



**SPECIALIST
ENVIRONMENTAL
CONTRACTING
SERVICES**



EXCELLENCE FROM THE GROUND UP

Hiway Group has been delivering innovative ground improvement solutions throughout New Zealand and the South Pacific since 1986.

Today we are New Zealand's largest provider of specialist solutions for pavement stabilisation, slip and slope reinforcement, soil mechanics, ground improvement and contamination remediation.

Our commitment to innovation, environmental sustainability and industry leadership has seen us introduce cutting edge technologies to the local market and develop our own advanced methodologies and stabilising products.

With a proven track record of ensuring high quality, lasting outcomes – even in challenging conditions – our in-house design and contracting teams are considered industry experts.



Hiway Stabilizers provides specialist pavement stabilisation services throughout New Zealand and the South Pacific. Our proven solutions increase strength and durability, and conserve diminishing resources.



Hiway Environmental's expert team provides cost effective, site-specific solutions for the remediation of contaminated sites and other environmental challenges, including treatment and processing of unsuitable materials.



Hiway Geotechnical uses world-leading technologies to meet a range of complex geotechnical and foundation requirements for ground improvement and slip/slope reinforcement.



Hiway Hire is a machinery hire company that provides purpose-built, state-of-the-art plant and equipment to Hiway Group's operating divisions, as well as external customers.



HIWAY ENVIRONMENTAL

Hiway Environmental is the New Zealand industry leader in site-specific solutions for remediation and treatment of contaminated sites. By efficiently managing and reusing natural materials, we help customers achieve significant time and cost savings onsite.

Hiway Environmental has been involved in some of New Zealand's most challenging and sensitive ground improvement projects. Our specialist services include remediation of contaminated soil, treatment of materials prior to landfill disposal, geotechnical works, stabilisation and soil recycling.

Our commitment to the sustainable use of natural resources includes the introduction into New Zealand of the world's first low-wind Eolgreen sustainable street lighting, using both wind and solar power generation. An impressive mix of innovation and technical expertise, this hybrid streetlight is the perfect complement to Hiway Environmental's approach to sustainability and the use of natural resources.

INNOVATIVE SOLUTIONS

Our state-of-the-art technology and professional personnel provide innovative and environmentally sound solutions.

Talk to Hiway Environmental about:

- ▶ **Stabilisation and solidification.**
- ▶ **Contaminated soils and water encapsulation.**
- ▶ **Soil recycling.**
- ▶ **Contaminated site remediation.**
- ▶ **Bioremediation.**
- ▶ **Mud-creting.**
- ▶ **De-sludging.**
- ▶ **Recycled concrete crushing.**
- ▶ **Materials recycling.**
- ▶ **Permeable reactive barriers and containment.**
- ▶ **Sustainable street lighting.**

SOIL RECYCLING

Hiway Environmental owns and operates New Zealand's only Reterra recyclers. This innovative technology offers customers a cost effective, environmentally sound solution to an often costly geotechnical problem.

The Reterra soil stabiliser is a purpose-built, soil stabilising and conditioning machine that outperforms conventional stabilisation methods. It recycles soil for improved performance, remediates contaminated soil and manufactures binder treated aggregates.

The mobile machine lowers costs by reducing reliance on labour, transport and landfill. Internationally, stabilisation and solidification of soils and granular materials is regarded as a proven way to treat or improve in-situ materials.



APPLICATIONS

- ▶ Bioremediation of contaminated soils.
- ▶ Stabilisation and solidification of contaminated soils, dependent on contaminants.
- ▶ Soil recycling and stabilisation to improve engineering properties.
- ▶ Reuse of stabilised materials for construction purposes.
- ▶ Solidification of sludge and high water content soils.
- ▶ Cement treated basecourse and aggregates for road construction.

BENEFITS

- ▶ Reusing recycled soil eliminates the costs associated with transportation, labour, landfill disposal and purchase of new materials.
- ▶ Suitable for a wide range of soil types from friable to highly plastic clays; silt, sand up to 200mm aggregate; contaminated soils, mud and sludge (where no dewatering is required).
- ▶ Mobile machine is easy to move onsite.
- ▶ On board computer control ensures quality control and a consistent mixture of soils and binders to achieve the desired soil strength.
- ▶ Causing minimal dust, noise and vibration, the Reterra is a low environmental impact solution.

New Zealand's only Reterra machinery is delivered to you with Hiway Environmental's engineering expertise.

SUSTAINABLE STREET LIGHTING

The wind and solar powered Eolgreen hybrid streetlight is a breakthrough in self-sufficient technology. Hiway Environmental, dedicated to innovative technology and the sustainable use of resources, has introduced the system to Australasia and the Pacific.

By relying on wind, the hybrid solves the problem of insufficient solar input, and can generate power with wind strength of just 1.7 metres per second. This low speed wind generation capability is the first of its type in the world.

Surplus energy created is stored for ongoing consumption, or can be pushed back into the grid. The light has many uses and offers opportunities in remote locations where hard-wired power connection is impractical or expensive.



APPLICATIONS

- ▶ Remote residential lighting.
- ▶ Wetland footpaths and walking trails.
- ▶ Car parking and isolated infrastructure.
- ▶ Intersection illumination.
- ▶ Parks and reserves.
- ▶ Renewable energy.
- ▶ Supporting 5-star green rated buildings.

BENEFITS

- ▶ Autonomous lighting system with no energy costs to run.
- ▶ The only type in the world that runs on low wind speed.
- ▶ Low maintenance, self-cleaning turbine.
- ▶ Saves on cost of ducting, cabling and connection to the network.
- ▶ Surplus energy returned to the grid.
- ▶ Lighting performance monitored and analysed remotely.

**Hiway Environmental delivers
the most reliable, energy efficient
street lighting technology
available in the world.**

CONTAMINATION REMEDIATION

Hiway Environmental has delivered some of New Zealand's largest and most challenging contamination remediation projects, including the remediation of the Tui Mine.

We offer stabilisation and solidification methods to treat and remediate a wide range of environmental issues. Our expertise covers hydrocarbon, heavy metals and chemical contaminants.

Remediating contaminated soil by mixing binders with contaminated materials results in a product that has less impact on the surrounding environment. The solidification and stabilisation methods we use also mean soil can be reused as engineered fill. Solidification binds the contaminants into a solid, impermeable form, and stabilisation chemically changes the contaminants so they become less mobile and less toxic.



APPLICATIONS

- ▶ Contaminated site remediation.
- ▶ High water table activities, permeability barriers.
- ▶ Mine tailing contamination.
- ▶ Soil recycling.
- ▶ Ground leaching prevention, watercourse contamination.
- ▶ Pond and watercourse de-sludging.
- ▶ Industrial contamination clean up.

BENEFITS

- ▶ Reduced costs of disposal.
- ▶ Reduced projects costs and timeframes using specialist equipment that rapidly treats the contaminated area.
- ▶ Contaminated waste can be reused rather than disposed.

For the most demanding geotechnical issues, Hiway Environmental offers fast, innovative solutions.

INNOVATION

Hiway Environmental uses the latest technology to provide cost effective solutions. Using world-class equipment we provide better ways to manage ground improvement projects.

Strict conformance to regulations and engineering criteria has seen our contamination remediation expertise called on to tackle New Zealand's largest site remediation at Tui Mine, as well as the removal of contaminated sludge from Auckland Domain. Hiway Environmental's solutions have also been used in the Christchurch rebuild to provide stable foundations.

Hiway Environmental is passionate about recycling and using natural resources and materials. Eolgreen sustainable street lighting harnesses both wind and solar energy to provide autonomous lighting with a zero carbon footprint.



DESIGN & PROJECT MANAGEMENT SERVICES

In the specialist field of soil remediation and recycling, Hiway Environmental delivers both the expertise and the specialist equipment to solve a wide range of soil issues and remediation challenges.

Our in house design team includes experienced ground improvement specialists with a wealth of knowledge on ground stabilising techniques, geotechnical solutions and environmental contracting. They can develop site-specific solutions, based on soil conditions and usage requirements.

In the field, our experienced project team delivers the best possible outcomes based on years of experience. We use leading edge computer controlled equipment, and have access to the expertise of our international partners when specialist knowledge is required.



**HIWAY
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