

July 22, 2019

Mr. Derek Teini  
Planning Division  
City of Laramie  
P.O. Box C  
Laramie, WY 82073

RE: Z Homes and Properties Subdivision Site Specific Investigation Response to Public Comments

Dear Mr. Teini:

Z Homes and Properties (Z Homes) plans to develop its property located at the northeast corner of Bobolink Lane and Vista Drive in Laramie, Wyoming. This property is located in the northwest quarter of the southwest quarter of Section 1, Township 15 North, Range 73 West. This property lies within the boundaries of the Casper Aquifer Protection Overlay Zone (APO Zone) described in the *Casper Aquifer Protection Plan* (CAPP), which was approved by the City of Laramie (City) on June 3, 2008.

A site-specific investigation (SSI) report was submitted to the City on March 7, 2019 that pertains to the proposed subdivision and addresses the requirements of Section 15.08.040.A of the Laramie Unified Development Code (UDC). The City's independent review performed by Engineering Associates (EA) dated April 30, 2019, provides comments regarding the SSI report. A response letter to the SSI review comments was submitted by Trihydro on May 21, 2019.

The project was presented to the Planning Commission on June 24, 2019 and City Council on July 16, 2019. During the meetings, Mr. Chris Moody of Wyoming Groundwater commented that the SSI and associated review from EA did not address data presented in the Laramie Monitor Well Project – Phase II Report (Hinckley 2015) indicating the presence of a fault zone associated with the Sherman Hills fault. This letter provides response to Mr. Moody's comments.

Geophysical data gathered by the Wyoming Center for Environmental Hydrology and Geophysics (WyCEHG) are presented in the Laramie Monitor Well Project - Phase I Interim Technical Memorandum (Hinckley 2014). The data were gathered during a 2014 geophysical investigation near Imperial Heights park. The data are interpreted to indicate the presence of a fault zone on the south side of the mapped location of the Sherman Hills fault. The figures presented in the interim memorandum indicate that the fault zone may be up to approximately 325 feet (100 meters) wide, though no further discussion is provided in the memorandum.

Most faults similar to the Sherman Hills fault occur as a fault zone rather than as a single plane. However, the width of the fault zone may vary along the length of the fault. The 2014 WyCEHG interpretation of the fault zone is a discrete segment of a linear feature and could be applied to other



Mr. Derek Teini  
July 22, 2019  
Page 2

segments of the fault, though with less certainty. If the fault zone is assumed to be approximately 325 feet wide at the proposed Z Homes subdivision, the fault zone and associated 100-ft setback would overlay almost the entire property. This interpretation would mean the property could only be developed as developments exempted from the provisions of the CAPP, such as single-family houses. The proposed Z Homes duplexes fall under the single-family category. However, the northeast portion of the property was designated for future development by Z Homes, possibly as multi-family units. This multi-family development would be prohibited if the 325 feet fault zone is extrapolated to extend as far south as the interpretation indicates at Imperial Heights Park.

Please add this letter to the documentation file for this project. If you have questions or need further information, please call me at (307) 745-7474.

Sincerely,  
Trihydro Corporation

Ryan Athey, P.G.  
Project Manager

63P-001-001

