



MEMORANDUM

CONSULTING ENGINEERS

To: Tucker Weight, Weber County Planning

From: Matthew Hartvigsen, P.E. *Matthew E. Hartvigsen*
Consulting Engineer for the Uintah Highlands Improvement District

CC: Blaine Brough, Uintah Highlands Improvement District

Date: January 5, 2021

Subject: **Highlands Bluff Estates Construction Plan Review – Water and Sewer Service**

We have reviewed the preliminary drawing for Highlands Bluff Estates dated 10-14-2020 from Ensign Engineering. The plans show a cul-de-sac coming off 2225 East and heading easterly for about 500 feet. Culinary water service to the cul-de-sac is shown by a new eight inch main connecting to the existing six inch main on 2225 East. The proposed eight inch sewer main also connects at 2225 East and follows the cul-de-sac. The development would add twelve new residential connections to the District's water and sewer systems. We have the following comments on the water and sewer utilities.

The District's water model indicates that there may be an available fire flow of 1,900 gallons per minute with a residual pressure of 20 psi. The maximum structure size may need to be limited based on this available fire flow as approved by the fire marshal. If additional fire flow is needed then the proposed water main may need to be looped to 2375 East. The location of the fire hydrant should also be coordinated with the fire marshal.

There is an existing sewer main at the back of the proposed lots 1-4. This sewer main should be relocated to a public right of way. At a minimum a utility easement should extend ten feet on either side of the existing main line.

There is an existing sewer manhole at the back of lot 4. The proposed development would block access to the manhole. Relocating the sewer main to a public right-of-way would help solve this problem. If the sewer main is not relocated then a right-of-way will be needed through the lot(s) to provide access to the existing manhole for cleaning by a vactor truck.

We request that the plans be updated and resubmitted for review by the District prior to approval being granted to the applicant. Please contact our office or the Uintah Highlands Improvement District if you have any questions.