

Launched Soil Nails – A Successful Introduction of an Innovative Technology for Slope Remediation

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Introduction

Soil nailing has now gained acceptance as a tool to enable the construction and remediation of oversteep slopes and/or oversteep excavations in soils. The methodology could have wider applications if it were able to be rapidly mobilised, was easier to establish, quicker to construct, had nails ready for service sooner, and didn't cost any more. A new tool that has these attributes has been developed - the soil nail launcher.

Methods

Six metre long nails are able to be fired into the ground, in a single shot, using high pressure compressed air. This design and construction expertise has been successfully transferred to New Zealand.

Results

The track record of this technology to date, particularly in the USA, demonstrates that launched soil nails are suitable for remediation of failed slopes. Although still early days, the results to date from the applications used in New Zealand have been very promising.

Discussion

Four case studies from New Zealand are presented which illustrate the range of applications successfully completed to date.

BIO

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