



# **Caversham Highway improvements** four laning



Retaining walls being installed on Bridge Street

# **Project progress**

Despite challenging weather in February and March that produced well above average rainfalls for these months, the project remains on track for completion in the third quarter of next year.

## **Precast operation**

During the last four months, around 1200 concrete panels have been produced in Green Island, for use in constructing three key retaining walls (Bridge Street wall, South Road wall, and Railway wall) that are an integral part of this project.

There are three different types of retaining wall panel finishes:

- Light coloured and smooth.
- Darkened and textured (exposed crushed aggregate).
- Blue stone tiled.

These were chosen to provide textural interest amongst the walls that are both substantial and quite irregular in shape. The blue stone tiles, while set in a modern regulated arrangement, give recognition to the early forms of wall construction in Dunedin.

# Retaining wall construction

The largest of the retaining walls is alongside the railway; some 330 metres long and an average height of around 5 metres. The installation of the concrete panels is nearing completion on the Bridge Street wall, with the South Road wall expected to be completed by the end of June. The Railway wall will be built up progressively from July and carry though to September 2011.

#### Construction vibration

Vibration equipment is critical in achieving required densities in bulk fill operations on this project, but can be a nuisance to those living near where this work is being carried out.

In response to concerns raised by some Bridge Street residents, the project team sourced from the North Island an alternative type of

roller that produces much lower levels of vibration to a conventional roller. A specialist was employed to carryout vibration measures in the area generated by both types of rollers. These measurements confirmed that vibrations from the alternative roller were below the international standard levels for damage and nuisance.



Site preparation work on the building of a 300 metre long retaining wall near the main truck railway line north of Barnes Drive

#### **Barnes Drive**

The pavement works between Barnes Drive and the Goodall Street Bridge are largely completed with only minor street work remaining. A chip seal surface is a temporary measure to allow the highway base to 'settle' until the final asphalt surface is applied in the summer.

A new footpath along Barnes Drive is currently being completed and will improve pedestrian access between the Barnes Drive traffic lights and the Goodall Street Bridge.



The new highway layout looking south toward Barnes Drive

### Forward programme

The construction work for the next three months will focus largely in the Glen area with construction of the retaining walls, pavement works, and storm water installation.

Work will start on the duplicate Glen Bridge and initially involve the establishment of the piling rig on South Road. A vibration technique will be used to press the two 13 metre long pile casings into the ground. While this involves less impact than traditional 'hammer driven' piles, it is still likely that there will be noticeable vibrations as a result. Every effort will be made to keep any disturbance from this work to a minimum.

In the next few weeks the Goodall Street pedestrian bridge is being closed temporarily. This is so the existing bridge sections can be refurbished and extended to span the widened section of highway. A sign has been placed on the bridge advising of the closure date and schools in the area have been made aware that this is happening.

#### Website

A website is operating that has the latest information about the Caversham Highway improvements project. It also features a web camera link showing construction progress in the Glen area as well as views of traffic flows along the existing Glen Bridge. The web address is:

http://www.nzta.govt.nz/projects/caversham-highway/

## What's happening and when

	JUNE	JULY	AUGUST
Retaining wall – South Road and Bridge Street			
Goodall Street Bridge removal			
Stormwater construction South Road and Bridge Street			
Railway retaining wall construction			
Glen Bridge duplication			

# **Project contacts**

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