



## GEOFABRICS CASE STUDY



# REHABILITATING COLSON ROAD LANDFILL WITH GRASSROOTS

## PRODUCTS USED

### GRASSROOTS® SYNTHETIC EROSION CONTROL MAT

- Made in Australia from heavy synthetic UV stabilised fibres which are needle-punched together into an open weave three-dimensional structure
- Permanent erosion control matting designed to protect underlying soil in steep slopes and channels from high velocity water flows, while allowing seeds to germinate successfully and grow, providing permanent vegetative reinforcement
- Improves plant establishment by 555% increase in biomass after 21 days



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📍 HAMILTON, NZ

## PROJECT DESCRIPTION

Colson Road in New Plymouth, New Zealand has been operating as the region's landfill for over 40 years. In March 2021, the decision was made by New Plymouth District Council to close the landfill and have it rehabilitated as a public space for the local community to enjoy. The client was seeking a lining solution for its drains that would assist with restoring the site to a natural ecological environment.

## OUR SOLUTION

Closure of the site involved capping the landfill by building contour and perimeter drains along the face of the slope. Geofabrics was approached by the lead contractor and installer, Whitaker Civil for technical support and design assistance on a solution to increase the pull-out resistance of the grass that will be lining the drains.

The key challenge in this project was to create a stabilised drain where the speed of water flowing would not cause erosion, result in scouring of the slope face or deteriorate the drainage channel. After surveying the site, Grassroots Synthetic Erosion Control Mat was chosen as the most suitable choice due to its immediate scour protection properties and high resistance to water flow. A total of 8,160m<sup>2</sup> Grassroots was installed on top of the drains, providing immediate protection to the underlying soil and pipes. This allowed seeds to germinate and strike through the matting within a few days, producing fuller vegetation for a more permanent reinforcement.

Grassroots provided a solution that was quick to install, and it continues to be easy to maintain for the Council. The short UV stabilised synthetic fibres in Grassroots allows it to be mowed during site maintenance without the likelihood of loose fibres from the product material being caught in the blades.

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Sustainable solutions





**8,160m<sup>2</sup> of  
Grassroots  
was installed**



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