



Transportation Department

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Sept. 16, 2015

RE: Flood recovery-related reconstruction of Fourmile Canyon Drive between Boulder Canyon Drive/CO 119 and Salina Junction

Dear Fourmile Canyon Resident,

I wanted to take a few moments to update you on what Boulder County Transportation has done since the June and July public meetings on our flood recovery plans and to provide information on what you can expect in the future regarding the Fourmile Canyon Flood Recovery Reconstruction Project. Our goal is to rebuild the two flood damaged sections of lower Fourmile Canyon Road to:

- Withstand future flooding, so that in the event of a significant future flood event the road will still be available for use.
- Make the road safer for all users.
- Reduce the impact of flooding for residents adjacent to the roadway.
- Maintain the special visual, environmental, and community character of the canyon.

Where We Have Been

Since the 2013 flood event, Boulder County Transportation has hosted four public meetings to gain public input and learn relevant information from area residents and roadway users as we move forward in our efforts to design the permanent repairs to the flood damage sections of Fourmile Canyon Road.

During this time, we have also collaborated in development of the Fourmile Creek Watershed Masterplan, which provided valuable information and direction on restoration of the damaged creek ecosystem. We intentionally timed the design of the road so we can incorporate any applicable recommendations from the watershed master plan into the roadway design.

The Fourmile Creek Master Plan recommends that the road design minimize encroachment into the creek to the degree possible. This sentiment was confirmed by those who attended the early public meetings, as public comment we received supported minimizing retaining wall construction out of concern for the visual impact of the walls on adjacent residents as well as the impact of the walls on the health of the watershed, trees and vegetation. The initial design was based on efforts to minimize impacts to the watershed and minimize the amount of retaining wall that would be necessary to stabilize the road against future flooding.

During more recent public meetings and public comment, we heard significant concern from a number of canyon residents and other interested parties with the visual impact associated with the rock cuts that would be needed if we are to minimize impacts to the creek. We also heard at the meeting, and in subsequent comment, both support and opposition to including a four-foot uphill shoulder into the road reconstruction.

In response to recent concerns, I directed our engineering team to develop an alternative scenario that would avoid the need for any significant rock removal, allowing us (and the community) to understand the trade-offs and implications of the two scenarios; one that minimizes impacts to the creek and the other that minimizes rock cuts.

In order to eliminate all rock cuts, not worsen flooding for adjacent property owners, and ensure the road can withstand future flood events, more road/creek embankment stabilization would need to be constructed than in the rock cut scenario. In some stretches, this means installing soil covered, revegetated rock banks (called rip rap) and, where the section of damaged road is elevated significantly above and adjacent to the creek, retaining walls and guardrails may be necessary to ensure the road does not get washed out again. Where significant lengths of retaining wall would be necessary, wildlife access ramps would be incorporated into project. However, construction of the rip-rap and retaining walls would also increase the number of trees and bank vegetation along the creek bank that would need to be removed, with the associated impact on creek habitat and the visual character of the canyon.

We have also heard many comments both opposing and supporting inclusion of a four-foot wide uphill shoulder as part of the permanent repairs. As was mentioned at the June and July public meetings, and as is evident in the canyon, there are many bicyclists using the canyon and the volume will only increase in the future. It has been County policy for many years that we incorporate measures that increase safety for all users when we reconstruct our roads, particularly in high use areas. The four-foot shoulders will improve safety for all users by providing space for cars and trucks to pass slower moving bicyclists and pedestrians. The impact of this four-foot shoulder on the road cross section is small since the space the shoulder occupies is also used for roadway drainage, minimal between the edge of pavement and the rock face, and is a place to catch any rock or debris that may fall from the hillside.

Many people have requested that the road be left as is, with no changes. This is simply not a feasible or acceptable solution. To leave the road as it is means the road will be continually washed out in even relatively minor storm events and snow melt during spring run-off. Our goal is that the reconstructed Fourmile Canyon Drive will be more resilient, more able to withstand future flood events, more safe for all users, and mindful of the natural beauty of the canyon that area residents and users of the road enjoy every day and that visitors travel many miles to see.

Trade-Offs

As mentioned, we have developed initial designs for two scenarios. The first scenario is focused on reducing impacts to the watershed and requires fewer retaining walls, but has more rock cuts on the uphill side of the road. The second scenario eliminates any rock cuts, but has more retaining walls and therefore a greater impact on the creek. Naturally, each of these scenarios has different impacts, and there are tradeoffs between the two concepts. The final design will likely be a combination of the two scenarios.

The first scenario (more rock cut/less retaining wall) minimizes impacts to the creek ecosystem, is more consistent with the Watershed Master Plan, maintains more vegetation and trees along the creek, and has fewer visual impacts for residents who live across the creek from the road, since

fewer retaining walls will be necessary. It does, however, have a greater visual impact on road users and those residents whose views include the areas with rock cuts.

The second scenario (no rock cut/more retaining wall) is less consistent with the watershed masterplan, would require more removal of trees along the creek, but minimizes the visual impact associated with rock cuts to both road users and residents whose primary view is of the road rather than the creek. This scenario also has greater impact on the creek ecosystem due to the construction of the retaining walls and embankment stabilization.

Next Steps

Transportation staff and our engineering consultants are currently scheduling individual meetings with property owners adjacent to the sections of roadway that will be rebuilt to understand their individual concerns and create a design that minimizes impacts to their property to the degree possible. We're working with the individual property owners because the proposed work will have a large impact on their daily lives and we want to make sure that we're doing everything we can to understand their perspectives and preferences.

But we also want to hear from everyone else. After the new "zero rock cut" option is finalized and ready for public display, we'll make both options available on the project website – www.4MileCanyon.com. In addition, we will create a survey that will allow you to tell us which option, or combination of option components, you prefer.

This survey will be open for a limited time so we can continue to move forward with our design of the permanent repairs. After the survey is closed, we'll take both the survey responses and the property owner feedback and incorporate what we learn, where applicable, into the final design option. This "hybrid" option will then be presented at an open house later this year where you'll be able to review the changes in detail and pose questions to project staff.

Please feel free to contact Andrew Barth at abarth@bouldercounty.org or call at 303-441-1032 if you have any questions or concerns about the plans for the canyon.

Thanks again for your time, patience and understanding.

Sincerely,

A handwritten signature in black ink, appearing to read "George Gerstle". The signature is fluid and cursive, with a large, stylized initial "G".

George Gerstle
Transportation Director