

Highway Bridge Inspection Report

COLD BROOK ROAD/I-95
COLD BROOK ROAD
over
I-95



Asset Code: 5970

Inspection Date: 12/18/2017

Inspected By: Scott Harris

Inspection Type(s): Routine

National Bridge Inventory

Status: 0 - ND

Bridge Name: COLD BROOK ROAD/I-95

Sufficiency Rating: 62.0

Inspections

(90) INSPECTION DATE	& (91) DESIGNATED INSPECTION FREQUENCY	24	12/18/2017
(92) CRITICAL FEATURE INSPECTION	& (93) CFI DATE		
(92A) FRACTURE CRITICAL DETAIL		N	
(92B) UNDERWATER INSPECTION		N	
(92C) OTHER SPECIAL INSPECTION		N	

Identification

(1) STATE CODE	231 - Maine
(8) STRUCTURE NUMBER	5970
(5) INVENTORY ROUTE	
(5A) RECORD TYPE	1: Route carried "on" the structure
(5B) ROUTE SIGNING PREFIX	4 - COUNTY HIGHWAY
(5C) DESIGNATED LEVEL OF SERVICE	0 - None
(5) INVENTORY ROUTE	0
(5) INVENTORY ROUTE	0 - NOT APPLICABLE
(2) HIGHWAY AGENCY DISTRICT	04 - Eastern
(3) COUNTY CODE	019 Penobscot
(4) PLACE CODE	30795
(6) FEATURES INTERSECTED	I-95
(7) FACILITY CARRIED	COLD BROOK ROAD
(9) LOCATION	I-95 INTERCHANGE #44
(11) MILEPOINT	2.090
(12) BASE HIGHWAY NETWORK	Inventory Route is not on the Base Network
(13) LRS INVENTORY ROUTE, SUBROUTE	
(13A) LRS INVENTORY ROUTE	0001900553
(13B) SUBROUTE NUMBER	00
(16) LATITUDE	44.77368
(17) LONGITUDE	-68.85938
(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	3 - Steel
(43B) TYPE OF DESIGN/CONSTR	02 - Stringer/Multi-beam or Girder
(44) STRUCTURE TYPE, APPROACH SPANS	
(44A) KIND OF MATERIAL/DESIGN	0 - Other
(44B) TYPE OF DESIGN/CONSTRUCTION	00 - Other
(45) NUMBER OF SPANS IN MAIN UNIT	5
(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	1962
(106) YEAR RECONSTRUCTED	-4
(42) TYPE OF SERVICE	
(42A) TYPE OF SERVICE ON BRIDGE	1 - Highway
(42B) TYPE OF SERVICE UNDER BRIDGE	1 - Highway, with or w/out pedestrian
(28) LANES	
(28A) LANES ON THE STRUCTURE	02
(28B) LANES UNDER THE STRUCTURE	04
(29) AVERAGE DAILY TRAFFIC	9885
(30) YEAR OF AVERAGE DAILY TRAFFIC	2016
(109) AVERAGE DAILY TRUCK TRAFFIC	5
(19) BYPASS DETOUR LENGTH	6

Geometric Data

(48) LENGTH OF MAXIMUM SPAN (ft.)	68.0
(49) STRUCTURE LENGTH (ft.)	325
(50) CURB/SIDEWALK WIDTHS	
(50A) LEFT CURB SIDEWALK (ft.)	1.5
(50B) RIGHT CURB SIDEWALK (ft.)	1.5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	30
(52) DECK WIDTH, OUT-TO-OUT (ft.)	35.5
(32) APPROACH ROADWAY WIDTH (ft.)	40
(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.)	30
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	327.76
(54) MIN VERTICAL UNDERCLEARANCE	
(54A) REFERENCE FEATURE	H - Highway beneath structure
(54B) MIN VERTICAL UNDERCLEARENCE (ft.)	16.75
(55) MIN LATERAL UNDER CLEARANCE RIGHT	
(55A) REFERENCE FEATURE	H - Highway beneath structure
(55B) MIN LATERAL UNDER CLEARANCE RIGHT (ft.)	11.15
(56) MIN LATERAL UNDER CLEARANCE (ft.)	6.9

Classification

(112) NBIS BRIDGE LENGTH	Yes
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0 - Structure/Route is NOT on NHS
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07 - Rural - Major Collector
(100) STRAHNET HIGHWAY DESIGNATION	Not a STRAHNET route
(101) PARALLEL STRUCTURE DESIGNATION	N - No parallel structure
(102) DIRECTION OF TRAFFIC	2-way traffic
(103) TEMP STRUCTURE	
(105) FEDERAL LANDS HIGHWAYS	Not Applicable
(110) DESIGNATED NATIONAL NETWORK	Inventory route not on 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	7 - Good Condition (some minor problems)
(59) SUPERSTRUCTURE	6 - Satisfactory Condition (minor deterioration)
(60) SUBSTRUCTURE	4 - Poor Condition (advanced deterioration)
(61) CHANNEL & CHANNEL PROTECTION	N - Not Applicable
(62) CULVERT	N - Not Applicable

Load Rating and Posting

(31) DESIGN LOAD	5 - HS 20
(63) METHOD USED TO DETERMINE OPERATING RATING	8 - Load and Resistance Factor
(64) OPERATING RATING	1.97
(65) METHOD USED TO DETERMINE INVENTORY RATING	8 - Load and Resistance Factor
(66) INVENTORY RATING	1.52
(70) BRIDGE POSTING	5 - Equal to or above legal
(41) STRUCTURE OPEN/POSTED/CLOSED	A - Open

Appraisal

(67) STRUCTURAL EVALUATION	5
(68) DECK GEOMETRY	4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	5
(71) WATERWAY ADEQUACY	N - Not Applicable
(72) APPROACH ROADWAY ALIGNMENT	8 - Equal to present desirable criteria
(36) TRAFFIC SAFETY FEATURE	
36A) BRIDGE RAILINGS:	1 - Meets acceptable standards
36B) TRANSITIONS:	0 - Does not meet acceptable standards/safety feature is required
36C) APPROACH GUARDRAIL	0 - Does not meet acceptable standards/safety feature is required
36D) APPROACH GUARDRAIL ENDS	0 - Does not meet acceptable standards/safety feature is required
(113) SCOUR CRITICAL BRIDGES	N - Not over waterway

Proposed Improvements

(75) TYPE OF WORK	
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(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 13839
(115) YEAR OF FUTURE ADT 2036

Navigation Data	
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(38) NAVIGATION CONTROL	N - Not applicable, no waterway
(111) PIER OR ABUTMENT PROTECTION	
(39) NAV VERT CLEARANCE	0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE	0
(40) NAV HORIZONTAL CLEARANCE	0

Inspection Notes

Structure Number: 5970

Town: Hampden

Structure Name: COLD BROOK ROAD/I-95

Structure Notes

Five span steel painted girders. Concrete deck, piers, abutments, wings and wearing surface.

Wearing Surface

Concrete wearing surface is in satisfactory condition with no issues noted.

Deck

NBI Item 58: 7

Bottom of the deck is in very good condition with no issues noted. No areas of spalled or delaminated concrete over the travel lanes. rail covered with snow at this time. Joints have minor tearing. No signage or light poles are attached to the bridge.

Superstructure

NBI Item 59: 6

Painted steel girders have 15% paint distress to the exterior girders and the bottom flanges of the interior girders and girder ends. No measurable section loss noted.

Substructure

NBI Item 60: 4

Concrete abutments have minor cracking and rust staining. Three out of four pier caps have serious section loss under the west exterior bearings, which have required blocking, see photos. Several of the columns have been rehabbed, but several have large areas of delaminated and cracked concrete.

Culvert

NBI Item 62: N

Channel

NBI Item 61: N

Other

Special Inspection

Monitoring

Pontis Notes

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Highway Bridge Inspection Report

Pictures



PHOTO 1

Description Roadway looking north



PHOTO 2

Description south joint

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Highway Bridge Inspection Report

Pictures



PHOTO 3

Description typical of pier joint



PHOTO 4

Description Wearing surface view

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Highway Bridge Inspection Report

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PHOTO 5

Description typical of pier joint



PHOTO 6

Description typical of pier joint

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Pictures



PHOTO 7

Description west side view



PHOTO 8

Description north abutment exterior beam end

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PHOTO 9

Description paint failures westgirder



PHOTO 10

Description north abutment

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PHOTO 11

Description north abutment slope pavement



PHOTO 12

Description north abutment beam end

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PHOTO 13

Description paint failures north abutment beam ends



PHOTO 14

Description blocking at NW pier

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PHOTO 15

Description north span view



PHOTO 16

Description north pier north face

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PHOTO 17

Description injured hawk



PHOTO 18

Description injured hawk

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PHOTO 19

Description Spalling nw pier cap



PHOTO 20

Description looking south

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PHOTO 21

Description Blocking at nw pier cap



PHOTO 22

Description NW pier cap

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PHOTO 23

Description west side view



PHOTO 24

Description Deteriorated south pier cap

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PHOTO 25

Description Typical beam end piers



PHOTO 26

Description south end view

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PHOTO 27

Description I-95 NB span



PHOTO 28

Description looking west

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PHOTO 29

Description east abutment