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# SH20 Manukau Extension taking shape



Construction of the SH2O Manukau Extension started in November 2006 and in the past year the project is showing good signs of progress.

Much work to date has focused on preparing the ground below the motorway for construction. This has included clearing the site and using compaction and drainage techniques to ensure that the ground is strong enough to support motorway embankments.

More than 120,000 cubic metres of earth have been moved to create the path of the motorway, and 1850 metres of temporary deviation road have been constructed on SH1, Great South Road

Left: Over 120,000 cubic metres of material has been moved in the last year.

and Lambie Drive to take traffic around work sites.

Above ground, construction is also progressing on four new bridges - Great South Road, Barrowcliffe Place, Wiri Station Road and Lambie Drive.

Construction of the bridges requires pre-cast concrete components, including 315 prestressed concrete beams, each weighing up to 56 tonnes. A pre-cast facility has been especially established in Takanini to manufacture the beams and other pre-cast concrete elements with over 75 beams manufactured to date.

### Upcoming work

The first sections of the SH20 Manukau Extension Project are set to open in early 2008.

Wiri Station Road Bridge will be the first of twelve bridges to open on the project, taking Wiri Station Road over the motorway.

A new northbound off-ramp from SH1 to Great South Road is being constructed approximately 50m to the south of the existing ramp and will open in mid 2008. The move will make room for other elements of the future SH1-SH20 Interchange.

Motorists will begin to use Great South Road bridge over the future SH20 in early 2008. Northbound traffic will be diverted onto one side of the bridge while the other side is constructed. Southbound traffic will continue to use the temporary deviation.

Early next year will also see the construction of a new deviation of the existing SH20 between Puhinui Road and Roscommon Road. The deviation will carry traffic past the work site where the new motorway is being constructed.

Construction will also continue on a new southbound on-ramp from Redoubt Road which will also open in mid 2008.

Left top: Wiri Station Road bridge is currently under construction and will be completed in early 2008. Left below: The pouring of concrete for the twelve bridge decks involves team effort.







## Creative design and landscaping for motorway

Urban design and landscaping along the SH2O Manukau Extension will reflect the cultural and natural identity of Manukau City and provide motorists with a gateway experience to New Zealand's fastest growing city.

Manukau is home to the largest Pacific Island community in the world, giving the city a unique pasifika character. To reflect this, the landscape and urban design concepts incorporate patterns and features of traditional Maori and Pacific Island design.

Sound barriers will be integrated into the motorway landscape, using a mixture of earth mounds and timber fences. The barriers will feature plantings and motifs and will minimise the effects of noise from the motorway on the surrounding neighbourhoods.

The planted slopes will provide a pleasant aspect to the driving experience as they will be covered with a wide variety of native plants. The many plants that will be planted will serve as a home for native birdlife.



Artist's impression of the pohutukawa plantings that are a reference to the hot lava flows that once covered the area.



Artist's impression of Great South Road bridge over the future SH20 Manukau Extension.

The planting will also help to absorb carbon dioxide and other vehicle emissions.

A grove of tall Totara trees will be planted alongside the SH1 and SH20 Interchange and flank the Redoubt Flyover. With the trees growing over 20 metres in height, motorists using the flyover will find themselves amongst the tree canopy.

"The SH20 Manukau Extension project will show how a motorway can highlight and celebrate both natural and cultural environments," says Transit New Zealand Regional Manager, Peter Spies.

Around the western end of the project towards the existing SH20, the area's volcanic origins are reflected with the planting of Pohutukawa trees. The red blossoms of the flowers are a visual reference to the red hot lava flow that cooled to form basalt rock. This rock will be used to form the abutment walls under the bridges.

Other factors shaping the design include the provision of safe run-off areas for vehicles and the protection of views to enable CCTV cameras, motorway signs and lighting to operate.



For more information please contact:

**CONTACT US** 

### THE SH20 MANUKAU EXTENSION PROJECT TEAM WISHES YOU A MERRY CHRISTMAS AND SAFE DRIVING OVER THE HOLIDAY SEASON.

If you would like to know more about the SH20 Manukau Extension, please call:

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