CONNECTICUT DEPARTMENT OF TRANSPORTATION

In Person Public Information Meeting
State Project No. 0073-0194
Replacement of Bridge No 02231,
State Route 202 over Still Brook in the Town of Litchfield

January 24, 2023 at 7:00 p.m. Located at Borough of Bantam Hall 890 Bantam Rd, Litchfield CT 06750

Report of Meeting

Present:

~ 15 Public Attendees including First Selectman Denise Raap and Town Engineer Raz Alexe

Team Presenting from the Connecticut Department of Transportation:

Andrew J. Cardinali, Principal Engineer, Bridge Design
Jonathan J. Kempf, Project Manager, Bridge Design
Ostap Lisowitch, Project Engineer, Bridge Design
Michelle Rame, Project Designer, Bridge Design
Matthew P. Geanacopoulos, R.O.W. Coordinator, Office of Rights of Way
Henry Fredericks, Supervising Engineer, District 4 Construction

Denise Raap - Town Selectwoman Alexe Raz – PW / Town Engineer

Presentation Summary:

Jonathan Kempf, Transportation Supervising Engineer, opened the meeting approximately at 7:00 pm with a brief welcome and introduced the project design team.

Jonathan offered information to the attendees on how to contact the design team during the live Question and Answer session following the formal presentation. The following means of contact were provided:

Project email: DOTProject73-194@ct.gov

Project website: https://portal.ct.gov/DOTLitchfield0073-0194

Q&A phone: (860)-594-2020

In person Q&A at the conclusion of the formal presentation

The attendees were informed that the period to provide comments and questions to the project team extends through February 07, 2023.

Ostap Lisowitch, Project Engineer began the formal presentation of the project with a brief project description and bridge location. Mr. Lisowitch continued presenting the following key points about the existing bridge condition:

- Existing Bridge Location and Information:
 - Route 202 (Bantam Road) over Still Brook in Litchfield
 - Existing structure is a single span concrete slab bridge on masonry abutments with a reinforced concrete deck. The structure has a span length of 11' and a curb-to-curb width of 29'-8". The Structure has an ADT of 7,400, 6% truck traffic.
- Purpose and Need:
 - The superstructure is rated a 4, which is considered "poor" condition due to areas of deep delamination and exposed rebar with heavy rust and section loss on the underside of the slab.
 - The substructure is rated a 5, which is considered "Fair" due to cracks in the mortar including a full height crack with open separation between the mortar and masonry as well as areas of loose and shifting stone.

The overall purpose is to improve the condition of the bridge to a state of good repair.

Michelle Rame, Design Engineer, continued the presentation by offering the following details of the Department's proposal.

• Site Constraints:

 Masonry abutments and wingwalls on unknown foundation, hydraulics, aerial and underground utilities, and Rights-of-Way (ROW).

• Utility Considerations:

- An 18" Reinforced Concrete Pipe (RCP) that is to be maintained and protected throughout construction.
- An 8" Sanitary Sewer that is to be maintained and protected throughout construction.
- Permanent relocation of overhead utilities will be required.

Environmental Considerations

 DEEP fisheries division recommends removing the concrete apron and partially removing the existing concrete dam downstream from the bridge to provide an additional 3.75 miles of fish passage.

Proposed Structure:

single span 31' bridge on precast integral abutments, prestressed NEXT beams and precast wingwalls to
minimize the duration of the road closure. The structure will have 2 – 11' lanes and 2 - 5' shoulders with
vertical face parapets.

• Project schedule and Cost:

The structure is currently scheduled to be replaced in 1 construction season starting in Spring of 2025, with
a 10-week road closure and detour in the Summer of 2025. A full road closure is being proposed due to
stability concerns with attempting staged construction with the existing masonry abutments.

State Road Detour:

- 18.4 miles or about 27 minutes
- Primarily for truck traffic
- 4 State Routes: Route 202, 209, 109 and 47

ROW:

There are anticipated ROW impacts under this project. Temporary Construction Easements will impact 4
properties, there also may be some permanent takes required for installation of Natural Rock Weirs
downstream, as requested by DEEP fisheries.

Concerns with Staging:

The department has years of experience with implementing staged construction on masonry abutments and
has a strong understanding of the implications that may arise when staging on masonry abutment. Based on
the unknown conditions, the age, and the integrity of the existing structure, keeping the road open for
staged construction is not recommended due to the risk associated with staged removal of masonry
abutments.

Lessons Learned:

- The replacement of Bridge 01379 Route 150 over Wharton Brook in Wallingford is an example of a similar project that attempted to used staged construction to reduce the road closure period. The construction began in the beginning of 2017. During stage 1 of construction the contractor raised concerns about the safety and stability of the existing structure and the unknown foundations. This concern led to a halt in construction that steamrolled further complications and initiated an extended delay. There are no existing plans for Bridge 02231 and it is on unknown foundation resulting in a major risk during construction. It would be a major risk in terms of both public safety as well as project completion time. This Wallingford project took almost 4 years to complete because the town was pushing for staged construction even though there were far too many unknowns to work with.
- Another example from a replacement of Bridge 00617 (State Route 800 over Mad River) Winchester, CT
 that was recently constructed this past year. Even though there were monitors set in place, the contractor
 still could not stop or avoid the collapse of this masonry retaining wall during construction. This collapse
 was due to a combination of weather and typical construction activities. This is a perfect example of what
 could happen to the masonry abutments and walls on this project.

Matthew Geanacopoulos then discussed the State's rights of way process:

- The proposed project design will require construction easements and minor permanent ROW acquisition.
- The Acquisition process: The ROW office will send out a letter of intent to acquire the property needed. The agent will then evaluate the current property cost and make an offer of just compensation to the owner. The owner of the property can then negotiate the offer to come to an agreement. If no agreement is made, then the State may try to obtain the property through eminent domain where the property owner has 6 months to appeal or accept the State's offer.

The presentation ended with Michelle Rame reminding attendees how to contact the design team with questions and comments. The meeting was then opened for questions and comments session for the public's participation.

Public Comments and Questions During Live Q&A that Followed the Presentation:

 Question: The Town Engineer asked, will all the Construction Easements be temporary, or will there be any permanent takes?

Response: The majority of the construction easements will be temporary, there may be minor permanent acquisitions within the stream of Still Brook to facilitate instream work and the construction of a fish passage system.

• Question: A Board of Ed member asked if the road closure will occur in the Spring of 2025, and stated concerns with impacts to school busses.

Response: The road closure will not be implemented until everything has been dry fitted and is ready to be installed. Our intent is to avoid impacting the beginning of the school year with the closure beginning in early summer going through to early fall. Currently, the schedule is preliminary and will be refined as the project timeline progresses.

• **Question:** A resident stated that on a different bridge in the area, the bridge was built with staged construction and asked us to clarify the difference between projects.

Response: Each bridge replacement project is unique to its own constraints and site conditions. Some projects where the existing bridge has the capacity and stability to handle stage construction, stage construction is typically used for those projects to avoid detours. Unfortunately, bridge 02231 does not have the adequate stability and capacity to handle staged construction.

 Question: A resident asked if the bridge would be wider, and asked how this would impact the road leading to and from the bridge

Response: The new bridge width is slightly larger than the existing structure. There will be 2-11-foot lanes and 2-5-foot shoulders. The extended shoulder widths would allow for the potential of widening the road in the future or incorporating bike lanes.

• Question: A resident asked about truck traffic, and if they would be using local roads to get around the road closure.

Response: Trucks typically stick to state routes to avoid unknown low clearances or narrow roads. The project team will be working closely with the traffic department to minimize the impact to the traveling public.

Question: A resident asked for further detail on the natural rock weirs and fish travel.

Response: The project team is currently working with regulators to determine the best course of action to potentially open 3.75 miles of fish passage.

Question: A resident asked about the increase in bridge span, and the impacts on the hydraulics.

Response: The existing structure is not wide enough and is hydraulically inadequate. The existing structure has an 11 foot wide clear span, and the proposed structure has a clear span of 31 feet. Our Hydraulics and Drainage department determined a minimum span of 22 feet would be needed to make the new structure hydraulically adequate.

Question: A fire company member asked about increased response times due to the road closure.

Response: The project team will be working closely with Selectwoman Denise Raap and the local emergency services to ensure that all potential impacts are considered and create a plan to minimize or eliminate any increased response time concerns.

Question: The first Selectwoman asked about the hours of construction during the road closure.

Response: From earlier coordination with Selectwoman Raap, it was determined that there are no noise ordinances that would prevent any night and weekend work and it would be allowed. There are properties at all 4 corners of the project, its preferred to avoid work on weekends/extended hours if possible. The contractor may request weekends/extended hours to maintain schedule. The project team will have requirements in place to limit the construction noise to what is reasonably acceptable per our specifications.

Question: A resident stated his concerns with cars/trucks using West Morris Road as a local detour and asked if
companies such as google maps will be notified to prevent rerouting traffic that way.

Response: The project team will be working closely with our traffic department to ensure a smooth transition. Notices will be sent in advance to inform the town of the detour. Variable message signs will also be put in place to give notice to people of the closure and to seek alternate routes. The project team will investigate the possibility of updating this detour on google maps.

Question: A resident asked if there would be negative impacts downstream because of the increased hydraulic
opening.

Response: Based on our preliminary hydraulic analysis, there are currently no negative impacts downstream resulting from the increased hydraulic opening.

• Question: A resident referenced a project in New Milford where there were significant delays and asked how the project team can guarantee the road opens on schedule.

Response: The project team will incorporate liquidated damages into the contract to ensure project completion time, as well as, potentially providing incentives for early completion. The Department can encourage the contractor to begin procurement at the time of award of the contract in advance of the notice to proceed. This will allow more time for the contractor to prepare all submittals and order materials. Administrative controls will be set in place to assist the contractor and to maintain the construction schedule.

• Question: A resident asked if the Contractor is monitored during construction to confirm they are on schedule, and to prevent them from cutting any corners.

Response: District of construction will be monitoring the contractor throughout the entire duration of the construction period. Inspectors will be on site inspecting each construction activity to ensure quality assurance and control.

Question: Mr. Raz, the Town Engineer, noted that on previous projects in the town had been issues with micro pile
installation due to out of state subcontractors who were unfamiliar with the subsurface conditions in the town and
asked how the project team could prevent the same issue on our project.

Response: Test piles will be installed prior to the closure to ensure no issues during the installation of all other micro piles. The test pile will undergo testing per our specifications to ensure it meets the desired design criteria. Production piles will not be installed until the test piles have been verified to meet our requirements.

• Question: A resident asked if there were any different methods to stage the bridge, to prevent the full road closure.

Response: If these were regular abutments with typical reinforcing, it's possible to quantify the load capacity and say with confidence that these abutments could be stabilized, however, these are not the condition on this project. The existing bridge is on masonry abutments with no existing plans for this bridge and the abutment are on unknown foundations. The condition and stability of the existing structure can only be determined when the contractor begins construction and cuts the abutments in half, this creates significantly more risk and the high potential for extended delays beyond the anticipated road closure. Furthermore, these masonry abutments and wingwalls are already experiencing loose and shifting stones, cracking, and crumbling as well as collapsing in the wingwalls. The masonry abutments and wingwalls have already been patched and repaired multiple times to stabilize the areas affected and at this point they are no longer repairable.

The main concern with staged construction is stabilizing the concrete masonry abutments, however if it cannot be done and issues arise there will be considerable delays and cost increases, resulting in larger impacts to the public. The intent is to avoid the possibility of this issue occurring during construction by planning for it during design dues to the risks associated with staging masonry abutments a full road closure is being proposed at this site.

• Question: A resident asked about how ambulance response time will be impacted by the closure.

Response: The project team will be working closely with Selectwoman Denise Raap and the local emergency services to ensure that all potential impacts are considered and create a plan to minimize or eliminate any increased response time concerns.

Question: A resident asked if the project team could notify neighboring towns, including Litchfield dispatch.

Response: The project team will be working closely with Selectwoman Denise Raap and the local emergency services to ensure that all potential impacts are considered and create a plan to minimize or eliminate any increased response time concerns.

 Question: A resident asked if the 10-week duration for the closure a worst-case scenario for the Contractor and wanted clarification if that was adequate time for the work.

Response: At this point, the 10 – week road closure is a conservatively estimated time frame. There is a possibility it could be shorter. Liquidated damages will be incorporated into the contract to ensure project completion time, as well as potentially provide incentives for early completion.

 Question: A resident asked if there are barriers in addition to signage to prevent anyone from driving into the bridge while out of service.

Response: Yes, there will be both signage and barriers in place to prevent the travelling public from driving into the bridge closure area. For the neighboring properties around the bridge, adequate access will be provided for those residents during construction.

Adjournment:

The meeting was adjourned at approximately 8:30 PM.