

## FLOOD REVIEW BOARD

**Date:** December 19, 2019

**Time:** 8:30 a.m., MST

**Location:** Lake Estes Conference Room (3<sup>rd</sup> Floor), 200 W. Oak Street, Fort Collins, CO

**Contact:** Devin Traff, Larimer County Engineering Department

## MEETING MINUTES

**Staff Present:** Devin Traff, Tina Kurtz, Amy White

**Board Members:** Elisabeth Ervin-Blankenheim, John Hunt, Greg Koch, Chad Morris, Mike Oberlander, Chris Thornton

**Public Present:** James Koehler, Chandler Merry, Frank Roberts, Tim Behlke, Linda Hardin

Mr. Koch opened the meeting at 8:35 a.m., MST.

Mr. Traff introduced Mr. Morris as the new Flood Review Board member.

Introductions

### **2222 Highway 66, Estes Park, CO**

Mr. Traff introduced the project and Ms. White discussed the Code Compliance case for this property, which is the construction of a deck not in compliance with the permitted building plans and the unpermitted construction of a pedestrian bridge.

This is a variance request for an existing residence to be used as a short-term rental that has an unpermitted deck and pedestrian bridge located within the floodway.

Mr. Roberts, project engineer, described the technical analysis performed for the project, including a survey and floodplain analysis using data from the Colorado Hazard Mapping Program (CHAMP) model. He said the deck piers would be moved three feet toward the structure from their current location, which would place them outside of the floodway. The deck would be cantilevered with approximately

three feet of freeboard above the base flood elevation. He calculated the scour depth in the new location of the piers to be 1.84 feet. The piers would be anchored below this depth.

There was discussion on the pedestrian walkway to the rock located in the channel concerning safety issues, debris risk, channel configuration and modeling results. The applicant said that there is a gate, lock and sign on the bank side of the bridge and that it will only be unlocked when the applicants are using it and it will be locked when rented. The discussion on whether the water levels represented in the engineer's analysis and report were accurate due to cross-section placement which resulted in a further discussion about how much freeboard should be required for the bridge.

Mr. Thornton made a motion to permanently approve the variance request. Seconded by Ms. Ervin-Blankenheim.

There was further discussion regarding moving the bridge, freeboard allowance of the bridge, signage and debris potential, including how it is anchored and/or attached. Mr. Roberts said the bridge has drilled-in anchorage into the rock and it is anchored to the foundation on the bank side. Mr. Hunt mentioned that a justification for asking for additional freeboard is that there is not accurate water surface data at the bridge location without additional cross-sections at that location.

Mr. Koch amended the motion to approve the variance for the short-term rental with a condition that the low cord of the pedestrian bridge is raised six (6) inches above currently proposed location so there would be twelve (12) inches freeboard above the base flood elevation in the engineer's report. Also, that this variance would be permanent. Seconded by Ms. Ervin-Blankenheim. Motion approved 6-0.

### **Big Thompson Coalition Letter of Map Revision (LOMR)**

Mr. Traff introduced the project. This was a stream restoration project, including channel realignment, completed along Reach 28 of the Big Thompson River.

Mr. Koehler presented a PowerPoint on the project background and analysis, which used the CHAMP model as the base.

Mr. Morris noted that the new project cross-section orientation was not perpendicular to the channel. There was then a discussion of the impact the new orientation would have on the results. Mr. Koehler said they put a new cross-section on each new riffle and pool and kept the new cross-sections parallel to the CHAMP cross-sections. He said they did not change the CHAMP 1% annual chance discharge of 15,000 cfs.

Mr. Koch said the typical standard is to have cross-sections perpendicular to the channel. He noted that in Table 4 of the report there are more rises than what is reported if interpolating between cross-sections. He also noted that there are two different models being used for the floodplain and floodway analysis and there is no comparison in the report between model versions. He said they should be using the same, more recent, model. He added that this application should come back to the Board due to the cross-section orientation issue.

The Board discussed this permit being approved as a no-rise and now the results seem to be showing a rise. They said that more accurate data is needed from the applicant to show whether there is a rise which impacts adjacent properties and insurable structures.

There was significant discussion on the cross-section orientation, placement, associated discharge and water surface elevations. The Board asked the applicant for a more accurate hydraulic representation between the pre- and post-project conditions in order to compare new base flood elevations, floodway boundaries and any potential impacts to adjacent properties. There was discussion on potential options of how to redo the analysis. However, Mr. Koehler said that he would talk to FEMA Region VIII staff regarding how they would like him to do the analysis.

Mr. Hunt moved to table the application for ninety (90) days so the applicant could bring back a more accurate comparison between pre- and post-project conditions and clarification on FEMA's acceptance of the comparative approach. Motion seconded by Mr. Morris. Motion passed 5-0.

Meeting adjourned at 11:30 a.m., MST.