



The Road Newsletter, Volume 7, Issue 7

July 2017

Concrete Roads Buckle Under Heat



Photo courtesy of Alex Doty, Grand Haven Tribune

High temperatures, like what we had in Ottawa County this June, can cause major problems to the roads. On extremely hot days, it is not uncommon to see concrete roads buckle and break under the pressure of the heat.

Concrete expands and contracts with the change of temperature. In the cold, concrete contracts, and in the heat, it expands. When concrete roads are built, joints are added into the road to account for this expansion and contraction. But even though the expansion is planned for, sometimes the heat is too intense.

This buckling usually occurs at a joint in the concrete, at a crack, or at another weak point. Sometimes moisture can play a role in causing cracks and other weak points in the concrete. Once the temperature gets too high, the concrete can be pushed past the limits that the joint allows and then can “blow up” often causing dangerous damage in the road. This kind of expansion and breaking is usually only a threat on concrete roads, because asphalt has more flexibility to expand than concrete does.

Most of the time concrete buckling requires immediate attention for the safety of those using the road. The Road Commission has dealt with several of these in the past month, and is prepared to deal with more before the summer is over. They typically occur in the heat of the day, when the temperature gets to be 90 degrees or higher, but they can happen randomly. Drivers should always be careful on hot afternoons when concrete is more likely to buckle and break. When this does happen, the broken concrete is cleared out and a temporary patch is put in place as quickly as possible. At the end of the summer, the Road Commission will evaluate the condition of the joints and replace those that need it. Our crews must always remain ready on hot days to keep the roads safe for drivers.

Chip Seal Collaboration with Muskegon County



For the past six years, a collaboration with Muskegon County has allowed the Ottawa County Road Commission to utilize more preventative maintenance to roads, at less cost. As part of this partnership Muskegon County provides the equipment, such as distributors, chip spreader, trucks, and two of the three rollers needed to apply the chip seal. This cooperation has allowed us to seal more roads because of lower cost.

Chip sealing is one of our most effective preventative maintenance

programs. Our chip seal program is a three-step process which consists of first spraying an asphalt emulsion from a distributor immediately followed by a layer of small aggregate, deposited by a chip spreader. Once the stone is placed, it is rolled into the emulsion to get proper embedment. After the stone is embedded we sweep the roadway the next day to remove any of the loose stones. The last phase is the application of fog seal which tightens, or locks in, the top layer of stone and provides resistance to the entrance of moisture.

This method of preventative maintenance is very effective and cost efficient. It can lengthen the life of a road by 5-10 years at 15-20% the cost of a traditional overlay. This allows the Road Commission to preserve the life of the road and better prevent problems in the future.

During the process of chip sealing, traffic is limited on the roads as much as possible to avoid the emulsion spray getting on people's vehicles. When the fog seal is placed on the road, the entire road is usually shut down since the seal takes about thirty minutes to dry.

Chip sealing is an efficient way for the Road Commission to do more work for less funds, while greatly increasing the life and quality of the roads. By utilizing collaborative programs with other counties, like Muskegon, the Road Commission makes effective use of the resources available and can treat even more roads. In the past, we have also collaborated with Montcalm and Kent Counties on similar projects that use funds in the best way possible to maintain the roads.



The Road Commission Participates in “Touch a Truck”



“Touch a Truck” was an event hosted at Loutit District Library in Grand Haven on Monday, June 19. The Road Commission brought one of our trucks for kids participating to see the truck up close as well as help educate them on what the Road Commission does. The Ottawa County Road Commission participated in this event along with the Ottawa County Sheriff, Grand Haven Light and Power, The Coast Guard, and many other public service entities. Keep an eye on our newsletter as well as our social media (see below) to stay updated on where you can see the Road Commission at community events.

Follow Ottawa County Road Commission on Social Media

You can now follow the Ottawa County Road Commission on Facebook and Twitter! The Road Commission is now using social media to communicate more effectively with the residents of Ottawa County. Follow our pages for construction updates, road closures, and other important information about the Road Commission. Find our Facebook page at: www.facebook.com/ottawacorc and on Twitter by searching for the handle: @ottawacorc. We would love to receive your feedback on what you think of our social media, and hopefully it will help us better serve the people of Ottawa County.



Equipment Supervisor Retires



After many years of serving at the Ottawa County Road Commission our Equipment Supervisor, Don Karle, retired in June. We are thankful for his years of hard work at the Road Commission, and wish him all the best in his retirement.

Congratulations to Randy Nagelkirk who is now taking over the position of Equipment Supervisor at the Road Commission.

Important Dates

Tuesday – July 4, 2017 | Office Closed in honor of Independence Day

Thursday – July 6, 2017 | 9AM | Board Meeting

Thursday – July 20, 2017 | 9AM | Board Meeting



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STAY CONNECTED.

SUBSCRIBE:



The Ottawa County Road Commissioners: Tom Bird | Tom Elhart | Betty Gajewski | Tim Grifhorst | Jim Miedema

Managing Director: Brett Laughlin

Who manages the roads and how are they funded? The Ottawa County Road Commission manages the roads--not the Ottawa County Board of Commissioners or County staff. The Ottawa County Road Commission is primarily funded by fuel taxes and vehicle registrations. Concerns about roads should be directed to the Ottawa County Road Commission. Questions? [Contact Us](#)

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