

**From:** [Matthew Glenn](#)  
**To:** [Planning Info](#); [Peter L. Britz](#)  
**Subject:** Draft CIP comments and question  
**Date:** Tuesday, December 14, 2021 12:47:45 PM

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Dear Peter and Planning Dept. staff,

I wanted to raise two points of confusion in the draft CIP, and ask about a third topic.

*TSM-21-PL-55: Market Street Side Path Department Planning Department Project Location Market Street between Kearsarge Way and Maplewood Ave*

As far as I can tell, Market St does not intersect Maplewood. Is this project meant to extend from Kearsarge to Woodbury?

*TSM-08-PL/NH-56: US Route 1 New Sidepath Construction Department Planning Department and Public Works Project Location US Route 1 from Andrew Jarvis to Elwyn Rd*

*This will be a phased project, the first phase of which will extend from the intersection of Elwyn Road/Peeverly Hill Road to Heritage Ave to correspond with the NHDOT Route 1 Corridor Project.*

Again, where exactly? The NHDOT corridor project is now from Wilson south to Ocean Rd (and I'm on the public advisory committee). I would really like to see a similar project from Andrew Jarvis to Elwyn, as the CIP project suggests, so I would really like to see this split off into two separate CIP projects.

Lastly, I had requested that the city look into acquiring a pedestrian easement in the existing utility easement at 101 Gosport Road for access to Urban Forestry Center, as suggested in the bike/ped plan. The response was that this is private property. I understand that, and want to ask the process for the city to look into acquiring a new easement. If this is not a question for the CIP, is there another way to work toward this?

Thank you so much. The draft CIP includes a lot of really fantastic projects.

Matt Glenn  
Seacoast Area Bicycle Riders  
[seacoastbikes.org](http://seacoastbikes.org)

**From:** [Kimberli Kienia](#)  
**To:** [Kimberli Kienia](#)  
**Subject:** FW: Draft FY 2023-2028 CIP  
**Date:** Thursday, December 16, 2021 11:08:56 AM  
**Attachments:** [Portsmouth Traffic Circle CIPs.pdf](#)  
[Bartlett Islington ReAlignment CIPs.pdf](#)  
[Bartlett -Jewell Realignment.pdf](#)  
[Bartlett RR Replacement CIPs.pdf](#)  
[Cate Street CIPs.pdf](#)  
[2019 Red List Bridges.pdf](#)  
[Maplewood Ave Culvert Replacement CIPs.pdf](#)  
[2018 Bridge Evaluation.pdf](#)

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**From:** JAH [<mailto:samjakemax@aol.com>]  
**Sent:** Monday, December 13, 2021 11:38 PM  
**To:** [dexter.legg@gmail.com](mailto:dexter.legg@gmail.com); [bmoreau@greatoak-ne.com](mailto:bmoreau@greatoak-ne.com); [chellman@tndengineering.com](mailto:chellman@tndengineering.com);  
[clarkcj7@gmail.com](mailto:clarkcj7@gmail.com); [pharris\\_portsnhplan@icloud.com](mailto:pharris_portsnhplan@icloud.com); [pawhelan@comcast.net](mailto:pawhelan@comcast.net)  
**Cc:** Peter L. Britz  
**Subject:** Draft FY 2023-2028 CIP

Dear Planning Board CIP Sub-Committee:

I recently reviewed the draft FY 2023-2028 CIP and was rather alarmed that some important CIP projects from previous years have disappeared or have been delayed, again. These projects are listed below ranked in their order of importance;

1) Cate Street Bridge over Hogdson Brook

This is a NHDOT Red-Listed bridge and has been on the CIP since at least 2011. It has a weight limit restriction of only 3 tons ( 6,000 lbs) which is the weight of some larger passenger car SUVs. (Most E-2 bridges are rated at around 90,000 lbs) As per below, Fire Chief Germain has confirmed that none of his fire-fighting equipment can use the Cate Street bridge because all his trucks exceed the weight limit of the bridge. The full replacement cost of this bridge needs to be included in FY 2023 of the CIP so that the bridge can be rebuilt ASAP.

2) Maplewood Ave Culvert over North Mill Pond

This is another NHDOT Red-Listed bridge that has been delayed and then disappeared all together from recent CIPs. . It too has been in the CIP since at least 2011 and was last seen in the FY 2020-2025 CIP. In the FY 2020-2025 CIP write-up, it stated this bridge replacement project was expedited due to the "critical need" to replace this bridge. Having a Red-listed bridge not even listed in the CIP is inexcusable. The full replacement cost of this bridge needs to be included in FY 2023 so that it can be rebuilt ASAP.

3) Bartlett Street Railroad Trestle Replacement / Jewell Court & Bartlett Realignment Project.

These two projects were in Portsmouth CIPs from about 1997 to 2016. Based on what is happening at the Cate & Bartlett intersection now, the reasons these 2 projects need to be expedited I hope are self-explanatory. The traffic issues in that area are only going to get worse until these projects are completed. The full cost of these 2 projects need to be included in the draft CIP so this "can" can stopped being kicked down the road.

4) Portsmouth Traffic Circle

Please see November 29, 2021 email that explains how the Portsmouth Traffic Circle needs to be redesigned to 21st century standards like the Lee Traffic Circle and the Keene Traffic Circle. The increase in traffic capacity from a modern traffic circle would eliminate NH 16 southbound back-ups and US 1 By-Pass back ups in both directions. A modern 2-lane traffic circle would also eliminate the need for CIP project TSM-20-PL-69 Coakley & Borthwick Connector on page 130 of the draft CIP. The \$ 1,000,000 budgeted for this project should be allocated to a modern 2-lane traffic circle. Attached are prior Traffic Circle redesign CIPs that disappeared in 2016.

I hope all the above projects will be added into the FY 2023 CIP budget. I will not be able to attend the December 16, 2021 CIP public hearing so please have these comments entered into the record.

Regards,

Jim Hewitt

-----Original Message-----

From: Todd A. Germain <[tagermain@cityofportsmouth.com](mailto:tagermain@cityofportsmouth.com)>

To: JAH <[samjakemax@aol.com](mailto:samjakemax@aol.com)>

Sent: Wed, May 26, 2021 4:47 pm

Subject: Re: Cate Street Bridge over Hodgson Brook

Jim,

That is correct.

Todd Germain  
Fire Chief

Portsmouth Fire Department  
170 Court St  
Portsmouth NH 03801

Business (603) 427-1515  
Cell (603) 502-3435

Please excuse any typos.  
Sent from my iPhone

On May 26, 2021, at 4:37 PM, JAH <[samjakemax@aol.com](mailto:samjakemax@aol.com)> wrote:

Dear Chief Germain:

I was hoping you can confirm that none of your ambulances or fire fighting trucks can cross the subject bridge as they all weigh more than the posted bridge weight limit of 6,000 lbs.

Thanks

Jim Hewitt

# IV. TRANSPORTATION MANAGEMENT



**CITY OF PORTSMOUTH - INDIRECT**

CAPITAL IMPROVEMENT PLAN

FY 16-21

120

## TSM-CITY/NHDOT-35: ROADWAY: Traffic Circle Replacement

Department: Public Works

Project Location: Route 1

Project Type: Upgrade Existing Facilities

Description: In January of 1998, the Council adopted a resolution requesting that NH DOT undertake the steps necessary to evaluate the Portsmouth Traffic Circle. In FY01, the NHDOT completed an assessment of alternatives for replacing the traffic circle. These alternatives include a roundabout, full signalization and grade separation. In FY02, the NHDOT selected a consultant to design the project as part of the Rehabilitation of the US 1 Bypass. In FY04 and FY05, Master Plan efforts continued on the Bypass.



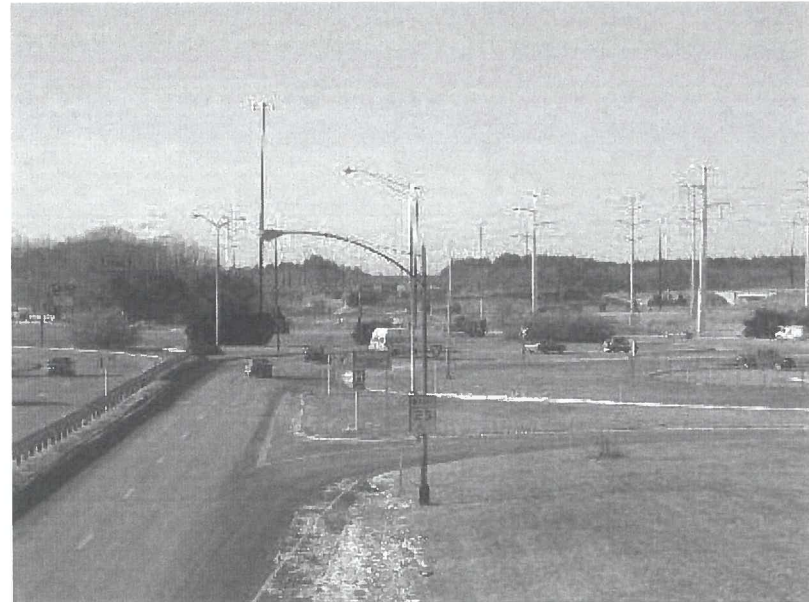
This project has been removed from the NHDOT 10 year Plan and is in the RPC Long Range Plan for construction and funding in FY 2025.

Justification: Alleviates substandard conditions

		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	Totals 16-21	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	100%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2025	Quarter:	1st	Priority:	1	Impact On Operating Budget:	Negligible			

## TSM-CITY/NHDOT-35: ROADWAY: Traffic Circle Replacement

- In January of 1998, the Council adopted a resolution requesting that NH DOT undertake the steps necessary to evaluate the Portsmouth Traffic Circle. In FY01, the NHDOT completed an assessment of alternatives for replacing the traffic circle. These alternatives include a roundabout, full signalization and grade separation. In FY02, the NHDOT selected a consultant to design the project as part of the Rehabilitation of the US 1 Bypass. In FY04 and FY05, Master Plan efforts continued on the Bypass.
- This project has been removed from the NHDOT 10 year Plan and is in the RPC Long Range Plan for construction and funding in FY 2025.



		FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Totals 15-20	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	100%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2025	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

## TSM-CITY/NHDOT-30: ROADWAY: Traffic Circle Replacement

- In January of 1998, the Council adopted a resolution requesting that NH DOT undertake the steps necessary to evaluate the Portsmouth Traffic Circle. In FY01, the NHDOT completed an assessment of alternatives for replacing the traffic circle. These alternatives include a roundabout, full signalization and grade separation. In FY02, the NHDOT selected a consultant to design the project as part of the Rehabilitation of the US 1 Bypass. In FY04 and FY05, Master Plan efforts continued on the Bypass.
- This project has been removed from the NHDOT 10 year Plan and is in the RPC Long Range Plan for construction and funding in FY 2025.



		FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	Totals 14-19	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	100%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Commence FY:	2025	Quarter:	1st	Priority:	I	Impact On Operating Budget		Negligible		

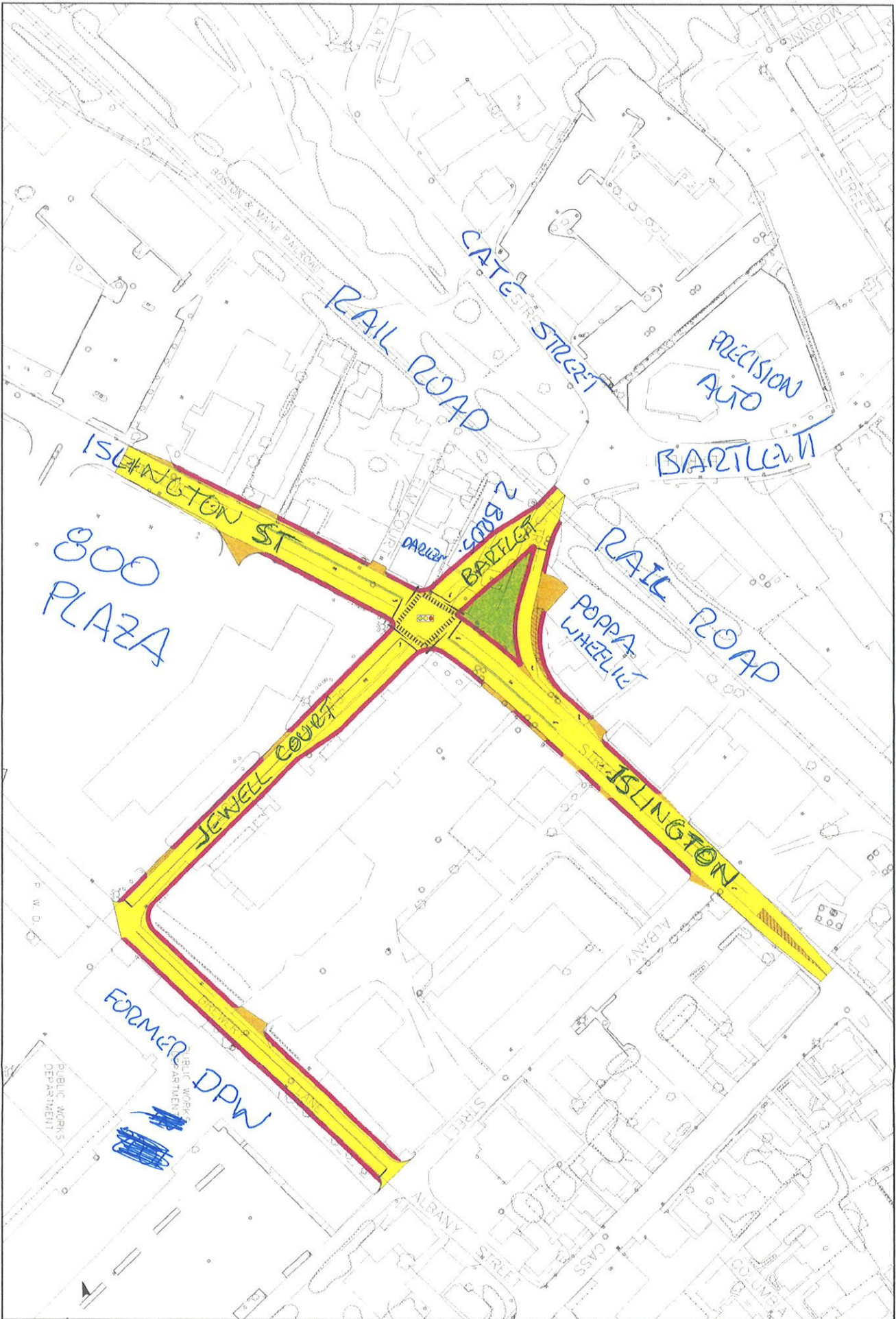


**TSM-CITY/NHDOT-39: ROADWAY: Traffic Circle Replacement**

- In January of 1998, the Council adopted a resolution requesting that NH DOT undertake the steps necessary to evaluate the Portsmouth Traffic Circle. In FY01, the NHDOT completed an assessment of alternatives for replacing the traffic circle. These alternatives include a roundabout, full signalization and grade separation. In FY02, the NHDOT selected a consultant to design the project as part of the Rehabilitation of the US 1 Bypass. In FY04 and FY05, Master Plan efforts continued on the Bypass.
- This project has been removed from the NHDOT 10 year Plan and is in the RPC Long Range Plan for construction and funding in FY 2025.



		FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Totals 13-18	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	100%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2025	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		



PROJECT  
 BARTLETT STREET / ISLINGTON  
 STREET RECONSTRUCTION  
 PORTSMOUTH, NH

SHEET TITLE			
SCHEME 1			
SCALE	DATE	REV	CHG
1" = 100'	03/02/01		1
SUBMITTED FOR:			
CITY OF PORTSMOUTH DEPT. OF PUBLIC WORKS 690 PEVERLY HILL ROAD PORTSMOUTH, NH 03801			



Maguire Group Inc.  
 Engineers • Architects  
 110 Corporate Drive, Suite 6  
 Portsmouth, NH 03801

## TSM-08-PW-70: CATE STREET BRIDGE REPLACEMENT

Department	Public Works Department
Project Location	<a href="#">Cate Street</a>
Project Type	Other (explained below)
Commence FY	2023
Priority	A (needed within 0 to 3 years)
Impact on Operating Budget	Negligible (<\$5,001)



**Description:** This bridge is beyond its 50-year design life. It cannot handle heavy truck volumes and loads. The bridge needs to be replaced. Residents have asked for the bridge to remain open if the median on Route 1 Bypass is extended past Cottage Street. This ensures emergency vehicle access to the Portsmouth Hospital from the neighborhood.

Evaluation Criteria	Satisfy
Identified in Planning Document or Study: <a href="#">Citywide Bridge Evaluation 2018</a>	Y
Improves Quality of Existing Services	Y
Provides Added Capacity to Existing Services	Y
Addresses Public Health or Safety Need	Y
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	

Useful Website Links:

- [Public Works Homepage](#)
- [FY21-26 CIP page](#)

		FY22	FY23	FY24	FY25	FY26	FY27	Totals 22-27	6 PY's Funding	Totals
GF	6%		\$100,000					\$100,000	\$0	\$100,000
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	94%			\$1,500,000				\$1,500,000	\$0	\$1,500,000
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$100,000	\$1,500,000	\$0	\$0	\$0	\$1,600,000	\$0	\$1,600,000

## TSM-08-PW/NH-78: CATE STREET BRIDGE REPLACEMENT

Department	Public Works
Project Location	Cate Street
Project Type	Construction or Expansion of a Public Facility, Street or Utility
Commence FY	2030
Priority	A (needed within 0 to 3 years)
Impact on Operating Budget	Negligible (<\$5,001)



Evaluation Criteria	Satisfy
Identified in Planning Document or Study	
Improves Quality of Existing Services	
Provides Added Capacity to Existing Services	
Addresses Public Health or Safety Need	
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	

**Description:** This bridge is past its intended 50-year design life and it cannot handle heavy truck volumes and loads. The bridge needs to be replaced. Since the Portsmouth Senior Activity Center on Cottage Street is being redeveloped, residents have asked for the bridge to remain open if the median on the Route 1 Bypass is extended past Cottage Street to ensure emergency vehicle access to the Portsmouth Hospital.

Useful Website Links:
<ul style="list-style-type: none"> <li>• <a href="#">Public Works Homepage</a></li> <li>• <a href="#">FY20-25 CIP page</a></li> </ul>

		FY21	FY22	FY23	FY24	FY25	FY26	Totals 21-26	6 PY's Funding	Totals
GF	6%			\$100,000				\$100,000	\$0	\$100,000
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	94%				\$1,500,000			\$1,500,000	\$0	\$1,500,000
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$0	\$100,000	\$1,500,000	\$0	\$0	\$1,600,000	\$0	\$1,600,000

## TSM-08-PW/NH-66: CATE STREET BRIDGE REPLACEMENT

Department	Public Works
Project Location	Cate Street
Project Type	Construction or Expansion of a Public Facility, Street or Utility
Commence FY	2030
Priority	C (can be placed on hold for after 6 years)
Impact on Operating Budget	Negligible (<\$5,001)



**Description:** This bridge is past its intended 50-year design life and truckloads are too heavy for it. The bridge needs to be replaced or closed. In FY05, the City began discussions with impacted property owners to investigate reopening Cate Street to the Bypass. This action could allow the bridge to close. The project is currently in the Long Range Plan for the RPC with construction and funding in FY2030.

Evaluation Criteria	Satisfy
Identified in Planning Document or Study	
Improves Quality of Existing Services	
Provides Added Capacity to Existing Services	
Addresses Public Health or Safety Need	
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	

Useful Website Links:

- [Public Works Homepage](#)
- [FY19-24 CIP page](#)

		FY20	FY21	FY22	FY23	FY24	FY25	Totals 20-25	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

FY 20-25

# TSM-08-PW/NH-71: CATE STREET BRIDGE REPLACEMENT

Department	Public Works
Project Location	Cate Street
Project Type	Upgrade Existing Infrastructure
Commence FY	TBD
Priority	C (can be placed on hold for after 6 years)
Impact on Operating Budget	Negligible (<\$5,001)



**Description:** This bridge is past its intended 50-year design life and truck loads are too heavy for it. The bridge needs to be replaced or closed. In FY05, the City began discussions with impacted property owners to investigate reopening Cate Street to the Bypass. This action could allow the bridge to close. The project is currently in the Long Range Plan for the RPC with construction and funding in FY2030.

Evaluation Criteria	Satisfy
Identified in Planning Document or Study	
Improves Quality of Existing Services	
Provides Added Capacity to Existing Services	
Addresses Public Health or Safety Need	
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	

- Useful Website Links:
- [Public Works Homepage](#)
  - [FY18-23 CIP page](#)

		FY19	FY20	FY21	FY22	FY23	FY24	Totals 19-24	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

## TSM-PW/NH-26: CATE STREET BRIDGE REPLACEMENT

Department	Public Works
Project Location	Cate Street
Project Type	Upgrade Existing Infrastructure
Commence FY	2030
Priority	C (can be placed on hold for after 6 years)
Impact on Operating Budget	Negligible



**Description:** This bridge is now well past its intended 50-year design life and loads well in excess of those for which it was originally designed. The bridge either needs to be replaced or discontinued along with related street work for Cate Street. In FY05, the City began discussions with impacted property owners to investigate the potential reopening of Cate Street to the Bypass, which could allow the bridge to be discontinued. This project is currently in the Long Range Plan for the RPC with construction and funding in FY2030.

Evaluation Criteria	Satisfy
Identified in Planning Document or Study	
Improves Quality of Existing Services	
Provides Added Capacity to Existing Services	
Addresses Public Health or Safety Need	
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	

		FY18	FY19	FY20	FY21	FY22	FY23	Totals 18-23	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

## TSM-PW/NH-25: CATE STREET BRIDGE REPLACEMENT

Department	Public Works
Project Location	Cate Street
Project Type	Upgrade Existing Infrastructure
Commence FY	2030
Ward	2,3
Priority	C (can be placed on hold for after 6 years)
Impact on Operating Budget	Negligible

Evaluation Criteria	Satisfy
Identified in Planning Document or Study	
Improves Quality of Existing Services	
Provides Added Capacity to Existing Services	
Addresses Public Health or Safety Need	
Reduces Long-Term Operating Costs	
Alleviates Substandard Conditions or Deficiencies	Y
Provides Incentive to Economic Development	
Responds to Federal or State Requirement	
Eligible for Matching Funds with Limited Availability	



**Description:** This bridge is now well past its intended 50-year design life and loads well in excess of those for which it was originally designed. The bridge either needs to be replaced or discontinued along with related street work for Cate Street. In FY05, the city began discussions with impacted property owners to investigate the potential reopening of Cate Street to the Bypass, which could allow the bridge to be discontinued. This project is currently in the Long Range Plan for the RPC with construction and funding in FY2030.

		FY17	FY18	FY19	FY20	FY21	FY22	Totals 17-22	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/ State	0%							\$0	\$0	\$0
Bond/ Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	Totals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

FY 17-22



## TSM-CITY/NHDOT-19: BRIDGE: Cate Street Bridge Replacement

Department: Public Works

Project Location:

Project Type: Upgrade Existing Infrastructure

Description: This bridge is now well past its intended 50-year design life and loads well in excess of those for which it was originally designed. Bridge either needs to be replaced or discontinued along with related street work for Cate Street.

In FY05, the City began discussions with impacted property owners to investigate the potential reopening of Cate St. to the Bypass, which could allow the bridge to be discontinued.

This project is currently in the Long Range Plan for the RPC with construction and funding in FY 2030.

Justification: Alleviates substandard conditions or deficiencies



		FY16	FY17	FY18	FY19	FY20	FY21	Totals 16-21	5 FY's Funding	Totals
GF	20%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PRP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY.	2030	Quarter:	1st	Priority:	I	Impact On Operating Budget:	Negligible			

**TSM-CITY/NHDOT-19: BRIDGE: Cate Street Bridge Replacement**

- This bridge is now well past its intended 50-year design life and loads well in excess of those for which it was originally designed. Bridge either needs to be replaced or discontinued along with related street work for Cate Street.
- In FY05, the City began discussions with impacted property owners to investigate the potential reopening of Cate St. to the Bypass, which could allow the bridge to be discontinued.
- This project is currently in the Long Range Plan for the RPC with construction and funding in FY 2030.



		FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Totals 15-20	6 PY's Funding	Totals
GF	20%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2030	Quarter:	1st	Priority:	1	Impact On Operating Budget:	Negligible			

**TSM-CITY/NHDOT-16: BRIDGE: Cate Street Bridge Replacement**

- This bridge is now well past its intended 50-year design life and is now carrying loads well in excess of those for which it was originally designed. Bridge either needs to be replaced or discontinued along with related street work for Cate Street.
- In FY05, the city began discussions with impacted property owners to investigate the potential reopening of Cate St. to the Bypass, which could allow the bridge to be discontinued.
- This project is currently in the Long Range Plan for the RPC with construction and funding in FY 2030.



		FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	Totals 14-19	6 PY's Funding	Totals
GF	20%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2030	Quarter:	1st	Priority:	I	Impact On Operating Budget:	Negligible			

**TSM-CITY/NHDOT-23: BRIDGE: Cate Street Bridge Replacement**

- This bridge is now well past its intended 50-year design life and is now carrying loads well in excess of those for which it was originally designed. Bridge either needs to be replaced or discontinued along with related street work for Cate Street.
- In FY05, the city began discussions with impacted property owners to investigate the potential reopening of Cate St. to the Bypass, which could allow the bridge to be discontinued.
- This project is currently in the Long Range Plan for the RPC with construction and funding in FY 2030.



		FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Totals 13-18	6 PY's Funding	Totals
GF	20%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	2030	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

CIP FY 13-18

**TSM-CITY-18: INTERSECTION/SIGNALS: Islington/Bartlett/Jewell Ct. Realignment**

- PHASE I IMPROVEMENT:** This is a City initiated project to realign Bartlett Street at Jewell Court to increase turn lane capacity and traffic signal controls. This project would serve as an interim step to a larger project that would widen the Bartlett Street approach by replacing the B&M Railroad Bridge over Bartlett Street. This intersection is anticipated to continue to experience increased traffic demands due to redevelopment of underutilized land parcels and regional growth patterns. As configured, this intersection hinders traffic flows and reduces levels of service. The project would reorient the intersection to make a direct connection to each street. Some private land would need to be acquired. Conceptual design completed in FY01.



		FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Totals 13-18	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	0%							\$0	\$0	\$0
Bond/Lease	100%					\$1,650,000		\$1,650,000	\$0	\$1,650,000
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$1,650,000	\$0	\$1,650,000	\$0	\$1,650,000
Commence FY:	2017	Quarter:	1st	Priority:	I	Impact On Operating Budget:	Negligible			

**TSM-CITY-14: INTERSECTION/SIGNALS: Islington/Bartlett/Jewell Ct. Realignment**

- PHASE I IMPROVEMENT:** This is a City initiated project to realign Bartlett Street at Jewell Court to increase turn lane capacity and traffic signal controls. This project would serve as an interim step to a larger project that would widen the Bartlett Street approach by replacing the B&M Railroad Bridge over Bartlett Street. This intersection is anticipated to continue to experience increased traffic demands due to redevelopment of underutilized land parcels and regional growth patterns. As configured, this intersection hinders traffic flows and reduces levels of service. The project would reorient the intersection to make a direct connection to each street. Some private land would need to be acquired. Conceptual design completed in FY01.



		FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	Totals 14-19	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	0%							\$0	\$0	\$0
Bond/Lease	100%				\$1,650,000			\$1,650,000	\$0	\$1,650,000
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,650,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,650,000</b>	<b>\$0</b>	<b>\$1,650,000</b>
Commence FY:	2017	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

**TSM-CITY-17: INTERSECTION/SIGNALS: Islington/Bartlett/Jewell Ct. Realignment**

- PHASE I IMPROVEMENT:** This is a City initiated project to realign Bartlett Street at Jewell Court to increase turn lane capacity and traffic signal controls. This project would serve as an interim step to a larger project that would widen the Bartlett Street approach by replacing the B&M Railroad Bridge over Bartlett Street. This intersection is anticipated to continue to experience increased traffic demands due to redevelopment of underutilized land parcels and regional growth patterns. As configured, this intersection hinders traffic flows and reduces levels of service. The project would reorient the intersection to make a direct connection to each street. Some private land would need to be acquired. Conceptual design completed in FY01.



		FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Totals 15-20	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	0%							\$0	\$0	\$0
Bond/Lease	100%						\$0	\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	0%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	?????	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

**TSM-CITY/NHDOT-36: BRIDGE: B&M RR/Bartlett Street Bridge Replacement**

- PHASE 2 IMPROVEMENT (see previous project) - project was submitted to Seacoast MPO for inclusion in previous Transportation Improvement Programs but has never been selected. This bridge is a hindrance due to its general condition, orientation, width and height. It also represents a bicycle, pedestrian and vehicular bottleneck.
- The City will work with the RPC on modeling the transportation benefits of replacing the bridge with improved roadway connections. Widening the bridge will improve operations substantially at a (future) realigned intersection of Islington/Bartlett/Jewell Court. Federal funding will again be sought.
- This project is in the RPC 2009-2035 Transportation Plan without designated funding or construction year.



		FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Totals 13-18	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	20%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	????	Quarter:	1st	Priority:	I	Impact On Operating Budget:	Negligible			



**TSM-CITY/NHDOT-28: BRIDGE: B&M RR/Bartlett Street Bridge Replacement**

- PHASE 2 IMPROVEMENT (see previous project) - project was submitted to Seacoast MPO for inclusion in previous Transportation Improvement Programs but has never been selected. This bridge is a hindrance due to its general condition, orientation, width and height. It also represents a bicycle, pedestrian and vehicular bottleneck.
- The City will work with the RPC on modeling the transportation benefits of replacing the bridge with improved roadway connections. Widening the bridge will improve operations substantially at a (future) realigned intersection of Islington/Bartlett/Jewell Court. Federal funding will again be sought.
- This project is in the RPC 2009-2035 Transportation Plan without designated funding or construction year.



		FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	Totals 14-19	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	20%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	????	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

**TSM-CITY/NHDOT-33: BRIDGE: B&M RR/Bartlett Street Bridge Replacement**

- PHASE 2 IMPROVEMENT (see previous project) - project was submitted to Seacoast MPO for inclusion in previous Transportation Improvement Programs but has never been selected. This bridge is a hindrance due to its general condition, orientation, width, and height. It also represents a bicycle, pedestrian, and vehicular bottleneck.
- The City will work with the RPC on modeling the transportation benefits of replacing the bridge with improved roadway connections. Widening the bridge will improve operations substantially at a (future) realigned intersection of Islington/Bartlett/Jewell Court. Federal funding will again be sought.
- This project is in the RPC 2009-2035 Transportation Plan without designated funding or construction year.



		FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Totals 15-20	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	20%							\$0	\$0	\$0
	<b>Totals</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commence FY:	????	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		

**TSM-CITY/NHDOT-33: BRIDGE: B&M RR/Bartlett Street Bridge Replacement**

Department: Public Works

Project Location: Bartlett St

Project Type: Upgrade Existing Facilities

Description: This bridge is a hindrance due to its general condition, orientation, width, and height. It also represents a bicycle, pedestrian, and vehicular bottleneck.

The City will work with the RPC on modeling the transportation benefits of replacing the bridge with improved roadway connections. Widening the bridge will improve operations substantially at a (future) realigned intersection of Islington/Bartlett/Jewell Court. Federal funding will again be sought.

This project is in the RPC 2009-2035 Transportation Plan without designated funding or construction year.

Justification: Alleviates substandard conditions



		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	Totals 16-21	6 PY's Funding	Totals
GF	0%							\$0	\$0	\$0
Fed/State	80%							\$0	\$0	\$0
Bond/Lease	0%							\$0	\$0	\$0
Other	0%							\$0	\$0	\$0
Revenues	0%							\$0	\$0	\$0
PPP	20%							\$0	\$0	\$0
	<b>Totals</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Commence FY:	????	Quarter:	1st	Priority:	I	Impact On Operating Budget:		Negligible		


**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION**

**MUNICIPALLY-OWNED RED LIST BRIDGES**  
*(Includes RR, Private and Village District Bridges)*

*Municipally-owned bridges requiring interim inspections  
due to poor conditions.  
These structures are inspected yearly.*

2019

*Prepared by the Bridge Management Committee*

Approved:   
Victoria F. Sheehan, Commissioner

3/20/2020  
Date

*Effective December 31, 2019*  
March 6, 2020

**2019 MUNICIPAL BRIDGE RED LIST**

March 6, 2020  
Insp. through 12/31/19

AVERAGE  
DAILY  
TRAFFIC

SQUARE  
FEET

WEIGHT

SEE  
NEXT  
PAGE

Town / City	Bridge Number	Facility Carried	Feature Crossed	Est. ADT (Year)	Condition of Deck, Superstructure, Substructure, or Culvert	Total Length (ft); Total Width (ft); No. of Spans	Gross Deck Area (sq ft)	Date of Most Recent Inspection	Bridge Posting	Structure Type	Year Modified / Year Built
Peterborough	092/089	MAIN STREET	CONTOCOCK RIVER	8,499-18	Deck 3 Serious Superstructure 3 Serious Substructure 5 Fair	L=86.0 W=41.5 1-span	3,569	7/8/2019	3 Tons	CRF	1940
Peterborough	132/134	SLAB ROAD	OTTER BROOK	88-18	Deck 5 Fair Superstructure 5 Fair Substructure 3 Serious	L=26.0 W=20.0 1-span	520	7/3/2019	E-2	Jack	1940
Pittsburg	134/057	HILL ROAD	PERRY STREAM	239-18	Deck 7 Good Superstructure 5 Fair Substructure 4 Poor	L=78.0 W=18.3 2-span	1,427	10/8/2019	E-2	TB-C	1991/1860
Portsmouth	198/107	CATE STREET	HODGSON BROOK	1,448(18)	Deck 2 Critical Superstructure 5 Fair Substructure 6 Satisfactory	L=37.0 W=28.0 1-span	1,036	10/1/2019	15 Tons 30,000 lbs	IB-C	1940
Portsmouth	231/103	MAPLEWOOD AVENUE	NORTH MILL POND	6,603(18)	Culvert 3 Serious	L=25.0 W=32.0 1-span	800	10/2/2019	E-2	MA-CA	1976/1940
Portsmouth	240/132	KEARSARGE WAY	PAR RAIL ROAD	541(18)	Deck 4 Poor Superstructure 7 Good Substructure 7 Good	L=152.0 W=40.5 2-span	6,156	10/29/2019	E-2	IB-C	1979
Randolph	080/047	DURAND ROAD	MOOSE RIVER	88-18	Deck 4 Poor Superstructure 4 Poor Substructure 4 Poor	L=14.0 W=28.0 1-span	392	10/15/2019	E-2	CB	1920
Richmond	065/083	WHIPPLE HILL ROAD	ROARING BROOK	233-18	Deck 6 Satisfactory Superstructure 4 Poor Substructure 6 Satisfactory	L=43.0 W=20.5 3-span	882	8/5/2019	NPR	IB-BP	1983/1950
Richmond	155/066	TULLY BROOK ROAD	TULLY BROOK	88-18	Culvert 4 Poor	L=14.0 W=18.0 1-span	252	8/5/2019	15 Tons	MP	1990
Rindge	154/069	WELLINGTON ROAD	CONVERSEVILLE BROOK	789-18	Culvert 3 Serious	L=28.0 W=24.0 2-span	672	7/2/2019	3 Tons	MP	1950
Rochester	114/046	FOUR ROD ROAD	RICKERS BROOK	1,031-18	Culvert 4 Poor	L=11.2 W=23.0 1-span	257	8/27/2019	E-2	MP	1965
Rollinsford	090/052	OLD MILL LANE	ROLLINS BROOK	201-18	Deck 4 Poor Superstructure 2 Critical Substructure 3 Serious	L=21.0 W=18.5 1-span	389	11/27/2019	NPR	TB	1900
Rumney	093/082	BUFFALO ROAD	BROOK	454-18	Culvert 2 Critical	L=13.0 W=21.0 1-span	273	10/28/2019	E-2	MP	1972
Salem	115/097	BRIDGE STREET	SPICKET RIVER	5,776-18	Deck 4 Poor Superstructure 4 Poor Substructure 4 Poor	L=29.0 W=35.0 1-span	1,015	8/20/2019	E-2	Jack	1959/1900
Salem	116/116	BLUFF STREET EXT	WIDOW HARRIS BROOK	4,593-18	Culvert 0 Failed - Closed	L=23.3 W=24.8 3-span	577	8/27/2019	NPR	MP	1960
Sanbornton	118/089	BROOK ROAD	SALMON BROOK	88-18	Deck 8 Very Good Superstructure 8 Very Good Substructure 4 Poor	L=35.0 W=16.0 1-span	560	10/8/2019	NPR	CS	2012/1900
Sandwich	157/101	BASKET STREET	BEARCAMP RIVER	88-18	Deck 7 Good Superstructure 5 Fair Substructure 4 Poor	L=24.0 W=18.1 1-span	434	11/22/2019	E-2	IB-C	1940

# BRIDGE WEIGHT LIMIT POSTING

## E-2 Information

The E-2 designation is to exclude all combination and single unit certified vehicles from crossing a specific bridge. For this to make more sense, I will mention several sections of state motor vehicle law.

### RSA 266:18-a Weight on Non-interstate and General Highway System:

This section defines maximum vehicle weights for all highways not considered Interstate Highways. It also defines requirements for individual axle weights and spacings, and generally limits vehicle weights to:

Two axle single unit: 33,400 lbs.

Three axle single unit: 55,000 lbs.

Four axle single unit: 60,000 lbs.

Combination vehicles (Tractor -Trailer): 80,000 lbs.

### RSA 266:18-b Weight on Non-interstate and General Highway System for vehicles with Additional Registration:

This section defines maximum vehicle weights for all highways not considered Interstate Highways. It also defines requirements for individual axle weights and spacings, and generally limits vehicle weights to:

Two axle single unit: 37,400 lbs.

Three axle single unit: 65,000 lbs.

Four axle single unit: 73,000 lbs.

Combination vehicles (Tractor -Trailer): 99,000 lbs.

### RSA 266:18-d Additional Certification and Registration:

This section defines a process of Certification for vehicles to be eligible to purchase the additional registration to enable them to travel at the higher weight limits allowed in RSA 266:18-b. (This is why we use the term Certified Loads for the higher set of weight limits.)

### RSA 266:18-c General Weight Provisions:

Section V describes the standard weight limit signs, and allows the commissioner of transportation to post standardized signs designating Caution Crossing Bridges and Excluded Bridges. (This includes the 'E-2' sign that excludes certified single unit and combination vehicles from crossing a bridge while traveling at the higher weight limit)

There is also an 'E-1' sign that excludes single unit vehicles from crossing a bridge, and a series of Caution Crossing signs that would allow the Certified Vehicles to cross only if they are the only truck on the bridge

I hope this helps to explain the mysterious E-2 sign.

The next part of your question has to do with the ownership of bridges.

If a municipality owns a bridge, they are entirely responsible for the bridge, its use and maintenance. We, the NHDOT will inspect any bridge on a public highway for reporting to the National Bridge Inventory (NBI), in accordance with the National Bridge Inspection Standards (NBIS). One of the requirements is that we calculate a safe load capacity for each bridge we inspect, which is reported to the NBI and to the owner of the bridge. We do recommend a weight limit posting to the owner of the bridge, however when RSA 266:18-b went into effect, we decided that it should be up to a municipality to decide if the bridges should be considered for allowing Certified Vehicles to cross them.

The municipality could study its own bridges to see if they have a structural capacity suitable for the heavier Certified Vehicles. In some cases the NHDOT could help with the determination.

If we, the NHDOT, own the bridge, we have already made the determination about its maximum safe load capacity. If the capacity is not there and there were some interest in increasing the capacity, we could study the bridge and consider it for a future project.

The last part of your question implies a difference between 'residential' and 'construction-type' vehicles. Residential uses often lend themselves to the occasional concrete truck for a garage floor, a well drilling rig for a new well, truckload of gravel for the driveway, fuel oil for the furnace, etc. These vehicles could travel at the higher Certified weight limit to lower delivery costs. Trucks hauling gravel from a pit could travel at the lower ordinary weight limits, if desired to comply with an E-2 posting.



2018

## City-Wide Bridge Evaluation Portsmouth, New Hampshire



Prepared for:  
City of Portsmouth, New Hampshire

**Hoyle, Tanner**  
& Associates, Inc.  
[www.hoyletanner.com](http://www.hoyletanner.com)

## 1 INTRODUCTION

### 1.1 Executive Summary

The City of Portsmouth retained Hoyle, Tanner to evaluate all City-owned bridges and prioritize maintenance, preservation, rehabilitation and replacement projects to be included in a 10-year capital improvement plan. The City currently owns fifteen bridges consisting of twelve vehicular bridges and three pedestrian bridges. Refer to Appendix A for the Recommended 10-Year Bridge Capital Improvement Plan matrix.

Hoyle, Tanner personnel performed limited field observations and reviewed available data to formulate a plan that prioritizes the City's bridges based on recommended work and available funding. Recommended work for each bridge is categorized into short-term, intermediate-term, and long-term needs, which should be addressed within the next 2 years, 2-7 years and beyond 7 years, respectively. Refer to Appendix B for a summary of the recommendations.

Bridges requiring major rehabilitation or complete replacement are eligible for funding through the NHDOT Municipal State Aid Bridge (SAB) Program. Funding for the SAB Program is available to municipalities in New Hampshire and provides 80% of total (eligible) project costs including design and construction. NHDOT has temporarily stopped adding new projects to SAB Program due to funding limitations and the need to balance the program. It is likely that when the SAB funding is restored, some or all of the City's SAB-eligible projects discussed herein would be programmed beyond this 10-year plan. Refer to Section 3 of this report for further discussion of the SAB program.

Based on the field observations, noted conditions of the City-owned bridges, and anticipated available funding, the following priority list is recommended:

Priority	NHDOT Bridge No.	Location
1	240/132	Kearsarge Way over PAR
2	240/106	Market Street EB over Tidal Basin
	241/106	Market Street WB over Tidal Basin
3	231/103	Maplewood Ave over North Mill Pond
4	220/143	Rec Trail over Market Street
5	191/110	Coakley Road over Hodgson Brook
6	204/101	Bartlett Street over Hodgson Brook
7	235/069	NH 1B over South Mill Pond
8	145/115	Rec Trail over PAR
9	154/101	NH 33 over PAR
10	246/083	US 1, Scott Ave over Daniel Street
11	198/107	Cate Street over Hodgson Brook
12	241/069	Peirce Island Road over Little Harbor
13	198/124	Rec Trail over US 4, NH 16 SP TPK
14	198/034	NH 1A over Sagamore Creek

RED LIST

RED LIST

RED LIST



General routine maintenance is suggested to be completed on a regular basis for all bridges and can likely be performed utilizing Public Works Department staff and equipment. These maintenance items, if performed on a routine basis, can significantly prolong the useful life of the City's bridges and postpone significant bridge repair or rehabilitation requirements. Refer to Appendix C for recommended routine bridge maintenance items and a maintenance schedule. Some bridge-specific routine maintenance recommendations are also included for select structures; however, the general routine maintenance recommended in Appendix C is applicable to all bridges, including those with specific maintenance recommendations.

## **1.2 Inspection Purpose and Methods**

A crew of two bridge inspectors from Hoyle, Tanner visited each bridge between July 25, 2018 and August 8, 2018 to perform limited field observations and to gather information for the preparation of this Report. The purpose of the site visits was to identify the necessary work for each bridge and to aid in the development of conceptual cost estimates for the identified work. All short span bridges over low velocity water crossings were inspected using chest waders to gain access within arm's reach to collect inspection data. All other bridges over water crossings were inspected visually from the river banks, as such, not all deficiencies were visible since the inspectors were unable to gain access within arm's reach for these bridges. It should be noted that conceptual estimates of probable construction costs are based on the limited visual inspections performed and associated observations.

Previous NHDOT Bridge Inspection Reports, as well as original drawings if available, were reviewed for each bridge prior to performing the site visits completed for the preparation of this report; NHDOT Bridge Inspection Reports are included for each bridge in Appendix D. Deficiencies noted in the NHDOT Bridge Inspection Reports were reviewed to evaluate if the deficiencies previously identified have been repaired or have increased in size and severity. Each bridge component was observed visually, at a minimum, if hands-on inspection was not feasible; however, visual inspections alone are not likely to reveal deficiencies beyond those that could be noted during a routine inspection.

PRIORITY #1

## **2.12 Kearsarge Way over PAR (NHDOT Bridge No. 240/132)**

Priority: 1

### Introduction

The existing bridge was constructed in 1979 and is comprised of weathering steel rolled I beams composite with a concrete deck. The bridge has two 75' spans and a total structure length of 152'. The bridge carries two lanes of traffic on a 31'-3" wide paved roadway. A 6' sidewalk is located on the west side of the bridge. The bridge has an 'E2' load restriction, and posting signs properly identifying this restriction are installed in both approaches.



North Elevation

According to the latest NHDOT Bridge Inspection Report, the condition rating of the deck is a 4 or 'poor', the superstructure is a 7 or 'good' and the substructure is an 8 or 'very good'. The bridge rail and approach rail ends for this bridge are substandard. The bridge is on the NHDOT Municipal Bridge Redlist due to the poor condition of the deck.

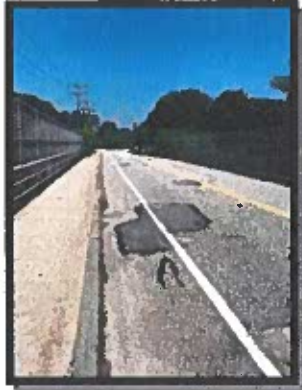
For the purpose of this report, the Kearsarge Way Bridge spans in the east-west direction with Market Street located to the west.

### Observations

The pavement exhibits cracking and settlement and has been sealed and patched in various locations. There is a localized area of the bridge deck pavement that is potholed with the concrete deck exposed. Settlement has occurred on the northwest sidewalk approach causing a tripping hazard at the transition onto the bridge. Depressions are most prominent where the potholes have been repaired. The east expansion joint is corroded with plow damage and is filled with debris.

The underside of the concrete deck exhibits cracking with efflorescence and leakage, with the most severe cracking and leakage present in the three interior bays. The steel girders are in good condition. The substructure (abutments, piers and wingwalls) is in good to very good condition. Map cracking and rust stains are present in the abutments.

The field observations made for this report are in general agreement with the latest NHDOT Bridge Inspection Report.



Deck Overview



East Expansion Joint



Underside of Deck

### Recommendations

#### **Short-Term Recommendations:**

- Perform an in-depth inspection and load rating.
- Review findings from the in-depth inspection, and implement a bridge rehabilitation project, anticipated to include:
  - Major deck repairs or complete deck replacement;
  - Bridge and approach rail replacement;
  - Isolated substructure repairs; and,
  - Joint replacements.

The Recommended 10-Year Bridge Capital Improvement Program matrix provided in Appendix A includes the higher cost of a bridge deck replacement project (versus a deck repair project) since it is more conservative for financial planning purposes.

#### **Intermediate-Term Recommendations:**

None.

#### **Long-Term Recommendations:**

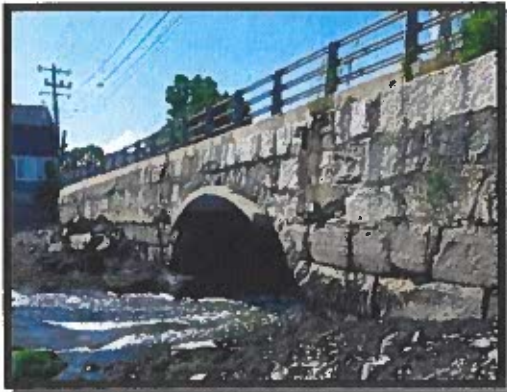
None.

PRIORITY #3

## 2.9 Maplewood Avenue over North Mill Pond (NHDOT Bridge No. 231/103)

Priority: 3

### Introduction



West Elevation

The existing bridge was constructed in 1940 and, according to NHDOT records, rehabilitated in 1976. The structure consists of a single masonry arch with a grouted corrugated metal plate arch (CMPA) liner founded on concrete footings. The 1976 rehabilitation consisted of the installation of the CMPA liner and construction of the concrete footings. The bridge has a total span length of 25' and carries two lanes of traffic on a 32' wide paved roadway. A 5'-11" wide sidewalk is located on the west side of the bridge and a 6'-8" sidewalk is located on the east. The bridge has an 'E2' load restriction, and posting signs properly identifying this restriction are installed in both approaches.

According to the latest NHDOT Bridge Inspection Report, the condition rating of the culvert is a 3, or 'serious', and has an AASHTO sufficiency rating of 43%. The bridge rail, rail transition, bridge rail approach, and approach rail ends are substandard. The bridge is listed on the NHDOT Municipal Bridge Redlist.

For the purpose of this report, upstream is considered south for this bridge.

### Observations

The pavement is in poor condition with cracking, settlement, and potholes throughout the approaches and on the bridge; pavement repairs have been completed in several locations. There is poor stormwater drainage at the bridge as evidenced by ponding on the west side and vegetation growth on and around the curbs. The sidewalks are rotating towards the road with significant settlement along both the west and east curb lines at the north and south ends. This settlement/rotation creates uneven walking surfaces on the sidewalk (i.e. tripping hazards). A section of the vertical granite curb is missing on the east side. The rail system, though substandard, is in good condition with minor plow damage.



Northeast Seawall

2018 City-Wide Bridge Evaluation Report  
Portsmouth, NH

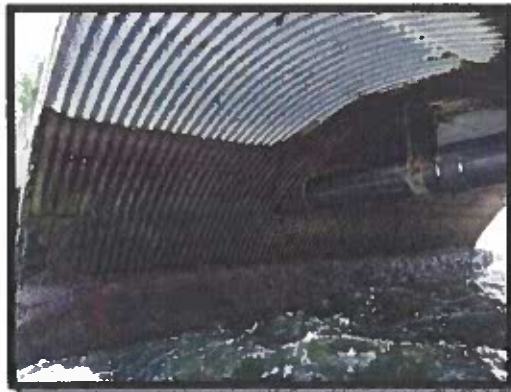
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On the east side of the bridge there is an exposed out-of-service sewer main that is severely deteriorated with extensive cracking and complete section loss along the invert. An active sewer main is located within the hydraulic opening and there is evidence that roadway backfill material is migrating through the culvert walls at the sewer main penetration. Bricks used to infill voids in the granite block headwall and seawall are missing in areas of the northwest seawall. The MPA liner exhibits heavy corrosion and several scattered holes, with 100% section loss at the bottom 6". The bolt heads along the seams in the bottom two-thirds of the MPA liner exhibit section loss. The concrete pedestals have exposed rebar, heavy deterioration, and marine growth.

The field observations made for this report are in general agreement with the latest NHDOT Bridge Inspection Report.



Typical Pavement Condition



East Intrados of Arch

Recommendations

**Short-term Recommendations:**

The bridge is in serious condition and should be replaced or repaired as soon as possible. Due to the complexity and cost of the project, it may not be feasible to design, permit and construct the replacement structure within the next 2 years; however, the process of replacing the bridge should begin as soon as possible.

**Intermediate-term Recommendations:**

Due to the complexity and cost of the project, it is likely the bridge will be replaced in the intermediate-term.

The City applied to have a repair or replacement project for this bridge added to the NHDOT Municipal SAB program in November 2000. NHDOT processed this application and provided the City with a total project cost estimate of \$1,100,000. To continue with the SAB application process, the City must next notify the NHDOT's Municipal Highways Engineer in the Bureau of Planning and Community Assistance of its intent to conduct the project. However, the estimate

prepared by NHDOT in 2000 is outdated, and may not reflect the scope or anticipated complexity of this project. It is recommended that the City contact NHDOT to express interest in moving forward with SAB funding, and to request an updated estimate for a complete replacement project.

As previously discussed, new projects are not currently being added to the SAB program; the Department has not identified when new projects will be added, or which Fiscal Year they will be added to for construction funding. If the City decides to utilize SAB funding to replace the Maplewood Avenue bridge, it is recommended that an interim repair project be completed to avoid deterioration of the structure to the point where closure is required. The design of the repair project should be started in the short-term with the repair being completed in the intermediate-term.

NHDOT will continue to inspect the Maplewood Ave bridge every 12 months because of its deteriorated condition (bridges in satisfactory or better condition are inspected on a 2-year cycle, but that frequency is increased when a bridge is added to the Red List). Should the current condition rating of 3 (serious) be reduced to 2 (severe), NHDOT will recommend to the City that the bridge be closed to vehicular traffic.

Two scenarios for the Recommended 10-Year Bridge Capital Improvement Program are presented in Appendix A; the first assumes the Maplewood Avenue bridge is replaced in the intermediate-term with City-only funds and the second assumes replacement with NHDOT Municipal SAB funding (80% reimbursable from the NHDOT) and a repair project is completed with City-only funds in the intermediate-term to prolong the life of the structure until SAB funding is available for the replacement project. The City may choose to upgrade the underground sewer main and water main within the limits of the Maplewood Avenue bridge replacement project; however, costs for upgrading the public utilities outside of work necessary to replace the bridge may not be eligible for NHDOT Municipal SAB funding.

**Long-term Recommendations:**

None.

PRIORITY #11

## 2.5 Cate Street over Hodgson Brook (NHDOT Bridge No. 198/107)

Priority: 11

### Introduction

The existing bridge was constructed in 1940 and is comprised of painted steel I-beams and concrete deck. The total length of the bridge is 37' and the clear span is 30'. The overall width of the bridge is 28' and carries two lanes of traffic on a 20' wide paved roadway. There is a 4' sidewalk on the east side of the bridge. The bridge is currently load posted at a 3-ton weight limit; signs identifying the load restriction are installed in both approaches. An insulated utility pipe is installed on the exterior face of the upstream exterior girder, assumed to be a water main based on the presence of a fire hydrant on the same side of the road.



West Elevation

According to the latest NHDOT Bridge Inspection Report, the condition rating of the deck is a 2, or 'critical'. The condition rating of the superstructure is a 5 or 'fair' and the substructure is a 6 or 'satisfactory'. The bridge rail, transition rail, approach rail, and rail terminations are substandard. The bridge has an AASHTO sufficiency rating of 26% and is on the NHDOT Municipal Bridge Redlist.

Hoyle, Tanner performed a hands-on field inspection in January 2017 as part of a separate project completed for the City. The inspection was initiated after an approximately 3' diameter hole developed in the concrete bridge deck that was discovered during a biennial NHDOT inspection. Results of Hoyle, Tanner's structural inspection, as well as a summary of the load rating analysis and recommendations for repair of the deck, were summarized in a Bridge Assessment letter dated April 3, 2017. The City immediately load posted the bridge and completed an emergency repair project that included installation of a steel plate over the hole in the bridge deck. The repair was considered a short-term solution, implemented with the understanding that a more extensive rehabilitation, replacement, or removal project would be necessary within the next several years to address the remaining deficiencies.

For the purpose of this report, upstream is considered west for this bridge.

### Observations

The pavement on the bridge deck and in the approaches is cracked and settled. The sidewalk and curb exhibit cracking and spalling and are covered with debris and vegetation. Nuts are missing from the anchor bolts of the steel pipe bridge rail, and the paint system is failing. The underside of the concrete deck exhibits areas of efflorescence indicating that water and chlorides are leaching through the deck. The deck concrete appears to have been poorly consolidated during construction as many patches of exposed aggregate and voids are also

visible on the underside of the deck. All five steel beams exhibit heavy corrosion and section loss with various levels of paint system failure ranging from minimal peeling to 100% failure. Both abutments exhibit spalling and cracking with localized areas of exposed rebar. A horizontal crack extends approximately 75% of the total width of both abutments at a location approximately 1' below the top of the bearing seat. A full-height vertical crack is located at the eastern-most portion of the north abutment.

The field observations made for this report are in general agreement with the latest NHDOT Bridge Inspection Report and the previous (January 2017) hands-on inspection performed by Hoyle, Tanner.



North Abutment



Looking South from North Approach

### Recommendations

#### **Short-Term Recommendations:**

None.

#### **Intermediate-Term Recommendations:**

None.

#### **Long-Term Recommendations:**

The Cate Street Bridge would require major rehabilitation, or replacement, to address the superstructure deficiencies noted herein and keep the bridge open to vehicular traffic. The Cate Street corridor is currently undergoing significant redevelopment, including construction of several new townhouse-style residential condominium buildings between the Cate Street Bridge and Bartlett Street. It is Hoyle, Tanner's understanding that this development project may include realignment and reconfiguration of Cate Street, including a new connection to US Route 1 Bypass at the existing Borthwick Ave intersection, through the former Frank Jones Center property. If this reconfiguration is constructed, the Cate Street crossing at Hodgson Brook would provide a secondary access to the proposed Portsmouth Senior Activity Center located at the recently acquired Paula A. Doble Army Reserve Center on Cottage Street. If the



Cate Street Bridge is to remain in-service, it is recommended that the structure be upgraded to increase capacity to safely carry loading from the City's fleet of emergency response vehicles, at a minimum, through either a major rehabilitation or replacement project.

The City applied to have a rehabilitation project for this bridge added to the NHDOT Municipal SAB program in September 2000. NHDOT processed this application and provided the City with a total project cost estimate of \$325,000. To continue with the SAB application process, the City must next notify the NHDOT's Municipal Highways Engineer in the Bureau of Planning and Community Assistance of its intent to conduct the project. However, the estimate prepared by NHDOT in 2000 is outdated and does not reflect any changes in condition of this structure that have occurred over the last 18 years. It is recommended that the City contact NHDOT to express interest in moving forward with SAB funding, and to request an updated estimate for a complete replacement project.

As previously discussed, new projects are not currently being added to the SAB program; the Department has not identified when new projects will be added, or which Fiscal Year they will be added to for construction funding. The Cate Street bridge is currently in fair condition with the deck being repaired; therefore, major repairs or replacement are not anticipated to be necessary within the 10-year period covered by this capital program. However, it is likely that a complete replacement would be recommended in the Engineering Study prepared as the first step in the engineering process for SAB projects. Therefore, the cost for a replacement project is included in the "Beyond Year 10" heading of the Recommended 10-Year Bridge Capital Improvement Program matrix provided in Appendix A.

NHDOT will continue to inspect the Cate Street bridge every 12 months because of the deteriorated condition of the deck (bridges in satisfactory or better condition are inspected on a 2-year cycle, but that frequency is increased when a bridge is added to the Red List). Should the current condition deteriorate further, NHDOT may recommend to the City that the bridge be closed to vehicular traffic.

**Routine Maintenance:**

In addition to the general routine maintenance procedures listed in Appendix C, continue to inspect the location of the steel plate repair annually to ensure the plate is secured to the deck and the pavement is not cracked around the plate.

### **2.13 Peirce Island Road over Little Harbor (NHDOT Bridge No. 241/069)**

Priority: 12

#### Introduction



South Elevation

The Peirce Island Bridge was constructed in 1958, rehabilitated in 1968, and rehabilitated again in 2016. The structure consists of four spans of painted steel rolled I beams with a non-composite concrete deck. The two end spans are 66'-6" long and the two interior spans are 70'-0" long, for a total bridge length of 273'. The overall bridge width is 32'-6" and carries two lanes of traffic on a 24' wide paved roadway. A 5' wide sidewalk is located on the north side of the bridge. The bridge has an 'E2' load restriction, and posting signs properly identifying this restriction are installed in both approaches; however, the bridge no longer carries an 'E2' load restriction and these signs may be removed.

The 1968 rehabilitation project included repairs to the bearings, construction of buried approach slabs, installation of riprap embankment protection, repairs to the joints at the ends of the bridge, and repairs to the jacketed concrete casings around the steel pier columns. The original steel bridge rail system was replaced with NHDOT 3-bar aluminum bridge rail at an unknown date, presumably in the late 1990s. A small-scale rehabilitation project was completed in 2016 consisting of partial and full depth concrete deck repairs, replacement of the barrier membrane and pavement, and replacement of the expansion joint at the west abutment with a prefabricated strip seal expansion joint.

The bridge carries three utilities servicing the Peirce Island Waste Water Treatment Facility, and the configuration of the utilities on the bridge has been rearranged since the bridge was originally constructed. The bridge originally only carried an 8" cast-iron waterline in the northern exterior bay and in 1965 a 16" cast-iron force main was installed in the northern exterior bay. In 1973, a 16" cast-iron sewer force main was installed in the southern exterior bay. The 16" cast-iron sewer force main and 8" cast-iron sewer force main located in the northern exterior bay were replaced in 1998. The 16" sewer force main was replaced with a 24" ductile-iron glass-lined pipe and the 8" waterline was replaced with a 10" ductile iron pipe. In 2017, the 16" diameter sewer force main in the southern exterior bay was replaced with a 16" cement lined ductile iron pipe.

According to the latest NHDOT Bridge Inspection Report, the condition ratings of the deck and superstructure are a 5 or 'fair' and the substructure is a 6 or 'satisfactory'. The approach rail ends are listed as substandard.

For the purpose of this report, the island side of the bridge is considered to be the east end.

Observations

The new bridge deck pavement, installed in 2016, is in good condition. The concrete bridge deck is considered to be in satisfactory condition based on observations made during the 2016 rehabilitation. A spall in the concrete deck underside is present at the northern sewer force main air release valve. The west expansion joint, replaced as a part of the 2016 rehabilitation project, is in good condition. There is no expansion joint on the east end of the bridge; installation of an asphaltic plug joint at the east end was removed from the 2016 rehabilitation project to avoid damage from excavation necessary for the 2017 force main replacement project.

The 3-bar aluminum bridge rail is in good condition with minor areas of impact from plow damage. NHDOT discontinued the use of aluminum rail systems on new bridges in June 2014 because the system was not crash tested for AASHTO and FHWA design requirements at that time. However, NHDOT found it acceptable to maintain, repair, or rehabilitate aluminum rail systems currently in use. Historically the aluminum rail systems were used in low-speed applications, such as in the application for the Pierce Island bridge, therefore, the aluminum rail system is acceptable for this bridge.

The steel beams are in fair to satisfactory condition with moderate paint system failure throughout, minor surface rusting and some laminar corrosion.



Typical Beam Corrosion



Deck Spall at Northern Air Release Valve

The substructure consists of two abutments, and three piers comprised of steel pile supported bents. The steel piles below mean lower low water (MLLW) are in good condition per the underwater inspection performed by Appledore Marine Engineering in 2015 included in Appendix E. Above MLLW, the steel piles are in satisfactory condition with one instance of poor condition isolated to pier 2. Pile deficiencies noted include missing portions of the protective fiberglass jacket with the concrete casing spalled and exposed portions of the steel piles and section loss of the weld between the piles and lateral bracing members. Moderate to severe laminar corrosion is located at Pier 2 in the vicinity of the northern (24" dia.) sewer force main air release valve, presumably from historic leakage from the valve. The abutments are in satisfactory condition with isolated map and hairline cracking, efflorescence and some spalling, cracking and delamination of previously repaired areas.

For a detailed list of observations, see the inspection report prepared by Hoyle, Tanner dated June 2018, entitled: "2018 Routine Inspection; Peirce Island Bridge, NHDOT Bridge N. 241/069, Portsmouth, NH".

The field observations made for this report are in general agreement with the latest NHDOT Bridge Inspection Report.

Recommendations

**Short-term Recommendations:**

None.

**Intermediate-term Recommendations:**

None.

**Long-Term Recommendations:**

The City applied to have a rehabilitation or replacement project for this bridge added to the NHDOT Municipal SAB program in November 2000. NHDOT processed this application and provided the City with a total project cost estimate of \$2,500,000. To continue with the SAB application process, the City must next notify the NHDOT's Municipal Highways Engineer in the Bureau of Planning and Community Assistance of its intent to conduct the project. However, the estimate prepared by NHDOT in 2000 is outdated and does not reflect any changes in condition of this structure that have occurred over the last 18 years. It is recommended that the City contact NHDOT to express interest in moving forward with SAB funding for this bridge, and to request an updated estimate for a rehabilitation or complete replacement project, if this request has not already been submitted.

The Peirce Island Bridge is currently in fair to satisfactory condition, having recently undergone a small-scale rehabilitation project. Major repairs or replacement are not anticipated to be necessary within the 10-year period covered by this capital program; however, a large-scale project (either major rehabilitation or complete replacement) will likely be necessary within the next 10 to 20 years. Rehabilitation is feasible and would be less costly than replacement. However, based on the age of the existing structure, significance and importance of the crossing, and potential desire to improve pedestrian, marine, and vehicular accommodations, complete replacement could be recommended over another rehabilitation project. It is recommended that a comprehensive Engineering Study be completed that evaluates all alternatives, whether funding from the SAB program is utilized or not. For budgetary planning, the cost for a major rehabilitation project is included in the "Beyond Year 10" heading of the Recommended 10-Year Bridge Capital Improvement Program matrix provided in Appendix A.

**Routine Maintenance:**

In addition to the general routine maintenance listed in Appendix C:

- Inspect the bridge every 12 to 18 months until the completion of the construction of the WWTF upgrade project to ensure the increased construction vehicle traffic associated with the Peirce Island WWTF upgrade project has not had a deleterious effect on the Peirce Island Road Bridge.
- Repair or replace the leaking air release valve on the 24" dia. sewer force main located in the northern exterior bay of the bridge to prevent further deterioration of Pier 2.

**From:** [A Howard](#)  
**To:** [Planning Info](#)  
**Subject:** Comment for CIP meeting on 12/16/21  
**Date:** Tuesday, December 14, 2021 6:37:43 PM

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To whom it may concern,  
I am requesting that the Maplewood Avenue Complete Streets bike lane project in the Capital Improvement Plan stop being delayed year after year and be considered for approval and moved up in priority for the 2022 planning and budget cycle process.

Personally, I believe Portsmouth has to do a much better job integrating pedestrian and bike pathways into our historic and growing city. Vehicles are not the only mode of transportation that needs to be accounted for when considering new developments throughout the city. Across the globe, there is a greater rate of increase in the number bikes, scooters, skateboards, and walkers in urban areas than the rate of increase for vehicles. Let's please make sure our city accounts for such growing trends and always strives to be a pedestrian friendly city.

Also, as a parent of two Portsmouth Middle School students who live on Maplewood Avenue, I am advocating for a Safe Route to the middle and high schools. There is a growing number of children attempting to bike to school from the north end, and the section between Deer Street and Richard's Avenue has no dedicated bike path or signage to alert bikers and drivers. Meanwhile, the section between Deer Street and Woodbury Avenue has a designated bike lane which encourages bike traffic to travel along the street until the bike path abruptly ends. My children have been yelled at and harassed by aggressive drivers while simply waiting at the stop light for it to turn green so they can reach the designated bike path lanes. It is very difficult to navigate the wide street with multiple turning lanes and no specific section for bikes, causing confusion for both the biker and driver. The bike lane needs to be completed and connected to other bike paths to create a continuous safe path for travel.

I would also request the Middle Street bike lane be reinstated for the many students attempting to access the High School by way of a "Safe Route" to school, not to mention access for bikers to the shops, restaurants, and other activities along Lafayette Road.

Finally, I recently visited Boston, and after having lived in the North End many years ago, I now noticed that the city had installed bike lanes throughout the area which connected to other bike lanes from other parts of the city. This is no small task in such a busy area and large city. The bike lanes were being widely used and seemed quite popular among the residents and tourists alike. Therefore, I am confident if a large city like Boston can install bike lanes, then I am sure Portsmouth can make similar strides to improve accessibility, safety, and the demands of a future generation.

Thank you for your time.  
Amy Howard

873 Maplewood Avenue