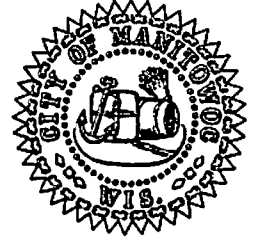




CITY OF MANITOWOC

WISCONSIN, USA

www.manitowoc.org

Date: May 4, 2021

To: Public Infrastructure Committee

From: Greg Minikel, P.E., Engineering Division Manager

Re: Magnolia Ave. Failing Retaining Wall (Item #21-0434)

The existing retaining wall on Magnolia Ave. near the railroad tracks between North 10th and North 18th St. had a major failure and a large segment of the wall collapsed on or about March 28th. The DPI crews cleaned up the area and salvaged many of the retaining wall blocks that were not damaged. They are stockpiled on pallets out at the DPW building for reuse.

The retaining wall was originally built in 2003 (just shy of 18 years ago) when the new Magnolia Ave. was constructed. The City designed the wall at that time and we installed 3 inch draitile behind the wall. We are not positive as to the cause of the failure, but we believe it was a combination of trees planted above the wall, the wall ended up slightly higher in elevation than the backyard, so water was running behind the wall and not over the wall, and it is possible that the draitile plugged up over the years and was not removing the water from behind the wall. We did notice that the wall was leaning a couple years ago.

We received a quote from Vinton Construction on March 31st to replace the entire wall (167 lineal feet) with a brand new poured-in-place concrete retaining wall. The cost proposal was \$119,000.

We also reached out to Highway Landscapers and they provided us with three different proposals on April 14th. Their lowest cost option (Option 1) was to reuse the existing blocks and rebuild the wall in basically the same location, but the top of the wall would be about 8 inches lower than the old wall. The cost proposal for Option 1 is \$67,871.10.

We recommend that the Committee approve the Highway Landscaper's Option 1 proposal at a cost of \$67,871.10. The Committee will also have to refer this issue to the Capital Allocation Work Group (CAWG) to request them to find a way to fund this project. If we delay this project until 2022, we will likely see more failures of the wall and the fence will likely collapse as well, so that the costs could end up being higher if we wait until 2022.

Dir. of Public Infrastructure Daniel J. Koski
CITY HALL • 900 Quay Street • Manitowoc, WI 54220-4543
Phone (920) 686-6910 • Fax (920) 686-6906