

Boulder Canyon Improvement Project and Impact to Boulder Creek

The Colorado Department of Transportation (CDOT) has been working on a highway project in Boulder Canyon to permanently repair Colorado Highway 119 after damage from the flooding in September 2013, and to protect it from future flood damage. As a part of this project, certain sections of Boulder Creek will be impacted. Armoring of the riverbank and highway embankment with riprap currently is being performed in lower Boulder Canyon. The nature of this work has created quite a stir in the local kayaking community and, as a result, a meeting was held at the project site on January 9, 2020 that included representatives from CDOT, Zak Dirt Inc., American Whitewater, Colorado Whitewater and a few local kayakers representing the private boaters in the Boulder area who are concerned about permanent impacts to this stretch of whitewater.

Overall, the meeting was very positive and attendees walked away feeling better about the situation; however, more work needs to be done to restore the recreational value of this reach of Boulder Creek. Attendees representing the kayaking community included Ian Stafford (American Whitewater) and Tim Friday (Colorado Whitewater) along with local boaters Gary Eldridge, Phil Schreiber, Gary Lacy and Spencer Lacy. A big thank you goes to Phil Schreiber and Gary Eldridge for putting this project on the radar for American Whitewater and Colorado Whitewater. Otherwise, this project might have proceeded without any input from boaters who like to paddle this stretch of challenging whitewater. We also owe a big thanks to CDOT and their project manager, Dan Marcucci, for arranging the meeting and letting our voice be heard. This transportation project encompasses a 15-mile stretch of roadway and represents \$31 million worth of construction work to complete permanent repairs of damage resulting from the 2013 flood. It's nice to know that even the smallest of voices will be considered in such a public works project. Finally, we can thank Gary Lacy for lending his expertise in river restoration (www.boaterparks.com).

The rapid at Elephant Butress is the most impacted river segment and it has been partially decimated by earthwork associated with armoring the riverbank and highway embankment. This work is necessary in order to protect the riverbank and highway from future damage from flooding in Boulder Creek. We get that. However, the damage to the river makes it almost unrecognizable from a boater's perspective. Fortunately, CDOT and their contractor, Zak Dirt, have good intentions and plan to restore the river back to its original condition, post 2013 flooding, as best that they can. In addition, Gary Lacy will provide direction as to how to place key boulders back in the river channel to try to recreate the features that were there before the project began.

All of the work in the river channel is being performed under a 404 permit administered through the Army Corps of Engineers. This permit requires that the original geometry of the channel prior to construction be maintained or restored if construction causes any changes. Furthermore, CDOT and Zak Dirt agreed to work with Gary Lacy to place boulders back where they belong as best they can. Although the river may not be exactly the same as it was prior to construction, Gary is committed to working closely with CDOT to ensure that the same whitewater character is maintained through this section of the river as well as several upstream sections that will have similar impacts, but to a much lesser degree. The pictures below show

the condition of the stream and river bank as of January 9, 2020 and the construction drawing shows the general detail being followed by Zak Dirt to reinforce and armor the riverbank. CDOT also is working closely with Colorado Parks and Wildlife to ensure that the fishery enjoyed in this section of the stream prior to construction is restored.

The Boulder Canyon Improvements Project will continue through 2020 (<https://www.codot.gov/projects/co-119-boulder-canyon-improvements>). The good news is that channel work will be completed before spring runoff and the contractor should be out of the stream corridor by May 1, 2020. We will keep you posted on progress with periodic updates to the Colorado Whitewater access webpage (<https://coloradowhitewater.org/river-access>) so check back periodically in the future for more information.



Upstream view of entrance to Elephant Buttes Rapid as seen from the road.



Downstream view of Elephant Butress Rapid as seen from the road.



River bed level upstream view of entrance to Elephant Buttes Rapid.



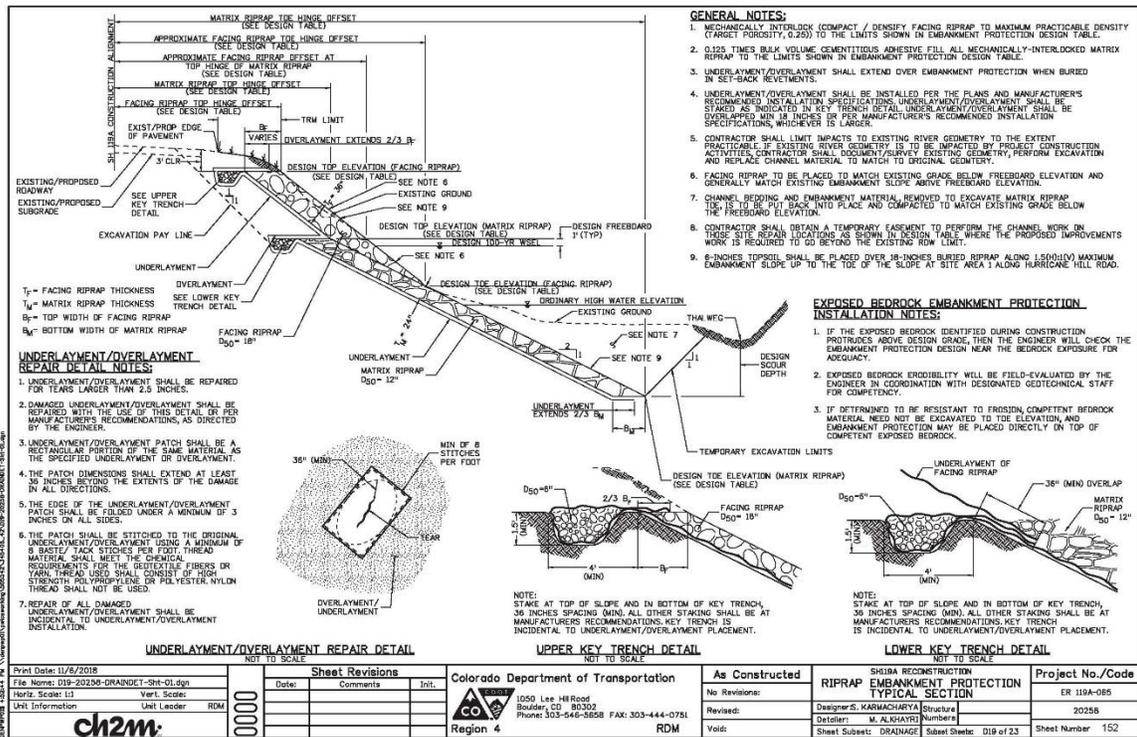
Looking downstream through the meat of Elephant Buttress Rapid.



Downstream view of runout of Elephant Butress Rapid with pipe bypass to enable construction.



Riverbank armoring with riprap installation in progress.



Construction detail for riverbank armoring.