

BrettYoung™
RECLAMATION, SIMPLIFIED



STABILIZING SLOPES:

The Marquis Wildlife Corridor Project

BRETTYOUNG PROFESSIONAL TURF AND RECLAMATION



Introduction

In October 2022, a new bridge at the Horsehills Creek Crossing in Edmonton, Alberta, was constructed to support growth into the Marquis and Marquis West subdivisions. This development required immediate revegetation and slope stabilization in the surrounding area, which lies within the Marquis Wildlife Corridor. These corridors play a crucial role in promoting biodiversity, enabling wildlife to thrive and adapt to the challenges posed by human activity and climate change.

Installation was completed by Farlinger & Associates Ltd. (F&A) using an Epic 4000-gallon Hydroseeder. A blended slurry of native grass seed and Profile Products LLC's ProMatrix™ Engineered Fiber Matrix™ (EFM) was applied to help stabilize the slope and support vegetation growth.

ProMatrix™ EFM is a biodegradable engineered fiber matrix composed of 100% recycled Thermally Refined™ wood fibers, crimped interlocking biodegradable fibers, and naturally derived biopolymers, designed to provide highly effective erosion control and promote rapid seed germination.



Installation Process

Proper planning is key to the success of any project, beginning with detailed discussions between the consultant, contractor and BrettYoung to define project goals.

ProMatrix™ was selected for its ability to create a flexible, erosion-resistant blanket that promotes rapid germination and plant growth. It’s also favoured by Farlinger & Associates (F&A) for its smooth blending, which reduces clogging—an essential feature for projects requiring extensive hose work. Graham Charles, Foreman at F&A, noted, “The ProMatrix product blends well in the hydroseeder and has given us consistent success in slope stabilization.”

To prepare for hydroseeding, the on-site landscaper spread and contoured topsoil at an average depth of 100 mm (4”) throughout the approximate 18,000 m² site needing to be stabilized, protected and seeded. With limited access and steep slopes, F&A utilized 110 meters (361 feet) of hose to reach the far corners of the wildlife corridor. The application rate for the ProMatrix was determined to be 3920 kg/ha.

“Even with the steep terrain and limited access, the knowledge and expertise of Farlinger and Associates and the dependable performance of ProMatrix made all the difference. The site was stabilized quickly and efficiently—this combination truly delivered,” said Corey Mandrusiak, BrettYoung Reclamation & ESC Specialist. The custom native seed mix, supplied by BrettYoung and applied without any additional soil amendments, included awned wheatgrass, western wheatgrass, slender wheatgrass, and Canada wildrye. This mix was designed to promote rapid establishment and long-term stability, while also providing environmental benefits. These tall grasses not only create valuable forage for wildlife throughout the year, but they also offer excellent cover and habitat for birds, rabbits, deer, and various insects. The seeding rate was 225 kg/ha.

Species	Amount
Awned Wheatgrass	30%
Western Wheatgrass	30%
Slender Wheatgrass	20%
Canada Wildrye	20%



GERMINATION & WILDLIFE EVIDENCE | JUNE 2023

Follow-up Visits

ProMatrix EFM paired with the specified native seed mix, contributed to this project's success. Six months after the installation, grass was germinating, and we didn't find any significant erosion. There was some wildlife damage from deer on one of the steeper slopes, but the grass germinated, established and covered the exposed area before erosion caused any severe damage.



WILDLIFE DAMAGE | JUNE 2023

Results

A final follow-up visit, conducted 12 months after installation, confirmed the site was fully stabilized. After just one full growing season, the native seed mix had taken root successfully, resulting in lush vegetation coverage across the entire area. There were no signs of erosion or other issues. With the vegetation now thriving, the site is well-prepared to remain stable for years to come.

To see the full project in action, including interviews with Farlinger & Associates, visit our YouTube channel at: [youtube.com/brettyoungprofessionalsturf](https://www.youtube.com/brettyoungprofessionalsturf)



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