

BALLOT QUESTION FACT SHEET WEST MAIN STREET BRIDGE

Ayer Department of Public Works

Project Description

This project is to **replace the existing stone culvert / bridge on West Main Street** over the Nonacoicus Brook. West Main Street is a critical link for the Town of Ayer connecting businesses and residents alike from the surrounding communities of Shirley, Devens and Lunenburg. School buses rely on West Main Street to transport students from surrounding communities to the two regional schools in the area. The only feasible West Main Street detour routes that would satisfy traffic demand includes a 6 mile circuitous route which is unacceptable from an emergency response perspective.



Why Does this Bridge Need to Be Replaced?

The existing bridge was constructed 1900 (117 years ago!). In 2015, the bridge located upstream on Shirley Street was deemed unsafe and permanently closed. The closure of the Shirley Street Bridge reinforces the importance of addressing structural deficiencies on the West Main Street Bridge.

- Culvert is in poor-to-severe condition
- Inlet and wingwalls suffer from scour and erosion
- Culvert is not aligned with brook, causing scour conditions
- Numerous utility penetrations and inconsistent masonry repairs are compromising the sidewalls
- Absence of mortar in certain areas is leading to movement of masonry stones
- Concrete patching (parging) is deteriorating and failing
- MassDOT inspected the structure in fall 2016 and due to the condition, MassDOT is requiring structural inspections every 6 months until it is repaired.

What has the Town Done?

- The Ayer DPW Superintendent and Town Engineer inspected the structure in June 2015 and recommended that the Town hire a Bridge Engineering Consultant to complete a detailed inspection of the bridge.
- Hoyle Tanner Associates inspected the structure and provided the Town with a report in October 2015
- In 2016, the Town hired WorldTech/Hoyle Tanner Team to develop alternatives for repair / replacement of W Main St and Shirley St bridges and prepare a preliminary design and cost estimate
- DPW Superintendent included the W Main St bridge replacement in the FY18 capital budget
- DPW Superintendent applied for and received a MassDOT Small Bridge Program Grant of \$500,000 for this project



What Happens If We Don't Approve The Funding For The Bridge?

West Main Street is a primary road between Ayer, Shirley, Devens and other adjoining communities and businesses. If the bridge structure fails, it would be closed for a significant amount of time resulting in detours through McPherson / Bishop Road or Barnum Road through Devens. The McPherson Road route is often closed due to flooding and trucks are not allowed due to the railroad bridge clearance.

The Barnum Road detour adds about 6 miles and 15 minutes which would significantly impact emergency response as well as school bus travel between the Ayer Shirley Regional Schools.

Replacement of the bridge is not a question of need, but when. This is an opportunity to have MassDOT partially fund the project before it fails and replacement costs increase.

What Is This Going To Cost And How Much Will It Impact My Taxes?

The estimated cost to replace the West Main Street Bridge is **\$1,730,000**. The Town has received a grant from MassDOT for \$500,000 resulting in a cost to the Town of **\$1,230,000**. This amount would add **\$17** to the average **FY2018 residential** tax bill in Ayer.

