

### 77 Hautapu Road HAUTAPU, CAMBRIDGE, WAIKATO

#### STORMWATER & SEDIMENT MANAGEMENT

#### Products: EcoAid Stormwater System & bidim geotextile

##### The Problem

The development of the surrounding industrial area around Hautapu provided a challenge for the engineers to accommodate the increase in stormwater runoff from the gravelled timber merchants stock yard sites and large roof areas. Regular heavy truck movement across this site, (outlined in the 1st photo), resulted in increased compaction of the runoff areas causing water ponding and sediment issues within the yard space after rainfall events with some overflow affecting neighbouring properties.

##### The Solution

Taking an innovative approach to the clients stormwater problem, the consulting engineer along with support from Maccaferri NZ Ltd, designed a solution around the use of the **EcoAid** underground stormwater management system.

The hydraulic design had to consider a catchment surface area of more than 2600m<sup>2</sup> and a mean annual rainfall of 1190mm. In addition to accommodating the resultant discharge, the design also had to consider sediment contained in the runoff from the site.

The **EcoAid** arch system offers the advantage over other systems by managing the sediment onsite along with storm water runoff, without an excessive investment. **EcoAid** has incorporated simple treatment technologies that facilitate the isolation and removal of suspended solids and gross pollutants (litter) but remaining easy to clean with long maintenance return intervals. The runoff is then simply disposed of via the **EcoAid** underground arches, which in turn allows natural recharging of the water tables.

**EcoAid** units are lightweight, easy to handle and install by a single person and designed with OSH requirements in mind.

**EcoAid** can be placed underneath driveways, car parks, roads and sports fields etc, to maximise use of the surface areas. Some other benefits include the corrugated arch design for optimum load support and the longer service life as the system is not exposed to above ground UV degradation.

This installation was completed in less than 24hours from excavation to backfill for a total solution for this sites problems

Contractors name:

GQJ Investments Ltd

Products:

EcoAid Arches, Bidim A19 and Mirafi 600X

Construction date:

July 2010



Site catchment photo

Date: July 2010



Quick and easy installation of arches

Date: July 2010



EcoAid arches ready for backfill

Date: July 2010

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Quality System AS/NZS ISO 9001:2000

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