



Bucks Bar Road Bridge Replacement

March 25, 2014

**(Continuation of Item 25
from February 4, 2014)**

**Recommended
Alignment for Bridge
Replacement**





Bucks Bar Road Bridge Replacement

At Last Meeting (February 4, 2014):

•Board directed staff to:

- Keep the existing bridge open during construction**
- Confirm funding of alternatives**
- Consider design exceptions**
- Explore reducing the impact to property owners**



Bucks Bar Road Bridge Replacement

Funding & Design Exception Approval Procedures:

- **The Bucks Bar Bridge replacement project is a local project off the State Highway System**
- **Federal Highway Administration and Caltrans delegate design exception approval to the local agency Public Works Director, or equivalent person with approval authority**
- **The local approving authority must be a California Licensed Civil Engineer**
- **A design exception for stopping sight distance would be required for a 30 or 35 mph alignment**
- **The recommended 40 mph alignment requires no design exceptions**



Bucks Bar Road Bridge Replacement

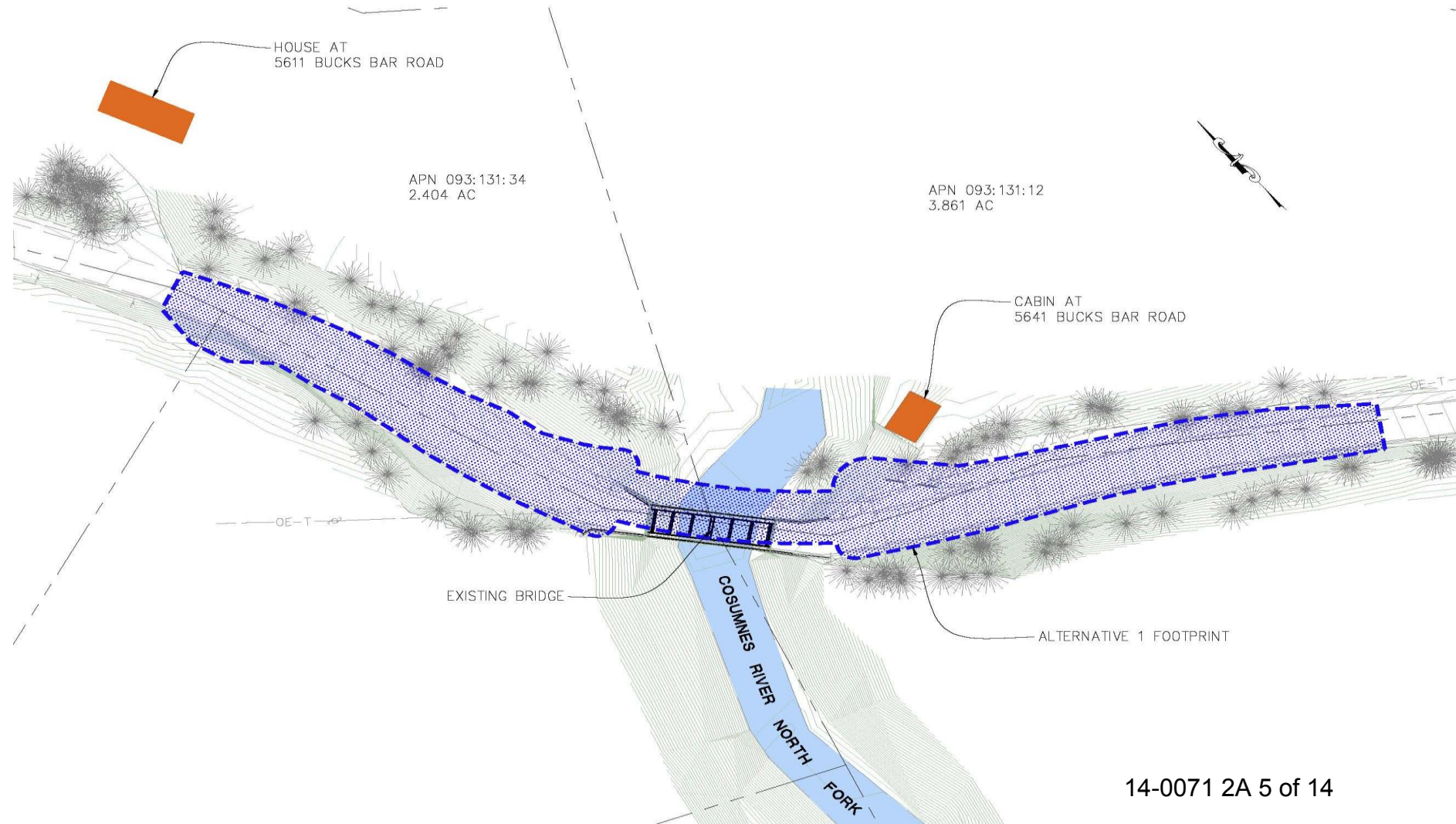
Recap of Public Outreach:

- The Transportation Division held a public meeting in 2010 to present a Feasibility Study recommending replacement of the bridge.**
- Staff met with Fair Play Winery Association, County Agricultural Commission and County Planning Commission in 2011.**
- Staff have since evaluated 3 replacement alternatives and concluded a 40 mph alignment as the safest, and most cost-efficient option.**
- A follow-up public meeting was held in 2014 to present the Division's recommendation. Staff met with the affected property owners and discussed the impacts resulting from the modified alignment. All attendees were notified of the February 4, 2014 Board meeting.**



Bucks Bar Road Bridge Replacement

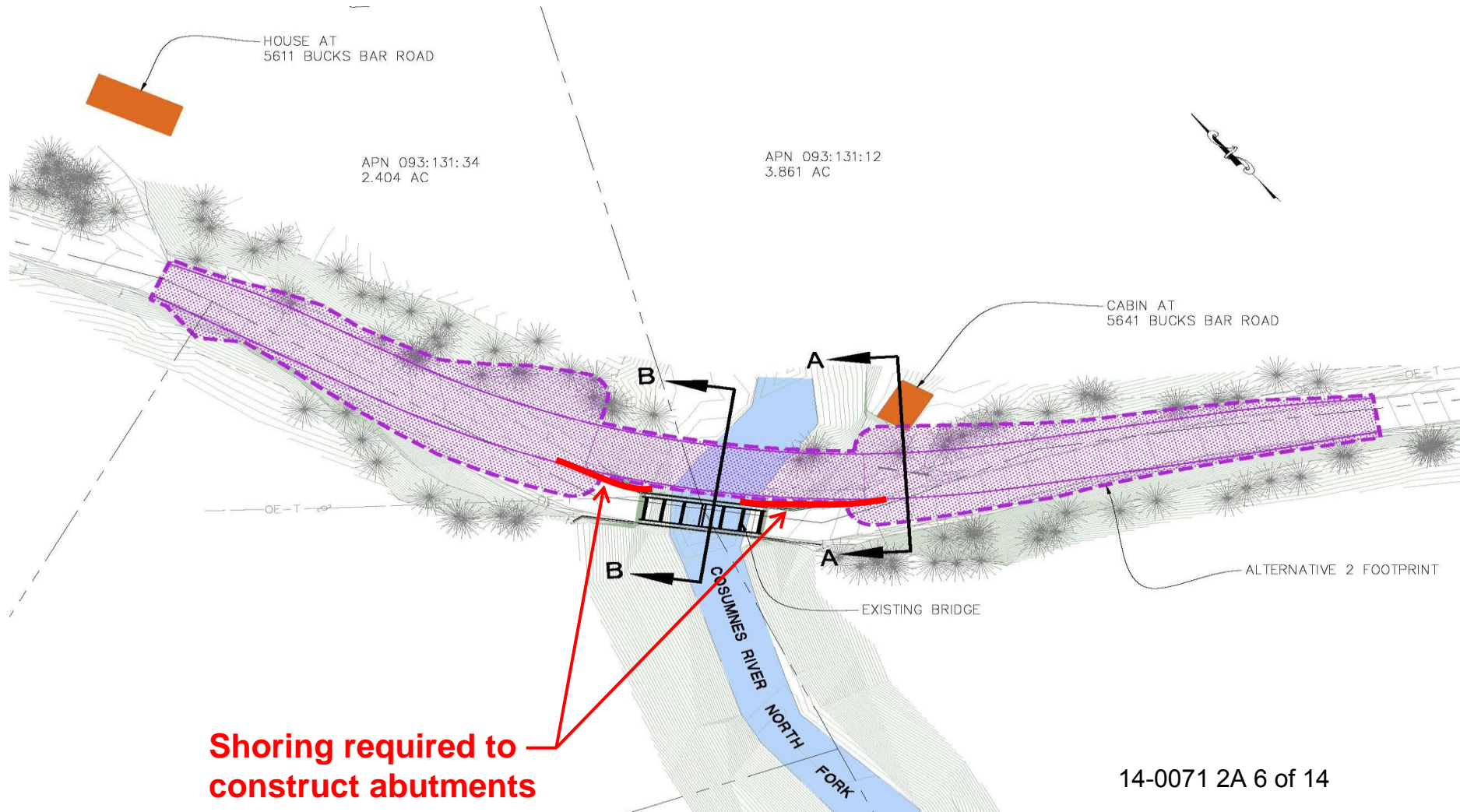
Alternative 1: 30 mph Design Speed Project Footprint





Bucks Bar Road Bridge Replacement

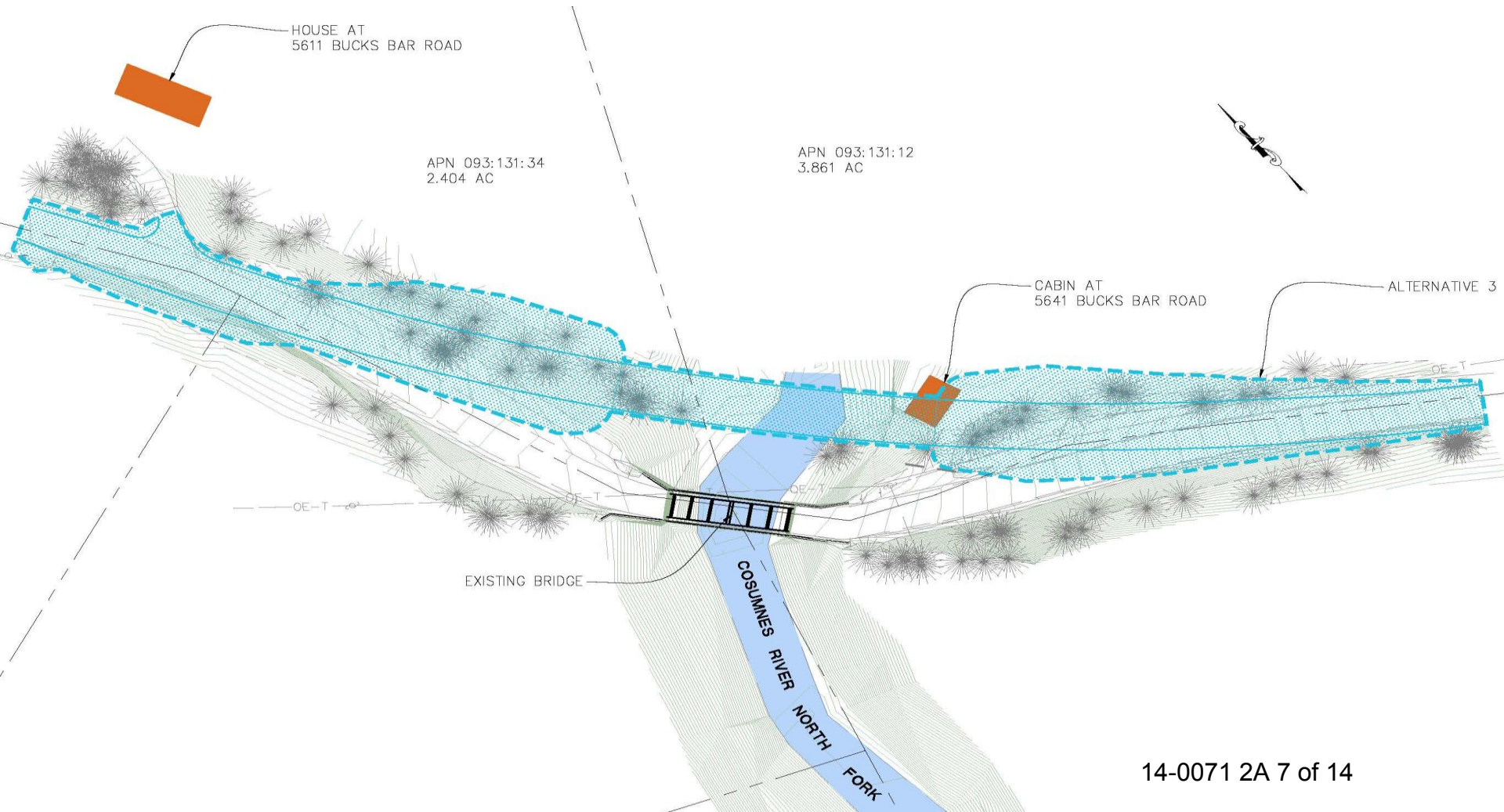
Alternative 2: 35 mph Design Speed Project Footprint





Bucks Bar Road Bridge Replacement

Alternative 3: 40 mph Design Speed Project Footprint

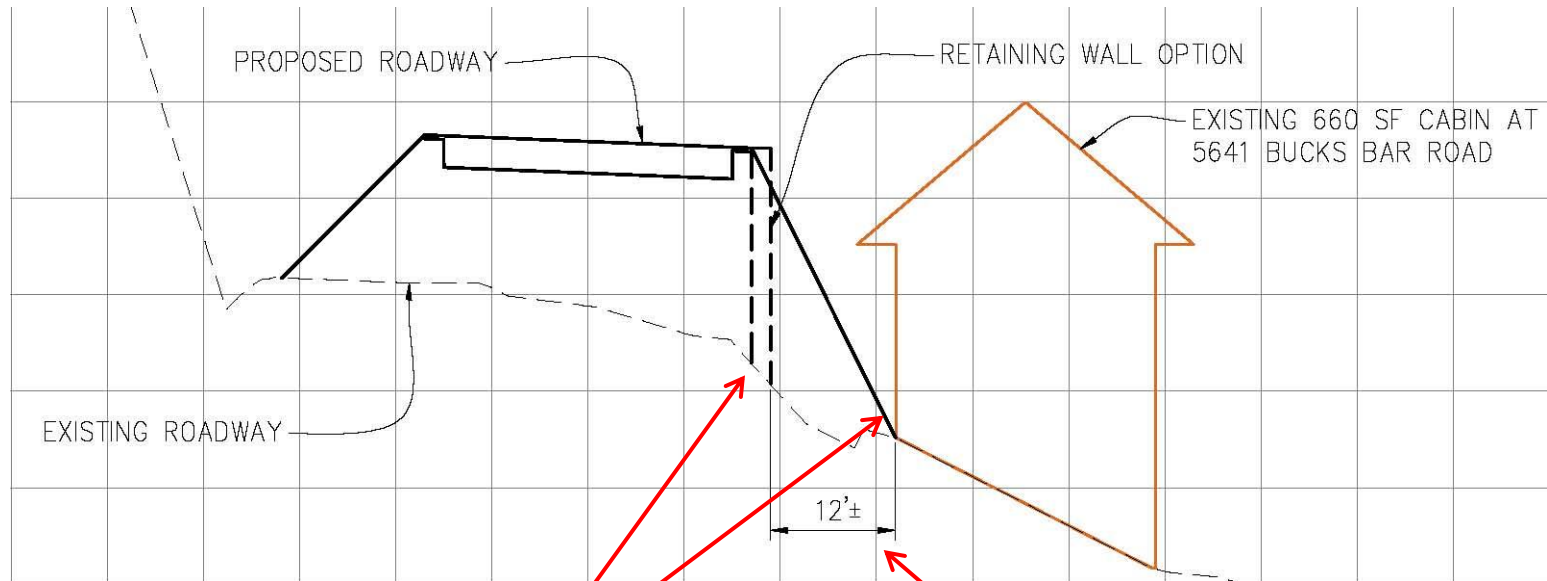




Bucks Bar Road Bridge Replacement

Alternative 2 (35 mph) Implications:

SECTION A-A



Retaining wall is required for cabin to remain

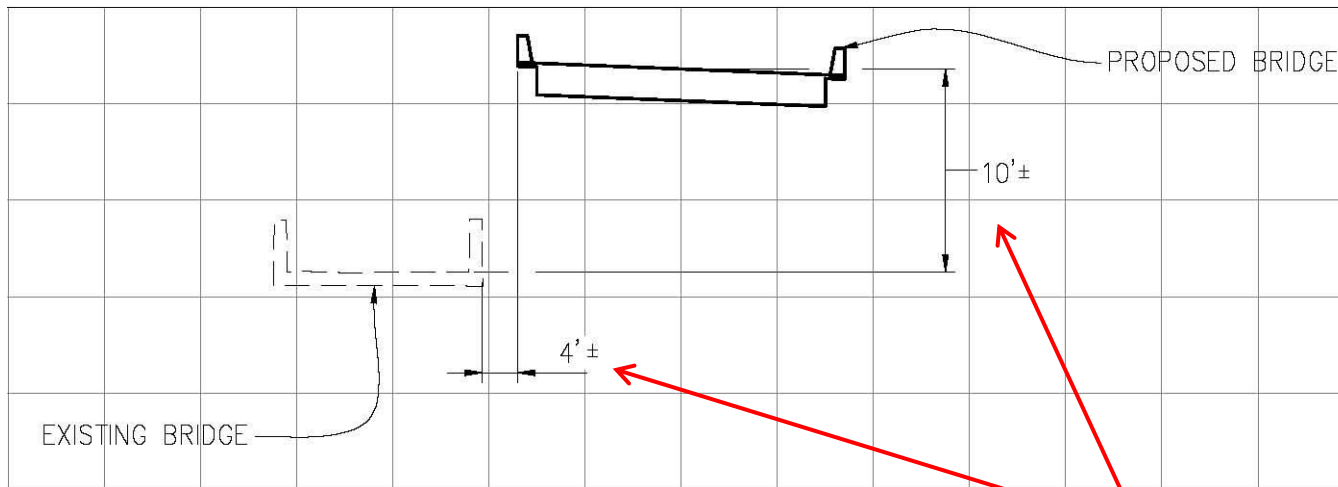
Edge of roadway will exist within close proximity to cabin



Bucks Bar Road Bridge Replacement

Alternative 2 (35 mph) Implications:

SECTION B-B



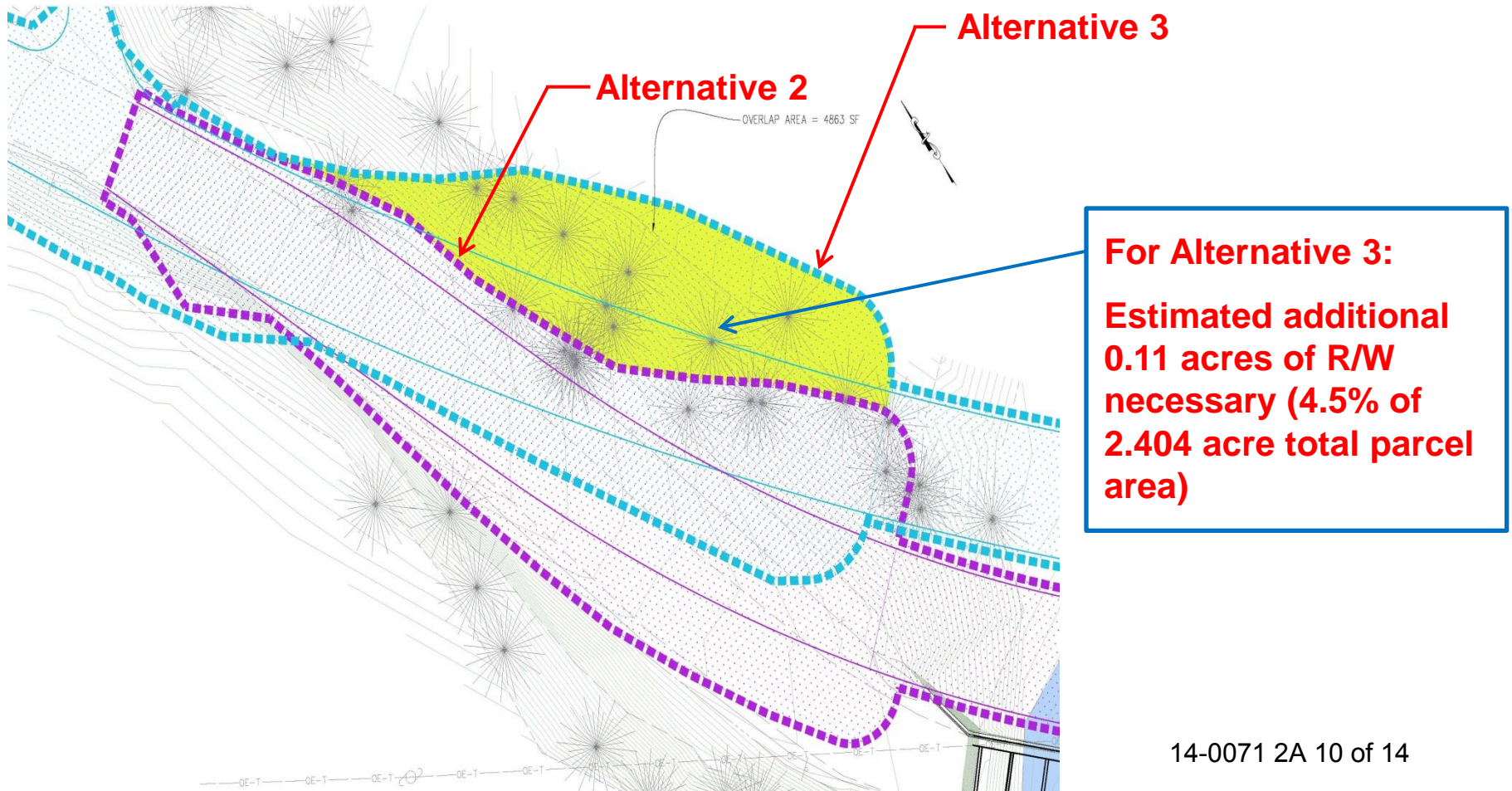
Staged construction* will be necessary due to limited clearance between existing and new bridge

***Staged construction considered problematic and possibly not feasible due to shoring necessary at abutments**



Bucks Bar Road Bridge Replacement

Alternative 2 (35 mph) vs. Alternative 3 (40 mph) Impact at North Property:





Bucks Bar Road Bridge Replacement

Cost Comparison Summary:

Alternative 1 (30 mph): \$2.2M (bridge) + \$1.8M (detour) = \$4M

Alternative 2 (35 mph): \$2.3M (bridge) + \$700k (staging) = \$3M

Alternative 3 (40 mph): \$2.5M (bridge) + \$200k (add'l R/W) = \$2.7M



Bucks Bar Road Bridge Replacement

Alignment Comparison:

Alternative No.	Design Speed	Net Cost	Estimated Impacted Area to Private Property	Meets Standards?	Other Considerations
1	30	\$4 million	0.34 acres	No	Long-Term Road Closure
2	35	\$3 million	0.47 acres	No	Difficult Staged Construction; Cabin Impacted
3	40	\$2.7 million	0.71 acres	Yes	Cabin Loss



Bucks Bar Road Bridge Replacement

Conclusions:

- **Alternative 1 (30 mph alignment) requires road closure and long-term detour.**
- **Alternative 2 (35 mph alignment) requires stage construction and would still result in significant impact to the cabin property.**
- **Alternative 3 (40 mph alignment) affects private property most but minimizes public traffic disruption and avoids long-term detour.**

**Recommendation:
Alternative 3 (40 mph alignment)**



Bucks Bar Road Bridge Replacement

Questions?

