



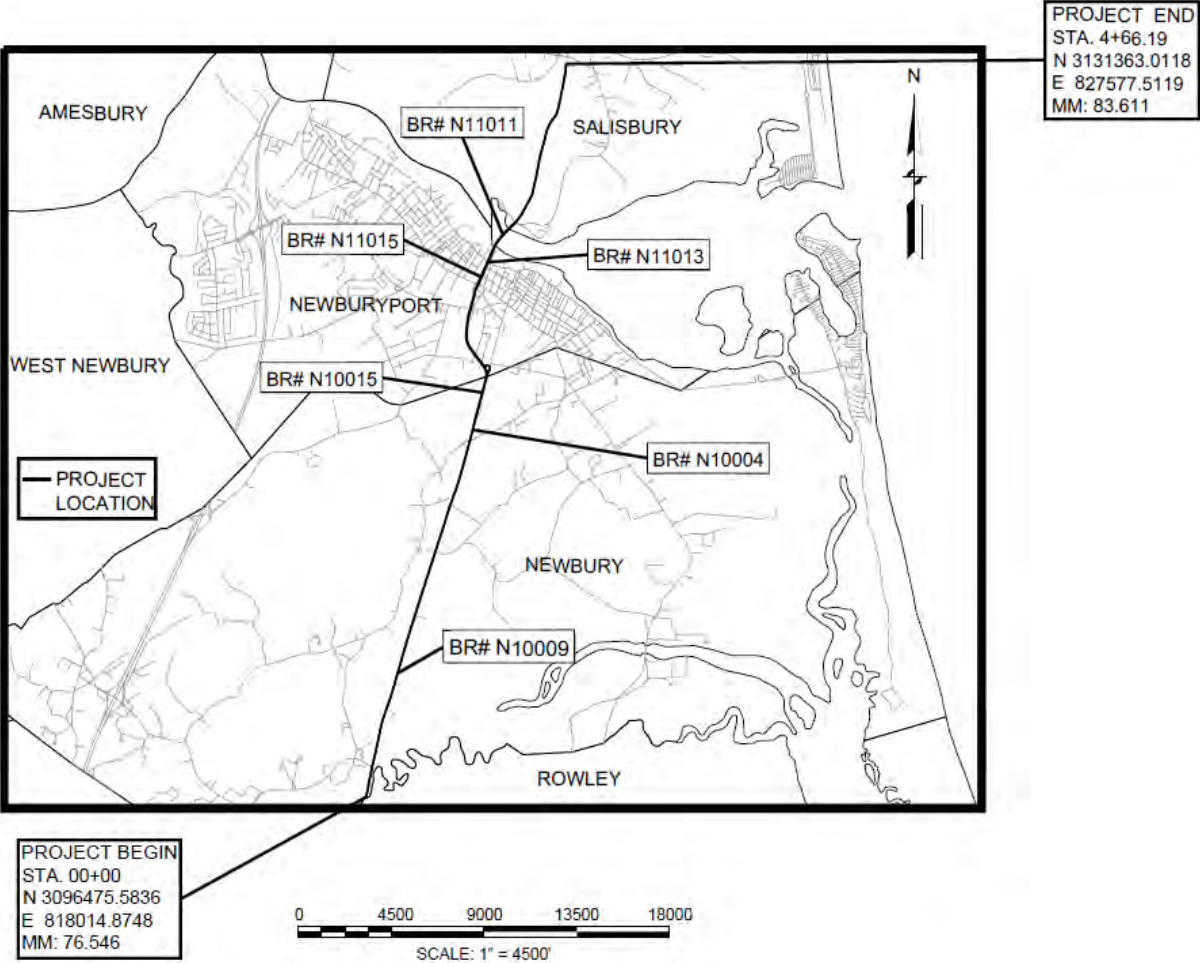
MassDOT Highway Construction Contract: 119810

Resurfacing and related work (including cement concrete pavement intersection and retrofit improvements to the Newburyport traffic circle) and bridge work (including bridge fascia repairs, bridge rail retrofit, and routine maintenance work) on a section of Route 1 (Newburyport Turnpike) in Newbury, Newburyport, and Salisbury

MassDOT Board of Directors

February 2, 2023

Project Location



LENGTH OF PROJECT = 37,303.20 FEET = 7.065 MILES

Overview



- Resurfacing and Related Work along a Section of Route 1 (Newburyport Turnpike)
- Resurfacing and Related Bridge Work including fascia repairs to address deterioration, replacement of bridge rail, and routine maintenance work
- The project begins in Newbury (STA 0+00, MM 76.5) and continues north and ends in Salisbury (STA 4+66.19, MM 83.6), a length of approx. 37,303 feet or 7.1 miles
- Requesting MassDOT Board approval of \$17,187,676.85 contract with MacKay Construction Services Inc.
- Construction will be staged to maintain 1 lane of traffic in each direction at all times and take approx. 2.5 years to complete.

Purpose and Need

- Existing pavement has degraded to a poor level and requires resurfacing.
- Superstructures of bridges have deteriorated and require routine maintenance work.
- Intersection of Route 1, Middle Road, and Hanover Street is identified as a good candidate for cement concrete pavement.
- Newburyport traffic circle is identified for necessary retrofit improvements to accommodate all users.

Purpose and Need (cont'd)



Purpose and Need (cont'd)



Purpose and Need (cont'd)



Purpose and Need (cont'd)



Construction Scope

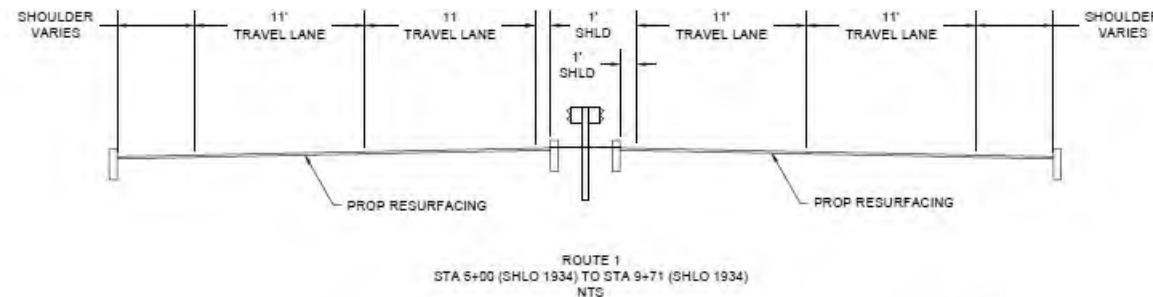
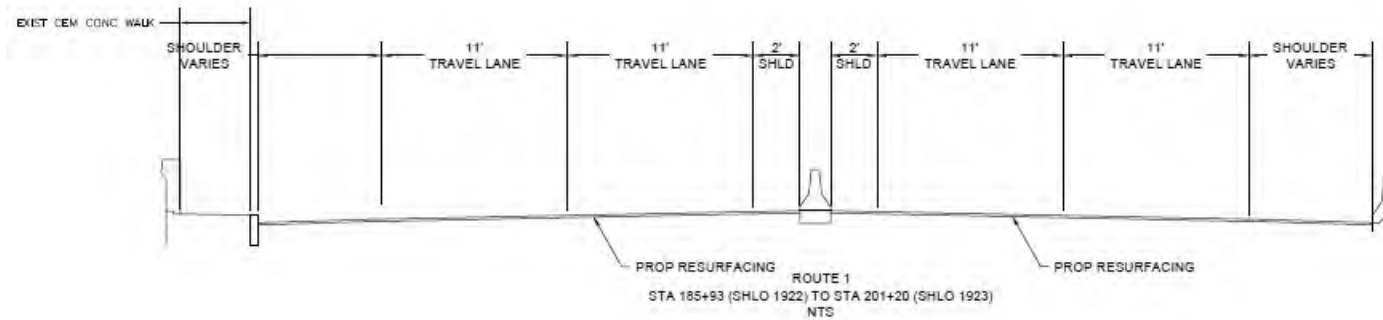
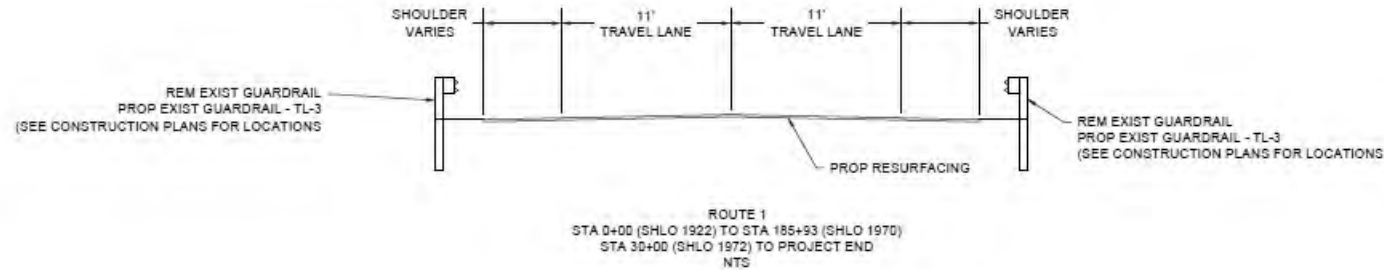


Route 1 (Newburyport Turnpike) Mainline:

- Roadway work shall consist of full width, curb to curb, fine milling and resurfacing with Superpave Surface Course - 12.5 – Polymer (SSC - 12.5 - P).
- Cement concrete pavement installation at the Route 1, Middle Road, Hanover Street intersection.
- Reconstruction of the Newburyport traffic circle for improved access to all users.
- Traffic signal modifications and other work as directed by the Engineer.
- Related work consists of replacing existing guardrail along the mainline with proposed MASH approved guardrail end treatments; replacing all drainage grates & covers with bolt down grates & bolt down covers; adjusting, cleaning and rebuilding drainage structures; removing and resetting granite edging; replacing any broken granite curb and edging; sidewalk and pedestrian curb ramp replacement at intersection of Route 1 and Low St./Pond St.; and other related work as directed by the Engineer.

Construction Scope (cont'd)

Route 1 Cross Sections:



Construction Scope (cont'd)



Cement Concrete Intersection at Route 1, Middle Road, Hanover Street:



Construction Scope (cont'd)

Retrofit improvements at Newburyport Traffic Circle:



Construction Scope (cont'd)



Route 1 (Newburyport Turnpike) Bridge Work:

- Bridge pavement milling and resurfacing with 2 ½" Superpave Waterproofing Course -12.5.
- Replacement of deteriorated bridge rails with three beam bridge rail retrofit.
- Repair to existing armor bridge joints.
- Bridge fascia repairs as necessary.

Traffic Impacts

- Lane shifting will have minor impacts to the overall traffic pattern.
- One lane of traffic in each direction will be maintained at all times.
- All work under this contract shall be conducted between the hours of 7am and 3pm unless otherwise authorized by the Engineer and with certain exceptions for holidays. Paving, milling, and pavement marking work shall be restricted to night work to the hours of 9pm to 5am Sunday through Thursday.

Municipal and Public Outreach



- All three host municipalities provided written support for the project and participated in the project development and design process.
- A project information meeting was held Nov. 10, 2021 to present the design, its benefits and potential impacts, followed with a ten-day comment period. The majority of the comments supported the project.

Procurement



- Project was advertised August 13, 2022
- Engineers Estimate was \$14,263,094.85
- Bid Opening was November 22, 2022
- Two (2) bids were received:
 - **MacKay Construction Services Inc.** **\$17,187,676.85**
 - Holcim-Ner Inc. **\$20,275,381.15**

Overall Project Budget



Line Item	Budget
Bid Amount	\$17,187,676.85
Contingencies	\$ 1,724,811.42
Construction Engineering	\$ 645,840.00
Total	\$19,558,328.27

- 80% Federal funding, 20% State funding
- Programmed Cost in the 2021 TIP: \$16.72M

Request of the Board



- Staff request that the MassDOT Board authorize the Secretary of the Massachusetts Department of Transportation, or her designee, to award and execute MassDOT Construction Contract 119810: Resurfacing and Related Work (Including Bridge Superstructure and Routine Maintenance Work) on a Section of Route 1 (Newburyport Turnpike) with MacKay Construction Services Inc. in the amount of \$17,187,676.85.