

Parkway Slope



Slope prior to application, June 2014



Installation, July 2016



Full vegetation established, August 2016

Situation

Record rainfall on a slope above a Minnesota parkway caused a massive landslide closing a popular biking, walking, and commuter road. Concerns over the stability of the slope added to the challenging project as a hospital and clinic were located at the top ledge of the slope. The scope of the project also raised environmental concerns and many federal regulations had to be addressed before a solution was implemented. Months of engineering and project solutions were discussed to determine the best plan for the failed slope. Weather and access to the site posed a separate set of challenges. All of these aspects made it critical for the engineers, contractors and Profile Products to work together to provide the most effective solution for this challenging situation.

Challenges

- Steep 1:1 slope
- Slope stabilization
- Environmental impact
- Weather and access to the site

Solution & Application

- Soil test performed to determine the nutrient value at the site
- Starter Fertilizer
- ProGanics® Biotic Soil Media™ at 3,000 lbs./acre
- GreenArmor® System:
 - Futerra® 7020 Turf Reinforcement Mat
 - Flexterra® HP-FGM™ at 3,000 lbs./acre

Results

After topsoil was used to help fill-in the site's new slope, a soil test was performed. Results from the test showed a lack of organic matter in the topsoil. The lack of organic matter made it impossible for the soil to provide the required nutrients to the plant and sustain vegetation. The soil test identified Profile's ProGanics® Biotic Soil Media™ as the prescribed solution. ProGanics not only raised the organic level, it also provided other beneficial constituents to the soil such as biochar, seaweed extract, humic acid and endomycorrhizae.

To increase the slope's stability, Futerra 7020 Turf Reinforcement Mat was used to stabilize the soil to provide a stable platform for the plant while it develops its own natural root zone. Flexterra®, Profile's High-Performance Flexible Growth Medium™ was also used to protect the seed and slope from erosion. Together, this created Profile's GreenArmor® System, a combination of superior turf reinforcement and the ideal growth medium for plant establishment.

The decisions made by engineers and contractors to stabilize and reestablish vegetation on the new slope paid off. ProGanics provided the rich nutrient organic matter needed for the seed to become fully establish in less than 2 months. Profile's GreenArmor System protected the site from erosion and helped strengthen the root zone of the vegetation.

Profile Products gives you access to the best products and industry expertise to ensure project success. Contact us today to see how we can be a resource for you on your next project.



For help on your next project site, contact Profile® Sales Support at 800-508-8681 or
Technical Services at tech@profileproducts.com.



Solutions for your Environment™

PROJECT PROFILE

MINNEAPOLIS, MINNESOTA



A Holistic Approach to Erosion Control and Vegetative Strategies

These five fundamentals take the guesswork out of the crucial decisions that need to be made to ensure project success.



1. Creating Optimal Soil Conditions

Soil testing provides essential information to determine what adjustments, if any, need to be made to assure a more favorable growing environment.



2. Picking the Right Plant Species

It is essential to select plant species that are adapted to project locations, site conditions, intended use and maintenance requirements.



3. Selecting the Correct Erosion Control Material

The correct cover is necessary to protect both seed and soil, taking into account erosion control effectiveness, ability to facilitate growth and functional longevity.



4. Ensuring Proper Installation

Correctly installing these products in accordance with the manufacturer's mixing, application and installation guidelines will maximize their performance.



5. Follow-up Inspection & Maintenance Practices

Monitoring project progress will ensure compliance issues are being addressed. Maintenance may be required to mitigate unexpected challenges.



Increase Organic Matter & Boost Soil Fertility

- Accelerates the development of depleted soils/substrates with low organic matter, low nutrient levels and limited biological activity
- An ideal time and money-saving alternative to topsoil and compost
- Excellent for challenging sites with difficult or limited access, and on steep slopes where topsoil placement is impractical or for when soils are too wet or frozen to dig, transport and spread



A Revolutionary Green Alternative to Hard Armor

- Futerra® TRM or Futerra® R45 HP-TRM hydraulically infilled with Flexterra® HP-FGM™ delivers unprecedented design safety against elevated levels of hydraulic lift and shear forces
- A more aesthetically pleasing and environmentally superior means of protecting high-discharge waterways and steep slopes
- Installation cost is 30-50% less than hard armor



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