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Natalie Noyes
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Subject: Heritage House Bridge Removal

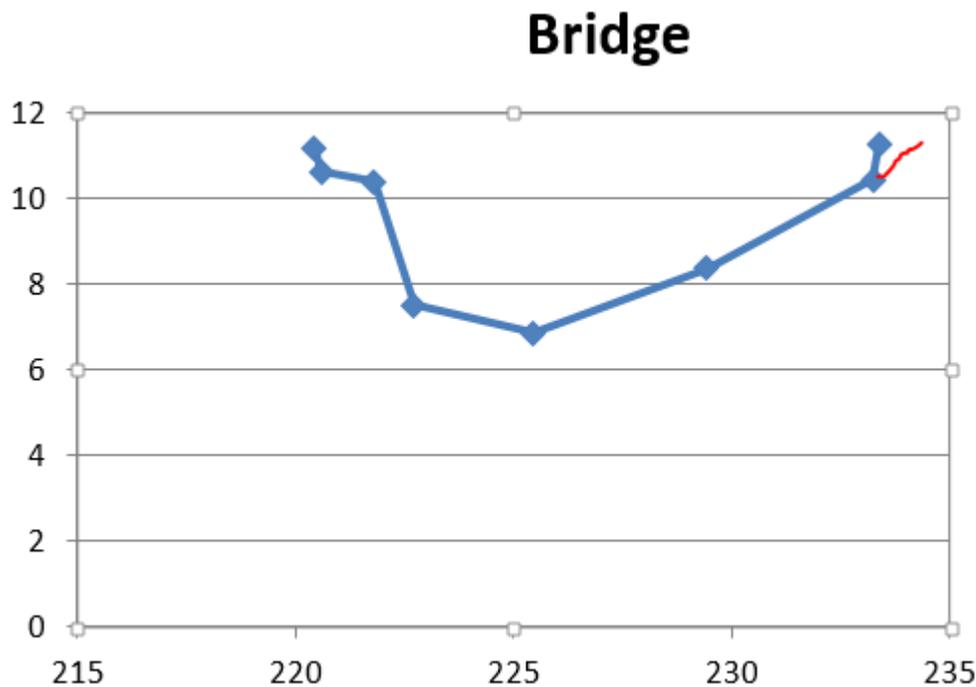
Dear Ms. Noyes:

This letter is in follow up to the CEQA analysis performed for the Heritage House project with partial removal of Zerba Bridge. The detailed analysis assumed removal of the bridge deck and piers only, while leaving the abutments in place. In general, removal of the bridge deck and piers resulted in lowering upstream water surface elevations and slightly increasing downstream water surface elevations. Downstream water surfaces were increased by less than 0.1 feet when considered in tandem with the onsite placement of fill and new building construction.

Since that time the City has considered the removal of the western abutment, while leaving the eastern abutment in place. The western abutment is located on the right when looking downstream as identified in the following photographs.



In the hydraulic model the bridge is input as the cross section shown in the image below. The western abutment is depicted as the vertical line on the right edge of channel. If removal of the bridge abutment were to be modeled, that line would be extended as shown in red, thereby allowing slightly greater flow conveyance through the one cross section. Without re-running the model precise changes in upstream and downstream water surface elevations cannot be determined; however, this action will generally lower upstream water surface elevation and slightly elevate downstream water surface elevations. Downstream impacts may increase above 0.1 feet, but the project would still meet the CEQA threshold of significance as identified in the previous detailed analysis. The Big Ranch Specific Plan identifies a 0.05 foot impact threshold for upstream impacts, but as the removal of the western abutment would continue to lower upstream water surface elevations the analysis's conclusion would not change.



Sincerely,
Schaaf & Wheeler

Caitlin Gilmore, PE, QSD/QSP, CPSWQ
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