

SH20 - SH1 MANUKAU EXTENSION LINKING SH1 AND SH20

www.transit.govt.nz/projects/manukauextension/

ISSUE 8 - JUNE 2008

Urban and landscape design becomes a reality

Although not as obvious as the large concrete structures on the SH1-SH20 flyover, there are also other changes to the landscape as part of the project such as re-contouring the surrounds and inlaid designs on bridge barriers and retaining walls.



Inlaid patterns on bridge barriers reflect Manukau's Pasifika identity.

Alongside the bridge barriers that have been installed are intricate patterns that reflect the unique Pasifika identity of Manukau. The bridge barriers are being made off site at the project's pre-cast yard in Takanini before being brought to the site and installed onto the bridges.

Landscaped noise mounds are also being constructed between State Highway 1 and the nearby houses of local residents. The noise mounds are large earth embankments and provide the best possible noise reduction where there is the available space. The mounds are also used to plant and regenerate native trees and bush.

More than 240,000 plants will line the route of the project, including a grove of totara trees by the SH1-SH20 triple level interchange and banks of pohutakawa trees leading to the interchange with Puhinui Road.

The trees are being grown from seeds at nurseries and will be transferred to the site and planted while still young.

Planning, design and communication key to traffic management

Managing traffic around a construction project is a complex affair, sometimes involving as much sociology or psychology as engineering.

To minimise disruption, the project team makes as few changes to the road alignment as possible, which has the added benefit of maximising time spent on construction.

Long term deviation roads are installed to take traffic away from construction activity and are built as though they were permanent roads to sustain as much traffic flow as possible.



Roscommon Road is being widened for a temporary deviation.

[continued on page 2](#)

Planning, design and communication key to traffic management

A good example of a substantial deviation road is the temporary realignment of the SH20 Southwestern Motorway where it crosses the Puhinui Stream. In order to move traffic around the construction of the new interchange, Roscommon Road is being moved south.

This requires the widening of the existing bridge. Because of the high numbers of vehicles that are currently carried by the existing bridge, the temporary bridge is constructed to be as strong and as enduring as the existing bridge. When the project is completed, the temporary bridge will be removed.

Finding out that a road is closed just before you make a turn at an intersection can potentially be dangerous. Communication is a vital tool in traffic management, ensuring people are aware of upcoming changes to the road layout.

In addition to this newsletter, the project uses signage around affected areas in the days and weeks before a road closure to advise of the forthcoming changes. Advertising and local newspaper articles are also used to communicate the changes to the public. The project team also liaises directly with key stakeholders, businesses and those likely to be affected to keep them updated.

Upcoming changes

Significant progress across the project will bring further changes and road closures on Manukau roads in the coming months.



SH1-SH20 Link Flyover.

Wiri Station Road will be realigned to go over the new Wiri Station Road bridge. At the same time, Davies Avenue between Putney Avenue and Wiri Station Road is also required to be closed for the remainder of the project and will reopen in mid 2010.

State Highway 20 Roscommon Road will be realigned and the northbound lanes travelling to the airport will move onto a temporary bridge structure. The southbound direction will also continue to operate. This realignment will allow the construction of the new interchange and the tie-in with the new motorway.

The State Highway 1 and Redoubt Road interchange will also be the focus of much activity as work progresses to move services such as



McLaughlin's Hill framed by a concrete culvert section being lifted into place.

power and water, prior to the construction of new on and off-ramps later in the year.

As the first phase of the underpass under SH1 is completed in September, the project team will begin realigning SH1 to enable construction of the triple level interchange to progress.

A construction area will be opened up in the median of SH1 for the building of the final pier for the SH1-SH20 flyover and to allow the bridge to be constructed over SH1.

Construction will also continue across the project on 12 of the 13 bridge structures.

For more information on the SH20-SH1 Manukau Extension please contact the project team on:

0800 SH20 2 1 (0800 742 021)

CONTACT US

For more information please contact:

Simon Paton
Project Manager
Transit New Zealand

Tel: (09) 368 2000 or 0800 742 021
Fax: (09) 368 2059
www.transit.govt.nz