Highway 63 Erosion Control

*Nilex GeoRidge offers proven energy dissipation and erosion control along a key Alberta highway.*

**LOCATION:**
Fort McMurray, Alberta

**PRODUCTS:**
GeoRidge permeable plastic berm
SC150 & C125 erosion control blankets

**PROJECT PARTNERS:**
Owner
Alberta Transportation

Contractors
Carillion Canada, E Construction, Erscon,
Get Green, Prairie North, North American Construction, Wapiti Gravel

**Completion Date:**
2016

Highway 63 connects Fort McMurray, Alberta’s largest industrial community, to markets across North America. It handles large volumes of widely-varied vehicles and is subject to extreme weather conditions. Alberta Transportation needed a cost-effective and reliable product to help reduce or eliminate damage from water erosion along this important route.

**Challenge**
Fast, easy, cheap and reliable are the buzzwords behind almost every construction project in Alberta; highway improvements are no exception. Beyond those drivers, Alberta Transportation also has to ensure it keeps Highway 63 open around the clock, even during extensive widening operations. Erosion control evaluation and installation has to work around these pressures and has to be installed quickly to reduce traffic impacts. The highway stretches through a number of elevation and soil condition changes throughout its run, and these affect the flow rates of water in ditches and down the slopes adjoining the road.

**Solution**
GeoRidge is an exclusive product Nilex designed to meet the needs our experts encountered on sites across North America. It’s a permeable plastic berm that controls water flow and encourages quick vegetation establishment. It can be part of a long-term or rotating site installation (GeoRidge Standard) or a temporary one, where it slowly biodegrades (GeoRidge Bio). GeoRidge Standard is fabricated using UV-stabilized High Density Polyethylene.
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It’s rugged but lightweight and has minimal impact on laydown space; one full pallet of GeoRidge can cover 250 linear metres once installed. It works well with erosion control blankets (ECBs), and our ability to store and quickly ship the required quantity of blankets also helps reduce on-site storage needs for contractors, giving them more room to work.

Installation

Another benefit of GeoRidge is its direct “flat” install on top of the ECBs, so there’s no need to recess it. All of the blankets for this project were secured with standard RECP staples. GeoRidge Standard was then placed across the project area, in its standard 1-metre lengths, and anchored with six spikes per unit. This makes for speedy and simple installation, allowing crews to cover a lot of territory in one day. Since GeoRidge Standard was chosen for this application, it can be removed and reused on other sites after vegetation takes root.

Results

GeoRidge has been a trusted option for decades, suitable for highways like this with varying soils and elevations. It saved the client time and money, compared to traditional rock check dams, and was easy to install around other ongoing construction in the area.

The Nilex Advantage

Nilex is committed to unearthing better results. Whether it’s for a civil, resource or environmental project, we offer the latest engineered and technically-superior materials and techniques to save our customers time and money, minimize the need to move or remove earth, and reduce the need for granular materials.

With over 38 years of experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

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