Engineering Department, City of Concord,

I attended and appreciated the Sewalls Falls Bridge Meeting on January 23rd. It was well run and generated a lot of valuable questions and answers. The following are my comments regarding the project:

1. Designing and constructing a bridge that is easy to maintain is essential for the preservation of the structure. A conventional I-Beam bridge with a paved concrete deck has been the standard bridge in New Hampshire for years. It is easily maintainable and can be enhanced to differing degrees with ornamental lighting and railings, pedestals, and sidewalks based on need and budget. Some good examples of this type of structure are the Holderness/Plymouth Bridge:175A over the Pemigewasset River, the Hanover Bridge over the Connecticut River, and the Concord Bridge: Manchester Street over the Merrimack River. The choice of bearings, joints and structural steel protection are also critical to the ease of maintenance and durability of a structure.

2. Having an adopted/written Maintenance and Preservation Plan for the bridge that has dedicated funding will assure that the bridge is maintained in the future and kept in good condition. Routine Maintenance and Preservation have to be performed to new bridges in a proactive manner in order to avoid extensive repair costs in the future. Painting, washing and sealing, joint repair, debris removal and repaving have to be anticipated in this program.
3. I understand that the construction of the road connecting the Concord Monitor and the Trash to energy plant; and the construction of a SB-On Ramp and a NB-Off Ramp at Sewalls Falls Road are in the future. However, there was great sentiment at the meeting to reduce and slow down traffic. Both of these projects will reduce traffic in these residential neighborhoods on both sides of the river. These projects should continue to be regularly considered in future planning.

4. The construction of full twelve foot lanes with ten foot shoulders will increase the speed of traffic dramatically in this a residential neighborhood. Consideration should be made to having ten or eleven foot lanes with narrower shoulders (as was done on Fisherville Road). Another example of where this was done is on the newly constructed Bristol/New Hampton Bridge over the Pemigewasset River. Sidewalks should only be constructed if they can be plowed. Presently, there are no other sidewalks in the immediate area and would need to be constructed.

5. I do agree that the removal of the existing bridge is best for the City. Maintenance of historic structures can be very costly. An example of the placement of a historic plaque with Pictures is also at the Bristol/New Hampton Bridge. There also, as a preservation measure, the granite blocks from the abutments were used as steps for recreational access to the river.

Thank you for considering my comments. I will be glad to discuss the project with any members of the project team.

Ed Welch
356 Mountain Road
Concord, NH 03301
(603) 224-5792
Roberge, Edward

From: Jerry Zoller <jZoller@dot.state.nh.us>
Sent: Friday, February 08, 2013 1:36 PM
To: Sewalls Bridge Group
Cc: * Engineering
Subject: Sewalls Falls Bridge - public comment from Jerry Zoller

City Engineer, Ed Roberge,

- I attended the public info meeting of January 23, 2013 as well as the original meeting of Nov 16, 2004. I have reviewed the on-line reports.
- I have lived close to the bridge at 10 Sewalls Falls Road since 1978 and cross it a lot.
- I work in the NHDOT Bridge Design office and am familiar with truss rehabs, and the other related issues involved.
- I comment in this email as a citizen of Concord and neighbor of the bridge, and not as a DOT official, but as a Professional Engineer familiar with the issues.

- I commend City Engineer, Ed Roberge, for his presentation at the public info meeting and his answers to questions from the public.
- I commend the City for hiring CHA to conduct the structural analysis in March 2012 and perform the load rating, and for hiring historian Richard Casella.

- I support Ed Roberge's recommendation to remove the existing truss bridge and replacing it with a new bridge.
- I support the "on-line" option (Alternative 8, I believe). As described in the "Alternatives Summary Matrix" it best serves the long-term needs of the City.
- Closing the bridge will impact people's travel habits somewhat, but it is necessary to accommodate construction, raising the grade, and on-line construction.

A couple of technical comments of support for the proposal to demolish the existing truss:

- The structural analysis makes it clear that an enormous amount of member replacement and strengthening is required to bring the truss up to legal loads. By default this analysis, as illustrated by the truss sketch with the 'red' members, is reason enough to demolish the truss.
- However, I assert that if the truss was to be salvaged, the enormous work involved would make it unfeasible anyway.
- For example, the truss would need supporting with temporary piers during member replacement.
- The condition of the lower truss connections will be much worse than even reported once the rivets are removed and the plates examined, due to rust and pack rust, section loss and deterioration.
- The issue of lead-bearing paint is under reported. In actual fact, during rehabilitation, provisions would have to be made to catch any LBP debris from falling into the river, even during member replacement. There would be additional costs associated with OSHA mandated worker protection for even rivet busting and other demolition activities.
- Keeping the truss would require repainting it, and dealing with the LBP will be expensive. The amount of long-term success with a protective coating system is limited by the built-up lattice members with many crevices and faying surfaces which will leak rust stain for years to come.
- As was pointed out at the info meeting, a truss is non-redundant and vulnerable to impact damage and failure. For example, a truss bridge in the early 1970's in Franconia collapsed when a truck approached and the
load slipped off the bed and into the end portal member, taking the bridge down and the truck with it. The 2007 collapse of the Minnesota I-35W bridge should make us sensitive to this point as well.

- Lastly, even if replacing the bad truss members and restoring the truss was economically feasible, when the work is all done we would still be left with a narrow, short, vulnerable structure that is inadequate to carry traffic, pedestrians, and bicyclists.

A few final considerations about the new bridge:

- In my view the F&G parking lot will be the staging area for the Contractor during construction. The boat launch and rec trail features will have to be relocated during the construction phase.
- The term "signature" bridge is often mentioned. My recommendation is that that not be a consideration. This location is neither a gateway or special in any of itself. The bridge type selected should be based on cost-effective design. For a two-span bridge this would be a deck plate girder. For a one-span bridge to eliminate pier work in the river, the bridge could be a deck truss, or possibly a through-arch. But the choice should be based on what is best not what is "signature".
- For a long-life steel coating, I recommend considering metallizing. It is expensive but it is also long-lasting. A local shop here in NH has a metallizing capability, namely, Structural Bridge in Claremont.

Thanks.

For your consideration.

Jerry

Jerry S. Zoller, P.E.
10 Sewalls Falls Road
Concord, NH 03301
603-223-1448
soccerbridge@comcast.net
Hi,

I felt that the alternatives presented at the January 23, 2013 public meeting were not sufficiently inclusive, and would like the Section 106 review process to include the following issues:

* Preservation of at least one span of the existing bridge intact on dry land, possibly adjacent to the Fish&Game parking area over the settling basin or maybe in the widened part of the state railroad right-of-way (or there's always the Industrial park). This would allow historians a closer look at a rare hundred-year-old bridge type without fear it would collapse a long distance or block the channel if it did.

* Consideration of a downstream location alternative which would avoid use of the conservation land on the NW corner and allow the existing bridge to be used as a temporary saving maybe $1 million on construction. The excuse given by the consultant for ignoring this was that the 2008 consultant had been told to avoid the boat ramp area - as this is an impossibility, why not look at the chance to save $1 million.

- Roy Schweiker, Concord NH
February 11, 2013

Regarding: Sewalls Falls Bridge

Thank you for holding a public meeting at Beaver Meadows on Wednesday, January 23, 2013.

I would like to see the Sewalls Falls Bridge closed permanently for vehicular traffic and the area used strictly for outdoor recreation. I would also like to see the Boscawen/Penacook exit developed (rather than Sewalls Falls) with better on/off ramps, gas stations, etc. Cars driving through downtown via that particular exit would help expand the Penacook area better with new local businesses such as restaurants, shops, a grocery store etc, reaching the committee’s goal without construction on the Sewalls Falls area.

Unfortunately, the decision has been made to repair or replace the bridge and it appears there is now talk of expanding Monitor Road to Whitney Road Extension for future development and perhaps to have an on/off ramp with access to Route 93 via Sewalls Falls Road.

All I can say is, UGH.

When I purchased my home at 172 Sewalls Falls Road in 2009, the proximity to the Sewalls Falls Recreational Area was an integral part of my decision. As a person who enjoys the outdoors, I’ve utilized the area to walk, run, swim, cross country ski, snowshoe and occasionally to relax and read a book. I have also viewed a variety of wildlife such as deer, fox and loons and bald eagles. Though it’s within city limits, it can be a quiet and peaceful area and I enjoy it very much.

However, I’m afraid that this area will change dramatically in the next several years, with the addition of a new bridge. I’m now questioning if purchasing a home in this area and in Concord in general, was the right thing to do. Yet, I truly enjoy living in Concord and I want to protect its resources.

With this new project, I am concerned about several factors:

- Increased speed — the speeding on Sewalls Falls Road is horrible. With the new bridge and newly paved roads leading to the bridge, the number of speeding vehicles will increase.
- Usage of large/heavy trucks at all hours of the day and night.
- Increased noise. More traffic, more truck usage brings more noise.
- Lack of sidewalks on Sewalls Falls Road (specifically from Manor Road to Abbott Road) makes it impossible to walk or run without the fear of being hit by a speeding car. The few sidewalks that are on Sewalls Falls Road have significantly pot holes. Increased traffic will make this more dangerous for pedestrians and especially children.
- Increased light pollution. Will the bridge have lights?
- What will become of the intersection at Sewalls Falls Road and Manor Road? A traffic light? A roundabout? This is directly across from my house and therefore I am not interested in having that intersection changed to process more traffic.
- Loss of natural resources. It pains me that this new bridge will encroach on surrounding woods.

I propose the following:

- We close the Sewalls Falls Bridge permanently and use the area strictly as a recreational area.

I am more than happy to speak with you directly about the proposed changes and my concerns. Please contact via the contact information below. Thank you for your time and consideration on this very important and impactful issue.

Respectfully Submitted:
Elizabeth Szelog
172 Sewalls Falls Rd
Concord, NH 03301
603-568-8105