

Bridge Inspection Report**Barrington 109/162****Date of Inspection:** 09/15/2011**Date Report Sent:** 12/9/2011☒ **Picture taken during inspection****Owner:** Municipality**GREEN HILL ROAD****Over****ISINGLASS RIVER****Recommended Postings:****Weight:** C2☒ **Weight Sign OK****Width:** Not Required☒ **Width Sign OK****NARROW BRIDGE SIGNS****Primary Height Sign Recommendation:** None**Optional Centerline Height Sign Rec:** None**Clearances:** Over:
(Feet) Under: 0.00
Route:☒ **Height Signs OK****Condition:** Not on the Redlist**Deck:** 6 Satisfactory**Superstructure:** 7 Good**Substructure:** 6 Satisfactory**Culvert:** N N/A (NBI)**Structure Type and Materials:****Number of Spans Main Unit:** 1**Number of Approach Spans:** 0**Main Span Material and Design Type****Steel Multiple Beam****Sufficiency Rating:** 69.1%**NBI Status:** Functionally Obsolete**Bridge Rail:** Substandard**Rail Transition:** Substandard**Bridge Approach Rail:** Substandard**Approach Rail Ends:** Substandard**NH Bridge Type:** I Beams w/ Concrete Deck**Deck Type:** Concrete, Cast in Place**Wearing Surface:** Bituminous**Membrane:** None**Deck Protection:** None**Pavement thickness:** 3.0 in**Curb Reveal:** 6.0 in**Plan Location:** Unknown**Bridge Dimensions:****Length Maximum Span:** 62.0 ft**Left Curb/Sidewalk Width:** 0.0 ft**Width Curb to Curb:** 18.0 ft**Approach Roadway Width (W/ Shoulders):** 18.0 ft**Total Bridge Length:** 66.0 ft**Right Curb/Sidewalk Width:** 0.0 ft**Total Bridge Width:** 19.8 ft**Median:** No median**Bridge Skew:** 0.00 °**Bridge Service:****Type of Service on Bridge:** Highway**Type of Service under:** Waterway**Lanes on bridge:** 2**Lanes Under:** NA**AADT:** 1700**Percent Trucks:** 4 %**Year of AADT:** 2008**Future AADT:** 2516**Year of Future AADT:** 2032**Year Built:** 1955**Year Rebuilt:** Not Rebuilt**Detour Length:** 2.0 mi

Bridge Inspection Report**Barrington 109/162**

Federal or State Definition Bridge: Fed. Definition Bridge

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Possibly eligible

Traffic Direction: Two-way traffic

National Bridge Inventory (NBI) Appraisal Ratings:

Deck Geometry: Intolerable, Replacement

Underclearances: Not Applicable (NBI)

Approach Alignment: Equal Minimum Criteria

Structural Evaluation: Equal Minimum Criteria

Channel/Channel Protection: Minor Damage

Waterway Adequacy: Above Desirable Criteria

Bridge Scour Critical Status: Stable for extreme flood

Riprap Condition: Fair Condition

Debris Present: No Debris Present

Date of Underwater Inspection: Not Applicable

AASHTO CoRe Element Condition State Data:

No.	Description	Env.	Material Notes and Condition Notes
13	Concrete Deck - Unprotected, with Asphalt Pavement	Moderate	ASPHALT- CRACKED AND PATCHED, DECK EXPOSED. CURB SPALLED AND REBAR EXPOSED AT NORTHEAST. MINOR SPALLS ON CURB AT SOUTH.
107	Painted Steel Beam or Girder (Open Web)	Moderate	STRINGERS HAVE LIGHT RUST AREAS. PAINT IS FLAKING.
217	Other Material Abutment	Moderate	STONE MASONRY ABUTMENTS AND WINGS. WITH CONCRETE CAP AND BACKWALLS. BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. BRIDGESEATS HAVE FINE CRACKS AND MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH.
311	Moveable Bearing (roller, sliding, etc.)	Moderate	BEARINGS ARE RUSTED.
334	Coated Metal Bridge Railing	Moderate	** W-Beam ** PAINTED STEEL POSTS. PAINTED STEEL POSTS RUSTED. MINOR DAMAGE TO RAIL.
359	Soffit of Conc Deck or Slab Condition Warning Flag	Moderate	DECK UNDERSIDE HAS FINE CRACKS, MODERATE LEAKING. MINOR SPALLS.

No.	Description	Env.	Quantity	Units	State 1	State 2	State 3	State 4	State 5
13	Concrete Deck - Unprotected, with Asph	Moderate	1,302	(SF)	0 %	0 %	100 %	0 %	0 %
107	Painted Steel Beam or Girder (Open We	Moderate	197	(LF)	0 %	34 %	33 %	33 %	0 %

Bridge Inspection Report

Barrington 109/162

No.	Description	Env.	Quantity	Units	State 1	State 2	State 3	State 4	State 5
217	Other Material Abutment	Moderate	161	(LF)	0 %	100 %	0 %	0 %	
311	Moveable Bearing (roller, sliding, etc.)	Moderate	6	(EA)	0 %	100 %	0 %		
334	Coated Metal Bridge Railing	Moderate	121	(LF)	0 %	0 %	100 %	0 %	0 %
359	Soffit of Conc Deck or Slab Condition W	Moderate	1	(EA)	100 %	0 %	0 %	0 %	0 %

Bridge Notes:

Approach and Roadway Notes: APPROACH ASPHALT CRACKED, SETTLED. TRANSVERSE CRACK AT DECK ENDS. EMBANKMENTS WASHED SLIGHTLY. NEW RIP- RAP INSTALLED AT SOUTHEAST. W-BEAM RAIL- SLIGHT DAMAGE.

Inspection History:

Inspection Date: 09/15/2011

Inspector: MAS

Deck: 6 Satisfactory

Notes:

Super: 7 Good

MAS - inspection comments -

Substr: 6 Satisfactory

DECK: DECK UNDERSIDE HAS FINE CRACKS, MODERATE LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND SPALLS WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. PAINT IS FLAKING. BEARINGS ARE RUSTED.

Culvert: N N/A (NBI)

SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. RIP- RAP INSTALLED AT SOUTHEAST EMBANKMENT.

PICTURES: C437-

31. CURB SPALLED WITH REBAR EXPOSED AT NORTHEAST.

32. ASPHALT POTHOLED WITH DECK EXPOSED.

33. SPALL WITH REBAR EXPOSED AT SOUTHWEST ABUTMENT.

Inspection Date: 06/12/2009

Inspector: DPC

Deck: 6 Satisfactory

Notes:

Super: 7 Good

DPC/KLM inspection comments -

Substr: 6 Satisfactory

DECK: ELEMENTS IN SATISFACTORY CONDITION. DECK UNDERSIDE HAS FINE CRACKS, MODERATE LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND SPALLS WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED.

Culvert: N N/A (NBI)

SUPERSTRUCTURE: ELEMENTS IN GOOD CONDITION. STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED.

SUBSTRUCTURE: ELEMENTS IN SATISFACTORY CONDITION. BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. RIP- RAP INSTALLED AT SOUTHEAST EMBANKMENT.

Bridge Inspection Report

Barrington 109/162

Inspection History:

Inspection Date: 09/17/2007	Inspector: RLM	Deck: 6 Satisfactory Super: 7 Good Substr: 6 Satisfactory Culvert: N N/A (NBI)
Notes: RLM inspection comments - DECK: DECK UNDERSIDE HAS FINE CRACKS, MINOR LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND A SPALL WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED. SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. RIP- RAP INSTALLED AT SOUTHEAST EMBANKMENT. PICTURE: C357- 15.		
Inspection Date: 10/04/2005	Inspector: DPC	Deck: 6 Satisfactory Super: 7 Good Substr: 6 Satisfactory Culvert: N N/A (NBI)
Notes: DPC inspection comments - DECK: DECK UNDERSIDE HAS FINE CRACKS, MINOR LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND A SPALL WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED. SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. FOOTINGS ARE NOT VISIBLE.		
Inspection Date: 08/27/2003	Inspector: RLM	Deck: 6 Satisfactory Super: 7 Good Substr: 6 Satisfactory Culvert: N N/A (NBI)
Notes: Sufficiency Rating Calculation Accepted by DEP at 7/20/2004 14:25:47 RLM inspection comments - DECK: ASPHALT CRACKS WITH DELAMINATED DECK UNDERNEATH. DECK UNDERSIDE HAS FINE CRACKS, MINOR LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND A SPALL WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED. SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. FOOTINGS ARE NOT VISIBLE. PICTURE: C192-13.		
Inspection Date: 08/17/2001	Inspector: RLM	Deck: 7 Good Super: 7 Good Substr: 6 Satisfactory Culvert: N N/A (NBI)
Notes: Sufficiency Rating Calculation Accepted by DEP at 01-16-2002 09:42:35 RLM inspection comments - DECK: ASPHALT CRACKS WITH DELAMINATED DECK UNDERNEATH. DECK UNDERSIDE HAS FINE CRACKS, MINOR LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND A SPALL WITH REBAR EXPOSED AT NORTHEAST. MINOR SPALLS AT POSTS. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED. SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. FOOTINGS ARE NOT VISIBLE.		

Bridge Inspection Report

Barrington 109/162

Inspection History:

Inspection Date: 09/17/1999	Inspector: RLM	Deck: 7 Good Super: 7 Good Substr: 7 Good Culvert: N N/A (NBI)
Notes: <i>RLM inspection comments - DECK: ASPHALT IS OK. DECK UNDERSIDE HAS FINE CRACKS, MINOR LEAKING. CONCRETE CURBS HAVE FINE CRACKS AND A SPALL WITH REBAR EXPOSED AT NORTHEAST. W-BEAM RAIL WITH PAINTED STEEL POSTS; POSTS RUSTED. SUPERSTRUCTURE: STRINGERS HAVE LIGHT RUST AREAS. BEARINGS ARE RUSTED. SUBSTRUCTURE: BREASTWALLS ARE MASONRY. CONCRETE BACKWALLS HAVE FINE CRACKS, MINOR SPALLS. CONCRETE BRIDGESEATS HAVE FINE CRACKS, MODERATE SPALLS AT SOUTH WITH REBAR EXPOSED AT SOUTHWEST; LIGHT SPALLS AT NORTH. WINGS ARE CONCRETE AND MASONRY. FOOTINGS ARE NOT VISIBLE.</i>		
Inspection Date: 09/01/1997	Inspector: Not Available	Deck: 7 Good Super: 7 Good Substr: 7 Good Culvert: N N/A (NBI)
Inspection Date: 09/01/1995	Inspector: Not Available	Deck: 7 Good Super: 7 Good Substr: 7 Good Culvert: N N/A (NBI)
Inspection Date: 02/01/1994	Inspector: Not Available	Deck: 6 Satisfactory Super: 8 Very Good Substr: 7 Good Culvert: N N/A (NBI)
Inspection Date: 08/01/1991	Inspector: Not Available	Deck: 6 Satisfactory Super: 8 Very Good Substr: 7 Good Culvert: N N/A (NBI)

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- ☐ Dept. of Res. and Econ. Dev.
☐ Dept. of Environmental Services
☐ USDA Forest Service
☐ Bureau of Traffic

N.H. D.O.T.

TOWN Barrington

BRIDGE CAPACITY SUMMARY

BRIDGE NUMBER 107/162DESIGN LOAD H515DESIGN METHOD WSDRATED BY LRL DATERATING METHOD WSD (Deck) LFD (Stringers)CHECKED BY DEP DATE 5-89

RATED MEMBER	EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY			AVAILABLE CAPACITY				
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES		MULTIPLE LANES LOADED		SINGLE LANE LOADED		
			SINGLE UNIT	MULTIPLE UNIT	INVENTORY	OPERATING	POSTING	INVENTORY	OPERATING POSTIN
Deck Stringers	1'-0"	H514.0	H515.4	H515.4	H514.4	H521.0	H519.3	H514.4	H521.0 H519.3
	62'-0"	H570.1	H524.1	H523.7	H515.6	H526.0	H523.4	H518.2	H530.4 H527.3

RECOMMENDED POSTING: " C2 "64. (Op.) 23866. (Inv.) 226

BARRINGTON 109/162
GREEN HILL ROAD over ISSINGLASS RIVER

Thursday, September 15, 2011

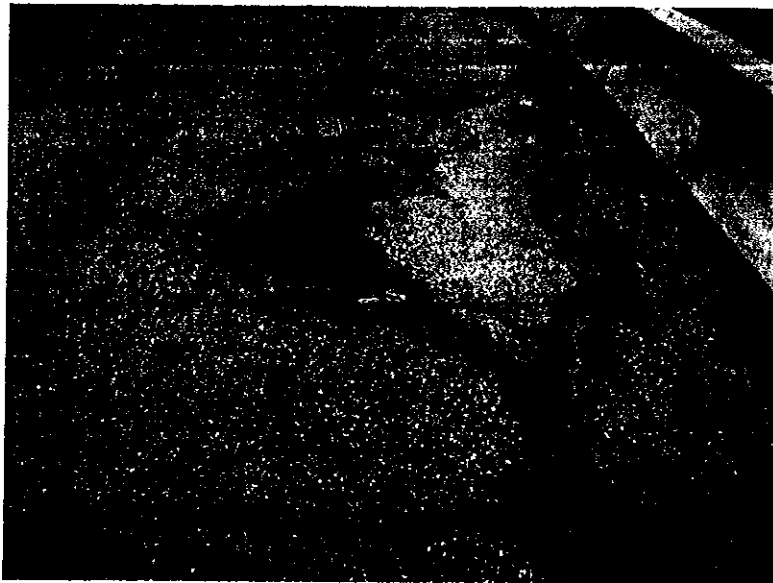
CURB SPALLED WITH
REBAR EXPOSED AT
NORTHEAST



C437 31

Thursday, September 15, 2011

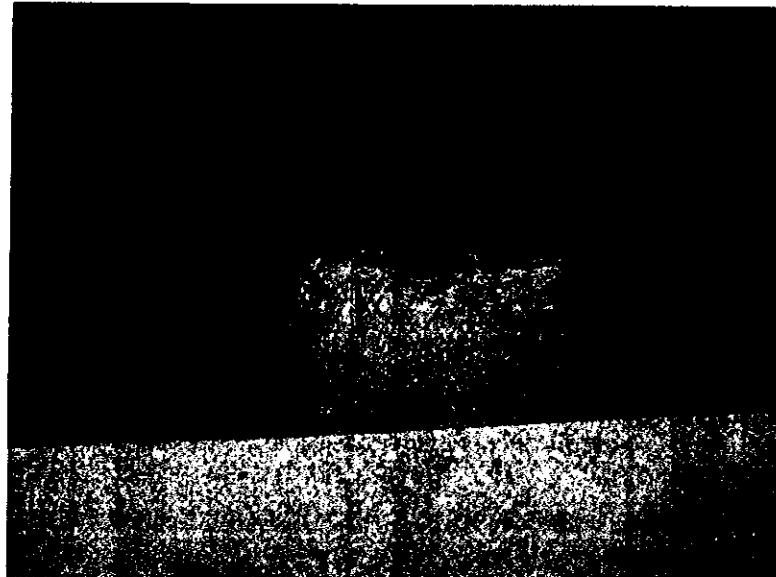
ASPHALT POTHOLED WITH
DECK EXPOSED



C437 32

Thursday, September 15, 2011

SOUTHWEST ABUTMENT
SPALLED WITH REBAR
EXPOSED



C437 33