Historic Elements

Whistle Post

Cattle Crossing

Future Details

- Gateways
- Rest areas / bike racks
- Mile markers
- Interpretive signage
- Designation signage
- Parking
- Landscaping

How will traffic be affected?

ALERT: Traffic Impacts

During Majority of Construction

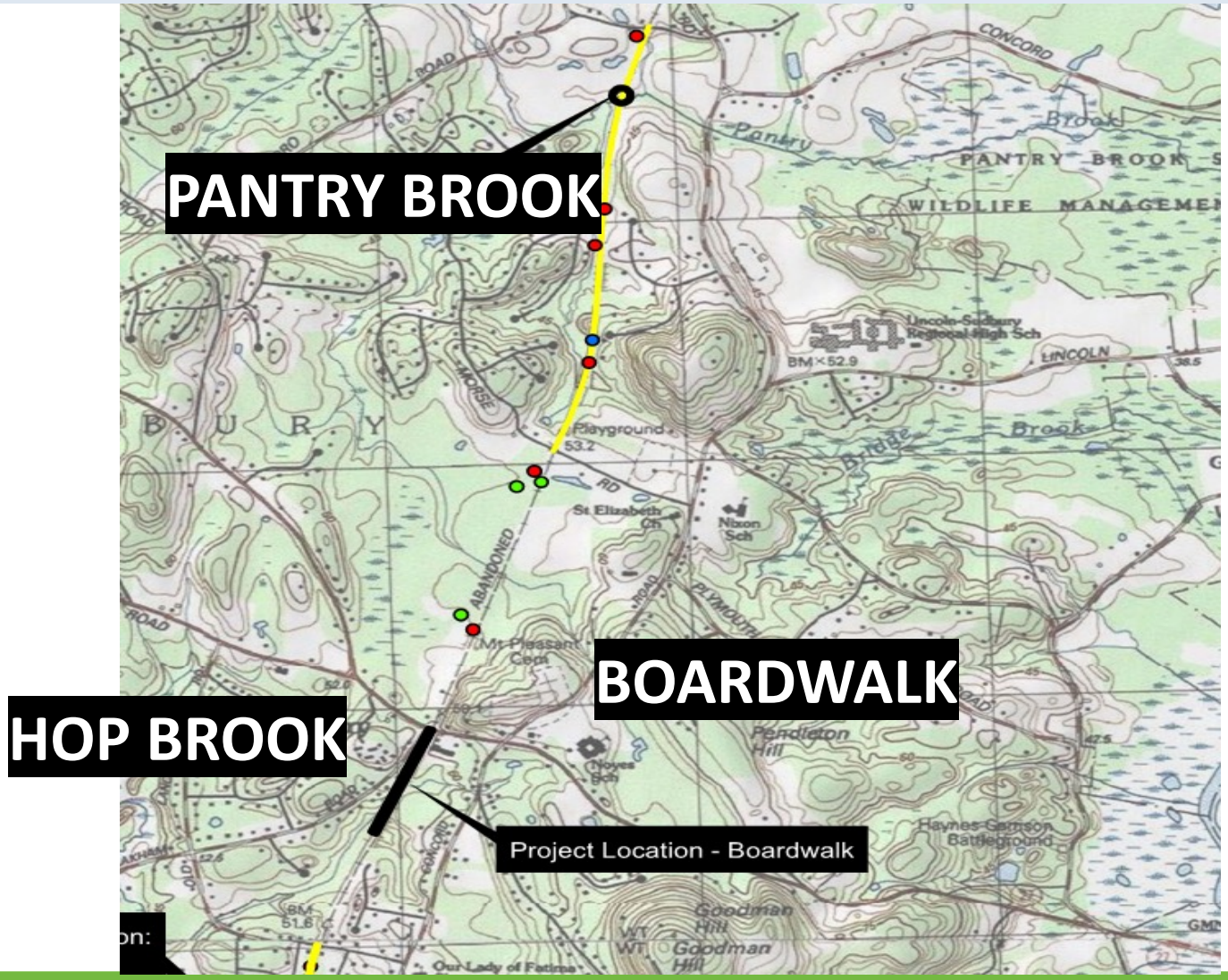
- Pedestrian, bicycle and motor vehicle access will be maintained along roadways
- A minimum of 1-lane in each direction will be maintained on roadways on major roadways
- 1-lane alternating traffic maybe implemented on minor roadways
- If required, roadway closures and detours will be limited to short durations
- Night work is not anticipated

Structural Design

Project Scope

- Provide subsurface exploration data
- Provide hydraulic analysis at three structures
- Provide a geotechnical report for all three structures
- Sketch Plan Design for two bridges and a boardwalk
- Assist the Town/MassDOT with environmental impacts and constructability

Project Location Map



Project Goals

- Improve Pedestrian Accommodations
- Improve Bicyclist Accommodations
- Avoid, Minimize, & Mitigate Right-of-Way Impacts
- Avoid, Minimize, & Mitigate Environmental Impacts
- Avoid, Minimize, & Mitigate Historic Site and Structural Impacts
- Ensure structural capacity of structures
- Improve existing bridge width of Hop and Pantry Brook bridges
- Obtain borings to provide geotechnical data for structural design

Hydrologic Study

- Complied with National Flood Insurance Program Special Flood Hazard Area and Regulatory Floodways Delineations
- Designed to a 10-year flood event
- Provided scour calculations
- Study ensures new structures do not increase base flood elevation

massDOT
Massachusetts Department of Transportation
Highway Division

Subsurface Exploration

Pantry Brook Bridge

Two borings and one test pit

Hop Brook Bridge

One boring and one test pit

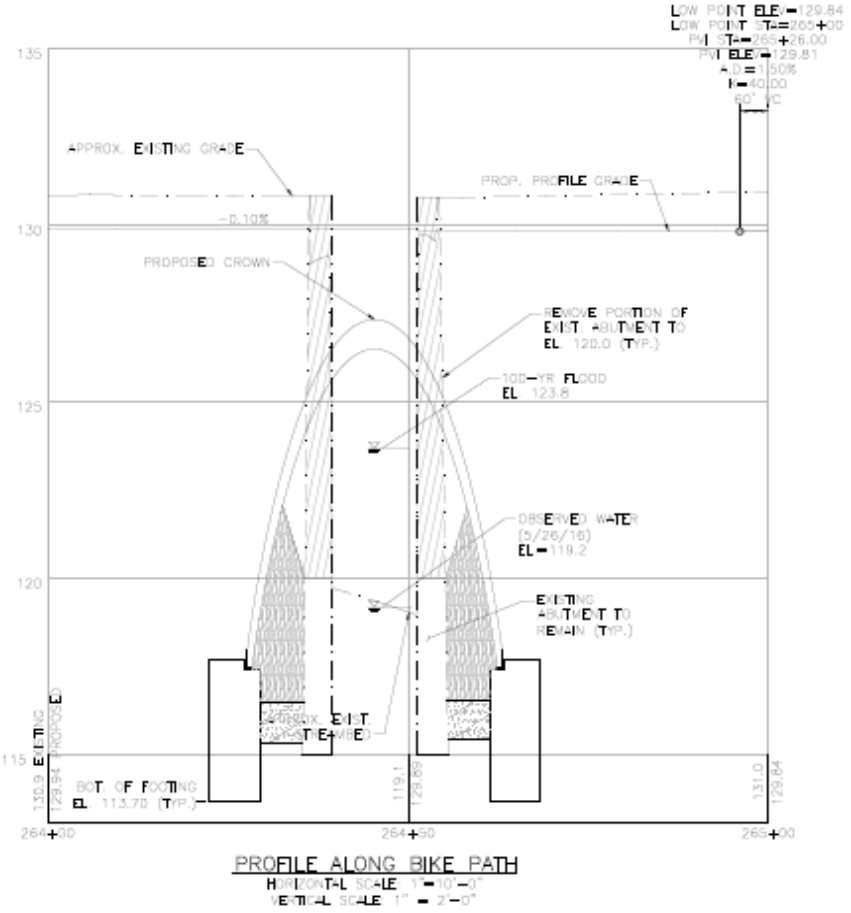
Elevated Boardwalk

Five borings and five test pits

Proposed Improvements

Pantry Brook Bridge

- Medium dense to dense granular soils
- Recommended shallow foundations of variable width, bearing 5.3 feet below the existing bottom of stream elevation to account for scour



PROFILE ALONG BIKE PATH
HORIZONTAL SCALE 1"=10'-0"
VERTICAL SCALE 1" = 2'-0"

Proposed Improvements

Boardwalk

- Dense to very dense soils
- Evaluated
  - Helical Piles ✗
  - Cylindrical Piles (pre-drilled) ✗
  - Micropiles ✗
  - Driven Piles ✗
  - Shallow Foundations ✓
- Designed 3ft x 3ft shallow foundations, bearing 4 feet below the proposed ground elevation