

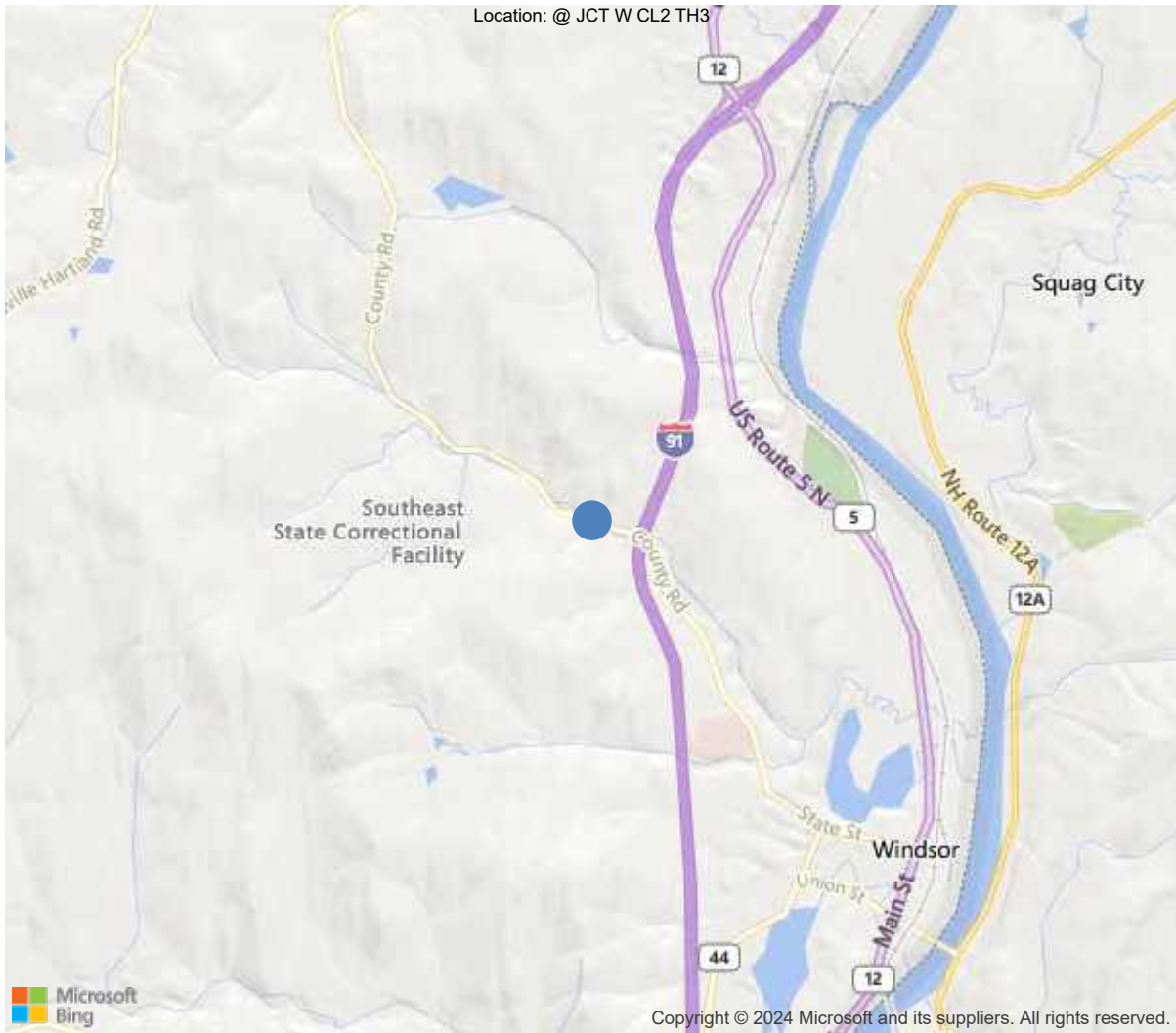


Town: 263 - WINDSOR

District 4, 27 - WINDSOR County

Owner: 3 - Town or Township Highway Agency

Maintenance Responsibility: 3 - Town or Township Highway Agency



43.50088, -72.41497

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	101423002714231
(5) Inventory Route	1
(2) Highway Agency District	4 - District 4
(3) County Code	27 - WINDSOR
(4) Place Code	84925
(6) Features Intersected	HUBBARD BROOK
(7) Facility Carried	C3022
(9) Location	@ JCT W CL2 TH3
(11) Mile Point	0 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	43.5008777777778
(17) Longitude	-72.4149722222222
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	8 - Wood or Timber
(108) Wearing Surface/Protective System	
Type of Wearing Surface	7 - Wood or Timber
Type of Membrane	0 - None
Type of Deck Protection	7 - Internally Sealed
AGE AND SERVICE	
(27) Year Built	1919
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	1
Under	0
(29) Average Daily Traffic	30
(30) Year of ADT	2019
(109) Truck ADT	2 %
(19) Bypass, Detour Length	99 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	33 ft
(49) Structure Length	38 ft
(50) Curb or Sidewalk Width	
Left	0.7 ft
Right	0.7 ft
(51) Bridge Roadway Width Curb to Curb	11.7 ft
(52) Deck Width Out to Out	12.7 ft
(32) Approach Roadway Width (W/Shoulders)	16 ft
(33) Bridge Median	0 - No median
(34) Skew	31 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	11.7 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	9 - Rural Local
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	3 - One lane bridge for 2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	3 - Town or Township Highway A
(22) Owner	3 - Town or Township Highway A
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	5
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	69
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	54
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	3
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	38 ft
(94) Bridge Improvement Cost (Multiply value by 1000)	\$ 169
(95) Roadway Improvement Cost (Multiply value by 1000)	\$ 50
(96) Total Project Cost (Multiply value by 1000)	\$ 219
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	32
(115) Year of Future ADT	2029

INSPECTIONS *			
(90) Inspection Date			09/29/2023
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

Team Lead: Justin White, **Inspection Date:** 09/29/2023

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
31	Timber Deck	SF	483	394	76	10	3
1140	Decay/Section Loss	SF	89	0	76	10	3
330	Metal Bridge Railing	LF	76	56	20	0	0
1000	Corrosion	LF	20	0	20	0	0

58 - Deck (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Areas of moderate to heavy saturation is visible along the beam flanges. The downstream end over abutment 2 the wearing surface has a 16"x 8' area where the top edge of the deck boards have broken out or are still peeling away, with heavy saturation and fungus growth visible in the soffit. Within this area 3' of the outer end is heavily rotten due to saturation held in place from the sand that has filled in this area. Further rot and fungus growth is visible along the board ends abutting this area extending under the anchored curb support.

A21 - Deck Wearing Surface Condition (Fair)

See deck comments.

A24 - Deck Curb Condition (Satisfactory)

Minor splintering and section loss scattered throughout due to the plow. The downstream abutment 2 and upstream abutment 1 ends have 1'- 2' broken out sections with anchor bolts exposed.

B.C.05 Bridge Railing Condition Rating (GOOD - Some minor defects.)

Scrape marks with some small areas of minor rust staining.

B.C.08 Bridge Joints Condition Rating (NOT APPLICABLE - Bridge does not have deck joints.)

APPROACH

72 - Approach Roadway Alignment (8 - Equal to present desirable criteria)

B.C.06 Bridge Railing Transitions Condition Rating (NOT APPLICABLE - Component does not exist.)

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	132	0	0	132	0
1000	Corrosion	LF	132	0	0	132	0
515	Steel Protective Coating	SF	924	0	506	0	418
3440	Effectiveness (Steel Protective Coatings)	LF	924	0	506	0	418

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
 Rust scale with minor to moderate section loss along the flanges and lower areas of the webs throughout.

B.C.07 Bridge Bearings Condition Rating (NOT APPLICABLE - Component does not exist.)

B.C.14 NSTM Inspection Condition (NOT APPLICABLE - Component does not exist.)

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	28	28	0	0	0

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Scattered fine map cracks with light staining. There is minor undermining of abutment 1 extending vertically as much as 9" and penetrating 2'-8" beyond the abutment face, undermining has exposed the timber piles.

A71 - Abutment End Walls Condition (Good)

Scattered fine shrinkage cracks with light staining.

CHANNEL

61 - Channel Condition (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)
 Settlement and erosion of the abutment 1 embankment has caused undermining along the length of the abutment, exposing two timber piles and penetrating at its deepest point 2'-8" below beam 3.

B.C.10 Channel Protection Condition Rating (FAIR - Some moderate defects; performance of the channel protection is not affected.)

B.C.11 Scour Condition Rating (No scour.)

GENERAL OBSERVATION

The deck has developed a large area of rot over the downstream end of abutment 2 with fungus growth visible in the soffit. A project to replace the timber deck should be considered, see maintenance report.

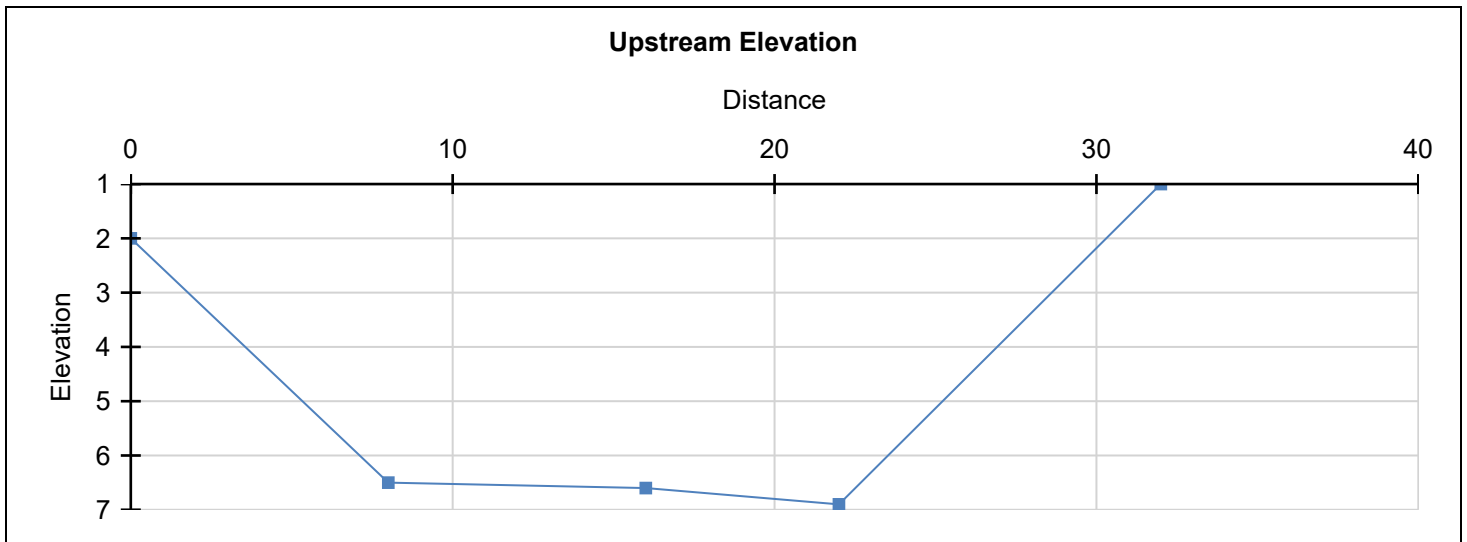
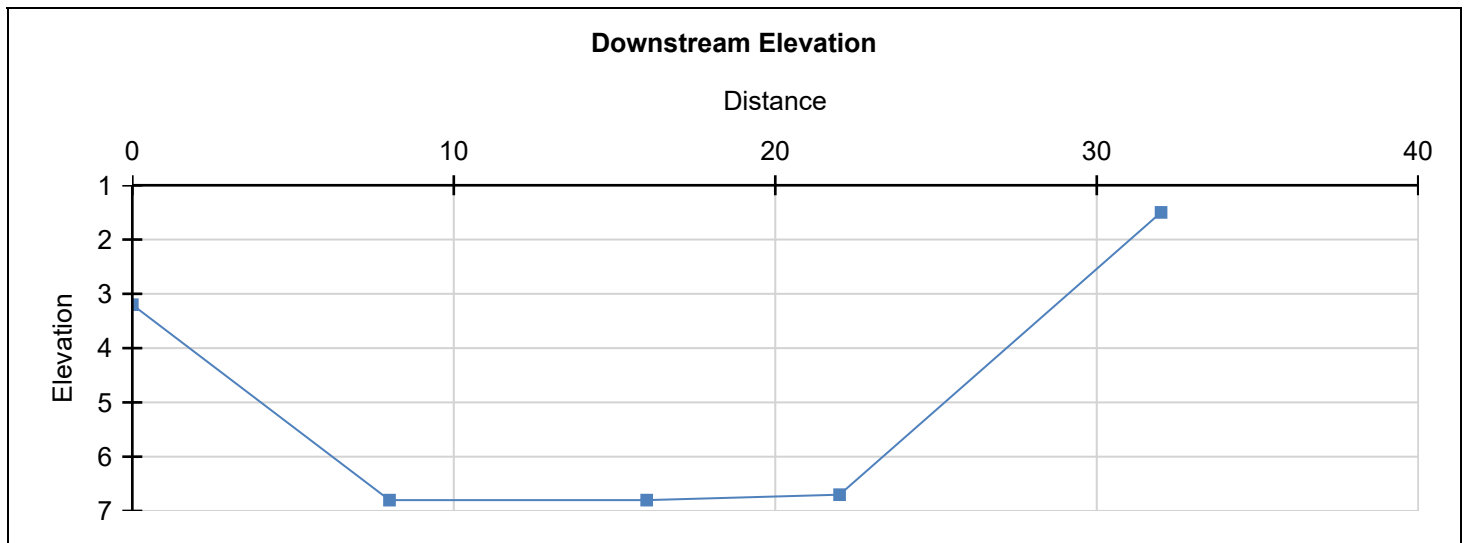
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1000	Corrosion	LF	20	0	20	0	0

Team Lead: Justin White, Inspection Date: 09/29/2023

Channel Profile

Waterway Flow: Left to right	Top of Water: 6.1 upstream abutment 1 6.4 downstream abutment 1
Origin: Beams	Bottom of Beam:

Station	Distance	Downstream	Upstream
Abutment 1	0	3.2	2
2	8	6.8	6.5
3	16	6.8	6.6
4	22	6.7	6.9
Abutment 2	32	1.5	1





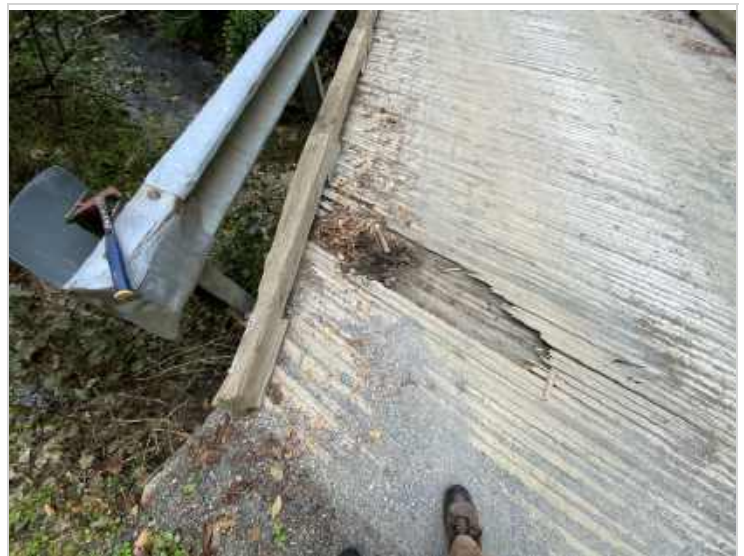
Approach abutment 1



Approach abutment 2



Wearing surface



Abutment 2 downstream end of deck



Abutment 2 downstream end of deck



Elevation downstream



Elevation upstream



Deck/Superstructure



Deck over abutment 2



Abutment 1



Abutment 1



Abutment 2



Upstream channel



Downstream channel

Team Lead: Justin White, Inspection Date: 09/29/2023

Maintenance Needs

Date Reported: 09/29/2023

Priority: 3 - Expedite - This Year

Status: Open

Type of Work: 8 - Deck - Deck replacement

Component: Deck

Deficiency Description

Areas of moderate to heavy saturation is visible along the beam flanges. The downstream end over abutment 2 the wearing surface has a 16"x 8' area where the top edge of the deck boards have broken out or are still peeling away, with heavy saturation and fungus growth visible in the soffit. Within this area 3' of the outer end is heavily rotten due to saturation held in place from the sand that has filled in this area. Further rot and fungus growth is visible along the board ends abutting this area extending under the anchored curb support.

Remarks



Abutment 2 downstream end of deck



Deck over abutment 2