

Town of Southbury
State Project No. 9130-0009
Replacement of Bridge No. 130-009
Old Field Road Bridge over Bullet Hill Brook

Public Informational Meeting Minutes
January 29, 2025, 2:00 PM
Room 205A, Southbury Town Hall, 501 Main Street South

Present

- Blake Leonard, Southbury DPW
- Matt Tarnowski, Southbury DPW
- Gary Giroux, P.E., Cardinal Engineering Associates
- Members of the public

Presentation

- Mr. Giroux began by reviewing the project background and current conditions. The roadway surrounding the structure has been significantly damaged by the storm of August 18, 2024. The structure was scheduled to be replaced prior to the storm.
- Permit applications have been submitted to DEEP, the Army Corps of Engineers, and the local Inland Wetlands Commission. Approvals are pending.
- The project should be put out to bid in February, with construction to follow later in 2025.
- The structure is in critical condition, with spalling and scouring present as well as deterioration of the headwalls and wingwalls. These factors contribute to the existing structure's sufficiency rating of 48.13%.
- In addition to the deterioration, the existing structure can only pass a 15-year flow prior to overtopping. The proposed structure will be designed to accommodate a 100-year flow prior to overtopping, and the new roadway will be designed to withstand overtopping.
- The existing twin 72" reinforced concrete pipes will be replaced with a 20' x 9' precast concrete box culvert, with 2' of natural streambed material in the bottom to accommodate fish passage. The proposed structure will be wide enough for a sidewalk to be added.
- Check dams have been added up and downstream of the proposed structure at DEEP's request to ease fish passage.
- The wingwalls will be curved to eliminate the need for metal beam rail, and will be formed and stained to mimic native stone.
- Wetland and watercourse impacts total approximately 5,842 square feet. There are no federal wetlands within the project area.
- Construction duration is expected to be 2-2.5 months.

Public Comments and Questions

- Is there any additional cost for the curved wingwalls and staining? Does the stain fade over time?
 - There are minor additional costs for the stain, roughly \$5,000-\$10,000. It lasts approximately 15 years.
- What is the expected cost of the project? How many bids are solicited?
 - Approximately \$1.5 million including engineering. Any contractor meeting the qualification requirements may bid, and projects typically get up to a dozen bids.
- When are permits anticipated?
 - The regulatory agencies have 60 days to act on the permits, making the deadline the end of February.
- How is the box culvert installed?
 - The culvert will be installed in 4-5 sections.
- How are change orders handled?
 - This is a unit price project, so any variations from estimated quantities will be measured in the field.
- How is construction inspection handled?
 - Cardinal will have a full-time inspector on site, with the town's input and oversight.
- Does this project include leveling the brook up and downstream of the project and removal of debris from the flood?
 - Project limits are roughly 50 feet in either direction. Other work on private property is the responsibility of the landowner.
- What is the extent of the sidewalk?
 - The proposed structure is wide enough to accommodate a potential future sidewalk. There is no sidewalk project planned at the moment.
- Is a 100-year storm design the best option?
 - It is the current design standard that DOT uses. It is a significant improvement over the existing structure. A structure could be designed to withstand larger storms, but this would significantly increase costs.
- What is freeboard? Why does the existing structure have freeboard but the proposed structure does not?
 - Freeboard is the amount of space between the highest water level in a storm and the top of the roadway. The existing structure has no freeboard in a 15-year storm, while the proposed structure has no freeboard in a 100-year storm, which is a much higher volume of water.
- Why is the proposed structure perpendicular to the road, despite the brook flowing at an angle?
 - There are a number of reasons, including regulatory requirements and expense.
- How is water handled during construction?
 - Twin 48" bypass pipes will be installed.
- Will the check dams catch debris? Much of the damage to the road was caused by the existing structure blocking debris.
 - The check dams will catch some debris, but the proposed structure is much less obstructive than the existing. The vast majority of debris will flow through.

- Is the design of the culvert accommodating the state projects upstream that may increase how much water passes through?
 - The culvert is being designed to DOT standards. There are structures between this project and the state project that are smaller than the proposed culvert.
- Are design calculations inclusive of the entire watershed upstream?
 - Yes. All design assumes no restrictions on the amount of water coming from the watershed.
- Is there natural streambed material in the bottom?
 - Yes, two feet.

Adjournment

- The meeting was adjourned at 2:42 PM.