

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key:	2019	Agency ID:	2019	SR: 6	SD/FO: SD
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IDENTIFICATION

State 1: 23 Maine Struc Num 8: 2019

Facility Carried 7: IN PERU = N. MAIN Location 9: 150 FT S'LY OF JCT US2

Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 3 State Hwy

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 Western County Code 3: 017 Oxford

Place Code 4: 17240 Peru Mile Post 11: 9.150 mi

Feature Intersected 6: ANDROSCOGGIN RIVER

Latitude 16: 44d 31' 48" Longitude 17: 070d 27' 51"

Border Bridge Code 98: Not Applicable (P)

Border Bridge Number 99: n/a

INSPECTION

Frequency 91: 24 months Inspection Date 90: 12/18/2013 Next Inspection: 12/18/2015

FC Frequency 92A: 24 months FC Inspection Date 93A: 8/9/2012 Next FC Inspection: 8/9/2014

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: 12/18/2013 Next Elem. Insp. Due: 12/18/2015

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 3

Main Span Material/Design 43A/B:

3 Steel 10 Truss-Thru

Deck Type 107: 1 Concrete-Cast-in-Place

Wearing Surface 108A: 1 Monolithic Concrete

Membrane 108B: 0 None

Deck Protection 108C: None

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: Not Applicable (P)

Highway System 104: 0 Not on NHS NBIS Length 112: Long Enough

Toll Facility 20: 3 On free road Functional Class 26: 06 Rural Minor Arterial

Defense Hwy 110: 0 Not a STRAHNET hwy Historical Significance 37: 5 Not eligible for NRHP

Owner 22: 01 State Highway Agency

Custodian 21: 01 State Highway Agency

AGE AND SERVICE

Year Built 27: 1930 Year Reconstructed 106: -4

Type of Service on 42A: 5 Highway-pedestrian

Type of Service under 42B: 5 Waterway

Lanes on 28A: 2 Lanes Under 28B: 0 Detour Length 19: 7.8 mi

ADT 29: 5,819 Truck ADT 109: 9 % Year of ADT 30: 2012

CONDITION

Deck 55: 5 Fair Super 59: 4 Poor Sub 60: 5 Fair

Culvert 62: N N/A (NBI) Channel/Channel Protection 61: 6 Bank Slumping

GEOMETRIC DATA

Length Max Span 48: 186.0 ft Structure Length 49: 574.0 ft

Curb/Sdwk Width L 50A: 0.5 ft Curb/Sidewalk Width R 50B: 5.2 ft

Width Curb to Curb 51: 22.0 ft Width Out to Out 52: 23.0 ft

Approach Roadway Width 32: 26.0 ft Median 33: 0 No median (w/ shoulders)

Deck Area: 13,201.5 sq. ft

Skew 34: 0.00 ° Structure Flared 35: 0 No flare

Vertical Clearance 10: 14.83 ft Horiz. Clearance 47: 22.00 ft

Minimum Vertical Clearance Over Bridge 53: 14.8 ft

Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR

Minimum Vertical Underclearance 54B: 0.0 ft

Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR

Minimum Lateral Underclearance R 55: 327.8 ft

Minimum Lateral Underclearance L 56: 327.8 ft

LOAD RATING AND POSTING

Inventory Rating Method 65: 3 LRFR Load & Res. Operating Rating Method 63: 3 LRFR Load & Res. F.

Inventory Rating 66: HS4.6 Operating Rating 64: HS5.8

Design Load 31: 5 MS 18 (HS 20) Posting 70: 5 At/Above Legal Loads

Posting status 41: P Posted for load

APPRAISAL

Bridge Rail 36A: 0 Substandard Approach Rail 36C: 0 Substandard

Transition 36B: 0 Substandard Approach Rail Ends 36D: 0 Substandard

Str. Evaluation 67: 2 Deck Geometry 68: 2 Intolerable - Replace

Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)

Waterway Adequacy 71: 6 Equal Minimum Approach Alignment 72: 6 Equal Min Criteria

Scour Critical 113: 8 Stable Above Footing

PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 5,319,000 Type of Work 75: 31 Repl-Load Capacity

Roadway Cost 95: \$ 532,000 Length of Improvement 76: 586.0 ft

Total Cost 96: \$ 7,978,000 Future ADT 114: 8,147

Year of Cost Estimate 97: 2004 Year of Future ADT 115: 2032

NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required

Vertical Clearance 39: 0.0 ft Horizontal Clearance 40: 0.0 ft

Pier Protection 111: Not Applicable (P) Lift Bridge Vertical Clearance 116: 0.0 ft

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
1	18/2	P Conc Deck/Thin Ovl	(SF)	13,202	0 %	0	100 %	13,202	0 %	0	0 %	0	0 %	0
1	113/2	Paint Stl Stringer	(LF)	3,444	95 %	3,272	5 %	172	0 %	0	0 %	0	0 %	0
1	121/2	P/Stl Thru Truss/Bot	(LF)	1,148	75 %	861	15 %	172	10 %	115	0 %	0	0 %	0
1	126/2	P/Stl Thru Truss/Top	(LF)	1,148	70 %	804	15 %	172	15 %	172	0 %	0	0 %	0
1	152/2	Paint Stl Floor Beam	(LF)	621	61 %	379	7 %	43	27 %	168	5 %	31	0 %	0
1	210/2	R/Conc Pier Wall	(LF)	46	0 %	0	70 %	32	30 %	14	0 %	0	0 %	0

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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
1	215/2	R/Conc Abutment	(LF)	46	0 %	0	70 %	32	30 %	14	0 %	0	0 %	0
1	218/2	Undefined Wall Elem.	(LF)	80	71 %	57	15 %	12	12 %	10	2 %	2	0 %	0
1	302/2	Compressn Joint Seal	(LF)	46	0 %	0	100 %	46	0 %	0	0 %	0	0 %	0
1	311/2	Moveable Bearing	(EA)	12	50 %	6	25 %	3	25 %	3	0 %	0	0 %	0
1	334/2	Metal Rail Coated	(LF)	1,148	0 %	0	0 %	0	50 %	574	50 %	574	0 %	0
1	362/2	Traf Impact SmFlag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	384/2	Wear.Surf. - Thin	(SF)	12,628	0 %	0	80 %	10,102	18 %	2,273	2 %	253	0 %	0
1	388/2	Paint	(SF)	72,874	78 %	56,842	15 %	10,931	5 %	3,644	2 %	1,457	0 %	0
1	389/2	Reinfor conc dk/slab	(SF)	13,202	33 %	4,357	33 %	4,357	34 %	4,489	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	18/2	Concrete Deck - Protected w/ Thin	< none >
1	113/2	Painted Steel Stringer	< none >
1	121/2	Painted Steel Bottom Chord Thru T	< none >
1	126/2	Painted Steel Thru Truss (excl. bot	< none >
1	152/2	Painted Steel Floor Beam	< none >
1	210/2	Reinforced Conc Pier Wall	< none >
1	215/2	Reinforced Conc Abutment	< none >
1	218/2	Undefined Wall Elem (Incl. Wing-,	< none >
1	302/2	Compression Joint Seal	< none >
1	311/2	Moveable Bearing (roller, sliding, e	< none >
1	334/2	Metal Bridge Railing - Coated	< none >
1	362/2	Traffic Impact	< none >
1	384/2	Wearing Surface - Thin (Dummy El	<none>
1	388/2	Paint (Dummy Element)	<none>
1	389/2	Reinforced Concrete Deck/Slab	<none>

BRIDGE NOTES

1930 Three span, riveted steel, through truss supporting concrete deck.

Inventory Load Rating very low.

PAST INSPECTION

Inspection Date: 12/18/2013

Type: 1 Regular NBI

Inspector: Pontis

Pontis User Key: Pontis - Pontis Poi

Scope:

NBI: ☒ Other: ☐ Element: ☒
Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

2012: See consultant report.

2013: SUBSTRUCTURE: Distress of all major components including minor cracking, scaling and spalling. Southerly upstream wingwall top is heavily scaled/spalled. Upstream end of both piers also heavily spalled and may be working in under dwydag system (check when doing fracture critical inspection) however, added concrete via dywidag is in good condition on piers and at abutment bearings.

SUPERSTRUCTURE: Deck both topside and underside is in generally sound condition w/only minor defects to note. Truss underside has scattered areas of paint loss and slight section loss. Truss topside however, has multiple hits from equipment, logging trucks and likely the snow plow. Damage extends from 3' above deck to sway frame and many places in-between. This inspector showed the most aggrecious, refer to previous consultant report for views of all impacted components. Members are bent, twisted and notched. Also, sway frames and portals have also been hit/deformed. Inspectors should monitor fracture critical members for further deformation or impact.

Structure Inventory and Appraisal Sheet (English Units)

PAST INSPECTION

Inspection Date: 08/09/2012

Type: 1 Regular NBI

Inspector: DTJHANN

Pontis User Key: DTJHANN - JAMIE

Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☒

INSPECTION NOTES

SEE INSPECTION REPORT

PAST INSPECTION

Inspection Date: 08/16/2010

Type: 1 Regular NBI

Inspector: DTJHANN

Pontis User Key: DTJHANN - JAMIE

Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

INSPECTION NOTES

Structure is in overall Fair condition.

Used UBC to inspect bridge.

Chain drag of the entire deck found only minor areas of delaminated concrete primarily around joint areas.

Bearing nut on SW bearing is backed off by 3/4"

Note that the nut is not painted and may have been part of the retrofit.

All four abutment bearings have been retrofitted with a catcher's mit.

Several of the keeper nuts on the bearing pins are cracked, broken or missing, see photos.

The South end of the center span bearings are tipped back.

There is a cable that has been strung around all of the bearings on the S'ly pier, but is not tight enough to do much.

Two locations of collision damage to verticals.

First is located on down stream side, center of S'ly span. Collision damage to vertical has twisted it out of plane by 2°.

Structure Inventory and Appraisal Sheet (English Units)

PAST INSPECTION

Inspection Date: 12/01/2009

Type: 1 Regular NBI

Inspector: DTJHARR

Pontis User Key: DTJHARR - STEV

Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

INSPECTION NOTES

Bridge is in overall satisfactory condition with the exception of collision damage to superstructure. Collision damage to South Span Portal, overheads diagonals (photos). Collision damage also to two center spans diagonals (photos). North portal has more recent repair. SW wing has moderate scaling and south pier has moderate scaling at nose. Concrete deck has isolated deck spalls and curbing has moderate/heavy cracking. Recommend truss repairs and joint seals.

PAST INSPECTION

Inspection Date: 08/01/2007

Type: 1 Regular NBI

Inspector: DTPVERR

Pontis User Key: DTPVERR - PAUL

Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

INSPECTION NOTES

Refer also to individual elements for add'l comments. Refer also to report(s) when under-br crane used.
CHANNEL: No footings exp'd at abut's. Able to see stone blanket around most of S'ly pier and all of N'ly .
Refer to prev report(s) for detailed descrip.
SUPERSTRUCTURE: Corrosion dam gen'ly <= minor where accessible. Collision dam inc's: Freq minor impacts thru isol'd severe crippling of panel members (no br rail on sidewalk side). Overhead has freq damage inc impacted lower struts of sway frames.
APPROACH ROADWAY: Lacks rail at one loc - dam'd cable rail at another. No ped rail at N'ly transition; w-beam only. Severe pavement deter pervasive S'ly and isol'd N'ly.

Structure Inventory and Appraisal Sheet (English Units)

PAST INSPECTION

Inspection Date: 06/22/2005

Type: 1 Regular NBI

Inspector: DTPVERR

Pontis User Key: DTPVERR - PAUL

Scope:

NBI: ☒ Other: ☐ Element: ☒
 Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Refer also to individual elements for add'l comments. Refer also to prev report as under-br crane used.
 CHANNEL: No footings exp'd at abut's. Unable to see at piers due to high, turbid water. Refer to prev report(s) for detailed descrip.
 SUPERSTR: Corrosion dam gen'ly <= minor where accessible. Collision dam inc's: Freq v minor nicks thru isol'd mod'ly sev crippling of panel members (no br rail on sidewalk side). Overhead has freq damage inc impacted lower struts of sway frames.
 APPR RDWY: Lacks rail at one loc - dam'd cable rail at another.

PAST INSPECTION

Inspection Date: 09/03/2003

Type: 1 Regular NBI

Inspector: -1

Pontis User Key: DEB

Scope:

NBI: ☒ Other: ☐ Element: ☒
 Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

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INSPECTOR WORK CANDIDATES

Work Candidate ID	Action	Object	Agency Status	Agency Priority	Assigned to a Project	Rec. Date
A-DOT001-0A4C4303-0000001F	Replace Super (flex)	Bridge	Approved	High	No	12/18/2013
A-DOT001-0A4C4303-00000023	Other	Bridge	Approved	High	No	7/30/2010
A-DOT001-0E433FD8-00000047	Other	Bridge	Approved	High	No	12/1/2009
A-DOT001-0A4C4303-0000001D	Replace	Bridge	Approved	Medium	No	6/22/2005
A-DOT001-0A4C4303-00000021	Replace	Bridge	Approved	Medium	No	6/22/2005
A-DOT001-0E433FD8-00000043	Rehab Elem	P/Stl Thru Truss/Top	Approved	High	No	7/30/2010
A-DOT001-0A4C4303-00000025	Min Repair	P Conc Deck/Thin Ovl	Approved	Medium	No	7/30/2010
A-DOT001-0E433FD8-00000045	Min Repair	P Conc Deck/Thin Ovl	Approved	Medium	No	7/30/2010
A-DOT001-0A4C4303-00000027	Rehab Elem	Undefined Wall Elem.	Approved	low	No	12/18/2013

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Work Candidate ID	Action	Object	Agency Status	Agency Priority	Assigned to a Project	Rec. Date
A-DOT001-0E433FD8-00000041	Rehab Elem	Metal Rail Coated	Approved	High	No	12/18/2013
A-DOT001-0A4C4303-00000029	Repl Elem	Metal Rail Coated	Approved	High	No	12/18/2013
A-DOT001-0A4C4303-0000002B	Repl Elem	Traf Impact SmFlag	Approved	High	No	7/30/2010