Public Informational Meeting – January 16, 2024

Christian Hill Road over Ashuelot Rail Trail
Swanzey, NH
NHDOT Bridge #098/122

HOYLE TANNER



TOWN OF SWANZEY, N.H. FOUNDED 1753

Trusted Experts | Innovative Results

Presentation Outline

- Introduction
- Hoyle Tanner
- Program Funding
- Presentation Goals
- Public Outreach
- Purpose and Need
- Project Discussion
- Schedule
- Feedback/Comments

Introduction

- Project Team
  - Town of Swanzey (Owner)
  - NHDOT & FHWA (Funding Agencies)
  - Hoyle, Tanner & Associates, Inc. (Consultant)

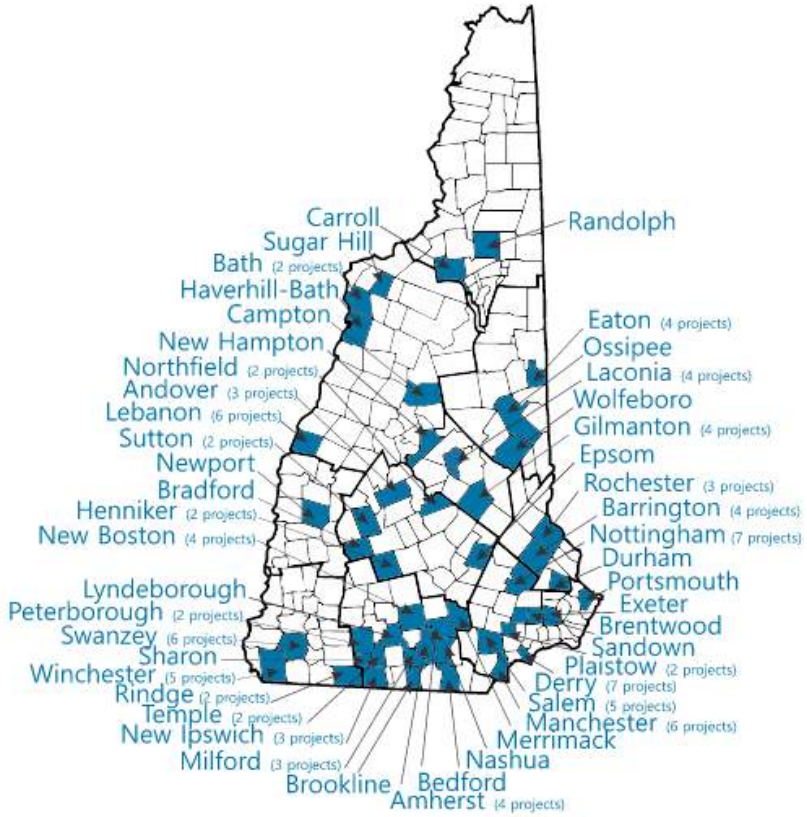
- Hoyle Tanner Team
  - Josif Bicja, PE – Project Manager
  - Elizabeth Bosiak – Land Acquisition Specialist

Hoyle Tanner

- NH Based Engineering Firm
  - Established in 1973
- Experienced Staff of Transportation Personnel
- All Types of Structures
- Project Partners
  - SW Cole Explorations, LLC
  - Doucet Survey, Inc.

Hoyle Tanner

- Over 120 Municipally Managed State Bridge Aid Projects
- 12 Projects in Swanzey
  - 9 Bridge/Culvert Projects
  - 3 Miscellaneous Projects



Program Funding

- NHDOT Local Public Agency (LPA) Program
- Preliminary Engineering
  - 80% State Funds (State Bridge Aid)
  - 20% Local Funds
- Construction
  - 100% Federal Funds (Federal Aid Municipally Owned Bipartisan Infrastructure Law Program)
  - No Local Match

Presentation Goals

- Make Public Aware of Project Early in Design Process
- Share Project Development Process/Alternatives
- Listen to Concerns
- Gather Public Input
- Answer Your Questions

Public Outreach

- Local Concerns/Public Meeting on June 3, 2020
  - Project Impacts to Rail Trail
  - Rail Powder Coated
  - Concrete Staining
  - Concrete Formliners
  - Local Support to Replace the Bridge
- Public Informational Meeting - Today

Purpose and Need

- Purpose
  - Provide structurally cost-effective, safe bridge, which provides adequate load carrying capacity and rail system to improve roadside safety.
- Need
  - Provide access for residents and emergency response vehicles. Improve the roadway safety, load carrying capacity, and sight distance.

Project Discussion

- Preliminary Engineering
  - Engineering Study
  - Preliminary Design
  - **Permitting/ROW**
  - Final Design
  - Bid Phase
- Construction
  - Construction
  - Construction Engineering

Project Discussion



- Built in 1930 (NHDOT Records)
- Three-Span Timber Stringer Bridge (74’-0” Total Length)
- Total Width ~21’ (14’-10” Travel Way and 4’-3” Sidewalk)
- Stacked Stone Abutments
- Structurally Deficient
- Closed to Vehicular Traffic in 2014

Project Discussion



Stacked Stone Abutment With Uneven Bearing



Timber Stringers – Not Sufficient to Carry Statutory Vehicular Loads

Project Discussion



Sidewalk Deterioration and Substandard Guardrail



Timber Curb Deterioration and Substandard Bridge Rail

Project Discussion

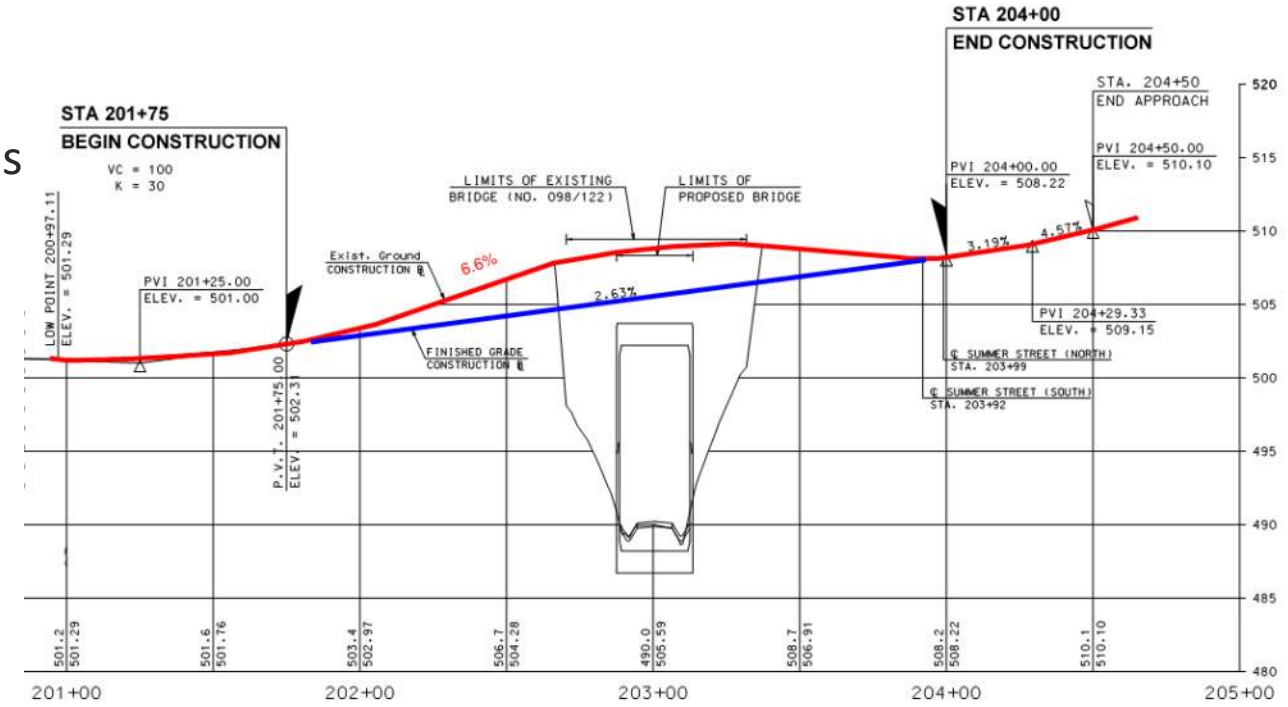
- Recommended Scope of Work
  - Replace Bridge
    - ✓ Precast Concrete Box Culvert
    - ✓ Avoid Impacts to Transmission Lines
  - 430’ of Roadway Reconstruction
    - ✓ (Including Christian Hill / Summer Street Intersection)
  - Roadway Will Remain Closed During Construction
    - ✓ Pedestrian detours for Christian Hill and Ashuelot Rail Trail



Eversource Transmission Lines

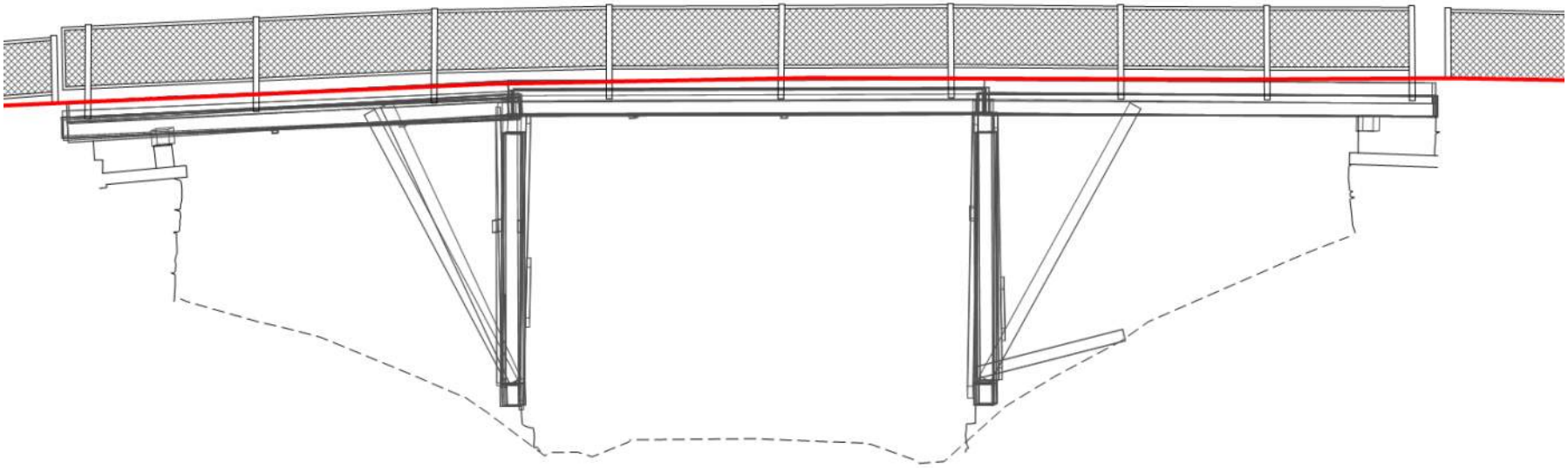
Project Discussion

- Roadway Profile
  - Lower Roadway By ~2.5’ To Improve Sight Distances
  - Eliminates “Hump” in Existing Bridge



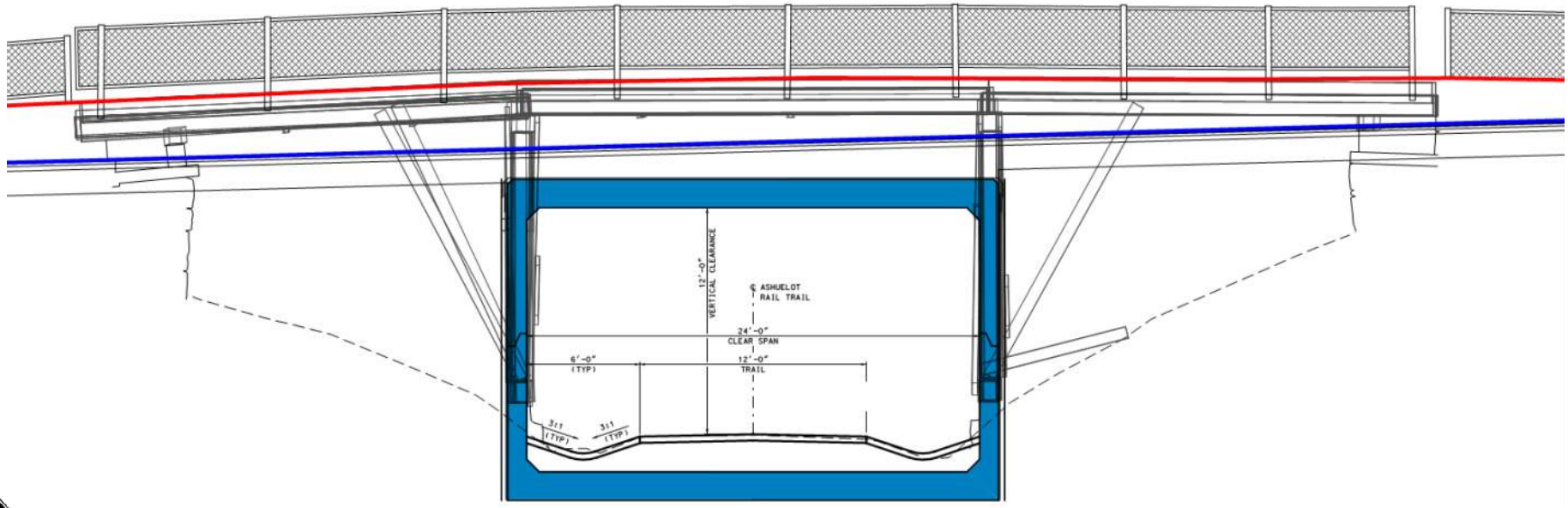
Roadway Profile Exaggerated by a Factor of 5

Project Discussion



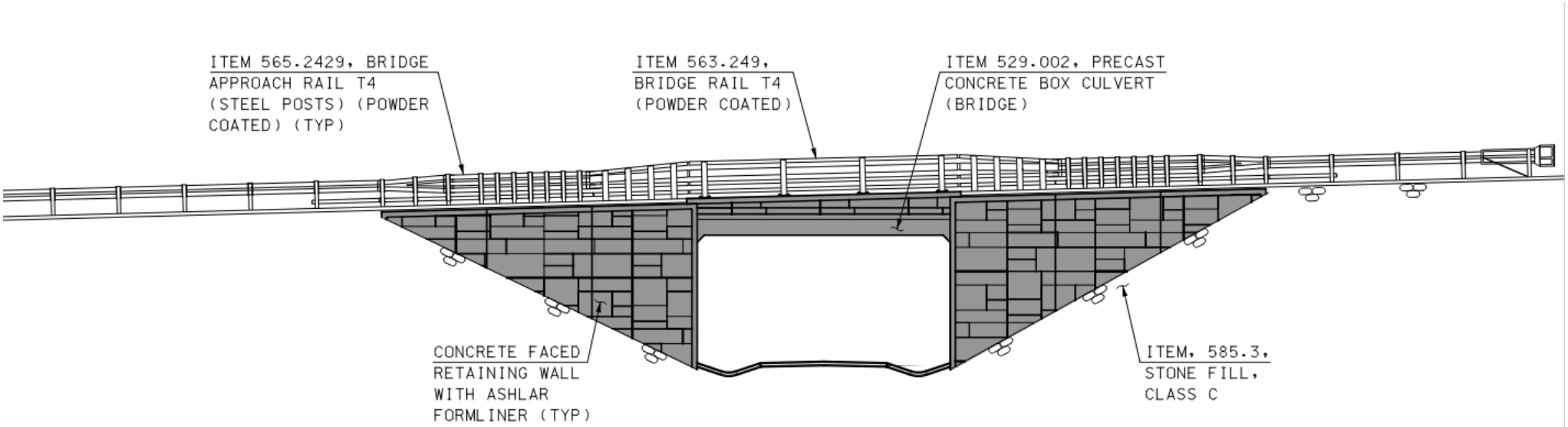
Existing Bridge Elevation

Project Discussion



Proposed Bridge Elevation

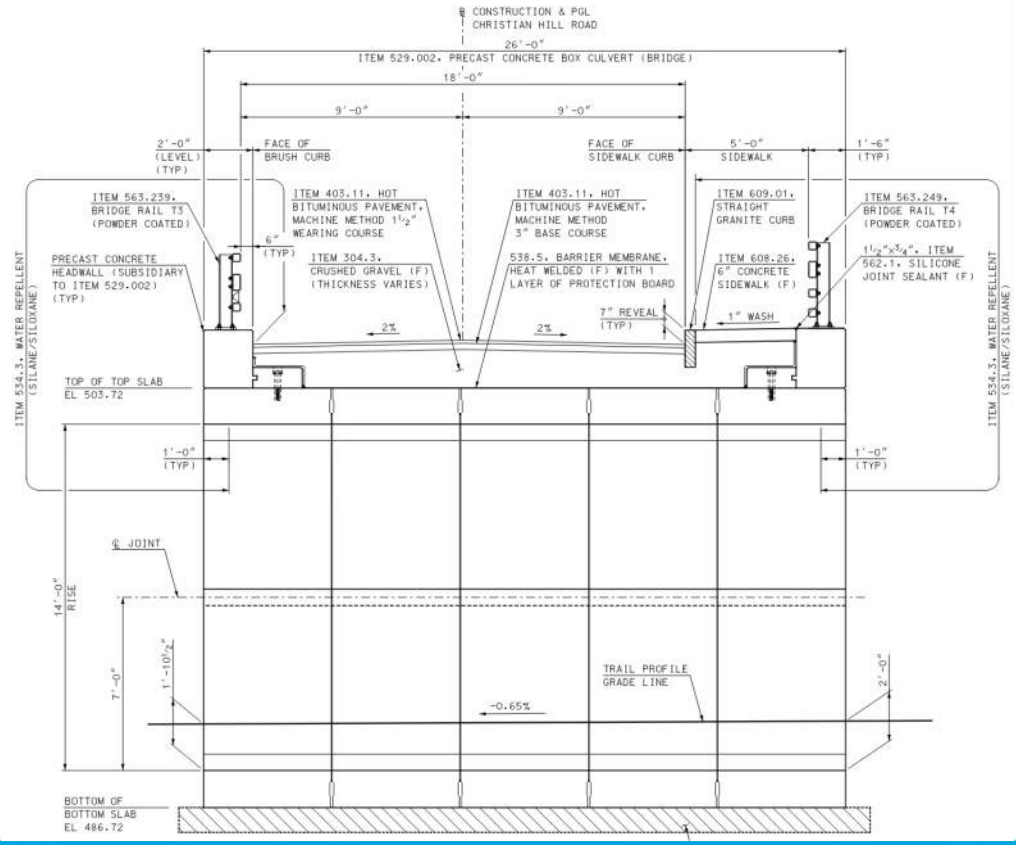
Project Discussion



Proposed Bridge Elevation

Project Discussion

- "Clamshell" Box Culvert
  - Delivered In Two Pieces (Top and Bottom)
  - Smaller Equipment for Installation
  - Allows Construction of Ashuelot Rail Trail



Project Schedule

- Permitting/ROW
  - October 2023 to October 2024
- Final Design
  - November 2024 to January 2025
- Bid Phase
  - February 2025
- Construction
  - 2025

FEEDBACK/COMMENTS?



THANK YOU

J

(

www.hoyletanner.com

HOYLE TANNER