

**REPAIR AND IMPROVEMENT OF OUELLETTE DRAIN WEST OUTLET  
AMHERSTBURG, ONTARIO, CANADA**

Longitudinal Protection

**Problem**

The Town of Amherstburg, located in Southwestern Ontario, Canada, around 30 kilometers southwest of the City of Windsor, sought to address the deteriorated and damaged section of the outlet of the Ouellette Drain West. The existing erosion protection system consisted of stacked limestone near the outlet, and approximately 60 meters of the banks needed repair.

**Solution**

RC Spencer Associates Inc., a reputable engineering firm in the Windsor area, was tasked by the Town of Amherstburg to devise a cost-effective solution for repairing and enhancing the Ouellette Drain West. Given their successful collaboration on past projects, Maccaferri, a trusted engineering solutions provider, was approached for their expertise.

After evaluating the information at hand, Maccaferri proposed constructing side bank gabion walls along the 60-meter stretch of the municipal drain. The use of gabion walls offers numerous benefits in a drainage channel context. Firstly, their inherent flexibility and permeability make them well-suited to withstand water flow and erosion, effectively safeguarding the channel's structure. Secondly, gabion walls are not only cost-effective but also easy to construct, requiring minimal specialized equipment and thereby reducing overall project expenses. Moreover, their modular design allows for swift installation, streamlining the construction process. Additionally, gabion walls utilize natural materials, blending harmoniously with the surrounding environment and supporting ecological balance. Lastly, their impressive load-bearing capacity and durability ensure long-term stability, providing reliable protection against soil erosion and embankment failures. As a result, gabion walls prove to be a sustainable and dependable choice for bolstering the integrity of the drainage channel.

**Client:** TOWN OF AMHERSTBURG

**Designer / Consultant:** RC Spencer Associates Inc.

**Contractor:** Nevan Construction

**Products used (Qty.)**

- Gabions 391 m<sup>3</sup>

**Date of construction:** 10/2021 - 04/2022

[Google Maps](#)

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Gabion wall during construction



Process to fill gabion basket



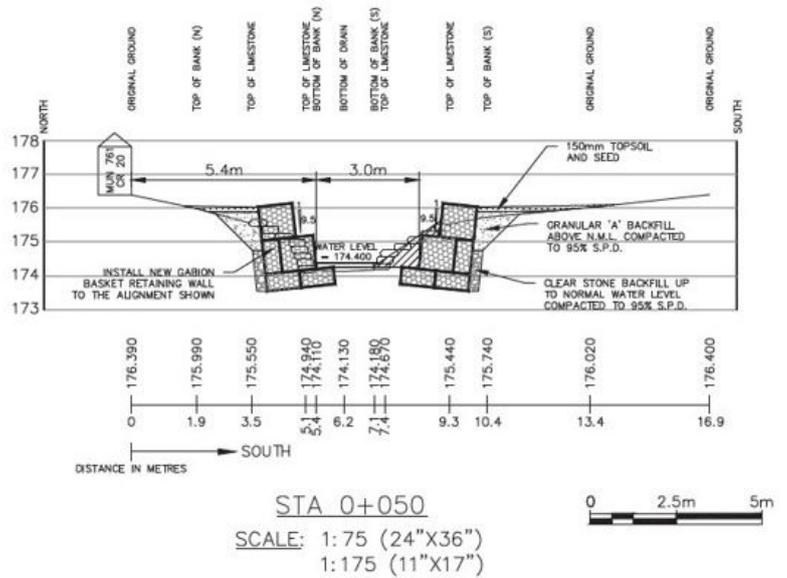
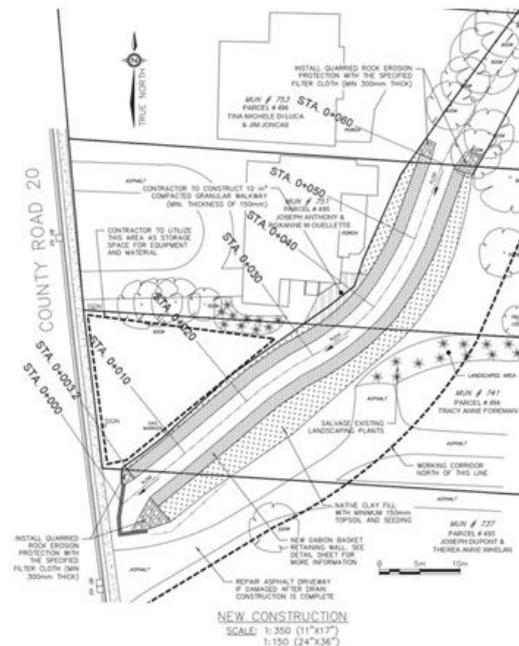
Detail of finished gabion basket



Finished gabion wall, upstream view



Finished gabion wall, downstream view



## Plan view and cross section

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