

SH2 GREYTOWN TO FEATHERSTON PASSING LANE GREYTOWN

DRAINAGE

Products: Megaflo

Problem

This particular flat section of SH2 is prone to frequent flooding due to a very high water table and low hydraulic gradient. Due to the deposits of alluvial silts and gravels, the water ponds take a long time to drain away. A new passing lane was required along this section, and drainage had to be installed on both sides of the road for a length of 900m.

Solution

Initially 26 open rock filled soakage pits were specified, however with a redesign, this was reduced to 24 large soakage pits with 3m concrete chambers, incorporating the use of Megaflo 450. The high profile of Megaflo ensures that effective drainage can be achieved even at such low hydraulic gradients. The high compressive strength of Megaflo allows it to be installed to within 150mm from the surface, thus making it an ideal solution for the high water table areas.

Approximately 1800m of drainage was installed on both sides of the passing lane. Megaflo is supplied wrapped with a Bidim drainage geotextile that meets TNZ F/7 requirements for geotextiles and the use of standard Megaflo fittings enabled easy connections to other drainage components.

The Maccaferri supplied Megaflo Spinning Jenny frame enabled quick installation of the product once the trench had been excavated using a 500mm wide digger bucket. With less excavation required than for standard round pipe installation the contractor was able to achieve installation rates of up to 200m per day including placement and backfilling. The 500mm bucket was required due to large rocks encountered. The contractor was very pleased with the ease of installation, and would be more than happy to use this system again.



Megaflo spinning Jenny frame



Laying of Megaflo on the edge of the trench



Completed passing lane

Client name:

TRANSIT NZ

Main Contractor:

FULTON HOGAN MASTERTON

Consultant:

MAUNSELL / CPG TSE MASTERTON

Products used:

MEGAFLO 450

Construction date:

SEPTEMBER - OCTOBER 2007

Maccaferri NZ Ltd.

14 Goodman Place, P.O. BOX 12536, Penrose, Auckland, New Zealand
Tel. (+64) 9 6346495 - Fax (+64) 9 6346492, FREEPHONE 0800 60 60 20
E-mail: sales@maccaferri.co.nz - Web site: www.maccaferri.co.nz
Quality System AS/NZS ISO 9001:2000

The information presented herein is, to the best of our knowledge and belief, correct and is subject to periodic review and revision. The validity of the information relative to the subsoil, hydraulic and other engineering conditions must be ascertained by a suitably qualified person. No warranty is either expressed or implied. Unauthorised reproduction or distribution is prohibited. Copyright is vested in Maccaferri or Maccaferri's Principal where applicable.