Commissioner-

I base my opinion on two things:

RSA 234: 2 Bridge Defined says that “The word bridge herein shall mean a structure, having a clear span of 10 feet or more measured along the center line of the roadway...spanning a water course...on a public highway to carry the traffic across, and shall include the substructure, superstructure and approaches thereto.”

RSA 234:4 Capacity of Bridge says that “All bridges constructed with bridge aid funds shall have a carrying capacity of at least the legal load as stipulated in RSA 266. All bridges reconstructed with bridge aid funds shall have a carrying capacity of 15 tons.”

RSA 234:5 Application says that “The selectmen of a town, the mayor of a city, or county commissioners for unincorporated place may annually apply to the commissioner of transportation in the manner prescribed by the commissioner for bridge aid on a class II, IV, or V highway.”

Administrative Rules known as Tra 501 includes the same information.

A utility type bridge would not carry traffic or legal loads or 15 T, so would not meet the requirements of the law or administrative rules to use bridge aid funding.

The sewer district collects user fees. It would seem that the users could pay the costs associated with providing the sewer crossing. The town and sewer district have known they had a problem that needed to be dealt with. They made a somewhat half-hearted attempt to rehabilitate the bridge through a TE project in the late 1990’s that was never built because it was too expensive for them and the TE program.

Other options would be for them to take would be to move the sewer to the river bottom, onto the railroad bridge, or onto the DOT’s Main St bridge and then demolish the truss. They could be exploring other options for funding that relate to sewers. It is my understanding that they did not move the sewer to the new bridge in the 1970’s when the new bridge was built because they deemed it to be too expensive.

Nancy
Thank you for the update. Can you pls research if their are any options for utility type bridges that would qualify for SAB. Is this a legislative or department rule regarding SAB qualification?

Regards,

Chris

On Aug 27, 2014, at 5:18 PM, "Nancy Mayville" <NMayville@dot.state.nh.us> wrote:

FYI, a status report on activity and progress regarding Lilac Bridge in Hooksett (closed steel truss with sewer line by Robie's Store)

1. CMA, engineering consultant (Jason Gallant), did inspection yesterday from boat, report summarized below and in attachment. More problems than was known from DOT inspection because we got off bridge after finding first broken bottom chord.
   a. Initial thought is to put some sort of structure through the bridge to support it.
2. Steve Liakos met with Hooksett Village Sewer Commission and Dean Shankle, Town Manager yesterday. He emphasized technical issues and urgency to address the situation because bridge has active sewer and boat traffic.
3. I talked to Town Manager this morning. He is discussing with Town Council tonight.
4. Town Manager was fairly positive with me and said
   a. Engineer is working on plan
   b. Wants to get done soon
   c. Bridge worse than thought
5. Town Manager voiced that this was the first we told them, he wasn't aware of the problems. My response was to point him back to history of inspections that is in the report, this is not new. I also explained it is their responsibility to have municipal bridges inspected. We do it for them for free and we recommend that they monitor the bridges in the interim. (Note: Their reaction is typical of most critical deficiency situations).
6. Town Manager voiced that our process will hold them up. I said no, we will expedite many things. As soon as something comes in on paper to us, we will review it and get comments/approval back to them. They do not have to wait for next SHPO meeting on Sept 11, we offered them several options next week for a special meeting, they chose Friday, Sept 5.
   There can be expedited bidding.
7. Jason Gallant, CMA, was going to contact Fish & Game about boating activity. We have agreed with him that the boat traffic should just be restricted to go only under the one span that does not have problems and restricted to not go under the other two.
8. The town does not have plan for how to handle sewer if the bridge went down and the sewer broke and dumped into the river. I am being told that sewage from the new rest areas will through this line on the bridge to the treatment plant. I need to confirm this with Turnpikes.
9. I am hearing that the reaction of the town officials particularly Sewer Commission and Town Manager is not as positive as my conversation with the Town Manager would indicate. I am waiting to hear what happens at Town Council tonight.
10. Again, I am offering up $500,000 of SAB to contribute to the stabilization so as to be in position for a future project. The permanent rehabilitation likely will not qualify for and be too expensive for SAB. A utility bridge just for the sewer will not qualify.

This summarizes what we know for the moment.
I am out of the office for a major part of Tuesday, but monitoring e-mail. You will be able to start talking to Steve between 6:30 and 7 AM at 271-4420.

Nancy

From: Leo Lessard [mailto:LLessard@hooksett.org]
Sent: Monday, August 25, 2014 1:27 PM
To: Steve Liakos
Subject: bridge meeting

Hi Steve, the meeting is at 10:00 am tomorrow morning at the sewer department it's at 1 Egarows road, which is off of Memorial dr. off of Hooksett road RT 3 right by the school. At the set of lights you'll see a brown wooden sign that says memorial school and sewer department. Take that right.
Thank you so much for coming

Leo
Leo Lessard
Director of Public Works
Town of Hooksett
210 West River Road
Hooksett, NH 03106
Tel. 603.668.8019  Fax. 603.668.6850

<Lilac Bridge Elevation with failure locations.pdf>
Nancy

From: Jason Gallant [mailto:jgallant@cmaengineers.com]
Sent: Wednesday, August 27, 2014 8:46 AM
To: Nicholas Goulas; Steve Llakos
Subject: FW: bridge meeting - update on findings

Good morning Nick and Steve,

As an FYI, I wanted to share what we found yesterday. In a nutshell, the upstream and downstream truss low chords have failed symmetrically in both of the 1909 spans. We're working with the Town to expedite shoring.

Regards,

Jason

From: Jason Gallant
Sent: Tuesday, August 26, 2014 7:08 PM
To: 'Leo Lessard'
Cc: William Straub; Dan Hudson
Subject: FW: bridge meeting - update on findings

Leo,

We were able to thoroughly review the underside of the bridge today. We physically probed areas of concern obtained and photo/video documentation of present conditions from the water. While we are in process of compiling all of the findings to be shared with the Town, I want to immediately share some of the initial findings that confirm the serious condition of the existing bridge.

There are critical fractures in the north and middle 1909 spans. There we no fractures found in the south 1936 span. I've shown the fracture locations on the attached sketch for your reference. Generally, the upstream side (sewer utility side) is in worse condition than the downstream side. We think this may be attributed to the downstream sidewalk providing some level of protection from de-icing salts over the years.

Based on the findings of field inspection, we recommend that the Town take immediate action, in accordance with prior DOT recommendations regards the active sewer on the bridge and boat traffic under the bridge. I will be in the office in Portsmouth tomorrow morning to discuss immediate and near term strategies.

Regards,

Jason

Jason L. Gallant, P.E.
Vice President
CMA Engineers, Inc.
From: Steve Llakos [mailto:SCllakos@dot.state.nh.us]
Sent: Monday, August 25, 2014 5:12 PM
To: 'Leo Lessard'
Cc: Nancy Mayville; Jason Gallant
Subject: RE: bridge meeting

Leo-

This is Nancy answering Steve’s e-mail.

I will not be able to attend the meeting with the Sewer Commission tomorrow with Steve. Steve can explain the technical aspects of what is going on with the bridge based on the Department’s inspection.

In our meeting on Thursday, Aug 21, we talked about funding. I wanted to recap and detail it for you, since I will not be there Tuesday to speak it.

1. I offered some State Aid Bridge funding to get the bridge stabilized to save it for the future rehabilitation project. The offer is for a limited amount of funding for the construction of the stabilization, no more than $500,000, preferably less. We cannot reimburse for design since you got the consultant using low bid. Qualification-based Selection (QBS) is required for design of state funded projects.

2. With respect to the long-term project, the bridge as a pedestrian bridge only would not qualify for State Aid Bridge funds and would cost too much for the program. For the rehabilitation of the bridge to qualify for state or federal bridge aid, it would need to carry at least 15 T and be on a public way.

3. The bridge could potentially be a candidate for funding through the new Transportation Alternatives Program (TAP), though too expensive to be wholly funded by the program. Projects in TAP need to be $800,000 or less. The application process has started. Since you did not submit a letter of interest for this project you cannot apply in this round.

4. If the town were to want to build a new utility bridge only for the purpose of carrying the sewer, we would not participate in that either.

It is my understanding that you voiced to Steve some thought of us going to the Town Council meeting on Wed. We will, if we have to, but my preference would be that you and your consultant be the ones to update the Town Council. Let us know.

Again, I would stress the urgency of implementing a solution for stabilization quickly while taking measures to protect the public and the environment such as cutting off the boat traffic and shutting down the sewer.