

Subject: Oceana County Road Commission Update

Longbridge Rd Closure May 10, 2019

On Monday April 29 water began encroaching on the paved shoulder on Longbridge Rd between the bridge and US 31 BR (Monroe Rd).

On Tuesday April 30 we (the Oceana County Road Commission) posted 5 ton weight limit signs on this section of road.

On Wednesday May 1, we closed the road and placed type three (3) barricades with road closed signs and barrels at Longbridge Rd to close off the section of road between Monroe Rd and Wayne Rd.

Water was encroaching on the paved shoulder, and the Lake Michigan lake level is 2 feet up over avg, and is the highest level since 1998. The Marsh and Pentwater Lake level are up also so the road bed is saturated. We closed the road for public safety and also to prevent the road from being destroyed while the road bed is saturated with water and the pavement is fragile and has no stability. Our bridge engineer looked at the bridge and road Monday May 6. Our crews had taken elevations earlier that morning which showed the center of road is only 6 inches higher than Pentwater Lake. So water is only 3" below the pavement in the center of the road, and right up to the pavement on the shoulder. One of our foremen and I probed the shoulder and hit water immediately. Our bridge engineer when asked stated that opening up the road to traffic would destroy road.

In the summer of 2018 the road was rated with MDOT and other pavement experts and was in generally excellent condition. The cold winter, rapid frost melt and rain caused a lot of structural damage over the winter and spring. You can see longitudinal cracks that show this damage. The Marsh is trying to reclaim the road bed as the water level rises, with the road settling 6" on the west side. On the bridge approach there are structural cracks where the road is trying to pull itself apart as it settles. The pavement is only so elastic and can stretch only so much before it cracks and breaks. Last summer we patched the approach to the bridge deck as it has been settling.

Rebuilding the road as is would only mean it would settle and crack again if water levels become high in the future.

Our bridge engineer has reviewed the bridge blueprints that show there is 30' down to bedrock. One method we are looking at is grout injection with boring, and to build the road on grout pilings with a geo tech fabric over it. This would allow a solid foundation, potentially raise the road above high water levels, and would be a permanent fix. The engineer is working on an estimated cost to see if this is a feasible plan.

The reality is that we may have to close the road for two to three months or more. The upside is we may be able to preserve the road until we can plan and fund a permanent fix.

Pentwater Fire Chief Paul Smith stated they placed a rescue unit on the south side of Longbridge and contacted Hart Fire Department to respond to emergencies on the south side. If Pentwater responds to a call on the south side of the lake, Riverton Fire Department will cover structure fires and rescue on the north side of Pentwater Lake until Pentwater Fire Department is able to respond.

We initially put type 3 barricades and barrels, then snow fencing. Unfortunately residents first moved the barricades, then they cut the snow fence, finally they pulled the posts out of the ground that the snow fence was attached to so they could drive through. We installed concrete barricades behind the snow fencing to keep people from continuing to drive through. We are trying to look out for people's best interests. We don't want to have the road closed or any roads closed. We have maintenance and upkeep of closure, and it is work to keep a road closed. But it is in the best interest of the county, the township, and the road commission to keep the road closed at this point. This is the only thing we can do to preserve the road at this point.

On Thursday May 10th water covered the road.

At the time we can safely let traffic across without destroying the road we will. We will keep an eye on the road and if lake levels recede and the road bed dries out we will look at opening the road

back up. Right now though, the forecast doesn't look good, lake levels are predicted to rise and the road may be closed for several months or more. We appreciate your patience and cooperation. Please don't attempt to move the barricades and drive through, as you are endangering yourself and others who may not be aware of the closure.