FALLS BRIDGE ADVISORY COMMITTEE MEETING MINUTES 01/25/18

IN ATTENDANCE:

Bridge Advisory Committee (BAC) Members: Facilitator Jim Schatz,
Mike Astbury, Deborah Brewster, John Chapman, Lynne Clark,
Vaughn Leach, Stephen Rappaport, Lori Sitzabee, Karen Wyatt

Department of Transportation (MDOT): Andy Lathe, Wayne Frankhauser, Michael Wight

Federal Highway Administration (FHWA): Cheryl Martin

HNTB: Kevin Brayley, Tim Cote

Public: Thom McLaughlin, Scott Miller, Dee Seymour, Butler Smythe, Betty

Stookey, Noel Paul Stookey, Madelyn Woods, S Wright

Replacement of Existing Bridge

- Purpose & Need / Design Criteria
 - Improve public safety.
 - Provide bridge capable of carrying all legal loads.
 - ➤ Provide bridge that lasts 75-100 years.
 - ➤ Use materials that hold up well (concrete, treated steel & rebar)
 - > New bridge would be wider:

Option: 30' span with wide shoulders Option: 24' span with 5' sidewalk

Substructure Alternatives

Rating condition for the stacked stone substructure is 4 (poor) Abutments and Retaining Walls need modification

Widen approach to accommodate "typical section" with wide-shoulders or with sidewalk.

Remove eroded fill within approaches, replace with concrete fill

Superstructure Alternatives

Option: Conventional Girder (precast concrete girder) or Precast Arched

Girder

Option: Tied Arch (steel, precast concrete or cast-in-place)

Both options provide 100-year service life, both feature a 100-120' long bridge, and both can accommodate sea level rise.

Replacement Strategy – Superstructure

Hanger Configuration

Vertical

Inclined/Network

Engineering benefits

Tie Girder Considerations

Concrete expected – lower cost, simplified construction

Arch Rib

Steel

Lower cost, faster construction

Deck System

Concrete, flat slab, more materials

Initial Constructability Assessment

Existing Bridge Demolition

Temporary supports necessary to remove existing bridge. Will need to widen approaches to accommodate cranes or build temporary trestles west of the bridge

Conventional Girder & Tied Arch Bridge Construction

Large cranes required

Accelerated Bridge Construction Techniques
Large cranes required
Pre-fabrication could happen at a site nearby (less travel to move)

Alternate Route Concept

Terrain drops at Salt Pond; would not meet embankment standards)

Noted that proposed eastern approach to 175 is very wet and may have unsuitable soils.

Noted that water moves very quickly (estimated 9 knots) through the narrow (estimated 50') channel at the narrows within the Salt Pond.

Falls Bridge would be closed to all vehicle traffic once a new bridge on alternate alignment is constructed.

Bridge ownership agreement required between Maine DOT and the Town.

Agreements required regarding the Falls Bridge: condition of bridge at time of transfer to be determined and future maintenance to be responsibility of the Town.

Portions of Route 175 may become Town-owned.

The small strut/bridge north of the Falls Bridge on Route 175 may become Town-owned.

A question was asked if there are any government agencies willing to participate in ownership of the existing bridge?

Public Comment

Noel Stookey asked about historical assessment. Andy said it would be spring or summer before a historical study could be initiated.

Butler Smythe said it took less time going on the Salt Pond Road to Brooklin rather than taking Falls Bridge.

Butler said he had concerns with the stop sign visibility at Hales Hill and Hales Hill Road and mentioned there was no center line.

Karen Wyatt referred to an email received and shared by DOT concerning the stability of the SW shoreline and asked about the erosion. Andy said they have not done an analysis. She also requested statistics for the last 3 years for ambulance and fire truck response times. Noel brought up the idea of a fire truck being housed in another location, and John Chapman said there were codes and regulations to adhere to as well as a shortage of manpower.

NEXT MEETINGS: 02/28/18, 6pm

03/22/18, 6pm

Handouts: Public Comments from Blue Hill Site Link 01/11/18 - 01/23/18

Adjourned at 7:35pm