

TOWN OF ORFORD

Board of Selectmen

Meeting Minutes

Archertown Road/Jacobs Brook bridge

May 4, 2022

MEMBERS PRESENT: John Adams, Chase Kling

OTHERS PRESENT: Robert Durfee (DuBois & King), Terry Straight, Bob Palifka

Call meeting to order

8:00 AM

Visual inspection of bridge: wing walls, underneath steel condition, erosion near the NW wing wall, railing condition.

Northwest wing wall concrete is showing significant horizontal cracking and displacement of upper and lower portions. The reason for the displacement is thought to be the moisture accumulation behind the wall freezing and expanding during the winter months. It is likely this will continue next winter during freeze-thaw cycles as water drains from up-hill road surfaces to a low spot just prior to the bridge (NW corner) and then into an erosion channel behind the wall. This erosion channel has been filled with crushed stone to slow the water flow.

To minimize the impact of traffic on that weakened corner the driving surface of the bridge has been restricted to 11 ft, offset to the south side away from the stressed area. To reduce added impact the weight limit has been reduced to 3 tons and stop signs have been placed on the approaches to the bridge to reduce speed and vibrations.

At this time, Bob Durfee does not recommend closing the bridge.

This bridge is scheduled for rebuilding during the 2023 construction season. Currently, it is not feasible to accelerate that schedule to complete the bridge rebuilding this construction year.

Temporary stabilization was considered: reinforce the NW wing wall but because of the bank and ledge structure in that area this would be a major expensive undertaking for a short-term fix.

Temporary solution: overtop the existing bridge with a temporary bridge such as a "Bailey" bridge that would need to be about 100 ft long. This may be able to be rented and should be in place before the winter season. It would remain in place until construction starts on the rebuild of the permanent bridge.

This could be a safe and economical solution. Chase and Terry to investigate renting such a bridge. Depending on availability of the "Bailey" bridge, more temporary barriers may be added to the existing bridge. Funding sources for the temporary bridge and barriers will be reviewed.

Some signage has been installed but additional signage will be obtained for weight limit and narrow road ahead notices on approaches from Hwy 10 along Archertown Road and on Town Shed Road just prior to the bridge. Terry to obtain.

Meeting adjourned at 9:25 AM

Respectfully submitted by John Adams