

RUSTON DRIVE NORTH SHORELINE PROPOSED ACCESS ALTERATIONS

Special Presentation Microsoft Teams Meeting

March 16, 2022 - 5:00 p.m. - 7:00 p.m.



Picture showing erosion of shoreline in 2016

PRESENTATION OVERVIEW

WHAT IS SHORELINE EROSION AND WHAT CAUSES IT?

WHY ARE WE HERE?

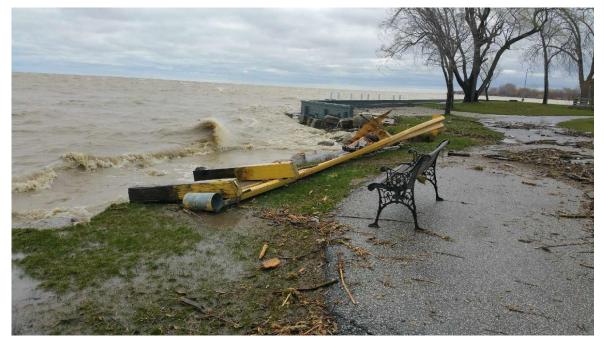
HISTORICAL PICTURES OF SHORELINE

PROPOSED ACCESS ALTERATIONS

BENEFITS OF ALTERATIONS

TIMING AND NEXT STEPS

CLOSING REMARKS AND RESIDENT QUESTIONS



Picture showing further erosion of shoreline in 2016



WHAT IS SHORELINE EROSION AND WHAT CAUSES IT?

Erosion is a natural process which includes the loss or displacement of land, or the long-term removal of sediment and rocks along the shoreline due to the action of waves, currents, tides, wind-driven water, waterborne ice, or other impacts of storms.

Several factors affect the pace of erosion:

- Heavy rainfall can carry topsoil down embankments, slopes and valley walls, causing slope instability or failure;
- Human activity, such as building, digging and removing vegetation; and/or
- Residential and industrial development in vulnerable areas, such as lakefronts, river lots and ravines.



Ruston Drive North Shoreline in 2004

All of the above factors contributed to the erosion along the north shore of Ruston Drive.



WHY ARE WE HERE?

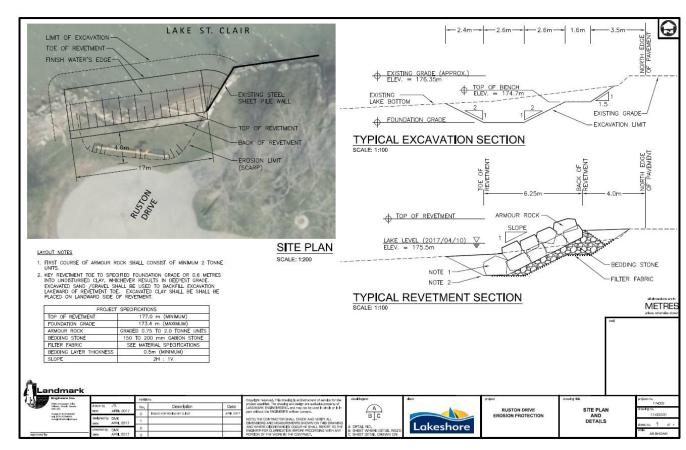
The need for shoreline protection along this stretch was identified based on safety concerns related to the roadway proximity and continued erosion along this unprotected bank.

In 2004 access was available to the water, however over time erosion occurred washing away part of the land area.

Adjacent breakwalls were installed over time, further centralizing the erosion onto unprotected areas.

In 2017, due to the high water levels, and the increased pace of erosion it became apparent that protection was needed at the north end of Ruston Drive.

Work was undertaken in 2017 to protect the shoreline from further erosion.



2017 Ruston Drive Shoreline Protection plan



WHY ARE WE HERE? CON'T

Once the works were underway in 2017, residents concerns were received regarding access to the water along the north side of Ruston Drive and a petition was brought forward to Council on May 23, 2017. This petition was signed by 47 residents.

Although work could not halt for safety reasons and the impact the erosion was causing on the municipal roadway, Administration committed to reviewing options to allow for passive access and egress into the water while continuing to protect the shoreline.

Based on the continued high water levels through the last couple of years and other areas of erosion that needed attention, this work had been delayed.

Council put forward a further Notice of Motion in December 14, 2021.

Early in 2022, this special presentation meeting was scheduled.

Petition to Stop the Closure of Ruscom Beach

We respectfully ask that work be halted at Ruscom Beach. This beach access is not only an attraction for the immediate neighbourhood but others as well who like to launch kayaks, jet skis and snowmobiles. Ice fisherman use it in the winter. This small beautiful beach is used in one way or another on a daily basis, weather permitting. There are many children who will be very disappointed with the closure of this beach.

We have been given no notice of the plans but it appears that it is about to be closed which will prevent any water activities in the future.

For several years this beach has been maintained by the residents. We keep it clean from unnatural debris and cut the grass. This has cost the township nothing in several years. Years ago there were rocks aligned in such a say as to mitigate erosion while still allowing for a small beach. The rocks were taken away and now here we are.

We appreciate that the erosion is being curtailed quickly and the sitting area extended. We do however respectfully request that a public meeting be held to identify the way(s) in which the beach can be preserved while mitigating the erosion. This will allow residents of the municipality to access the lake for swimming, kayaking and watersports. In the interim we request a temporary halt of the erosion measures being undertaken.



HISTORICAL PICTURES OF SHORELINE



In 2008 (and in previous years) shoreline protection was not enhanced in this area.

Access to the water was available, but not maintained by the Municipality.





HISTORICAL PICTURES OF SHORELINE CON'T



Over time, installation of adjacent breakwalls/erosion protection increased the pace of erosion.

In 2017 protection of the shoreline was determined to be required based on the erosion of the land area adjacent to Ruston Drive roadway.





HISTORICAL PICTURES OF SHORELINE CON'T



In 2021 it was further identified that passive access to the water be restored, while still providing protection of the shoreline and roadway.

2021 Aerial View



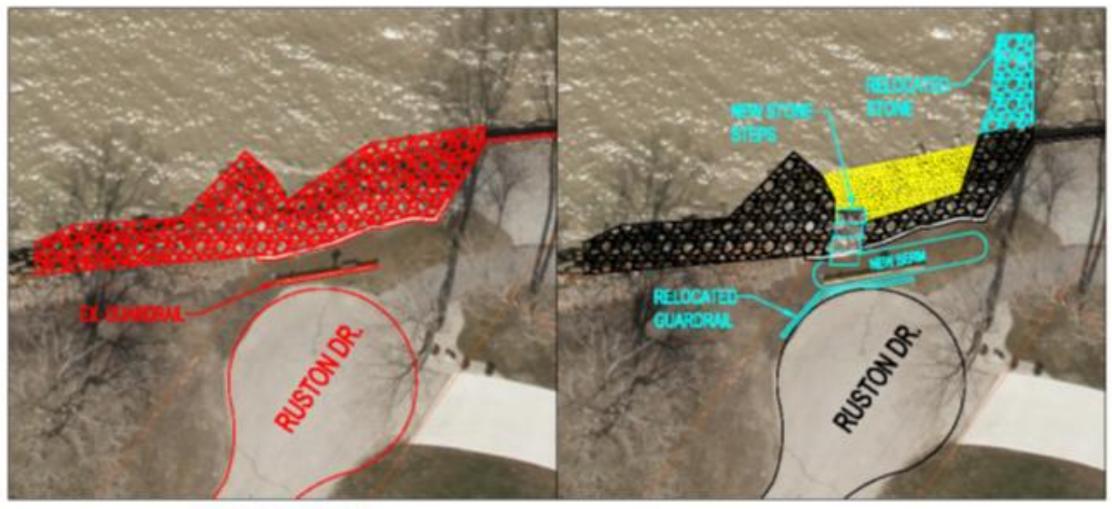


PROPOSED ACCESS ALTERATIONS

A passive access plan was investigated and the following is being proposed:

- Reform the existing rock to protect the access area from easterly winds;
- Install a berm in the grass area at the end of the road to ensure the roadway will still be protected from erosion; and
- Install additional stone slabs to form a flat, wide rock step system to gain access to the lake.

EXISTING CONDITIONS AND NEW CONSTRUCTION



EXISTING CONDITIONS

NEW CONSTRUCTION

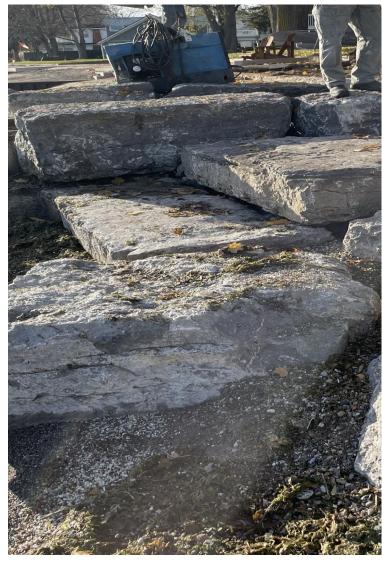


SIMILAR PASSIVE SHORELINE PROTECTION PROJECT(S)



After Shoreline Protection & Access

SIMILAR PASSIVE SHORELINE PROTECTION PROJECT(S) CON'T



Stepped armour stone to allow for access



Stepped armour stone to allow for access





BENEFITS OF ALTERATIONS

- Continue to protect the shoreline from erosion;
- Provides a passive access to the water for the public;
- Maintenance is minimal; and
- Increases public safety for both access and roadway protection.







NEXT STEPS AND TIMING

A report to Council will follow in March/April with an update related to this meeting and a summary of comments received.

The report will also include:

- Proposed access alterations and costs (budget impacts);
- Approvals required and timelines DFO, ERCA;
- Proposed duration and schedule challenges (i.e. fish spawning window); and
- Recommendation for funding.

NOTE: This plan is dependent on budget approval and obtaining the required approvals and permits.

CLOSING REMARKS, QUESTIONS & COMMENTS



