

Potash Brook Path Crossing Feasibility Study
Public Meeting
April 13

Christine Forde (CCRPC) gave an introduction to the project. CCRPC has looked at this corridor a couple of times in the past for improving bike/ped connections. The two biggest challenges were the stream crossings at Muddy Brook and Potash Brook. The bridge over Muddy Brook has been replaced and includes a multiuse path. Now we are turning our attention to Potash Brook

This project is being funded with federal transportation planning dollars that comes through CCRPC. South Burlington requested this project and DuBois & King was hired to evaluate options for improving this crossing. We are interested in your comments.

Julia Ursaki (D&K) reviewed the project area which is a gap in the South Burlington path network over Potash Brook. There are intersecting land uses in the project area – industrial, commercial, residential, and open space – which make this an important corridor for bicycle and pedestrian connections.

Kimball Avenue in the project area is 32 feet wide with 12-foot lanes and 4-foot shoulders. There are steep slopes on both sides of the road. There are existing utilities along the corridor – water lines, storm sewer, sanitary sewer and gas. Average daily traffic is about 8,500 vehicles per day and the posted speed is 40 miles per hour.

There are wetlands and wetland buffers in the area which introduce permitting issues.

Brian Breslend (D&K) reviewed three alternatives developed for the project.

Alternative 1 – Keep the existing curb and add a 10-foot grass buffer, and a 10-foot bike path with a 2-foot shoulder on either side. On the outside of path add some type of fence. Outside of that install a stone embankment. Would have to extend the existing corrugated metal pipe approximately 12 feet. Planning level cost estimate \$735,000 including municipal project management, permitting, design, right-of-way, and construction. Permitting – would need NEPA, Act 250 coordination, construction general permit, stormwater operational permit, US Army Corps of Engineers permit, and wetlands permit.

Alternative 2 – Similar to Alternative 1 but uses a gabion (steel wire mesh baskets with stone fill) retaining wall instead of the stone embankment. Due to the weight of the gabion wall would add a concrete slab over the pipe to distribute the weight. The cost of this alternative would be \$785,000.

Permitting is almost identical but may not need the stream alteration or US Army Corps of Engineers permits because the footprint is reduced. (But might still be required due to a secondary stream crossing.)

Alternative 3 – Put the path close to the existing road and reduce the buffer. Does not provide adequate stormwater treatment. Proposing a sand filter to treat stormwater. Don't have to extend the pipe but do need to replace the headwall. Cost \$790,000. All permits likely to apply.

Quick Build Concept 1 – Jersey barriers to separate an 8-foot path from two 11-foot travel lanes. This alternative does provide separation from the travel lanes but would likely feel crowded with 8 feet between the concrete curb and the jersey barriers.

- Does not meet the National Association of City Transportation Officials (NACTO) buffer minimum (3 feet)
- Does not meet Federal Highway Administration (FHWA) minimum width for a bike lane
- Does not meet Vermont State Design Standards for travel lanes for an urban minor arterial.

Quick Build Concept 2 – uses bollards instead of jersey barriers. Bollards are flexible and not continuous so could reduce the travel lanes to 10.5 feet and increase the bike lane to 9.5 feet. Since the bollards are not continuous it would not feel as protected as a continuous barrier. This concept also does not meet the standards as discussed above.

Quick Build Concept 3 – This is not truly a quick build but avoids some of the permitting requirements. Place the path 2 feet from the edge of the road and construct it with pervious material. At the stream crossing the path would narrow to 8-feet and would require regrading the slope to create a flat area. The pervious pavement would have a rougher surface as compared to asphalt. The cost estimate is \$365,000.

Note that the City could also consider removing the curb on the south side of the road and adding pervious pavement at the edge of the shoulder.

Discussion

D&K confirmed that the path would be asphalt.

Comment -- Quick Build – Concerned about the proposed travel lane width given the truck volume on this road.

D&K – Yes, it would be tight but would protect the more vulnerable users.

Question -- Quick Build – How would the city maintain the facility in the winter? Would the bollards be removed?

D&K – Winter maintenance would be challenge and more discussion would be required.

Christine explained that the quick build options were added to see if there was a way we could come with a less expensive option. It seems clear that they may not be good options.

Question – Was a cantilevered structure considered?

Answer – A cantilever option was more expensive.

Question – Could we consider shrinking the travel lanes and adding striping for bike lanes on each side as another quick build option?

Answer – Yes, that could be considered.

Question – How would the quick build options transition back to on-road facilities if one of them is constructed before the path to the west is completed.

Answer – These options consider connecting to the future path that will be constructed and don't consider interim transitions. If one of these options was selected before the path to the west is constructed the transition would need to be discussed.

Question – Did the path consider needs on the north side of Kimball? Would it make sense to do improvements on both sides of the road at the same time? There are safety needs for businesses on the north side of the road for employees who walk to the bus.

Answer – This study specifically considered the south side and was focused on the stream crossing. There might be some savings if improvements were constructed on both sides of the road at the same time. A follow up study could be constructed to look at both sides.

Question – Do the consultants have a recommendation?

Answer – Alternative 1 or 2 because you don't have to maintain the sand filter.

Comment – Alternative 2 has less impact on the wetland area.

Christine noted that the purpose of this meeting is to present the options and get comments. A preferred alternative does not have to be selected at this time but you can if you want to. A final report will be prepared that will provide detail on all the options presented.