Durham-Newmarket 13080

NH Route 108/Newmarket Road

Transportation Enhancement Project

Project Update

September 19, 2013

CHA

New Hampshire DOT
Department of Transportation

Project Team

- Design Consultant - CHA - Clough Harbour and Associates
- In-house staff design review and guidance
- In-house Right-Of-Way staff
- In-house Environmental staff
- In-house Utility Relocation/Coordination

Color Plan Review

- Review of Color Legend
  - Existing Roadway - Gray
  - Existing Wooded Areas – Light Green
  - Existing Buildings – Red/Pink
  - Proposed Travel Lanes – Yellow
  - Proposed Shoulders – Brown
  - Proposed Sidewalks - Purple
  - Proposed Slope Limits – Darker Green
  - Driveway Construction Limits – Orange
  - Water - Blue
  - Wetlands – Blue Hatch

- Plan Orientation – North to the right

Project Limits

- The overall project begins just south of Bay Road in Newmarket and extends approximately 3.7 miles northerly to the intersection of Mill Pond Road in Durham.
- The first project scheduled to advertise, the “A” project begins 650 feet north of Stagecoach Road and continues north approximately 1.6 miles to Hamel Brook
- The “B” project will be completed in two sections:
  - The first begins just south of Bay Road in Newmarket and continues north to the pavement joint 650 feet north of Stagecoach Road
  - The second section begins at Hamel Brook and continues north to the intersection of Mill Pond Road in Durham

Existing Conditions

- Roadway Classification
  - Rural, Major Collector
    - Provides a linkage between cities, larger towns and other traffic generators
    - Durham & Newmarket

- Speed Limit (Design Speed)
  - 45 mph – Southern limit to just prior to Bennett Road
  - 35 mph – Prior to Bennett Road to Northern limit

Existing Conditions

- Existing Typical Section
  - 11’ Travel Lanes
  - 0’ – 4’ Shoulders – mainly Gravel

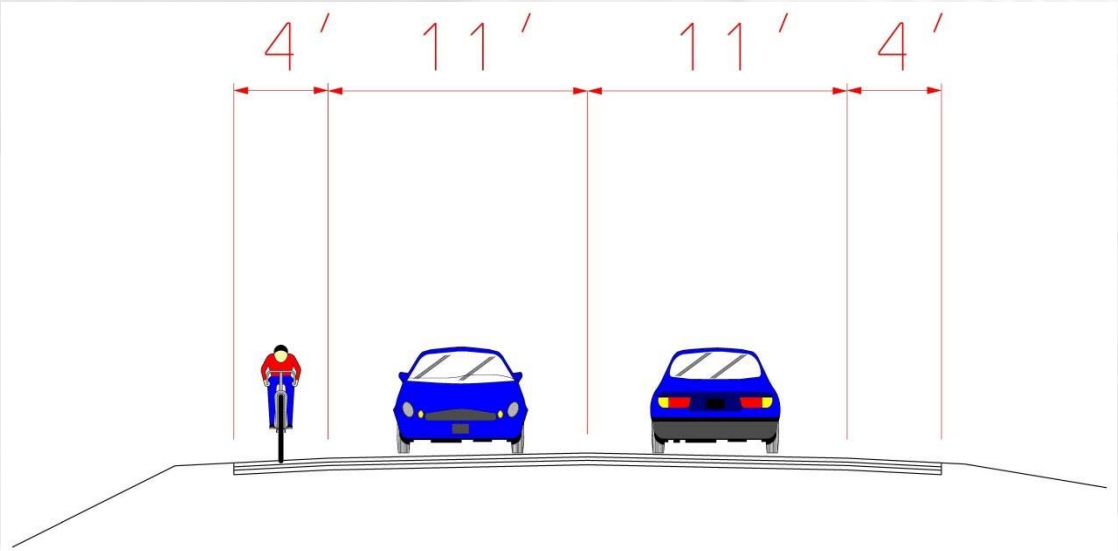
- Project Corridor / Evolution of NH Roads
  - Horizontal Alignment
  - Vertical Alignment
    - Sandwich of extremely flat terrain (less than 0.3%) between rolling terrain
  - Cross Slope / Superelevation

Project Goals

- Provide additional width for:
  - Vehicles
  - Bicycles
  - Pedestrians

Project Goals

- Proposed Typical Section
  - 11’ Travel Lane with 4’ Paved Shoulder



Project Goals

- Formalize and improve Wildcat Transit Bus Pull Offs

Project Goals

- Improve the following:
  - Pavement Condition / Structural Box
  - Clear Zone / Side Slopes / Guardrail
  - Drainage – open and closed systems

Project Constraints / Controls

- Closely Mimic Existing Geometry
- Right-of-Way (ROW)
- Wetlands
- Utility Poles

Project Challenges

- Balancing improvements to Route 108 against impacts to properties
  - Horizontal Alignment
    - Closely mimics existing layout
  - Vertical Alignment
    - Improving sight distances – Crest & Sag
    - Creating vertical geometry in the “Flats”
    - Reclaiming existing pavement / profile control

Right-of-Way Impacts

- Avoid or minimize ROW impacts through design alternatives
  - Modified ditch sections
  - Re-routing drainage

- Unavoidable in all locations

Right-of-Way Impacts

- Easements
  - Permanent and Temporary
    - Drainage
    - Slope
    - Stone Wall
    - Driveway
    - Sight Line
- Acquisitions – minimized but unavoidable

Environmental Issues

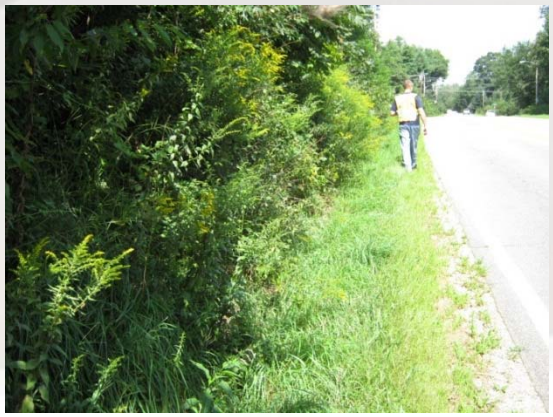
- Wetland Impacts
  - Minimized using 4:1 slopes
  - Clearing to Slope Limits
- Prime Turtle Habitat

Blanding's Turtle

Environmental Issues

- Invasive Species Program
  - Started Fall 2011
- Vegetation Management

Japanese Knotweed



Dense Roadside Vegetation

Cultural Issues

- Historic District
  - Doe-Mooney-Dame-Stevens Farms
  - Newmarket Historic District
- Stone Walls
  - Reconstruction

Looking Ahead

- Finalize Design
- Utility Coordination
- Environmental Permitting
- ROW Process
- Prepare for Contract Advertising
- Construction

Current Project Cost and Schedule
13080-A

- $2.42 million
  - 80% Federal / 20% State
  - No Town funds
- Final Design plans – Ongoing
- Right of way acquisition – Nearing completion
- Advertise project for bids – **April 1, 2014**
- Begin Construction – June 2014

Current Project Cost and Schedule
13080-B

- $4.6 million
  - 80% Federal / 20% State
  - No Town funds
- Final Design plans – Ongoing
- Right of way acquisition – 2013 / 2014
- Advertise project for bids – **April 7, 2015**
- Begin Construction – June 2015

Coordination with Town

- Sidewalk Maintenance Agreement
- Municipal Work Zone Agreement (MWZA)

Thank You

Plans and presentation are available on Internet

http://www.nh.gov/dot/projects/specifics.htm