### Replacing the General Sullivan Bridge

The General Sullivan Bridge (GSB) provides a critical connection for pedestrians, cyclists, and other recreational users—it is also one of the most significant historic bridges remaining in the State of New Hampshire. To maintain a safe connection for all travelers, the New Hampshire Department of Transportation (NHDOT) has reviewed options for its rehabilitation or replacement. The Selected Alternative will involve replacement of the historic GSB, which spans Little Bay and the navigational channel between Newington and Dover.

The GSB is a 1930s-era, 9-span structure over the Little Bay between the Town of Newington and the City of Dover, New Hampshire. Since 1984, the historic structure has been closed to motor vehicle traffic, but has provided an important connection for pedestrians and bicyclists, prior to its recent closure in 2018. The bridge is listed on the NHDOT's Red List of Bridges as structurally deficient, and as determined during the 2022 National Environmental Policy Act (NEPA) evaluation process, the Department will replace the superstructure of this historic bridge. The Selected Alternative will involve the complete removal and replacement of the GSB superstructure with a new steel bridge with a concrete deck on the existing GSB alignment, thereby allowing the reuse of the existing GSB stone masonry piers.



# Where are we in the project development process?

Since 2022, when the NHDOT successfully completed both the NEPA and Section 106 of the National Historic Preservation Act processes, the consultant team has been making progress on environmental permitting, and addressing environmental and cultural resources commitments. The NHDOT's consultant team is currently in the final design phase for the Selected Alternative integrating mitigation measures stipulated in Section 106 Memorandum of Agreement and the surrounding natural resources.

The NHDOT and its consultants are working toward fulfilling the mitigation measures and environmental commitments, including those associated with offsetting the loss of the historic bridge.

Newsletter #9 Spring 2023 The final practicable mitigation measures and environmental commitments, including measures to minimize wetland impacts, minimize the visual impact of the project, mitigate or minimize adverse effects on cultural resources, and avoid impacts to fisheries, are identified in the 2022 Supplemental Record of Decision, available here: <a href="http://newington-dover.com/gsb\_subsite/February%202022FSEIS\_SROD.html">http://newington-dover.com/gsb\_subsite/February%202022FSEIS\_SROD.html</a>. Work on obtaining various additional federal and state permits, approvals, or certifications is ongoing.

#### **Permits and Approvals**



### **Environmental Mitigation Status**

The GSB spans a tidal estuary system known as Little Bay near its confluence with the Piscataqua River in southeast New Hampshire. The Little Bay and the larger Great Bay estuary play a critical role in flood prevention for many communities in southeastern New Hampshire. The tidal estuary supports a diverse and rich ecosystem of various plant and aquatic species that are essential to the marine environment as well as the fishing, shell fishing and tourism industry. Additionally, periphery wetlands along Little and Great Bay act as a buffer/ barrier against waves and storm surge.

Most of the proposed impacts for the replacement of the GSB superstructure are temporary in nature, with limited permanent impacts associated with construction access. Construction of the new bridge will permanently impact about 1,000 square feet of a small wetland in Newington. Construction of the new bridge will also permanently impact a total of about 2,700 square feet of bank in Newington and Dover. This impact is necessary to allow for construction access to the temporary causeways and

work platforms which will be used for removal and erection of the superstructure. Upon removing this temporary causeway, the disturbed areas will be graded and stabilized with vegetation. Based on site constraints, the NHDOT has determined that permittee-responsible mitigation is not practicable or suitable. The NHDOT proposes to mitigate these impacts by payment of an in-lieu fee to the New Hampshire Department of Environmental Services (NHDES) Aquatic Resource Mitigation fund.



The NHDOT has submitted a Wetlands Permit Application to NHDES pursuant to the New Hampshire Revised Statutes (RSA) Chapter 482-A, Fill and Dredge in Wetlands, and Wetland Bureau Code of Administrative Rules, Chapters Env-Wt 100 through Env-Wt 900. The project qualifies and will receive a NH General Permit from the US Army Corps of Engineers. The consultant team is continuing to work through a Coastal Zone Management Application, a Shoreland Water Quality Protection Act Application, and a US Coast Guard Bridge Permit.

NHDOT will continue to coordinate closely with permitting authorities, the City of Dover and Town of Newington, and maritime transportation entities.



### **Historic Mitigation Status**

Measures for historic mitigation to compensate for the loss of the GSB have been finalized through a collaborative, public input approach consistent with the Section 106 process. Mitigation measures for the adverse effect have been finalized and stipulated in a new Memorandum of Agreement (MOA) pursuant to Section 106, which was executed by the Federal Highway Administration (FHWA), the New Hampshire Division of Historical Resources (NHDHR), the NHDOT and Concurring Parties on November 10, 2021.

The cultural and historical significance of the GSB is currently being documented through the preparation of a Historic American Engineering Record (HAER) document for submission to the National Park Service. This document will include large format photos and negatives, historic bridge plans, an engineering description, and a history of the structure. Copies of the HAER will be provided to the City of Dover, the Town of Newington, the Newington Historical Society, and the Portsmouth Athenaeum. In addition to HAER documentation, the consultant team will prepare a building assessment and feasibility reuse study for the rehabilitation of the Newington Railroad Depot and Toll House property on Bloody Point. The building assessment is complete, and documentation is currently underway. In 2022, the NHDOT and its consultants visited the Newington Depot to assess existing conditions and capture photographs of its existing condition (see photos above). The feasibility and reuse study effort is anticipated to kick off in spring 2023.

Additional historic mitigation stipulated under the 2021 MOA include measures concerning the Dover Recreational Trail, marketing of the GSB, developing interpretive panels, and promotion of the NHDOT Bridge Inventory and Bridge Management Plan. The Selected Alternative (Alternative 9) involves the complete removal and replacement of the GSB superstructure. The GSB superstructure will be replaced with a steel girder system with a structural steel "V-Frame" extending from the bottom of the girders to the top of the existing GSB piers. The Selected Alternative follows the existing GSB alignment, thereby allowing the reuse of the existing GSB stone masonry piers, which would be repointed, without requiring substantial modifications. The illustration below depicts the conceptual design for Alternative 9. The Selected Alternative's concrete bridge deck will range in width from approximately 21 to 22 feet, with an approximately 16-foot-wide multiuse path. The multiuse path will be fully consistent with national engineering standards, will comply with the ADA guidelines for accessibility, and will have a steel pedestrian rail along both sides of the new bridge deck. These characteristics contribute to the high performance of the design with respect to user safety, emergency access, and inspection safety.



### Final Design is Almost Complete

Currently, the NHDOT and its consultants are progressing the last stages of final design for the replacement bridge. Final design involves modeling and detailing the superstructure and bridge railing, as well as finalizing drainage, landscaping, and surface treatments. Utility accommodations, including water lines, navigational lighting, and CCTV, among other components, are also being finalized. Final design is expected to be complete in the late spring of 2023, with construction anticipated to begin in 2024.

February 2022

FHWA Issues Combined FSEIS/SROD March 2022 Ma Start of Final Design Env and Environmental Permitting Ap

March 2023 Environmental Permit Applications Submitted

**June 2023** Complete Final Design July 2023 Complete Environmental Permitting and Advertise for Construction

**2023** Start of Construction (Anticipated) **2026** Open New Bridge (Anticipated)

**2027** Project Completion (Anticipated)



Construction will include the installation of two temporary stone causeways and two, contractor-designed, temporary pile-supported work platforms to provide construction access. These temporary structures will be in place for approximately three years. The photo above left depicts the temporary construction platforms that were built to construct the Little Bay Bridge.



Navigation channel beneath the GSB and LBBs.

The new bridge will retain a 200-foot-wide navigation channel. The new bridge will benefit marine traffic by removing the GSB as the controlling navigational vertical clearance between the three bridges. Within the 200-foot navigation channel, the new bridge would increase the existing 34.7-foot vertical navigational clearance beneath the GSB by 12 feet. However, the overall 200-foot navigational channel would subsequently be controlled by the adjacent northbound Little Bay Bridge, for a new overall clearance of approximately 44.9 feet. Marine vessels would have more room to pass through the 200-foot navigation channel.

## How will construction affect boating access?



Recreational boating is prevalent in this coastal area of New Hampshire. Because the GSB crosses the Little Bay, a navigable water, recreational boaters and other marine traffic pass under the GSB. Because of the space needed for the temporary causeways during construction, the 200-foot-wide navigation channel width may be restricted. The NHDOT is coordinating with the US Coast Guard (USCG), the NH Marine Patrol, Pease Development Authority Division of Ports and Harbors, marine businesses and marine users to reduce the navigation channel width to 120 feet during construction activities.

### **Temporary Bicycle and Pedestrian Detour**



A temporary bicycle and pedestrian detour was constructed on the northbound Little Bay Bridge to provide non-motorized connectivity across Little Bay due to the

closure of the GSB in 2018, and opening for public use in August 2019. This detour will remain in place throughout construction, until the replacement bridge is open for public use.

The detour path is 10 feet wide, with a concrete barrier and chain link fencing installed to separate path users and vehicular traffic on the existing northbound Little Bay Bridge. The temporary bicycle and pedestrian detour approach from Shattuck Way on the Newington side connects to and utilizes the access road constructed for the water quality treatment basin, located adjacent to the Exit 4 northbound on-ramp from Shattuck Way. The temporary detour approach on the Dover side connects to Wentworth Terrace, adjacent to the eastern side of Hilton Park. Once the new pedestrian bridge is open in the spring of 2026, the temporary approaches and the detour will be removed to allow the northbound Little Bay Bridge to accommodate four lanes of vehicular traffic as intended and designed.

### Where can I learn more?

Catch up on progress made to date by reviewing past public meeting presentations, notes, and documents, and sign up for email notices at:

#### http://newington-dover.com/

For more information about the Newington-Dover project, contact:

Ms. Jennifer Reczek, NHDOT (603) 271-3401 or Jennifer.E.Reczek@dot.nh.gov

### **Construction Access and Staging in Hilton Park**



During construction, the Contractor will need approximately 2 acres (0.5 acre in Newington and 1.5 acres in Dover) for access, laydown, and staging. Of the area proposed to be used in Dover, approximately 1 acre of the west side of Hilton Park will be fenced off. Most of Hilton Park—including the entire eastern portion at the public boat launch—will be kept open to the public during construction. The Contractor will restore the disturbed portions of Hilton Park once construction is complete. Landscaping will include planting deciduous trees, shrubs, ornamental grasses, and perennials.

Use of Hilton Park for construction staging will require the replacement of the existing picnic shelter (also known as the Hilton Park Pavilion) located on the west side of Hilton Park. A new pavilion will be erected in its current location. The replacement of the shelter has been coordinated with the NHDOT Bureau of Turnpikes which manages the Park.