

29 July 2013

Paul Hughes  
Grow Paekakariki

Dear Paul

**Subject Protection of SH1 in Paekakariki: Erosion Control in “Fly by Wire” Gully**

I am writing to advise you of the findings of the NZTA's investigations for potential planting of the Fly-by Wire Gully. As you are aware, planting the Fly by Wire (Waikakariki) catchment has been suggested as a possible way to prevent debris flooding, like that which occurred in October 2003.

It was determined at the time, that the storms which caused the 2003 and 2004 debris floods were very rare events with a return period of more than 100 years. Flooding caused damage to homes and property in Paekakariki, and resulted in a full closure of SH1 while the debris was cleared. A similar debris flood emerged from Hill Road Gully and closed the North Island Main Trunk railway. These events were particularly significant as they caused the closure of these two nationally important transport links.

Our investigations sought to identify the extent of the planting required to protect SH1 and the NIMT Railway and the implications for future use of this part of the Perkin's Farm. We employed specialist consultants to advise us in this regard. Copies of their advice are attached with this letter for reference.

On the basis of this work, we have determined that vegetated stream banks will not stop debris moving down the gully in a major event, but may reduce the quantity of debris. Planting of Fly by Wire Gully will therefore not necessarily prevent a recurrence of the debris floods. We have also concluded that the protection will not be realised until the root systems of the strategic planting are at least partially established, which will take at least five years, and longer.

The Transmission Gully Motorway is planned to open to traffic by approximately 2020. The new motorway will create a nationally strategic road link, bypassing and reducing our reliance on the existing SH, hence this additional north-south route will provide greater route security.

After full consideration of the specialist advice, we have concluded that the proposed planting is not

warranted from an operational highway perspective and therefore cannot be supported by the NZTA Highways and Network Operations Division.

Yours sincerely



**Mark Owen**

Regional Performance Manager (Central)

cc. John Humphrey - KiwiRail Area Manager  
Sean Mallon - KCDC Group Manager Infrastructure Services

Enclosed: Letter from Roy Fraser, PGG Wrightson Consulting  
Memorandum from Boffa Miskell "SH1 Paekakariki - Fly By Wire valley investigations"