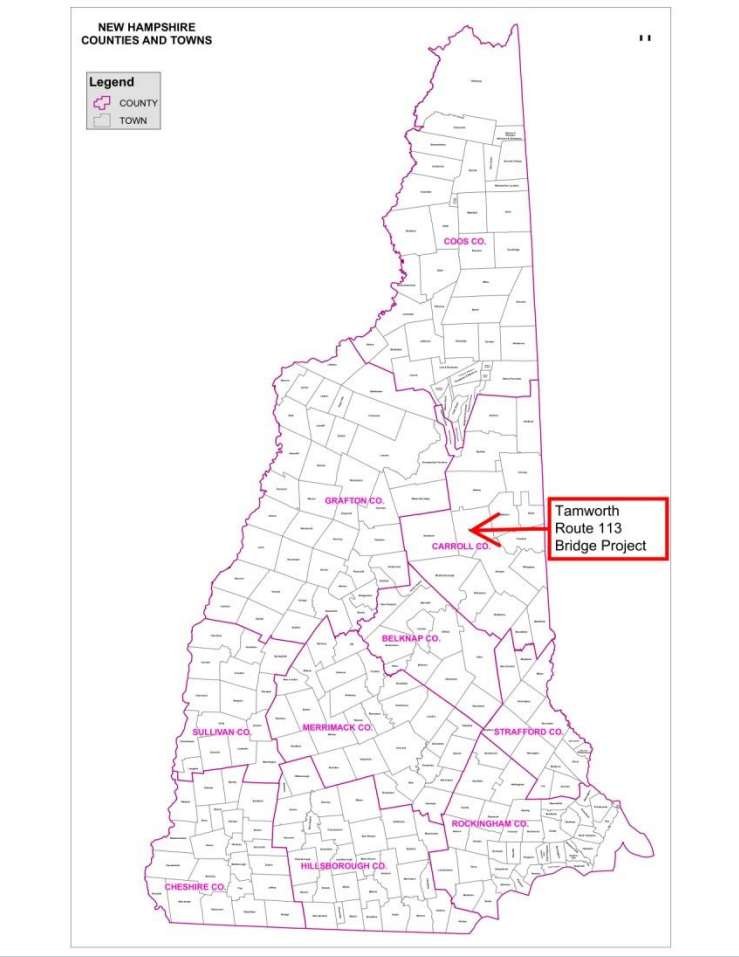
Tamworth
NH Route 113 Bridge over the Bearcamp River

New Hampshire DOT
Department of Transportation

DuBois & King Inc.

Overview

- Project will either Replace or Rehabilitate Existing Bridge carrying NH 113 over Bearcamp River
- Bridge is on the State's Red List
  - Both Deck and Substructure are rated "4-Poor"
- NH Bridge Priority #79



Overview

- Existing Bridge Constructed in 1955 (58 years old)
- Composed of 3 Simple Spans:
  - 24’-6” Concrete Slab Approach Spans
  - 71’-6” Main Center Span- composed of 5 steel girders and concrete deck
  - Overall Length = 123’-9”
- 28’-0” curb to curb (34’-6” out-to-out)
  - 2’-6” safety curb on each side (no approach sidewalks)

Photographs

NH Route 113 Bridge, looking upstream 7/25/13

Photographs

Northern Pier & Abutment – 7/25/13

Photographs

Southern Pier- 7/25/13

Photographs

Looking South Towards Intersection with Whittier Road

Options for Rehabilitation

- Bridge Closure Rehabilitation
  - Approximate 4 to 6 Month Duration during Construction Season
  - 13 Mile Detour (State Roads)

- Phased Construction Rehabilitation
  - Maintaining One Lane of Traffic with Temporary Traffic Signals
  - Probably 2-year effort during Construction Season

Options for Replacement

- Bridge Closure (On-Line Replacement)
  - Approx. 4 to 6 Month Duration (depending on structure type)
  - Contractor can work partially during winter months
  - 13 Mile Detour (State Roads)
- Phased Construction Replacement
  - Maintaining One Lane of Traffic with Temporary Traffic Signals
  - Approximate 18 Month Duration
- Complete Off-Line Replacement
  - Requires Right-of-Way and Adds 4 years to the Design Process
  - 7 to 9 Month Duration, can work partially during winter months

Potential Replacement Bridge Type Alternatives

- Stream width = 80 feet (approx.)
- Bank Full width = 99 feet

1. 125-130’ single span precast, prestressed concrete box beam bridge

2. 125-130’ single span steel girder bridge

Precast

Steel girder

Information Needed

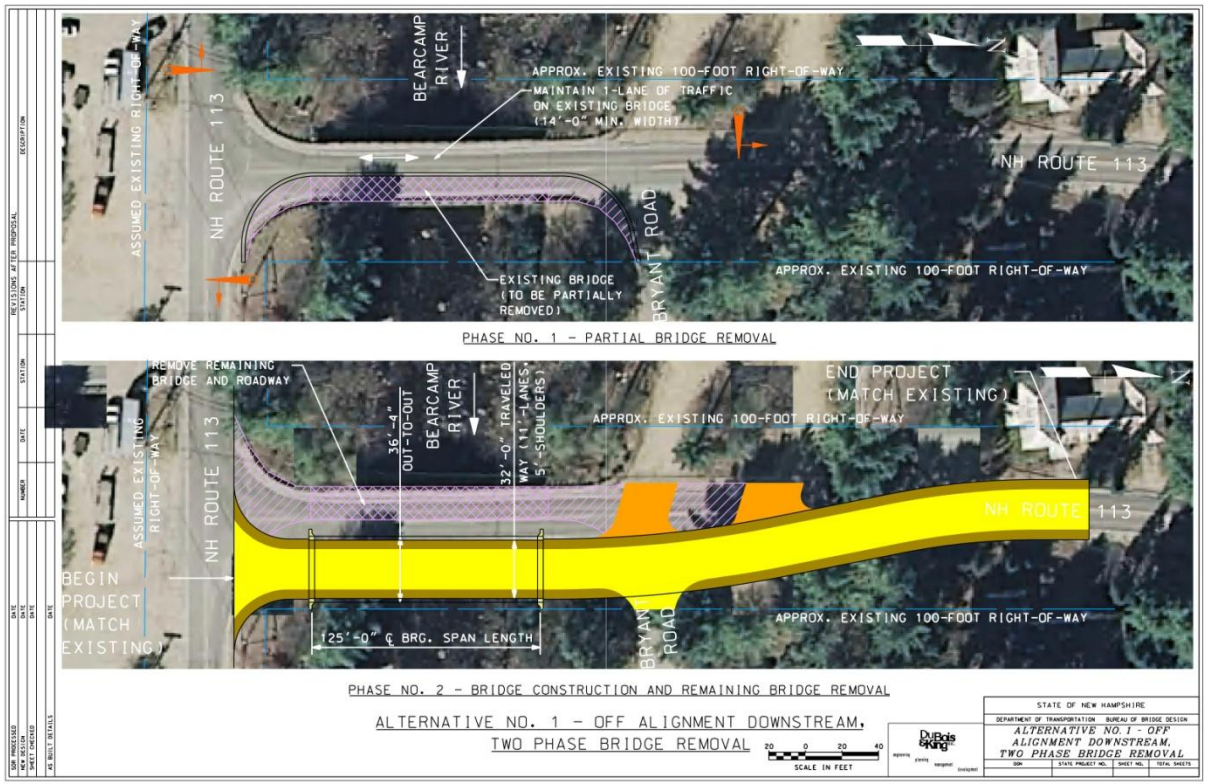
- Pedestrian Usage
- Emergency Response
- Mutual Aid
- Location of Fire Station, Police Station
- School Bus Routes and Distance to the School
- Major Town Events
- Local Flooding Issues

Schedule

- Next Public Informational Meeting Spring 2014
- Public Hearing (if necessary) Spring 2015

- Funding per Draft Ten Year Plan is 2022

Conceptual Alternative Plans

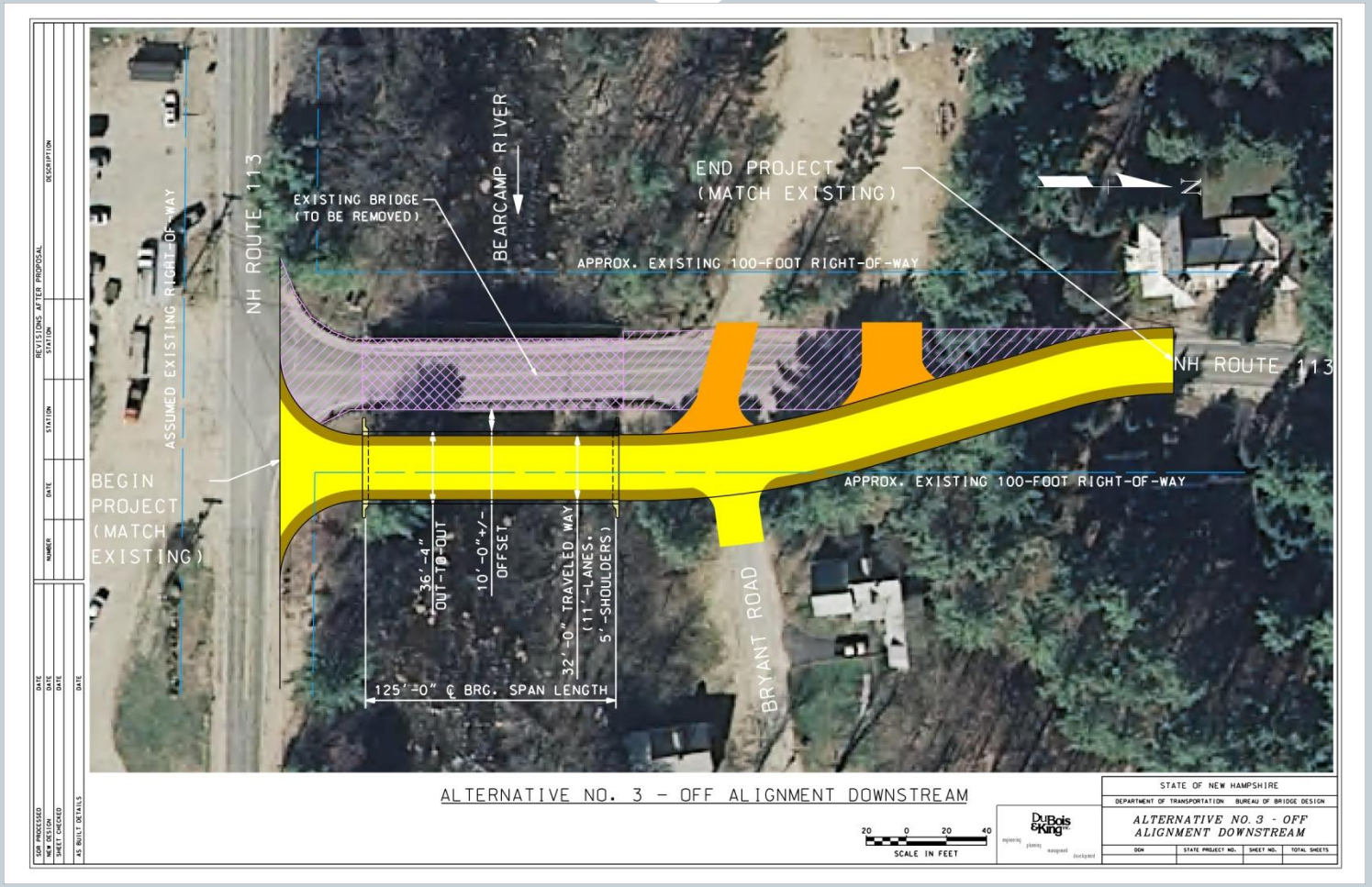


Alternative 1- Alignment Shift Downstream

Conceptual Alternative Plans

Alternative 2- On Alignment

Conceptual Alternative Plans



Alternative 3- Off Alignment Downstream