

TECHNICAL MEMORANDUM



To: Tim Resseguie, YN

From: Dan Miller, P.E. ¹

Date: May 29, 2025

Project: Toppenish 3Way Phase 2 Construction

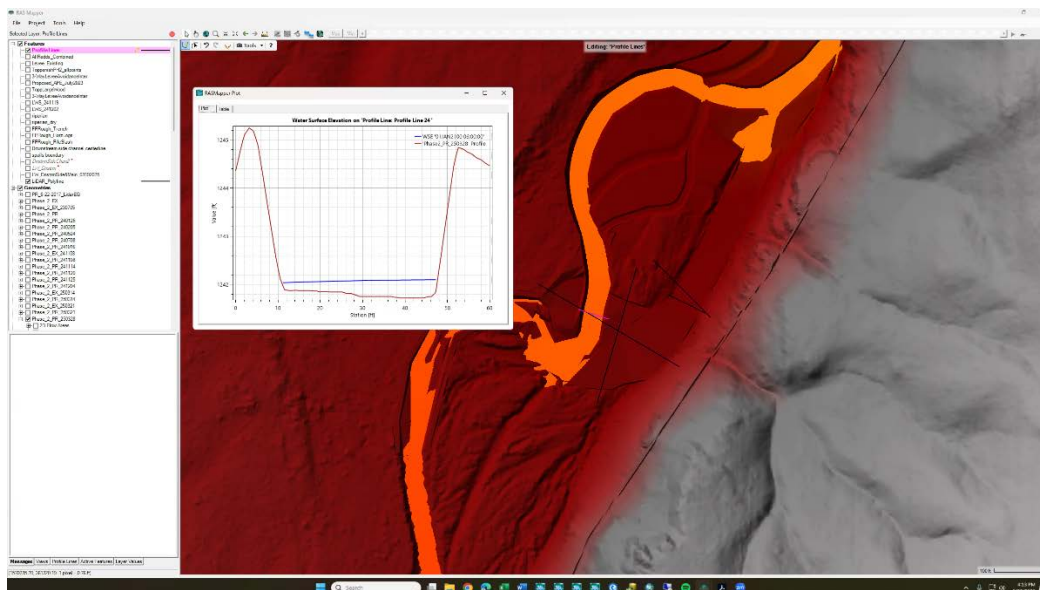
Re: RFI-1: Temporary bridge span

Contractor question: Can 35-ft clear span bridge be used for temporary stream crossings?

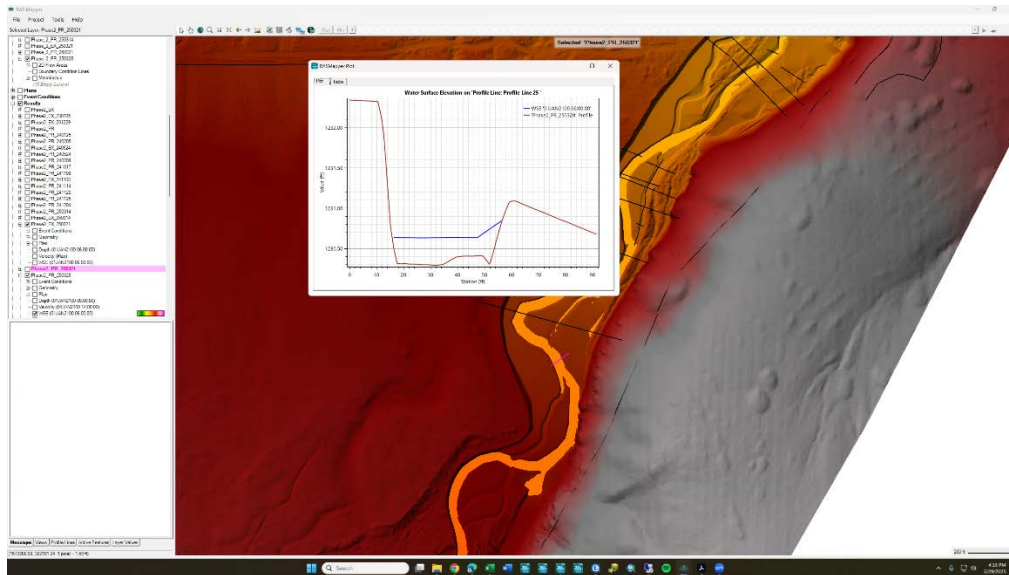
Answer: In review of hydraulic model, 35-ft clear span bridge placed on ecology block-sized abutment with vertical stream-side face will work as a temporary crossing structure for anticipated flows during construction of 15 cfs

Supporting information: Flows during construction are anticipated to be 15 cfs based on USGS gage records. Snap shots of cross sections at each crossing for proposed conditions with model results for water surface elevation are shown below.

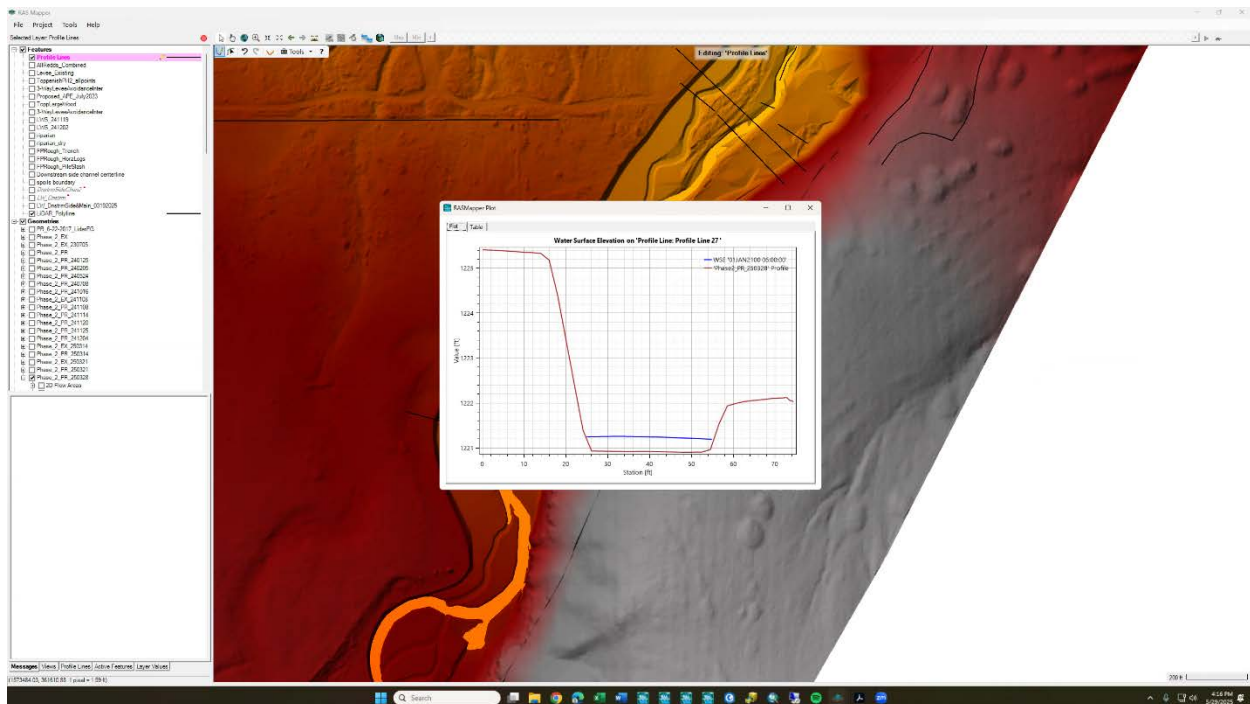
Sheet 11, Station 84+70 – Maximum flow depth is 0.4-ft. Width of flow is approximately 36-ft with river-left stream bed rising for shallower flow depth. Encroaching the width to 35-ft is anticipated to have minimal impact on water surface elevation.



Sheet 12, Station 72+40 – Maximum flow depth is 0.3-ft. Width of flow is approximately 38-ft. Encroaching the width to 35-ft is anticipated to have minimal impact on water surface elevation.



Sheet 12, Station 62+25 – Maximum flow depth is 0.35-ft. Width of flow is approximately 32-ft. The temporary bridge abutments are anticipated to be clear of flowing water.



Sheet 13, Station 49+60 Maximum flow depth is 0.6-ft. Width of flow is approximately 28-ft. The temporary bridge abutments are anticipated to be clear of flowing water.

