

## FLOOD REVIEW BOARD

**Date:** October 28, 2021

**Time:** 8:30 AM, MDT

**Location:** Lake Estes Conference Room, 3<sup>rd</sup> Floor, 200 W Oak St., Fort Collins, and Zoom meeting

**Contact:** Tina Kurtz, Larimer County Engineering Department

## MEETING MINUTES

**Staff Present:** Tina Kurtz (remote), Devin Traff, Traci Shambo, Amy White, Alan Kee

**Board Members:** Bets Ervin-Blankenheim (remote), Chad Morris (Remote), Chris Carlson, Dr. Chris Thornton (remote), Greg Koch, John Hunt, Mike Oberlander (remote)

**Applicants Present:** Kent and Mary Jane Houston; Hydrau-Tech, Inc - Dustin London, Albert Molinas, John Yang; Van Horn Engineering - Frank Roberts and Jason Walker; Ayres Associates - Matthew Hickox, Lauren Winkelhake

**Call to Order:** Mr. Koch opened the meeting at 8:30 a.m., MDT

### Introductions

#### Item #1: 1071 W Hwy 34, Loveland Variance Request

Ms. Kurtz introduced the project. This is a petition filed by Mary Jane and Kent Houston to review a variance request for unpermitted development within the FEMA Floodplain Zone AE (Floodway) Floodplain Overlay District along the Big Thompson River located at 1071 W Hwy 34, Loveland. There are five unpermitted items that are the subject of this variance request: enclosed hot tub, deck, fountain, patio cover and gazebo.

Mr. Houston gave an overview of the variance request from his point of view. He was using the money he collected from flood insurance and use as a vacation home to help pay for debt from flood repairs. He immediately ceased the vacation home use after receiving a notice from Ms. White to stop the use. He has been renting it for six years and it has good reviews as a vacation home.

Mr. Houston moved into the property 36 years ago and converted the shed into a residence in 2007. He stated that he did not believe the deck needed a permit and that he had received all necessary permits for the other work that was done. Mr. Kee mentioned that the compliance document previously provided to Mr. Houston states that building permits are required for the variance request items among others. Mr. Houston said the subject items were completed between 1991 – 2007. Ms. White stated that all items under consideration in this variance application were built post-1979 (the date County floodplain regulations were first adopted) and that most of the improvements came after the September 2013 flood.



Mr. London gave a brief overview of the project. The modeling performed by Hydrau-Tech is based on CDOT's preliminary hydraulic study from August 2016 (covering Estes Park to the mouth of the Big Thompson Canyon near Loveland) which was modified in 2017 with the Jasper Lake Stream Restoration project (just downstream of the subject site). The hydrology is from the Jacobs 2014 post-flood hydrology study. CDOT has previously stated that the Jasper Lake study will be incorporated into the future Big Thompson Physical Map Revision (PMR).

There was discussion on the modeling analysis. Mr. London showed the cross-sections that were added to the model to better analyze the five elements of this application. There was a question regarding the deck and Mr. London responded that it is elevated and is modeled as such.

Mr. London discussed the two alternatives proposed to achieve a no-rise condition based on modeling conditions used.

Proposed alternative one assumes the floodway coincides with the floodplain boundary (no encroachment). The proposal to achieve a no-rise condition under this assumption is to remove 120 cubic yards of material from driveway south of home. The length of the material removal is approximately 200 feet.

Proposed alternative two involves a new floodway delineation to create a 0.5-foot surcharge. The proposal to achieve a no-rise condition for this alternative involves removal of 430 cubic yards of material from the area south of home for a length of approximately 225 feet, with an approximate one-foot depth. The gazebo and grill would be moved to the south of the home.

Mr. Traff mentioned that the new floodway delineation was performed to analyze and mitigate impacts within the future floodway as based on the Jasper Lake model.

Ms. Ervin-Blankenheim asked about the possibility of debris from the subject items. Dr. Thornton said the velocity would dissipate in the area of the subject items and the fountain stones would be like boulders during a flood.

There was a discussion on a flood load analysis requirement for building permits on each subject item.

**Motion:**

Mr. Hunt motioned to recommend approval of the variance for the alternative one mitigation proposal to the County Engineer with the conditions that a structural analysis be submitted to floodplain staff showing the flood load analysis for the deck columns, gazebo, hot tub and covered patio; and a floodplain development permit is submitted for all improvements subject to this variance approval. Mr. Carlson seconded. Motion passes 6-1.

**Item #2: Letter of Map Amendment for Dry Gulch**



Ms. Kurtz introduced the project. This is a petition filed on behalf of Yakutat Land Corporation to review a map amendment proposal to revise the Best Available Floodplain Zone AE (Floodway) and Zone AE (Flood Fringe) Floodplain Overlay District along Dry Gulch.

This proposal is to revise the Colorado Hazard Mapping Program (CHAMP) preliminary floodplain map, currently in the Preliminary Flood Insurance Rate Map process. The map amendment proposal stems from construction of a box culvert crossing of Dry Gulch for access to the Estes Mountain Coaster (now known as the Mustang Mountain Coaster). This portion of Dry Gulch is not within the effective floodplain but is within the CHAMP floodplain. The culvert construction project was heard before the Board on 10/3/2018 and 10/28/2018, who made a recommendation for approval to the Board of County Commissioners (BCC). The BCC approved the project on 12/10/18. The floodplain development permit for construction of the culvert was issued on July 2, 2020.

Mr. Roberts gave an introduction. He said that the project was built per plan and the base flood elevation rises were similar to the proposed plan. The rises are contained within the channel on the subject property and there are no adverse impacts on other properties or insurable structures.

**Motion:**

Dr. Thornton made a motion to recommend approval of the Letter of Map Amendment proposal as submitted to the County Engineer. Seconded by Ms. Ervin-Blankenheim. Motion passed 7-0.

**Item #3: Approval of August 26, 2021, Board meeting minutes**

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**Motion:**

Mr. Morris made a motion to approve the August 26, 2021, Board meeting minutes. Ms. Ervin-Blankenheim seconded. Motion passed 4-0. Mr. Koch, Mr. Oberlander and Mr. Carlson abstained.

Meeting adjourned at 11:05 a.m., MDT.