MEETING MINUTES

Date:	October 27, 2023
RE:	Brantner Gulch MDP Alternatives Discussion
Project #	018-2897

ANTICIPATED ATTENDEES

Attendance	Name	Company	E-mail
x	Andy Stewart	Mile High Flood District (MHFD)	astewart@mhfd.org
x	Hung-Teng Ho	MHFD	rnelson@adcogov.org
x	Amy Gabor	Olsson	agabor@olsson.com
x	Hannah Pring	Olsson	hpring@olsson.com

The meeting was held to discuss the changes to the FHAD submittal of the study. This summary is intended to reflect the key points raised, issues for further consideration, and action items resulting from the discussions. The non-bold items comprised the meeting agenda. The items in bold resulted from the discussions.

FHAD CHANGES

1. Ohio Lake
    a. Thornton would like to modify the outlet box to eliminate the 100-year spill. This is recommended since the Ohio Lake spill path has structures in the floodplain
        i. **Follow up with Rachelle and see if she is going to be moving these improvements along in Jim's absence and if there is an estimated timeline.**
    b. Updates needed:
        i. Hydrology
        ii. HEC-RAS model
        iii. 100-year and 500-year floodplains until peak flows catch up (minor differences in flows)
            1. **If spill is reduced to just 500-year, a profile is not needed.**
            2. **Could do mapping based on 2D analysis, if needed, or maintain the 1D approach in this area.**
            3. **Remove East Lake No. 2 spill profile from the FHAD submittal, since it is for the 500-year only.**
        iv. Narrative
        v. All tables and outside calcs related to changed flows
        vi. Map and profile
    c. Information needed – as-built measurements upon completion

2. Ohio Lake outlet pipe
    a. Channel has been removed and replaced with pipe - active construction. Modify this part of the model to reflect the as-built condition
    b. Updates needed
        i. HEC-RAS model
        ii. Alignment/XS stationing, maps, profiles, station references, etc.
        iii. Remove cross sections and floodplain in this reach
        iv. Narrative
        v. Outside calculations
            1. Use their StormCAD model to estimate 500-year capacity before system is surcharged and compare to overtopping elevation in Ohio Lake? Based on flows, seems likely to be a similar flow in Ohio Lake spill and shouldn't modify floodplain much.
                a. **Need to make sure how much of the 500-year goes into the pipe and check to see if it bubbles out anywhere.**
        vi. Information needed – as-builts. Can modify StormCAD network as needed to incorporate any minor changes.

3. **Hung-Teng said the design information can be incorporated into the model, then verified with the As-Builts. Design information can be used for the pipe change, but it would be beneficial to wait until the Ohio Lake modifications are completed so that hydrology only needs to be updated once in case it's slightly different than design.**

4. **Hung-Teng's schedule is changing. Would Brantner Gulch FHAD take priority over Van Bibber Creek FHAD? From Olsson's perspective, Brantner would take priority, but can be verified with Dan Hill about his needs for Van Bibber Creek.**

ACTION ITEMS

Olsson:

1. **Ask Thornton for contact at the development that would provide the digital design information and model.**
2. **Ask Thornton about status of Ohio Lake modifications.**
3. **Incorporate information upon receipt to hydrology and hydraulics.**

Please contact Olsson at 303-237-2072 with changes or questions regarding these meeting minutes. These minutes will be considered final unless comments are received within seven days of distribution. Although comments will be incorporated, as appropriate, only major revisions will be redistributed.

Minutes prepared by: Hannah Pring
cc: Attendees, File