REPORT OF MEETING

Subject: Report of Public Information Meeting - Project 16301 – Bridge Carrying NH Route 123A over Bowers Brook

Meeting Date: April 24, 2014

Location: Acworth Town Hall, 13 Town Hall Road, Acworth, NH

Attendance

NHDOT
- Bob Landry
- Jennifer Reczek

UVLSRPC
- Nate Miller

GM2 Associates, Inc.
- Darren Blood
- Tom Levins

Town of Acworth
- Kathi Bradt, Administrative Assistant to the Select Board

Bob Landry opened the presentation with introductions and a description of the work necessary.
- It is currently anticipated that the bridge will require replacement.
- There are two options for maintaining traffic while replacing the bridge, using an on-site diversion or a short term (approximately 3 week) closure.

Jennifer Reczek then covered the project details as follows.

- Overview
  - Replacement of the existing bridge
  - 570 LF associated roadwork

- Existing Roadway
  - 20’ paved width, widens to 24’ at bridge
  - Minimal gravel shoulders
  - Average Daily Traffic count ~350 (2011)

- Existing Bridge – 1915
  - Jack arch – concrete deck arches between longitudinal steel beams
  - 24’ rail-to-rail
  - 13’ clear span along 37° skew, 10.5’ hydraulic span
  - Deck severely deteriorated
  - Oct. 2005 flooding undermined the west abutment, causing the southwestern wing wall and south corner of the west abutment to collapse - repaired by Bridge Maintenance
  - Currently posted E2, excludes overweight loads
  - And on State Red List since 2004
  - Ranked 13th in the most recent 2013 Bridge Priority List

- Proposed Roadway
    - Horizontal alignment shifted south by approx. 4' at the bridge
    - Profile similar to existing
    - Modified to ensure adequate drainage across the bridge
    - Maximum increase of approx. 1' on the west approach (Station 202+20)
    - 11-3 typical roadway section (11-5 typical caused additional impacts and was discarded)
    - 22' travel way with 3' shoulders.
    - Shoulders will taper to match existing at both ends of project

- Proposed Bridge
    - Stream restoration study determined a bankfull width of 25'
    - Hydraulic analysis used to determine the waterway opening required to convey

    50-year storm 1-foot freeboard – pass 100-yr
    - Resulted in 27.5' hydraulic span
    - ~33.5'clear span along 35° skew, 27.5' hydraulic span (1.1 times bankfull)
    - Concrete voided slab – economical for the span
    - Concrete overpour
    - T3 bridge rail, used due to pedestrians crossing the structure
    - Boring showed dense glacial till – Likely to be spread footings with concrete abutments
    - Minimum standard width of 28' rail-to-rail, 4' wider than existing

- Utilities
    - Overhead utilities along NH Route 123A, south side of bridge
    - Relocation needed for three poles
    - Water and sewer on the east side of the bridge between store and community aid building – Location TBD – do not anticipate impact

- Environmental and Cultural Resources
    - The Cold River is a Designated Resource River
    - The project has Federal Funding and is subject to Section 106 compliance
    - Interested consulting parties to the project should contact the NHDOT Bureau of Environment
    - Division of Historic Resources (DHR) coordination is ongoing for the project and to date has included an inventory form for the existing bridge and an archeological investigation of the project site.

- Traffic Control

Based on input at previous public meetings – currently:
    - 24' temporary diversion road with temporary bridge to south of NH 123A
    - 10-2 typical section – 24' pavement
    - Allows for fire trucks and school busses.
    - Tractor-trailer trucks with trailers 43' or longer will require detour or additional impacts due to wheel tracking (utility and archeological)
    - Two corrugated metal crossing pipes may be replaced under NH Route 123A
    - Overlay pavement at the intersection, poor existing condition

- ROW
    - Slope impacts to 3 properties, south of bridge due to profile adjustments
    - Diversion impact 1 additional property on southwest of the bridge and the Town owned lot

- Schedule
    - Advertise in August 2017
    - Diversion installed in fall of 2017
    - Bridge replacement and roadway reconstruction in 2018
    - Diversion removed late 2018 or early 2019

- Programmed for 2017 in Draft 10-year Transportation Plan,
    - Bridge Replacement and Road work $940,000
    - Detour Cost $300,000
    - Total Estimated Construction Cost $1.2 million

Questions and comments were then solicited from the attendees.

There are two septic systems on the South side of NH Route 123A between the bridge and the intersection with Beryl Mountain Road.

There is concern about scour behind the bridge as was the case with the existing bridge. Also, during significant weather events Bowers Brook has overtopped NH Route 123A and flowed across the road at the low point into the Village Store property.

The proposed bridge has been modeled to pass the 50 year storm with 1 foot of freeboard to the low chord, and to pass the 100 year event. The opening of the proposed structure is significantly larger than the existing bridge. Also, the proposed roadway low point is roughly in the same location as existing.

Could there be any cost savings by eliminating the pavement on the on-site diversion? Yes, the cost of the pavement for the diversion is about $34K. However, dust could be an issue for abutters during construction if the diversion is not paved. Also, the diversion would likely stay in better condition with less maintenance during construction if it were paved also minimizing sediment runoff into the brook.

If the on-site diversion is employed, construction would likely start in May and end in October.

As an alternative to the on-site diversion, the bridge could be closed for approximately 3 weeks and replaced using Accelerated Bridge Construction (ABC) techniques. Access to the Village store could be gained from a pedestrian bridge connecting the Town parcel on the west side of Bowers Brook to the parcel adjacent to the Village Store. Parking would be on the Town owned parcel where there is currently a skating rink. Staffed emergency vehicles could be staged on the east side of the Brook for emergency service calls.

The Village Store is concerned about the loss of business and revenue during a closure of the crossing. It was pointed out that business may be affected even with the on-site diversion option.

The mail currently is delivered west to east from Alstead across the existing bridge.

A blueberry farm on the west side of the crossing is concerned about the construction during the peak picking season as many customers come from the Newport area. It may be possible with the ABC option to start construction after school is out for the summer and complete the bridge (not necessarily the entire project) before the blueberry season at the end of July.

There is an animal boarding business on the west side of the crossing with similar concerns as their busy time of year is during the summer.

Springfield, Vermont is the closest hospital to the project site.

Is the abutter adjacent to the project (where the diversion is proposed) agreeable to the diversion?

The project will need to go through the Public Hearing process to acquire the temporary and permanent easements required for the improvements. It takes roughly two years to complete the Right of Way process. The diversion would be built on top of a geotextile fabric and the field would be reestablished to its current state at the conclusion of construction.

The elected officials in attendance were recognized.

There is no perfect answer to replace this bridge and a compromise will be necessary.

A Village Store representative asked if any sort of payment is available for lost business during construction. It is illegal for the State to compensate businesses for lost revenue. It was asked if this also applied to non-profit organizations as the Village Store is a registered non-profit.

Mr. Demuro representing Northern Heritage Mills asked to read a prepared statement.

- The Village Store is the Town meeting place.
- The village character is defined by the features.
- The viewscape from the village store toward the bridge should be replicated.
- An open looking industrial wooden deck bridge with wood rails built to military specifications with patterned concrete abutments (formliners) should be considered
- This would preserve and retain the natural character of the village.

Bob Landry replied that the Department will be open to a wooden structure, but to his knowledge there is not a timber bridge approach rail available that is crash tested to meet Federal guidelines. Also, the NHDOT budgets are tight. The Town would be required to pick up the cost difference with the wooden option.

There was a question of how many workers would be on the construction project on a daily basis. There will be five or so daily depending on the contractor and the construction duration.

How long does a wooden bridge last versus a concrete bridge? A wooden bridge can be expected to last 50 years, while the concrete bridge has a design life of 75 years.

In the on-site diversion option, how does the reclamation of the field occur after construction? The end of the diversion on the west end would likely remain at the desire of the Town. A fabric will be installed under the diversion, and the property would be returned to the pre construction state.

The Fire Chief asked about weather provisions should a three week closure be used. The contract will be written incentives / disincentives to encourage that the bridge will need to be reopened to traffic in three weeks.

What is the ADT of NH Route 123A? About 350 vehicles per day.

What are the costs to the Town? The project is funded with 80% Federal funds and there is a 20% match funded by the State. There is zero cost to the Town with the current design.

Has the mail delivery schedule been considered accounting for extra delivery times and such? There is another post office in Town, next to the Fire Station. There are also Rural Route customers throughout Town.

The bridge is important to mail delivery.

The NHDOT signs detours only on State routes. Local detour alternatives on Town roads will not be signed.

The construction will occur when school is out of session.

There would be no compensation to the Town to re-grade the local detour after construction.

The construction season coincides with the peak season for the Village Store.

Bob Landry asked if he understands that most feel the three week closure is not desirable.

Is a Public Hearing required for the project? Yes.

Is 2017 still the target for construction? Yes, the contract may be awarded as early as the Fall of 2017, but construction likely won't start until 2018.

Nate Miller stated that the NHDOT has shown great commitment to the Town by moving this replacement project up from the year 2020. He thanked Bob and his team for their efforts.

Has climate change been considered in the design? While not directly considered, more recent rainfall intensity data was used to calculate the flow that the bridge is required to pass based on data from Cornell.

Seeing no more questions or comments the meeting was concluded.

Subsequent to the discussion, many of the attendees who had concerns about a three week closure thought it may have merits. The Town will take a poll to determine local preference of the two traffic control options and report back to Bob Landry in the coming weeks.

A preliminary plan was left with the Town.

New Hampshire DOT
Department of Transportation

BUREAU OF BRIDGE DESIGN

CALCULATION SHEET for BRIDGES & STRUCTURES

PROJECT Acworth Rt 123A
PROJECT NO. 16301 BR. NO. 113/064
CALCULATIONS FOR _____
MADE BY _____ DATE _____
CHECKED BY _____ DATE _____

Sign In Sheet

NAME	ADDRESS	TITLE	E-MAIL ADDRESS
Carole Wallace	PO Box 1 03607	(-Trustee (Chmn) ConCom. - - LAC)	cwallace@myfairpoint.net
Ken & Linda Christie	131 Derry Hill, Alstead 03602	Resident	christiescrafts@myfairpoint.net
Charlotte Comeau	375 River Rd.	Acworth Town Clerk	atclerk@sover.net
Kara Comeau	375 River Rd.	Resident	teenauthor@gmail.com
Debby Hinman	82 Hill Rd	resident + Con Com + LAC	debbyhinman@gmail.com
Mary Lou Robinson	71 Ball Rd	Resident	
Douglas Robinson	Box 37	Chair. Planning Board	
P. DEMEO	B# 58	BOARD CHAIR Nashua Heritage Mills	NHERITAGEMILLS Cyahoo.com
Rob DeValk	36 COVE Rd PO Box 867 CLAREMONT	BOS CHAIR	DEVALKRob@GMAIL.COM
K.W. CUBBERLEY	PO BOX 65 S. ACWORTH 03607	SEC. PL. BOARD	CUBDEBBIE@AOL.COM
Deborah Tuddy	PO Box 65 So Acworth 03607	Resident	
Rob Vogel	P.O Box 55 So. Acworth 03607	Treasurer Village Store PB - Vice Chair	Robmvogel@gmail.com
PETER HAAS	Box 71	S. Acworth 03607	Acworth Fire
Tom Tonioli	Box 82	S. Acworth 03607	Resident
Kevin Davey	Box 49	S Acworth 03607	Manager Acworth Store
Jim Neidert	Box 189	Acworth 03601	Village Store jjneidert@me.com

SHEET_____ OF _____

New Hampshire DOT
Department of Transportation

BUREAU OF BRIDGE DESIGN

PROJECT _____

PROJECT NO. _____ BR. NO. _____

CALCULATIONS FOR _____

MADE BY _____ DATE _____

CALCULATION SHEET for BRIDGES & STRUCTURES

CHECKED BY _____ DATE _____

NAME ADDRESS TITLE EMAIL

Kathi Bradt	03607-0017	Acworth HAA	townhoff@sover.net
William W. Browne	PO Box 13 So. Acworth 03607		wbrodnec@gmail.com
Michael Aron	266 Forest Rd So. Acworth 03607	Planning Board Village Store	michaelaron@sbcglobal.net
Judy Aron	266 Forest Rd So. Acworth 03607	Budget Comm. Village Store	injfaron@sbcglobal.net
F. Joann Brown	118 River Rd. South Acworth		
James K. Brown	118 River Rd	South Acworth	
Adam Ricker	Upper Valley Lake Sunapee RPC		aricker@uvlsrpc.org
Nate Miller	UVLSRPC		nmiller@uvlsrpc.org
Nathaniel & Sharon Symonds	Box 14 S. Acworth 03607		nssymonds@myfairpoint.net
Linda + Dave Lacasse	PO Box 104 Acworth 03601		david@lacasseenterprise.com
Bret Lord	Box 36 So. Acworth		MLORD@SOVER.NET