

CASE STUDY TRANSCANADA PIPELINE CROSSING

STRUCTURAL SLOPE REINFORCEMENT
CAP DE LA MADELEINE, QC

PROJECT SUMMARY

TransCanada has the largest pipeline infrastructure in Canada. In 2008, TransCanada, now known as TC Energy, successfully ran a large diameter gas pipeline below the St. Maurice River in Cap de la Madeleine, Quebec. After construction, the steep 1:1 slopes that were cleared for access began to experience erosion and stability issues. Sandy soils caused slides and deposited sediments along the river's bank.

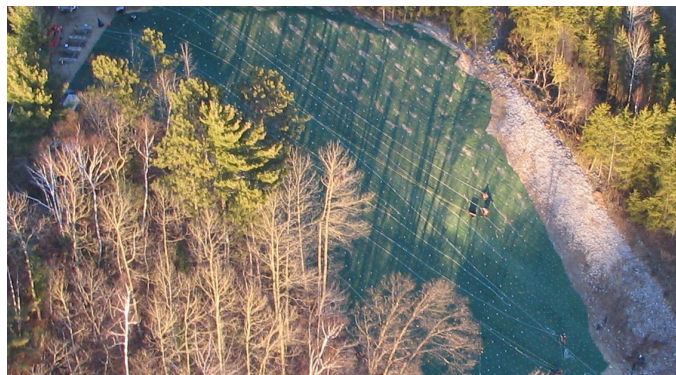
Due to the terrain's extreme slopes and the remote area, access to the site was prohibitive of most slope stabilization solutions. ARMORMAX® was selected because it is light weight, easily transported to remote areas, and is low impact development (LID). Plus, it provides immediate and long-term stabilization. Pipelines workers tethered to the top of the slope and installed the PYRAMAT® 75 High Performance Turf Reinforcement Mat (HPTRM) and B2 Engineered Earth Anchors™ with ease.

After installation, ARMORMAX was live staked with trees and seeded. Twelve years later the trees and vegetation have matured and continue to prevent erosion of sediments into the river with a natural, vegetated solution.



PROBLEM

Sandy soils and clearing for the TransCanada Pipeline caused slope failure along the St. Maurice River



SOLUTION

Due to the terrain's steep slopes and the remote area, most stabilization systems were prohibitive



ARMORMAX®
Engineered Earth Armoring System

PropexGlobal.com/Armormax

FEATURES & BENEFITS

- Provides permanent erosion protection for up to 75 years
- Withstands both hydraulic and non-hydraulic stresses
- Ease of installation reduces time and labor costs
- Reinforces vegetation and promotes a living shoreline
- Outlasts other slope reinforcement methods yielding significant cost savings
- Promotes infiltration of surface water
- Available in green or tan to fit specific project needs
- Lightweight and easily transported into areas with access challenges



PERFORMANCE

ARMORMAX provided immediate erosion control and encourage natural vegetation



10+ YEAR PERFORMANCE

ARMORMAX continues to protect the slope from slides and erosion and native vegetation is flourishing



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Visit our website for more information, Product Samples, or other inquiries, or call Customer Service at 800 624 1273

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