

River Point Bridge Replacement

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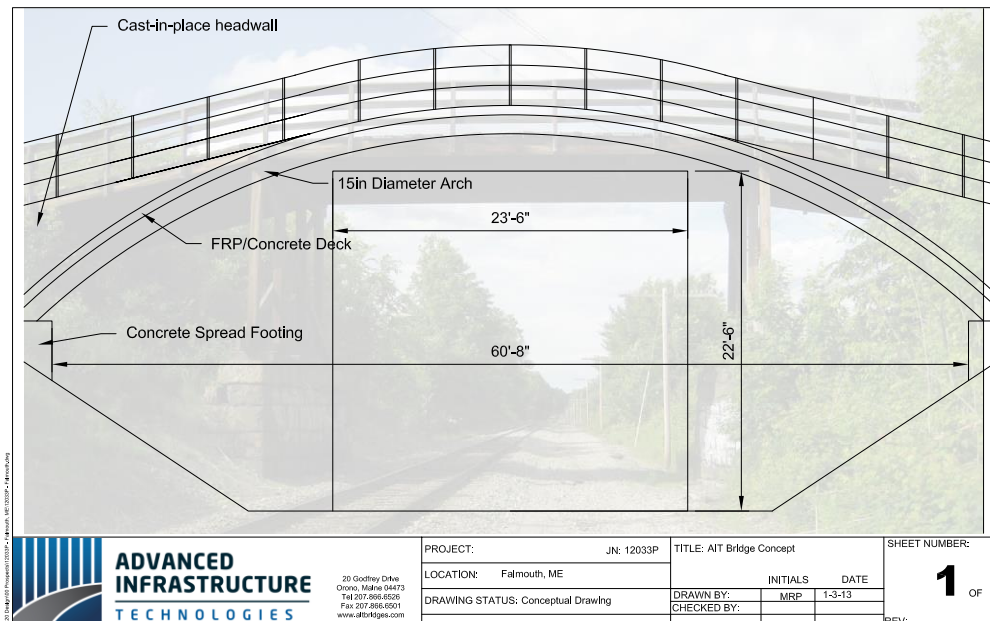
Background

The wooden railroad bridge that provides the only access to the town's River Point Conservation Area property is in poor condition and needs to be replaced. Originally built in 1859, the bridge is rapidly approaching an unsafe condition. Recent improvements to the railing system have made it passable for pedestrian traffic, but there is no way to get a vehicle (i.e. – pickup truck, tractor) to the property in order to maintain the buildings, trails and habitat. Continued deterioration of the decking is making even pedestrian traffic hazardous. Without the ability to get a tractor and mowing attachment into the property, we will soon lose the grassland and early successional habitat that makes the property such a rich area for wildlife.

Options

Three options have been investigated. Replacing the bridge with a new wooden bridge was considered several years ago. That option was rejected for both cost and structural reasons (wood has the shortest lifespan of the other available options).

Recently, two other options have emerged. The first is a “bridge in a backpack” option that uses a new technology developed by the University of Maine College of Engineering. It is a concrete span, 8 ft. in width. Examples can be seen by Googling “bridge in a backpack” at www.youtube.com. A proposed structure for River Point is shown below. The estimated cost of this bridge, including demolition, is \$260,000. That figure does not include railroad required insurance and the cost of a flagman at the site during construction.



The firm that would manage the project is Advanced Infrastructure Technologies in Orono, www.ait.com.

Another option is a self-supporting steel span, also 8 ft. in width, that would span the full 100 ft. distance. It would have a concrete deck. The span itself is expected to cost

\$92,200. Additional costs would include installation (estimated at twice the cost of the span), demolition (\pm \$25,000), and the railroad imposed fees. Based on the information available, the comparative price to the “bridge in a backpack” option is \$301,000.

The firm promoting this option is Contech Engineered Solutions in West Chester, Ohio, www.ContechES.com. Here’s a photo of a similar structure.



Caveats/Unknowns

As previously stated, we do not yet know the cost of the insurance the railroad requires, other than it is very expensive. We do know that a railroad flagman costs \$900 a day, but not how many days construction will require.

Pan Am Railways, the owner of the rail corridor, has specific requirements for any such structure built in the right of way and must approve any final design. How much time and effort that will require is unknown.

Next Steps

Both the “bridge in a backpack” and the steel span seem like viable options that would meet our needs for access, require little or no maintenance, and have a long lifespan. If we decided to proceed with one of these options, we will solicit bids and plan to replace the bridge within the next year. Unassigned fund balance would be necessary for funding to avoid an increase in the operating budget.