

Highway Bridge Inspection Report

**SOUADABSCOOK CENTER NB
95 NB
over
SOUADABSCOOK STREAM**



Inspection Date: 05/07/2015

Inspected By: Jamie Hannum

Inspection Type(s): Routine

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP	3
NATIONAL BRIDGE INVENTORY REPORT - MAINE	4
GENERAL DATA REPORT	7
INSPECTION NOTES REPORT	9
ELEMENTS	11
DIVE - REPORT	12
PHOTOS	13
WORK ITEMS REPORT	23
JOB SAFETY REPORT	24

Inspector: Jamie Hannum

Inspection Date: 05/07/2015

Structure Number: 5950

Facility Carried: 95 NB

Highway Bridge Inspection Report

Location Map

National Bridge Inventory

Status: 1 - SD

Bridge Name: SOUADABSCOOK CENTER NB

Sufficiency Rating: 78.8

Inspections

(90) INSPECTION DATE	& (91) DESIGNATED INSPECTION FREQUENCY	24	05/07/2015
(92) CRITICAL FEATURE INSPECTION	& (93) CFI DATE		
(92A) FRACTURE CRITICAL DETAIL		N	
(92B) UNDERWATER INSPECTION		Y	60
(92C) OTHER SPECIAL INSPECTION		N	10/26/2011

Identification

(1) STATE CODE	231 - Maine
(8) STRUCTURE NUMBER	5950
(5) INVENTORY ROUTE	
(5A) RECORD TYPE	1: Route carried "on" the structure
(5B) ROUTE SIGNING PREFIX	3 - STATE HIGHWAY
(5C) DESIGNATED LEVEL OF SERVICE	1 - MAINLINE
(5) INVENTORY ROUTE	95
(5) INVENTORY ROUTE	1 - NORTH
(2) HIGHWAY AGENCY DISTRICT	04 - Eastern
(3) COUNTY CODE	019 Penobscot
(4) PLACE CODE	30795
(6) FEATURES INTERSECTED	SOUADABSCOOK STREAM
(7) FACILITY CARRIED	95 NB
(9) LOCATION	2.5 MI E TL/ 95 MI 177.1
(11) MILEPOINT	175.560
(12) BASE HIGHWAY NETWORK	Inventory Route is on the Base Network
(13) LRS INVENTORY ROUTE, SUBROUTE	
(13A) LRS INVENTORY ROUTE	000000095X
(13B) SUBROUTE NUMBER	00
(16) LATITUDE	44.762569444 4444
(17) LONGITUDE	68.909333333 3333
(98A) BORDER BRIDGE CODE	
(98B) PERCENT RESPONSIBILITY	0
(99) BORDER BRIDGE STRUCT NO.	n/a

Structure Type and Material

(43) STRUCTURE TYPE, MAIN	
(43A) KIND OF MATERIAL/DESIGN	4 - Steel continuous
(43B) TYPE OF DESIGN/CONSTR	02 - Stringer/Multi-beam or Girder
(44) STRUCTURE TYPE, APPROACH SPANS	
(44A) KIND OF MATERIAL/DESIGN	
(44B) TYPE OF DESIGN/CONSTRUCTION	
(45) NUMBER OF SPANS IN MAIN UNIT	3
(46) NUMBER OF APPROACH SPANS	0
(107) DECK STRUCTURE TYPE	1 - Concrete Cast-in-Place
(108) WEARING SURFACE/PROTECTIVE SYSTEMS	
(108A) WEARING SURFACE	1 - Monolithic Concrete (concurrently placed with structural deck)
(108B) DECK MEMBRANE	0 - None
(108C) DECK PROTECTION	0 - None

Age of Service

(27) YEAR BUILT	1961
(106) YEAR RECONSTRUCTED	0
(42) TYPE OF SERVICE	
(42A) TYPE OF SERVICE ON BRIDGE	1 - Highway
(42B) TYPE OF SERVICE UNDER BRIDGE	5 - Waterway
(28) LANES	
(28A) LANES ON THE STRUCTURE	02
(28B) LANES UNDER THE STRUCTURE	00
(29) AVERAGE DAILY TRAFFIC	12090
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014
(109) AVERAGE DAILY TRUCK TRAFFIC	11
(19) BYPASS DETOUR LENGTH	4

Geometric Data

(48) LENGTH OF MAXIMUM SPAN (ft.)	50
(49) STRUCTURE LENGTH (ft.)	135
(50) CURB/SIDEWALK WIDTHS	
(50A) LEFT CURB SIDEWALK (ft.)	0.2
(50B) RIGHT CURB SIDEWALK (ft.)	0.2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	40
(52) DECK WIDTH, OUT-TO-OUT (ft.)	42.4
(32) APPROACH ROADWAY WIDTH (ft.)	43.0
(33) BRIDGE MEDIAN	0 - No median
(34) SKEW (deg.)	0
(35) STRUCTURE FLARED	0 - No flare
(10) INV RTE, MIN VERT CLEARANCE (ft.)	328.05
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	40
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	327.76
(54) MIN VERTICAL UNDERCLEARANCE	
(54A) REFERENCE FEATURE	N - Feature not a highway or railroad
(54B) MIN VERTICAL UNDERCLENREANCE (ft.)	0
(55) MIN LATERAL UNDER CLEARANCE RIGHT	
(55A) REFERENCE FEATURE	N - Feature not a highway or railroad
(55B) MIN LATERAL UNDER CLEARANCE RIGHT (ft.)	327.76
(56) MIN LATERAL UNDER CLEARANCE (ft.)	99.9

Classification

(112) NBIS BRIDGE LENGTH	Yes
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1 - Structure/Route is on NHS
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01 - Rural - Principal Arterial - Interstate
(100) STRAHNET HIGHWAY DESIGNATION	Is on an Interstate STRAHNET route
(101) PARALLEL STRUCTURE DESIGNATION	R - Right structure (North or East)
(102) DIRECTION OF TRAFFIC	1-way traffic
(103) TEMP STRUCTURE	
(105) FEDERAL LANDS HIGHWAYS	Not Applicable
(110) DESIGNATED NATIONAL NETWORK	Inventory route on National Truck Network
(20) TOLL	3 - On Free Road
(21) MAINTENANCE RESPONSIBILITY	01 - State Highway Agency
(22) OWNER	01 - State Highway Agency
(37) HISTORICAL SIGNIFICANCE	4 - Not determinable

Condition

(58) DECK	4 - Poor Condition (advanced deterioration)
(59) SUPERSTRUCTURE	6 - Satisfactory Condition (minor deterioration)
(60) SUBSTRUCTURE	6 - Satisfactory Condition (minor deterioration)
(61) CHANNEL & CHANNEL PROTECTION	7 - Bank protection needs minor repairs
(62) CULVERT	N - Not Applicable

Load Rating and Posting

(31) DESIGN LOAD	6 - HS 20+Mod
(63) METHOD USED TO DETERMINE OPERATING RATING	3 - Load and Resistance Factor
(64) OPERATING RATING	35.3
(65) METHOD USED TO DETERMINE INVENTORY RATING	3 - Load and Resistance Factor
(66) INVENTORY RATING	27.1
(70) BRIDGE POSTING	5 - Equal to or above legal
(41) STRUCTURE OPEN/POSTED/CLOSED	A - Open

Appraisal

(67) STRUCTURAL EVALUATION	6
(68) DECK GEOMETRY	7
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(71) WATERWAY ADEQUACY	9 - Bridge Above Flood Water Elevations
(72) APPROACH ROADWAY ALIGNMENT	8 - Equal to present desirable criteria
(36) TRAFFIC SAFETY FEATURE	
36A) BRIDGE RAILINGS:	1 - Meets acceptable standards
36B) TRANSITIONS:	1 - Meets acceptable standards
36C) APPROACH GUARDRAIL	1 - Meets acceptable standards
36D) APPROACH GUARDRAIL ENDS	1 - Meets acceptable standards
(113) SCOUR CRITICAL BRIDGES	8 - Stable for scour conditions

Proposed Improvements

(75) TYPE OF WORK

(75A) TYPE OF WORK PROPOSED

(75B) WORK DONE BY

(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)

(94) BRIDGE IMPROVEMENT COST (\$K)

(95) ROADWAY IMPROVEMENT COST (\$K)

(96) TOTAL PROJECT COST

(97) YEAR OF IMPROVEMENT COST ESTIMATE

(114) FUTURE ADT

16926

(115) YEAR OF FUTURE ADT

2034

Navigation Data

(38) NAVIGATION CONTROL

0 - No navigation control on waterway (bridge

(111) PIER OR ABUTMENT PROTECTION

(39) NAV VERT CLEARANCE

0

(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE

0

(40) NAV HORIZONTAL CLEARANCE

0

General Bridge Data

Structure Number: 5950

Structure Name: SOUADABSCOOK CENTER NB

Owner: 1 State DOT

Town: Hampden

Co-Owner: N Not applicable

Town2:

Region: 04 Eastern

Maintainer: 1 State DOT

Bridge Plans: ☐

Co-Maintainer: N Not applicable

Structure Type

Main Span

Type: 1 Girder

Sub Type: 1 Deck

Construction: 1 Rolled

Material: 1 Steel

Continuity: 2 Continuous

Composite: 1 Non Composite

Moveable: 0 No

Deck Area: 5724.28507560 (SF)
000000

Curb Reveal Lt: 7.9 (in)

Curb Reveal Rt: 8.0 (in)

Approach Span

Type: _

Sub Type: _

Construction: _

Material: _

Continuity: _

Composite: _

Moveable: _

Repairs Done:

Year How

Scope

Substructures

Shaft	Notes
Abutment 1	
Pier	
Pier	
Pier	
Abutment 2	

Foundation	Notes
Abutment 1	
Pier	
Pier	
Pier	
Abutment 2	

Roadway

Road/Route Name	95 NB
Abut-Abut Detour	83.952102424000000
Corridor Priority	1

Inspection Notes

Structure Number: 5950

Town: Hampden

Structure Name: SOUADABSCOOK CENTER NB

Inspection Date: 05/07/2015

Structure Notes

Three span steel painted girders. Concrete deck, piers, abutments, wing-walls and wearing surface.

Wearing Surface

Did not chain wearing surface due to heavy traffic, but observed approximately 25% cracking, patched areas. Bottom of deck has heavy spalling with exposed re-steel at deck blocking areas and a high percentage of staining bottom of deck. Concrete wearing surface has 3 transverse cracks near center and 1/3rd of the way from each abutment, see photo.

Deck

NBI Item 58: 4

Extensive areas of spalled concrete with exposed re-steel on bottom of joint header. Staining areas on the bottom of the deck. Seals are intact, but have signs of moderate to heavy leakage. Joint haunch areas have spalling.

Superstructure

NBI Item 59: 6

Approximately 15% paint system distress with moderate rusting at beam end exterior bearing areas. Anchor bolts are missing. Bearings have 50%+ Paint loss for bearings under joints.

Substructure

NBI Item 60: 6

Moderate cracking and staining of back-wall areas. Pedestals have moderate cracking and staining.

Culvert

NBI Item 62: N

Channel

NBI Item 61: 7

Other

Special Inspection

Monitoring

Pontis Notes

Inspector: Jamie Hannum
 Inspection Date: 05/07/2015

Structure Number: 5950
 Facility Carried: 95 NB

Highway Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	4 - Sev.	5724	sq. ft.	0	5724		
107 - Steel Open Girder/Beam	2 - Low	810	ft.	700	110		
515 - Steel Protective Coating		810	sq. ft.	610	200		
210 - Reinforced Concrete Pier Wall	2 - Low	85	ft.	85			
215 - Reinforced Concrete Abutment	2 - Low	98	ft.	50	30	10	8
302 - Compression Joint Seal	2 - Low	85	ft.	0		40	45
311 - Movable Bearing	2 - Low	12	each	6		6	
515 - Steel Protective Coating		12	sq. ft.	0	6	6	
313 - Fixed Bearing	2 - Low	12	each	12			
515 - Steel Protective Coating		12	sq. ft.	0	6	6	
801 - Beam End	2 - Low	12	each	6	6		
843 - Rigid Wearing Surface	4 - Sev.	5400	sq. ft.	4050	1200	150	
861 - Beam End – Protective Coating	2 - Low	12	each	0	6	6	

Underwater Dive Inspection Report

Structure Number: 5950

Town 1: 19280 - Hampden

Division: Bangor

Location: 2.5 MI E TL/ 95 MI 177.1

Tide Information:

Dive Entry Location: Upstream end

Scour:

Comments/Hazards:

dive same time as SB bridge

Bridge Name: SOUADABSCOOK CENTER NB

Town 2:

DiveID: 5156

☐ Tidal:

Streambed Description:

Gravel and stoney. Very silty.

Channel Description:

Mostly flat, even

Substructure Description:

2 mass concrete piers. Both of the footings are exposed on the channel side. Concrete was in good condition. According to plans footings are 6'-6" in height and shown to be sitting on piles. 2007: Right footing exposed 0" to 10". Left footing exposed 0" to 17". 2011: Right footing exposed up to 10" max. Left footing exposed up to 24" max. Ratings remain same. Footings on piles.

Inspection Team:

Edwards

Merrithew

Wathen

Falla

Role:

TL,SD

SD

D

D

Dive Conditions:

Time: Entry: 2:20 AM/PM AM

Time: Exit: 3:00 AM/PM AM

Water Temp: 52

Visibility (ft): 3

Max Depth (ft): 9

Current: slight

Weather: sunny

Underwater Inspection Date: 10262011

Channel Condition: 7

Substr/Culvert Condition: 7

Inspection Cycle: Y60

Ratings Comments:

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 1

Description Roadway looking East



PHOTO 2

Description General view of concrete wearing surface

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 3

Description West joint seal



PHOTO 4

Description Up stream end

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 5

Description West abutment



PHOTO 6

Description Spalled haunches with exposed re-steel, West end

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 7

Description Spalled joint header, typical of East and West joint



PHOTO 8

Description West side of the West pier

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 9

Description Exterior bearing and beam end, West end



PHOTO 10

Description Transverse deck cracking, worst of three

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 11

Description General view of patched concrete wearing surface



PHOTO 12

Description East abutment

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 13

Description Spalled joint header, East end



PHOTO 14

Description East side of East pier

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 15

Description Patched concrete



PHOTO 16

Description Exterior beam end

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 17

Description Down stream end



PHOTO 18

Description Transverse deck cracking

Inspector: Jamie Hannum
Inspection Date: 05/07/2015

Structure Number: 5950
Facility Carried: 95 NB

Highway Bridge Inspection Report

Pictures



PHOTO 19

Description End post map cracking

Maintenance Work Items

Structure Number: 5950

Structure Name: SOUADABSCOOK CENTER
NB

Town 19280
:

Owner: Hannum, Jamie

Type	Work Item	Priority	Notes
------	-----------	----------	-------

MaineDOT NBIS Bridge Safety Inspection JSA

Inspector: Hannum, Jamie

Structure Number: 5950

Inspection Date: 02/04/2016

Structure Name: SOUADABSCOOK CENTER NB

Team Leader: Jamie Hannum

Additional Team Members/Visitors:

- 1.)
- 2.)
- 3.)
- 4.)
- 5.)
- 6.)
- 7.)
- 8.)
- 9.)

Job being performed:

Bridge inspection

Hazard:

- ☒ Exposure to traffic

Control:

- ☒ Parked off road with strobe
- ☒ Less than 1 hour on bridge
- ☒ Wear standard reflective clothing and hard hat
- ☐ Spotter
- ☐ Traffic Control Crew

Hazard:

- ☒ Steep slopes and uneven working areas (rip rap, mud, loose fill, etc)

Control:

- ☒ Wear appropriate, prudent footwear
- ☐ Rope or fall protection

Hazard:

- ☒ Chipped Concrete or Steel (hand tools only)

Control:

- ☐ Wear appropriate, prudent eye/hand protection

Hazard:

- ☒ 6' Vertical drops

Control:

- ☒ Stay away from areas

Hazard:

- ☒ Water Hazards

Control:

- ☒ Evaluate conditions. Wear appropriate, prudent PPE

Hazard:

- ☒ Insects, Poison Ivy, or other environmental hazards

Control:

- ☒ Apply insect repellent and/or sunscreen
- ☒ Protect skin with appropriate, prudent clothing

Hazard:

- ☒ Lead paint and Avian excrement

Control:

- ☒ Wear gloves, do not scrape

Hazard:

- ☐ Heavy Manual Lifting

Control:

- ☐ Ask for assistance in donning dive gear, lifting equipment

Hazard:

- ☐ DCS, Lung Expansion

Control:

- ☐ Ascend slowly, use computers, Safety Stops (15' mark for 3 min.)

Hazard:

- ☐ Entanglement U/W

Control:

- ☐ Use knife, Comm gear

Hazard:

- ☐ Boat Traffic

Control:

- ☐ Fly Dive Flag, use spotter, contact bridge on Chan. 13

Hazard:

- ☐ Cold Water

Control:

- ☐ Use adequate dry suit underwear for water temperature

Hazard:☐ Live Boating**Control:**☐ Keep track of divers, avoid powering during drop-off/pick-up**Other Hazards****Other Controls****Safety Equipment Required:**☒ Hard hat☒ Vest☒ Glasses☒ Gloves☒ PFD☐ Rain Gear☒ Bug Spray☒ Sunscreen☒ First Aid☐ O2☐ AED☐ Comm Gear☒ Cell Phone**Other Safety Equipment:****Emergency Action Plan:**☒ Call 911☒ First Aid Kit☐ Fall Rescue Plan☐ Water Rescue Plan☐ Dan 1-919-684-9111☐ USCG 741-5465**Other Emergency Action Plan:**

I certify that the MaineDOT NBIS Bridge Safety Inspection JSA has been completed according to all proper procedures required by the Maine Department of Transportation.

☒ Complete

Jamie Hannum