

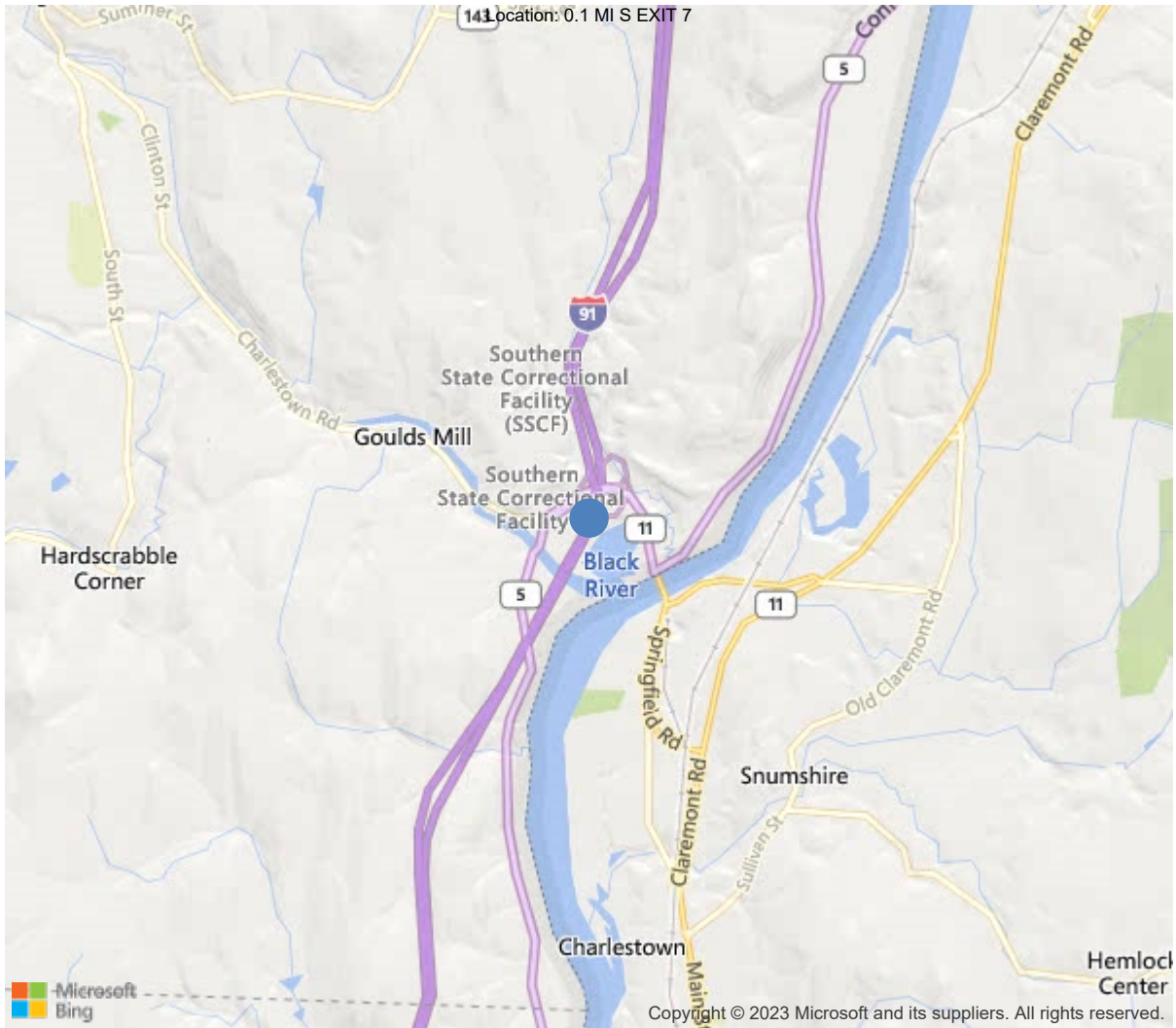


Town: 206 - SPRINGFIELD

District 2, 27 - WINDSOR County

Owner: 1 - State Highway Agency

Maintenance Responsibility: 1 - State Highway Agency



43.26478, -72.43352

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	200091027S14182
(5) Inventory Route	1
(2) Highway Agency District	2 - District 2
(3) County Code	27 - WINDSOR
(4) Place Code	69550
(6) Features Intersected	BIKE PATH
(7) Facility Carried	I 00091 ML
(9) Location	0.1 MI S EXIT 7
(11) Mile Point	41.541 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0270000091
(16) Latitude	43.2647777777778
(17) Longitude	-72.4335166666667
(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	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	2 - Preformed Fabric
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1965
(106) Year Reconstructed	0
(42) Type of Service	13
On	1 - Highway
Under	3 - Pedestrian-bicycle
(28) Lane	
On	3
Under	0
(29) Average Daily Traffic	15000
(30) Year of ADT	2018
(109) Truck ADT	13 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	72 ft
(49) Structure Length	74 ft
(50) Curb or Sidewalk Width	
Left	0.7 ft
Right	0.7 ft
(51) Bridge Roadway Width Curb to Curb	42 ft
(52) Deck Width Out to Out	47.2 ft
(32) Approach Roadway Width (W/Shoulders)	41 ft
(33) Bridge Median	1 - Open median
(34) Skew	20 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	42 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	N - Not applicable, no waterwa
(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	1
(26) Functional Class	1 - Rural Principal Arterial -
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	L - The left structure of para
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	97
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	58
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	7
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	N - Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	74 ft
(94) Bridge Improvement Cost	\$ 1222
(95) Roadway Improvement Cost	\$ 50
(96) Total Project Cost	\$ 1273
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	15750
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			05/24/2022
(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.			

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3493	2813	500	180	0
1080	Delamination/Spall/Patched Area	SF	300	0	180	120	0
1120	Efflorescence/Rust Staining	SF	320	0	320	0	0
1130	Cracking (RC and Other)	SF	60	0	0	60	0
510	Wearing Surfaces	SF	3108	3088	20	0	0
3220	Crack (Wearing Surface)	SF	20	0	20	0	0
301	Pourable Joint Seal	LF	90	90	0	0	0
330	Metal Bridge Railing	LF	148	148	0	0	0
804	Concrete Fascia	LF	148	63	10	75	0
1080	Delamination/Spall/Patched Area	LF	15	0	0	15	0
1120	Efflorescence/Rust Staining	LF	10	0	10	0	0
1130	Cracking (RC and Other)	LF	60	0	0	60	0

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Reinforced concrete deck is in satisfactory condition being fairly clean with scattered areas of minor transverse cracking with efflorescence leakage present. Delaminations are forming around a few of the cracks scattered around the deck.

200 - Existing pavement depth on bridge (3")
A21 - Deck Wearing Surface Condition (2 - Good)

Asphalt is in fairly good condition with light wear in travel lanes and some light cracking.

A24 - Deck Curb Condition (5 - Poor)

Concrete curbing with granite block facing is in poor condition with the concrete behind the granite facing having areas of moderate to heavy concrete scaling and areas of minor cracking. Curbing over wingwalls have heaviest deterioration present.

A28 - Deck Rail Condition (2 - Good)

Galvanized two (2) tier box beam rail is in fairly good condition having some minor scrapes and dents with some light surface rusting around scrapes.

A31 - Deck Post Condition (2 - Good)

Pedestal mounted galvanized steel tube posts are generally in fairly good condition with some minor wear present.

A34 - Deck Joint Condition (2 - Good)

Asphaltic plug joints are present over both abutments in fairly good condition with joints having some light wear and some minor transverse cracking at edges of joints.

A38 - Deck Drain Condition (2 - Good)

Weep tubes are present along both fascia's and have been extended below the lower flange of the fascia beams and are in good condition.

A39 - Deck Fascia Condition (3 - Satisfactory)

Concrete fascia has some areas of minor cracking and small rust stains in various locations along both fascias. Delaminations are starting to form along the top surface where cracking is progressing.

APPROACH

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

Roadway alignment has minor curve throughout with a slight elevation drop in the direction of traffic flow.

A13 - Approach Rail Condition (3 - Satisfactory)

Galvanized steel beam rail is in satisfactory condition with areas of rail having flattened out areas with scrapes and dents. Scraping has minor rusting and freckling surface rusting throughout.

A16 - Approach Post Condition (3 - Satisfactory)

Galvanized steel posts with steel offsets have small dents and bends along the upper portions and some surface rusting throughout.

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	518	466	26	26	0
1000	Corrosion	LF	52	0	26	26	0
515	Steel Protective Coating	SF	4144	4074	0	50	20
3420	Peeling/Bubbling/Cracking	LF	70	0	0	50	20
311	Movable Bearing	EA	7	6	0	1	0
1000	Corrosion	EA	1	0	0	1	0
313	Fixed Bearing	EA	7	6	0	1	0
1000	Corrosion	EA	1	0	0	1	0

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Seven (7) painted steel rolled beams are in fairly good condition having positive camber and cover plates welded along the bottom of the beams. Small areas of surface rusting are present mainly along the lower flanges and lower sections of the webs near the ends of the beams. Paint has minor distress along the lower flanges near the beam ends with steel corrosion initiated. Paint has small areas where paint is starting to bubble, flake and peel.

A55 - Lateral Bracing Condition (2 - Good)

Three (3) painted steel c-channel diaphragms that are bolted to plates that are welded to the webs of the rolled beams are in fairly good condition with some very small areas of corrosion.

A63 - Bearing Condition (2 - Good)

Abutment #2 has bronze bearings with interior bearings having some light surface corrosion starting and fascia bearings having minor rust scaling starting to form. Sliding steel plates are present over abutment #1 having light surface corrosion starting along the interior with fascia bearings having minor rust scaling starting to form. Bearings #1 at both ends have heaviest corrosion.

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	100	84	16	0	0
1120	Efflorescence/Rust Staining	LF	10	0	10	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
800	Reinforced Concrete Wing/Retaining Wall	EA	4	2	2	0	0
1120	Efflorescence/Rust Staining	EA	2	0	2	0	0

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

Abutment #1 is in fairly good condition with some hairline vertical shrinkage cracks scattered throughout the stem. Minor sandy debris build up is present along bridge seat. Minor saturated concrete and efflorescence leakage on the eastern end of abutment stem.

Abutment #2 is in fairly good condition with some hairline vertical shrinkage cracks scattered throughout the stem. Minor sandy debris build up is present along bridge seat.

A71 - Abutment End Walls Condition (3 - Good)

Reinforced concrete curtain walls are in fairly good condition having some light hairline cracking.

A77 - Retaining/Wingwall Condition (3 - Good)

Concrete wingwalls are in fairly good condition having some light map cracking.

CHANNEL

61 - Channel/Channel Protection (N - Not applicable.)

GENERAL OBSERVATION

Structure is in fairly good condition but still needing a few repairs. Older sections of galvanized steel beam rail and damaged rail should be replaced. Asphaltic plug joints over both abutments have minor transverse cracking along edges and should be considered for replacement to prevent leakage to structure below. Both sides of concrete curbing have areas of deep concrete scaling and should be cleaned and patched. Debris should be cleaned off abutment bridge seats. General spot cleaning of the paint is needed along the lower flanges at beam ends and bearings should be cleaned and repainted.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3493	2813	500	180	0
1080	Delamination/Spall/Patched Area	SF	300	0	180	120	0
1120	Efflorescence/Rust Staining	SF	320	0	320	0	0
1130	Cracking (RC and Other)	SF	60	0	0	60	0
510	Wearing Surfaces	SF	3108	3088	20	0	0
3220	Crack (Wearing Surface)	SF	20	0	20	0	0
107	Steel Open Girder/Beam	LF	518	466	26	26	0
1000	Corrosion	LF	52	0	26	26	0
515	Steel Protective Coating	SF	4144	4074	0	50	20
3420	Peeling/Bubbling/Cracking	LF	70	0	0	50	20
215	Reinforced Concrete Abutment	LF	100	84	16	0	0
1120	Efflorescence/Rust Staining	LF	10	0	10	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
301	Pourable Joint Seal	LF	90	90	0	0	0
311	Movable Bearing	EA	7	6	0	1	0
1000	Corrosion	EA	1	0	0	1	0
313	Fixed Bearing	EA	7	6	0	1	0
1000	Corrosion	EA	1	0	0	1	0
330	Metal Bridge Railing	LF	148	148	0	0	0
800	Reinforced Concrete Wing/Retaining Wall	EA	4	2	2	0	0
1120	Efflorescence/Rust Staining	EA	2	0	2	0	0
804	Concrete Fascia	LF	148	63	10	75	0
1080	Delamination/Spall/Patched Area	LF	15	0	0	15	0
1120	Efflorescence/Rust Staining	LF	10	0	10	0	0
1130	Cracking (RC and Other)	LF	60	0	0	60	0



Eastern Elevation



Abutment #2 between Beams #4 and #5



Bronze Bearing #1 at Abutment #2



Abutment #1



Superstructure from South End



Bays #1 through #3 Deck Soffit South End



North End Deck Soffit



Bronze Bearing #1 at Abutment #1



Abutment #1



Abutment #2



Failing Retaining Wall Northeast Corner of
Structure



Abutment #1



Abutment #2



Fixed Steel Bearing #1 at Abutment #1



Superstructure from Southwest Corner



Eastern Curb / Fascia Cracking / Scaling



Asphaltic Plug Joint over Abutment #2



Deck Wearing Surface from Northeast Corner



Western Curb Heavy Spalling

Maintenance Needs

Date Reported: 05/24/2022
Priority: 4 - Maintenance Finding - Next Inspection Cycle
Type of Work: 12 - Deck - Fascia and curb repair or reconstruction
Status: Open
Component: Deck

Deficiency Description

Concrete curbs have deep spalling / scaling scattered throughout and need to be cleaned and patched. Fascia's have longitudinal cracking that are starting to delaminate and have scaling in surrounding areas along the top surface and should also be considered for repairs.

Remarks



Eastern Curb / Fascia Cracking / Scaling



Eroding curbing at West mid-span