

APPROVED

Board of Selectmen Town of Gilmanton, New Hampshire

Workshop- Bridge Public Forum
November 14, 2016
6:00 p.m. – Gilmanton Academy

Present: Chairman Stephen McWhinnie, Vice Chair-Selectman Michael Jean, Selectman Marshall Bishop, Town Administrator Paul Branscombe, and Administrative Assistant- Heather Carpenter, Presenting for Hoyle and Tanner Associates-Sean James and Joseph Bicja.

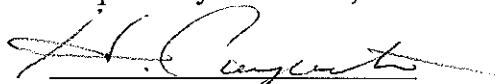
Chairman McWhinnie opened the meeting, took attendance of those present. (Chairman McWhinnie, Selectman Bishop, & Selectman Jean).

Mr. Sean James and Mr. Joseph Bicja with Hoyle, Tanner and Associates presented a power point and breakdown of the company's bridge experience, their combined experience of the team that will be working on the two bridges on Stage Road and the how the NH DOT State Aid Bridge Program works.

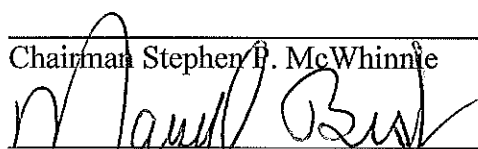
**Please see the copy of the power point attachment for details of the presentation.*

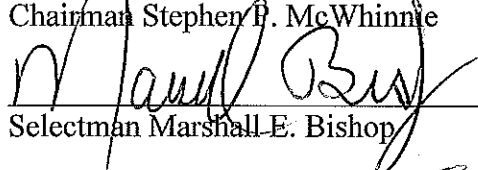
Adjournment: On a Motion by Chairman McWhinnie and seconded by Selectman Jean it was voted unanimously to adjourn at approximately 6:41 p.m. (3-0).

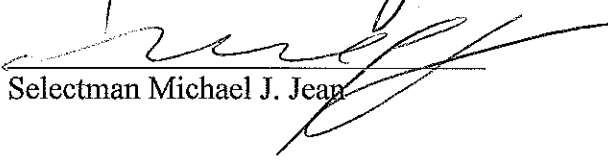
Respectfully Submitted,


Heather Carpenter
Recording Secretary

Approved by the Board of Selectmen


Chairman Stephen P. McWhinnie


Selectman Marshall E. Bishop


Selectman Michael J. Jean

{Audio recordings are available at the Selectmen's Office}

Stage Road Bridges



Public Information Meeting
Town of Gilmanton, New Hampshire
November 14, 2016

Prepared by:
Hoyle, Tanner
& Associates, Inc.

Presentation Outline

- Hoyle, Tanner & Associates, Inc.
- Bridge Experience/Project Team
- NHDOT State Aid Bridge Program
- Project Discussion
- Questions



Hoyle, Tanner & Associates, Inc.

- NH Based Engineering Firm
 - Established in 1973
- Experienced Staff of Transportation Personnel
 - Highway/Structures Group Staff of 19
- All Types of Structures
- Project Partners
 - Sanford Survey
 - SW Cole Engineering



Bridge Experience/Project Team

- 94 Municipally Managed Bridge Aid Projects
- Project Team:
 - Sean T. James, P.E. – Project Manager, Vice President
 - Josif Bicja, P.E. – Senior Structural Engineer
 - Audrey G. Beaulac, P.E. – Transportation Engineer



NHDOT State Bridge Aid Program

- Project Funding
 - 80% from NHDOT
 - 20% from Municipality
- Process
 1. Engineering Study
 2. Preliminary Design & Permitting
 3. Final Design
 4. Bid Phase
 5. Construction



NHDOT State Bridge Aid Program

➤ Main Requirements

1. Follow "Attachment B"
2. 24 Foot Wide Roadway Minimum
3. HL-93 Design Load
4. 75-Year Design Life
5. 1 Foot Freeboard over 50-Year Flood



Project Discussion

- Services to Date:
 - Topographic Survey
 - Subsurface Borings
 - Hydraulic Analysis
 - Bridge Options Analysis
 - Draft Engineering Study



Soil Borings Operations



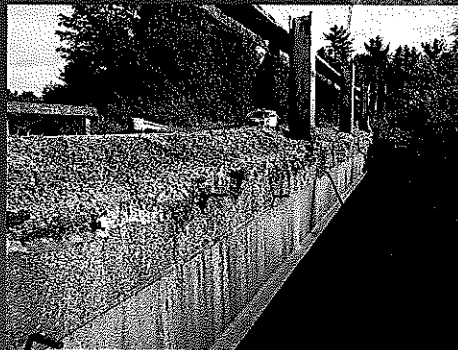
Project Discussion

- NHDES Stream Crossing Rules
 - Accommodate 100-year Flood
 - 1.2 Times Bankfull or Greater Spans
 - Generally Longer Spans than in the Past



Stage Rd over Nighthawk Hollow Brook

- Built in 1930, Rebuilt 1960
- 25' Clear Span
- I Beams w/Concrete Deck Superstructure
- Cast-in-place Concrete Substructure
- Generally in Fair Condition
- 810 Vehicles/Day



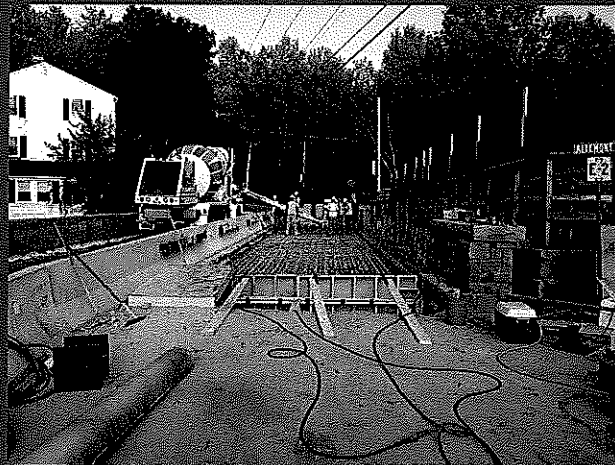
Stage Rd over Nighthawk Hollow Brook

➤ Traffic Control Options

- Detour (8-10 Miles)
- Phased Construction
- Temporary Bridge



Temporary Bridge Project



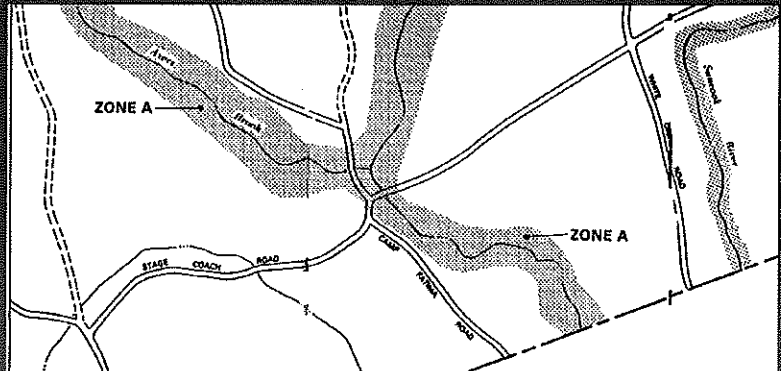
Phased Construction Project



Stage Rd over Nighthawk Hollow Brook

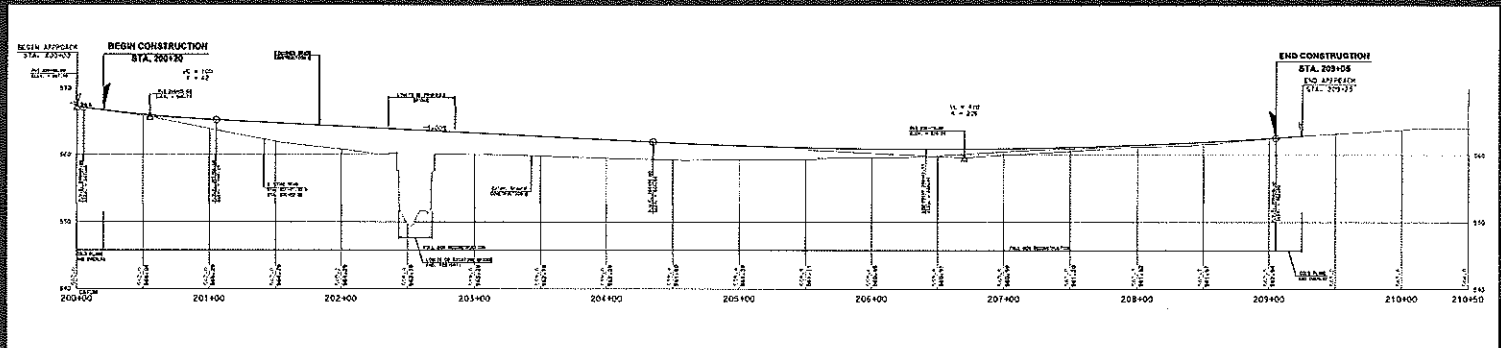
➤ Hydraulics

- FEMA Flood Zone A
- 50-Year Flood Event Overtops Road 18"
- NHDOT Requires 1' Freeboard at Bridge
- Raise Road Approx. 3'
- 50' Proposed Clear Span



Stage Rd over Nighthawk Hollow Brook

Roadway Profile



Stage Rd over Nighthawk Hollow Brook

- Replacement Bridge Options
 - Prestressed Concrete Deck Beams
 - Prestressed Concrete Box Beams
 - Steel Beams
- Scope of Work
 - Raise Road Approx. 3'
 - Replace Bridge
 - Concrete Deck Beams
 - Steel Pile Supported Abutment
 - 925' of Roadway Reconstruction

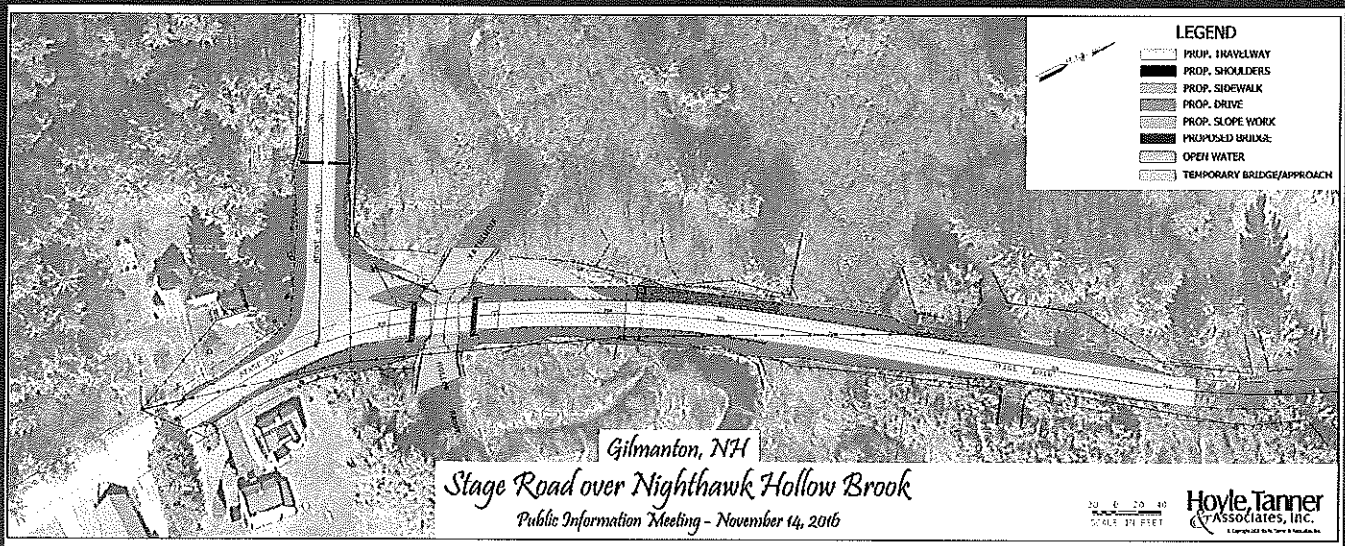


Clay Soil Sample



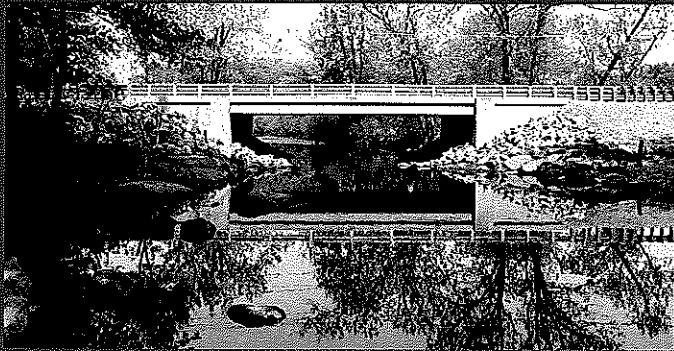
Stage Rd over Nighthawk Hollow Brook

Roadway Plan

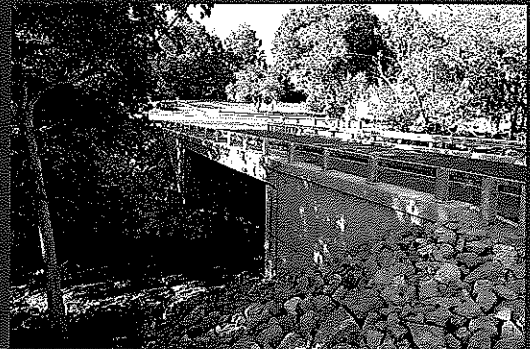


Stage Rd over Nighthawk Hollow Brook

➤ Prestressed Concrete Deck Beams Bridge Examples



Town Farm Road, Salem, NH



Crawley Falls Road, Brentwood, NH

