

October 24, 2005

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN**

CONFERENCE REPORT

PROJECT: CONCORD
BRF-X-5099(021)
12004
Sewalls Falls Bridge

DATE OF CONFERENCE: September 15, 2005

LOCATION OF CONFERENCE: Beaver Meadow School, Concord

ATTENDED BY: DEPARTMENT OF TRANSPORTATION
Don Lyford Mark Hemmerlein
John Butler Tim Boodey

OTHERS

See attached Sign-Up sheet

SUBJECT: Ad Hoc Committee Public Informational Meeting

Roger Hawk opened the meeting by explaining that the purpose of the project is to address the bridge on Sewalls Falls Road over the Merrimack River. The bridge is owned and maintained by the City of Concord. An Ad Hoc committee of City officials has been formed to consider alternatives for replacement or rehabilitation and provide a recommendation to the NHDOT. The committee has been working with the DOT over the past several months to develop the four alternatives to be presented at tonight's meeting.

Mark Hemmerlein discussed the environmentally sensitive issues and properties in the project area:

- The existing truss bridge is historic. It is eligible for listing on the National Register of Historic Places. Impacting the bridge can only be approved if there is no "prudent and feasible" alternative that doesn't impact the bridge.
- The Fish & Game boat launch facility.
- The wooded property opposite the Fish & Game boat launch was purchased or enhanced with Land Conservation Investment Program (LCIP) funds, which carries strict protective covenants.
- The U.S. Fish & Wildlife Service is concerned with preserving the large pine trees on the upstream side of the bridge as potential bald eagle perch and roost trees.
- Brook Floater mussels, a protected State species, exist in the river near the bridge.

John Butler described the need for the project and the four alternatives. The existing truss bridge was constructed in 1915 and the trestle extension on the south (west) side was constructed in 1937. The bridge is on the Department's Red List, which means it is in poor structural condition, and is posted for a 14 ton maximum weight limit. The traveled way width on the truss bridge is narrow (approximately 18 feet) and is signed for alternating one-way traffic. There are no shoulders or sidewalks on the bridge or on Sewalls Falls Road, which is a safety concern for vehicles, bicyclists, and pedestrians. The grade on Sewalls Falls Road on the north (east) approach to the bridge is steep (8%) with abrupt vertical curvature in the profile. The posted speed limit is 30 mph. The current average daily traffic across the bridge is approximately 3000 vehicles, which is projected to increase to about 4500 vehicles by 2018. A gas line and a City sewer line cross the river on the existing bridge.

Alternatives 4 and 8 involve constructing a new bridge and Alternatives A and B involve rehabilitating the existing bridge. Alternatives 4 and 8 would allow for improvements to the profile of Sewalls Falls Road on the west side of the bridge by raising the elevation at the west abutment. Alternatives A and B would involve very little change in the profile, however, the west end of the bridge would be raised slightly to allow the existing steel grate decking to be replaced with a conventional concrete deck.

The four alternatives were described in detail:

Alternative #4

This alternative would construct a new bridge just upstream of the existing bridge. The bridge and roadway approaches would have two 12 foot wide travel lanes, two 5 foot wide shoulders, and two 5 foot wide sidewalks. Traffic would be maintained on the existing bridge while the new bridge is constructed. The existing bridge could remain in place for non-vehicular use (pedestrians, bicyclists, snowmobiles). Property impacts would be primarily to the Concord Monitor (no impacts to parking areas) and the LCIP property. Difficult environmental issues with this alternative would be the LCIP property impact and impacts to potential bald eagle perch trees.

Alternative #8

This alternative would construct a new bridge on the same alignment as the existing bridge. The width and layout would be the same as with Alternative #4. The bridge crossing would require closure during construction. Increased emergency response times for fire and ambulance services may be an issue. The existing bridge would be removed. Relocating the sewer and gas lines from the existing bridge to the new bridge would be difficult. It appears that no property acquisition would be required, but slope and drainage easements would be required on all four properties adjacent to the bridge. Difficult environmental issues with this alternative would be removal of the historic bridge, impacts to the LCIP property, and potential closure of the boat ramp during construction.

Alternative A

This alternative would rehabilitate the existing bridge and retain the existing one-way alternating traffic pattern. A sidewalk could be added to the bridge, attached to the outside of the existing truss structure. The bridge would require closure during most or all of the rehabilitation

process, which is estimated to take 2 years. This alternative may still have minor property impacts due to the reconstruction of the roadway approaches.

Alternative B

This alternative would rehabilitate the existing bridge for eastbound traffic and construct a new one lane truss bridge upstream for westbound traffic. As with Alternative A, a sidewalk could be added to the outside of the existing bridge. Alternating one-way traffic could be maintained on the old and new bridges during construction. Some shoulder width could be provided on each bridge for bicycle use. Property impacts would be primarily to the Concord Monitor and LCIP properties. Difficult environmental issues with this alternative would be impacts to the LCIP property, and potential impacts to bald eagle trees.

Don Lyford discussed the cost estimates in the matrix (copy attached). The funding for the project is 80% Federal, 20% City, however, if the City chooses to pursue an unconventional bridge type for a new bridge (such as a truss or covered bridge) the City may have to pay the additional cost above that for a conventional steel girder/concrete deck design. Don noted that the project is currently programmed in the Department's 10 year plan to advertise in the Fall of 2008, with construction in 2009 to 2010.

Tim Boodey, Bureau of Bridge Maintenance, briefly discussed some repair work that is planned for the existing bridge pier. Some scour has occurred at the nose of the pier. This will be repaired by replacing the granite stone blocks which have shifted. The work is scheduled for this Fall and will cost approximately \$10,000.

Discussion:

1. Several speakers, most of whom live in the area, expressed concern that a new two lane bridge would result in increased traffic volume and speeds on Sewalls Falls Road. They generally favored Alternative A. One person noted that increased traffic would prompt other infrastructure improvements along the road. Another person noted that controlling traffic is done by controlling growth and development, not by replacing a bridge.
2. It was suggested that signals be installed to control the alternating one-way traffic if Alternative A is chosen. It was also suggested that signals be installed now at the current bridge, prior to construction.
3. Councilor Blanchard noted that some of the drawbacks with Alternative A are that the future cost to the City to maintain an old bridge will be greater than with a new bridge, and that perpetuating the one lane bridge would not be compatible with the potential construction of a new I-93 interchange at Sewalls Falls Road (so called Exit 16 ½) at some point in the future.
4. One person noted that building a new, two lane bridge may "promote" the construction of Exit 16 ½.
5. Some speakers saw no need to save the existing bridge and favored building a new, two lane, economical bridge (Alternative 4 or 8).

6. Jim Garvin, State Division of Historical Resources, asked why the full cost of rehabilitating the existing bridge for non-vehicular use in Alternative 4 would not be paid for by Federal Highway Administration (FHWA). Federal law requires preserving the existing historic bridge if possible. Don Lyford responded that the law only requires that the bridge be avoided, not preserved, therefore FHWA will only participate in its preservation in an amount equal to what it would cost to demolish the bridge. Alternative funding could be pursued for the rest of the preservation cost.
7. One person noted that the closed truss bridge across the river in Boscawen was designed by the same engineer, John Storrs, and that it is in a deteriorating condition.
8. It was suggested that rehabilitating the existing bridge for vehicular use may alter it to such a degree that it loses its historic value.
9. A representative from the Fire Department stated his desire to see two lanes on the bridge and to not have the bridge closed during construction.
10. It was asked if the load restriction would be removed if the bridge is rehabilitated. Don Lyford replied that the bridge would be good for legal loads.
11. It was asked if the existing pier would be retained. Don Lyford said that Alternative 8 is the only one that would require removal of the existing pier.
12. It was suggested that pedestrian access be provided from the boat launch facility directly up to the bridge.
13. One person spoke strongly in favor of providing access for snowmobiles on a new bridge. He suggested that one sidewalk be flush with the bridge deck to facilitate snowmobile use.
14. A representative from the Concord Monitor said their operation could live with a temporary bridge closure if necessary. He stressed preserving the aesthetics of the area, and didn't want to see two bridges at the crossing.
15. It was asked how likely it would be to get approval to impact the LCIP property. Mark Hemmerlein responded that it would be difficult, but is not unprecedented. A change in the law would be required before it could even be considered.

At the end of the meeting, Councilor Blanchard asked for a show of hands for the four alternatives. The approximate vote was as follows:

Alternative 4	7 hands
Alternative 8	5 hands
Alternative A	20 hands
Alternative B	16 hands

Submitted by:

John D. Butler, P.E.
Preliminary Design Supervisor

NOTED BY: D. Lyford

cc: J. Moore
D. Lyford
R. Barry
S. Liakos
M. Hemmerlein
W. Oldenburg
J. Butler

Roger Hawk, City of Concord
Rob Faulkner, Clough, Harbour & Associates

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Public Meeting
Sewalls Falls Bridge Replacement
Beaver Meadow Elementary School
September 15, 2005
7:00 PM

Agenda

1. Introduction of City Council Ad Hoc Committee Members and DOT Staff
2. Ad Hoc Committee process
3. Purpose of meeting: To receive input from public on Council Committee recommendations
4. Presentation of alternatives by NHDOT
 - Environmental Issues: Mark Hemmerlein
 - Presentation of Alternatives – John Butler
 - General Overview: Don Lyford
5. Questions from the audience
6. Next steps by City Council

Project Contacts for additional information:

Roger Hawk, Community Development Director, City Hall – 225-8595
Donald Lyford, Project Manager, NH Department of Transportation – 271-2165

City Council Ad Hoc Committee Members:

Douglas Black	Elizabeth Blanchard	James Bouley (Chair)
Dana Lankhorst	Jan McClure	

Additional information and a copy of the project alternatives matrix can be reviewed on the NHDOT web site at: <http://webster.state.nh.us/dot/projects/concord12004/index.htm>

MEETING SIGN-UP SHEET

PROJECT CONCORD
 LOCATION Sewalls Falls bridge
 PROJECT NO. BRF-X-5099 (021) 12004
 Federal State
 Public Informational Meeting

Name	Agency	Comments
Jan McClure	City Council Ward 3	
Phyllis MacKown	—	
SIM MERRROW	—	COVERED BRIDGE?
Jay Girovard		
Bernard Chase	Resident ABBOTT RD	ALT 4 ① improves ped. + bicycle traffic
Kathy Brockett	1 Alder Creek Drive	② NO CLOSURE
Lee Lasjee	494 Main Rd	
Ben Allen	128 Sewalls Falls	traffic increase w/ added lane no closure
Doug James	1 Flume St	keep it open - <u>WATER</u>
STEVE TAYLOR	142 SEWALLS FALLS	" " " "
Bob Bosa	Resident MANON RD	+ KEEP IT CHEAP!
Al Hirschlag		TRAFFIC IMPACT - speed and congestion
Matthew Richard	4 Wildblowis Dr	Alt. #4 - remove old bridge
John Grocer	15 Hubert Street	Keep the old Br. &
Michael Pepin	5 Davis St	All New 2 lane Bridge
Jamie Baumeister	12 Yarrow Way	New 2 lane bridge
Lynn Duffly	Resident Second St.	Remove old bridge!
Phil Donovan	96 Abbott Rd	Build most economical 2 lane bridge.
David Murray	42 Long Pond Rd / Concord Heritage Commission	Recreational Passage is very important!!
John Mercier	11 Douglas Ave Concord NH	

Sheet of

Date Sept. 15, 2005

MEETING SIGN-UP SHEET

PROJECT _____
 LOCATION _____
 PROJECT NO. _____

Federal

State

Name	Agency	Comments
Anthony Fontaine	Town Line Trail Dusters	Rec. Trail Access
Nonnan LaPierre	Snowmobile club	" " "
Tom Brown	Resident/monitor Resident	FAVOR one, safe, TWO-LANE Bridge
Tom LEVINS, PE	RESIDENT	24' WIDTH MAXIMUM
Ann Potoczak	Resident 14 Sewalls Falls Rd	WILL BE SUFFICIENT
NEED further review of traffic impact once load limit is lifted		
Sign up sheet did not get routed completely. Approx. 80 attendees.		

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Date _____