

SHORELINE PROTECTION

1. Attached are preliminary plans for the revetment and slope stabilization of the existing embankment.
2. TAMCOR, LTD. provided my office with preliminary plans. SmithGroup, hired by my office, reviewed the design-year storm analysis and plans prepared by TAMCOR and have determined the analysis and plans to be sound engineering. Final approval of the plans is under the purview of the Wisconsin Department of Natural Resources/US Army Corps of Engineers as they are the regulatory and permitting agencies over waters of the State.
3. The toe of the proposed revetment will be placed well above the Ordinary High-Water Mark (OHWM) of Lake Michigan, meaning there will always be a beach that will exist between the toe of the revetment and the shoreline that is defined by the current lake level. This will always be available for the public to walk the entire 3,000-foot shoreline.
4. The statutory (OHWM) for Lake Michigan and Lake Huron is 579.8 feet (IGLD 1985) for regulatory purposes. This elevation represents a fixed, legal point used to determine state jurisdiction for coastal management and permitting (e.g., seawalls, revetments), rather than a daily average water level.
5. The toe of the revetment will be constructed at various locations along the 3,000' +/- improvement at an elevation that varies between 583 and 585, well above the OHWM.
6. The current lake level for March 2026 from the USACOE is ~577.5. The all-time high is 582.4 (June 1986) and all time low was 576.02 (January 2013). For reference, the recent high in 2020, Lake Michigan reached near-record levels, close to the 1986 mark, causing significant coastal erosion and flooding.
7. The estimated construction cost of the shoreline protection project for the revetment, slope embankment and access road is estimated between \$1.2M and \$1.3M. The engineering and permitting is estimated at \$150K.
8. The revetment is estimated to have a useful service life between 50 and 100 years. This is dependent on wave conditions.

9. The revetment should be inspected by a coastal engineer after any significant wave producing storm that occurs when the current lake level is above 581.0. If there is significant damage, then a coastal engineer should prepare plans, specifications and estimates for any repairs needed. **This responsibility should be identified during the term of the lease.**
10. FEMA provided no funding for repairs of this property after evaluation and applications were made by the City of Racine and SmithGroup. The repairs to the access road off the existing parking lot were estimated at \$85K in 2020 and that is still out of service to present day.

EXISTING BUILDINGS

1. Both buildings, Club House (CLB) and Service Garage (SVG) are included in the City's Facility Condition Assessment (FCA) program.
2. Both buildings have FCI scores well over 0.30. The Facility Condition Index (FCI) score represents the percent or fraction of what the investment needs to be made in the building over the next ten divided by the replacement cost of the building. Anything over 0.30 should be considered for replacement or being razed. The FCI for the CLB = 0.37 and the SVG is 0.42.
3. The estimated useful life of each facility is: CLB = 6.7 years and SVG = 5.3 years.
4. There are several assets associated with each building that are already beyond their useful service life and the replacement cost is as follows:
5. The CLB has a net present value of \$976K (includes parking lot & land): roof = \$72K, parking lot = \$187K, wall siding = \$7K, water heater = \$8K. The CLB assets that are beyond their useful life now total \$274K.
6. The SVG has a net present value of \$109K: roof = \$8K, wall siding = \$17K. The SCG assets that are beyond their useful life now total \$25K.

SUMMARY

The value of the shoreline protection is probably close to \$1.5M. The assets at both buildings that have already reached their useful lives represent an overdue liability of \$300K.

Besides whatever rent is trying to be negotiated for the lease, there is a total of \$1.8M in actual need at this entire property right now. The shoreline protection alone represents a \$25K benefit to the City if amortized over a 60-year lease.

I cannot speak to the annual O&M obligations of the Parks Department for this property, but it appears those costs would disappear as well.