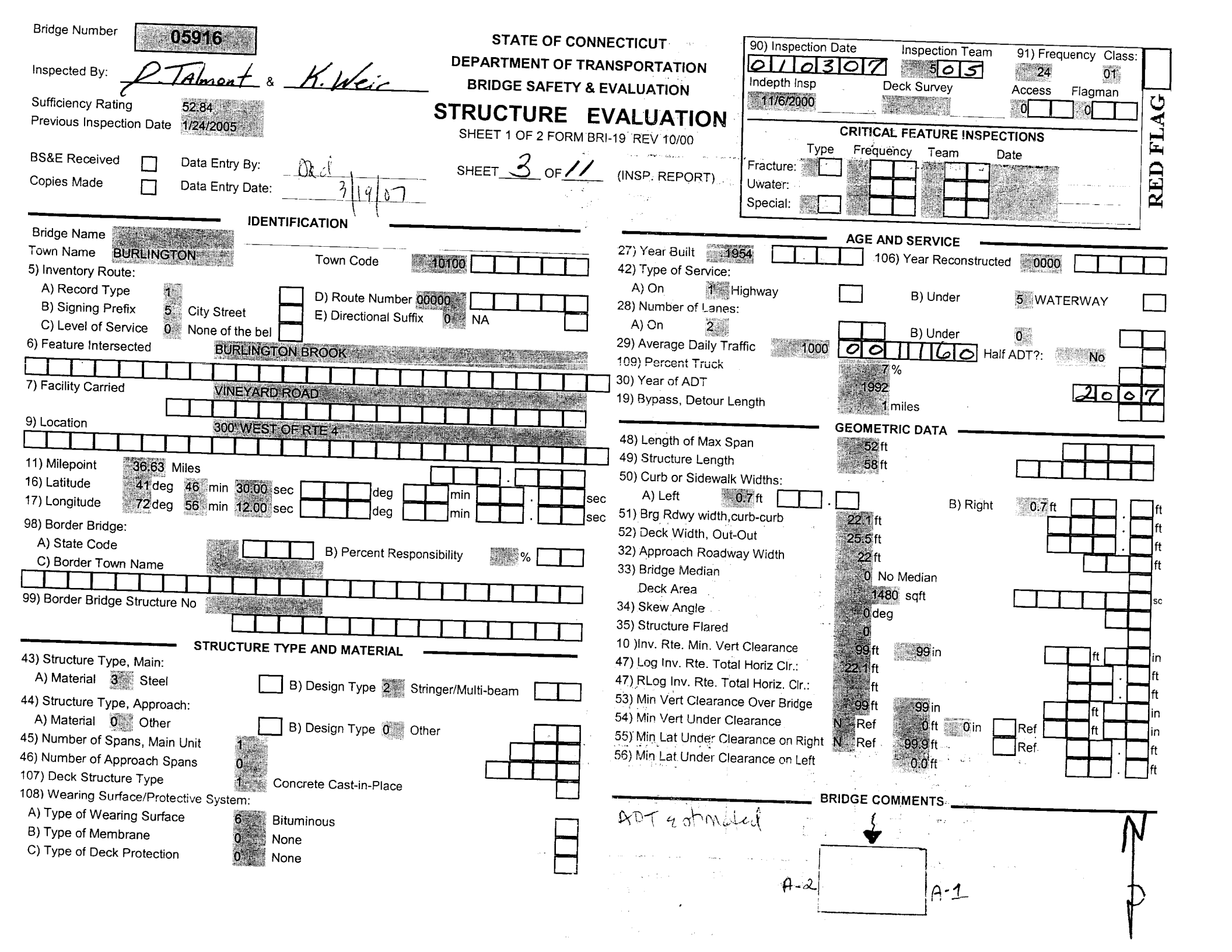
55) Min Lat Under Clearance on Right: N Ref 99.9 ft Ref

56) Min Lat Under Clearance on Left: 0.0 ft

BRIDGE COMMENTS

ADT estimated

A-2 A-1



STRUCTURE EVALUATION

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

SHEET 4 OF 11 (INSP. REPORT

Bridge Number	05916
Town Name	BURLINGTON
Facility Carried	VINEYARD ROAD
Feature Crossed	BURLINGTON BROOK
NBIS Length	Yes 58

Inspected By: P. Talmont & K. Weir

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	0	Off System
26) Functional Class	9	Rural Local
100) Defense Highway	0	Not Defense Highway
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	3	Town or Township Highway Agency
22) Owner	3	Town or Township Highway Agency
Report Class	L	LOCAL
37) Historical Significance	5	Bridge is not eligible for National Register

WATERWAY

DrainageBasinCode	4311	
38) Navigation Control	0	No navigation control on waterway
39) Navigation Vert Clr.	0	
116) Vert-Lift Brg Nav Min		
111) Pier Abutment Protection		
40) Navigation Horiz Clr.	0	

PROPOSED IMPROVEMENTS

75A) Type of Work Proposed		Replacement - substandard
75B) Work Done By		Work done by owner's forces
76) Length of Struct. Improvement		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. 20-103 Advertised 11/26/08

POSTED SIGNS & UTILITIES

Other Posted Signs 1	0	Other warning signs			
Other Posted Signs 2	0	One lane bridge			
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	25	mph			mph
Utility					

LOAD RATING AND POSTING

31) Design Load	5	Evaluation Code	L
63) Operating Rating Type	1	Year of Evaluation	1997
64) Operating Rating	70.0	70) Bridge Posting	5
65) Inventory Rating Type	1	41) Structure Status	A
66) Inventory Rating	42.0	Open, no restriction	

CONDITION

	Rating	By
58) Deck	7	DT
59) Superstructure	4	DT
60) Substructure	5	DT
61) Channel & Chan. Protection	6	DT
62) Culverts	N	DT

APPRAISALS

	Rating	By
67) Structure Evaluation	4	DT
68) Deck Geometry	4	DT
69) Under Clear Vert & Horiz	N	DT
71) Waterway Adequacy	7	DT
72) Approach Rdwy Alignment	7	DT
113) Scour Critical	8	

Items 58 Thru 72 Checked By: D Dumas

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	No		Barrel Ladder	No	
Fence Present	No		Stand Pipes	No	
Fence Height	0.0	ft	Cat Walks	No	
Fence Type		Combination	Movable Inspection System	No	
Fence Material		Other	Loose Concrete Checked?	No	
Fence Top Type		Vertical			

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2010
Senior	debishopk
Supervisor	lapierretd

REVIEWED BY D Dumas Date 5/19/09

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05916 **INSPECTION DATE:** 1/3/2020

INSPECTION TYPE: Routine **PREVIOUS INSPECTION DATE:** 1/24/2005 **SNOOPER REQUIRED:** No
INSPECTION PERFORMED BY: Team 5 **SNOOPER USED:** No

TOWN: BURLINGTON **FEATURE CARRIED:** VINEYARD ROAD **YEAR BUILT:** 1954
LOCATION: 300' WEST OF RTE 4 **FEATURE INTERSECTED** BURLINGTON BROOK **YEAR REBUILT:** 0
MAIN MATERIAL: Steel **MAIN DESIGN:** Stringer/Multi-beam or Girde

INSPECTION VISITS:
Inspection Date: 1/3/2007 **Start Time:** 11:00 AM
Temperature: 40 ° F **End Time:** 12:15 PM

INSPECTORS:
Inspector: D. Talmont **Task:** Routine Inspection
Inspector: K. Weir **Task:** Routine Inspection

58. DECK

OVERALL RATING 7

	RATING	
OVERLAY	8	BITUMINOUS CONCRETE WEARING SURFACE WITH ADDED CHIP SEAL & NO MEMBRANE WATERROOFING. INSIDE VERTICAL FACE OF RAILBASES REVEALED UP TO 11 INCHES +/-. SEE PHOTO 2.
DECK STR. CONDITION	7	UNDERSIDE SHOWS LOW % DETERIORATION. LARGE AREAS OF DISCOLORATION WITH CURING TYPE MAP CRACKING AND AREAS OF FROSTING. ALSO,RANDOM SMALL AREAS OF MINOR CRACKING WITH RUST AND EFFLORESCENCE STAINING WITH ISOLATED SHORT STALACTITES. ISOLATED SIGNS OF ACTIVE LEAKAGE ALONG TOP FLANGES OF BEAMS #1 AND #4 WITH EFFLORESCENCE AND SHORT STALACTITES. SEE PHOTO 5.
CURBS	N	
MEDIAN	N	
SIDEWALKS	N	
PARAPET	7	CONCRETE RAILBASE SHOWS RANDOM VERTICAL CRACKS, MINOR COLLISION SPALLS & SCRAPES AT ENDS. LIGHT ACCUMULATION ON SAND ON TOP.
RAILING	6	"H" POSTS WITH CHANNEL CAP AND (2) WIRE CABLES. PAINT SHOWS AREAS OF PITTING WITH LIGHT RUST AND BASE PLATES SHOW SAND BUILT-UP ALONG BASE WITH POCKETS OF HEAVY TO LAMINAR RUST PAINTED OVER, & SOME ANCHOR NUTS ROSEBUDDING.
PAINT	N	
FENCE	N	
DRAINS	N	
LIGHTING STANDARD	N	
UTILITIES TYPE/SIZE	N	
CONSTRUCTION JOINTS	N	
EXPANSION JOINTS	N	INDISCRIMINATE BITUMINOUS WEARING SURFACE OVER EXPANSION JOINTS SHOW FULL WIDTH TRANSVERSE CRACKS OPEN UP TO 1/4 INCH +/-. SEE PHOTO 3.

59. SUPERSTRUCTURE

OVERALL RATING 4

	RATING	
BEARING DEVICES	6	ALL BEARINGS SHOW AREAS OF PAINT PITTING WITH AREAS OF LIGHT TO MEDIUM RUST,EXPOSED PRIMER.

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05916 **INSPECTION DATE:** 1/3/2020

59. SUPERSTRUCTURE **OVERALL RATING** 4

ABUTMENT #1 (FIXED) BEARING #1 SHOWS HEAVY RUST.
SEE PHOTOS 12 & 14.

STRINGERS	N	
GIRDERS	4	STRINGERS SHOW AREAS OF PAINT PITTING AND FLAKING WITH LIGHT TO MEDIUM RUST & SMALL AREAS OF EXPOSED PRIMER. ALSO,ISOLATED AREAS OF HEAVY RUST. SOUTH FASCIA SHOWS 13 LINEAR FEET +/- OF LAMINAR RUST AND HEAVY PITTING WITH SECTION LOSS RANGING FROM MINOR TO APPROXIMATELY 3/8 INCHES +/- LOCATED ON INSIDE OF FLANGES AND WEB AREA NEAR MID SPAN,CAUSED FROM DECK LEAKAGE ABOVE. MOST OF THE RUST WAS REMOVED DURING FIELD INSPECTION & REMEASURED. BEAM #4 NORTH EDGE OF BOTTOM FLANGE APPROXIMATELY 2 FEET 8 INCHES FROM WEST INTERMEDIATE DIAPHRAGM SHOWED FLANGE WITH APPROXIMATELY 1/4 INCH REMAINING FOR 12 INCHES LONG UP TO 2 -1/2 INCHES WIDE. NORTH FASCIA OUTSIDE FACE SHOWS AREA OF HEAVY TO LAMINAR RUST ON BOTTOM FLANGE AND LOWER WEB AREA WITH MINOR LOSS,EXTENDING FOR APPROXIMATELY 16 FEET +/ FROM ABUTMENT #1 WITH ADJACENT 3 FOOT AREA OF LAMINAR RUST ON BOTTOM OF TOP FLANGE WITH HEAVY PITTING. ALSO,INSIDE BOTTOM OF TOP FLANGE AT SAME LOCATION SHOWS AREAS OF LAMINAR RUST,CAUSED FROM DECK LEAKAGE ABOVE. SEE ATTACHED SKETCH & PHOTOS 6 THRU 9.
FLOOR BEAMS	N	
TRUSSES-GENERAL	N	
TRUSSES-PORTALS	N	
TRUSSES-BRACING	N	
PAINT	5	SEE PHOTO
RUST	4	SEE ABOVE.
MACHINERY MOV SPAN	N	
RIVETS & BOLTS	7	
WELDS & CRACKS	8	COVER PLATES LOCATED ON INTERIOR BEAMS ONLY.
TIMBER DECAY	N	
CONCRETE CRACKING	N	
COLLISION DAMAGE	8	
MEMBER ALIGNMENT	8	
DEFLECT. UNDER LOAD	N	
VIBR. UNDER LOAD	N	
STAND PIPES	N	
BARREL LADDERS	N	

ARE BARREL LADDERS OSHA COMPLIANT? NA

60. SUBSTRUCTURE **OVERALL RATING** 5

	RATING	
ABUTMENTS-STEM	5	ABUTMENTS SHOW AREAS OF LIGHT SCALE AND NUMEROUS MAP HAIRLINE CRACKS WITH DISCOLORATION & SOME LIGHT EFFLORESCENCE. ALSO,RANDOM FULL HEIGHT

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05916 **INSPECTION DATE:** 1/3/2020

60. SUBSTRUCTURE

OVERALL RATING 5

VERTICAL CRACKS,SOME OPEN UP TO 0.030 INCHES +/- EXTENDING ACROSS SEAT.
ABUTMENT #2 SHOWS MODERATE TO HEAVY SCALE UNDER 4 INCH WEEP DRAINS.
NORTH END FACE SHOWS (1) ISOLATED 50 INCH HORIZONTAL CRACK OPEN UP TO 1/4 INCHES +/-.
SOUTH END FACE SHOWS (1) ISOLATED 36 INCH HORIZONTAL CRACK OPEN UP 1/8 INCHES +/- EXTENDING DIAGONALLY DOWNWARDS. ALSO,ABUTMENT SHOWS RANDOM HORIZONTAL & DIAGONAL CRACKS WITH MODERATE EFFLORESCENCE & RUST STAINS.
SEE PHOTOS 11 & 13.

ABUTMENTS-BACKWALL	7	BACKWALL #2 BAY #2 SHOWS (1) ISOLATED FULL HEIGHT VERTICAL CRACK EXTENDING FROM ABUTMENT.
ABUTMENTS-FOOTINGS	N	NOT VISIBLE.
ABUT.-SETTLEMENT	7	NORTHWEST WINGWALL JOINT MISALIGNED AT TOP 7/8 INCH AND OPEN 1-1/4 INCH. (NO CHANGE)
ABUTMENTS-WINGWALLS	6	WINGWALLS SHOW VERTICAL,HORIZONTAL AND MAP CRACKS WITH DISCOLORATION & EFFLORESCENCE. ALSO,SOME STAINING FROM POURLINES. NORTHWEST WINGWALL SHOWS (1) ISOLATED 43 INCH HORIZONTAL CRACK OPEN UP TO 1/16 INCH. NORTHEAST WINGWALL SHOWS AREAS OF ACTIVE LEAKAGE THIS INSPECTION. SEE PHOTO 10.
PIERS/BENTS-CAPS	N	
PIERS/BENTS-PILE BENT	N	
PIERS/BENTS-COLUMN	N	
PIERS/BENTS-FOOTINGS	N	
PIERS/BENTS-SETTLEMent	N	
EROSION-SCOUR	8	
CONCRETE CRACK-SPALL	6	SEE ABOVE ITEMS.
STEEL CORROSION	N	
PAINT	N	
TIMBER DECAY	N	
COLLISION DAMAGE	N	
DEBRIS	7	LIGHT TO MODERATE ACCUMULATION OF PIGEON DROPPINGS AND SMALL STONES LOCATED ON SEATS.

61. CHANNEL PROTECTION

OVERALL RATING 6

	RATING	
CHANNEL SCOUR	8	LARGE ROCKS & BOULDERS LINE CHANNEL.
EMBANKMENT EROSION	6	EMBANKMENT EROSION LOCATED UP AND DOWNSTREAM EXPOSING TREE & BRUSH ROOTS.
DEBRIS	6	OBSTRUCTION - LARGE GRAVEL ENCROACHMENT AT WEST WITH MODERATE VEGETATION GROWTH RESTRICTS CHANNEL FLOW. SEE CHANNEL CHANGE BELOW. SEE PHOTO 4.
VEGETATION	7	TREES OVERHANGING CHANNEL.
CHANNEL CHANGE	6	FREEBOARD - 9 FEET 5 INCHES +/-. AVERAGE WATERDEPTH - 12 INCHES +/-. MEASUREMENT TAKEN AT MIDSPAN INLET END.

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05916 **INSPECTION DATE:** 1/3/2020

61. CHANNEL PROTECTION **OVERALL RATING** 6

ALIGNMENT - STREAM ENTERS STRUCTURE AT MODERATE ANGLE WITH FLOW ALONG THE SOUTHEAST CHANNEL EMBANKMENT AND ABUTMENT #2.
AVERAGE WATERDEPTH ALONG ABUTMENT #2 17 INCHES +/- THIS INSPECTION.

FENDER SYSTEM	N	
SPUR DIKES & JETTIES	N	
RIP RAP	7	RIP RAP PARTIALLY BURIED UNDER ENCROACHMENT.

62. CULVERTS & RETAINING WALL **OVERALL RATING** N

APPROACH CONDITION **OVERALL RATING** 6

	RATING	
APPROACH SLAB	N	
RELIEF JOINTS	N	
APPROACH GUIDE RAIL	6	(2) WIRE CABLES WITH WOOD POSTS. SEVERAL POSTS SPLIT AND WEATHERED & SEVERAL HAVE BEEN REPLACED. NORTHWEST SHOWS (1) POST TIPPED. SLIGHTLY LOOSE CABLES ARE INTEGRAL WITH BRIDGE RAILING.
APPROACH PAVEMENT	7	BITUMINOUS CONCRETE WITH ADDED CHIP SEAL. WEST APPROACH SHOWS RANDOM TRANSVERSE CRACKS, SOME FULL WIDTH AND ISOLATED LONGITUDINAL CRACKS. ALSO,SOME 'D" CRACKING ALONG DECK END. EAST APPROACH SHOWS A TRANSVERSE CRACK & RANDOM LARGE "D" CRACKS AT DECK END WITH SETTLEMENT UP TO 3/4 INCHES +/-. SEE PHOTO 1.
APPROACH EMBANKMENT	8	

TRAFFIC SAFETY FEATURES:

BRIDGE RAILINGS	0	
TRANSITIONS	0	
APPROACH GUARDRAILS	0	
APPR. GUARDRAIL ENDS	0	

LOAD POSTING

SINGLE UNIT (TONS)		
HS (TONS)		
4 AXLE (TONS)		
3S2 (TONS)		
ADVANCE WARNING Y/N	N	
LEGIBILITY	N	
VISIBILITY/LOCATION	N	

MISC.

MIN VERT. UNDERCLR.	0'	0"	
POSTED CLR. UNDER BRIDGE			

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05916 **INSPECTION DATE:** 1/3/2020

POSTED CLR. ON BRIDGE	' "	
ADVANCE WARNING (Y/N)	No	
SPEED LIMIT (IF ANY)	25 MPH	
CHARACTER OF TRAFFIC		

ADDITIONAL NOTES

LIGHT - LOW% TRUCKS.

ADDITIONAL COMMENTS:

Inspectors' Signatures:

1) _____ **Date:** 01/08/2007

2) _____ **Date:** 1/8/07

3) _____ **Date:** __/__/__

4) _____ **Date:** __/__/__

P.E. Signature: _____ **Date:** __/__/__

P.E.#: _____

Reviewed by: Sandra A Dumas **CDOT** **Date:** 3/18/07