



RIFLE RANGE ROAD ROUNDABOUT. An aerial view of the new Rifle Range Roundabout taken late August 2008, showing excavation almost completed for Norton Road



NORTON RAIL BRIDGE. The new Norton Road connection to the Rifle Range Road Roundabout was opened to traffic on 27 September 2008

The Transformation of the Norton Road Intersection

The replacement of the former railway level crossing with a new roundabout and rail bridge has made it possible for children to safely cycle and walk to school - well away from the busy state highway and railway line.

Almost 1km of paved pedestrian/cycleways and underpasses have been constructed in the intersection area, including two shared pedestrian/cycleways that pass under the Norton Road rail bridge.

The former signalised intersection between Lincoln Street, Norton Road and Rifle Range Road provided only one controlled pedestrian crossing of Lincoln Street, which required pedestrians to cross

Norton Road and Rifle Range Road as gaps in the traffic occurred. Pedestrians and cyclists also had to cross the railway level crossing.

NZ Transport Agency (NZTA) Regional Manager Kaye Clark says, "Providing for the needs of pedestrians and cyclists to encourage these modes of transport is a key priority for NZTA, and the facilities provided in the Rifle Range Road Roundabout area reflect this. The underpasses allow pedestrians and cyclists to travel under the roundabout in all directions without having to cross any roads, and all the routes are well lit and sign-posted."



NORTON ROAD. The former Norton Road level crossing

Environmental Enhancements at the Waitawhiriwhiri Gully

During the construction of the Avalon Drive Bypass the NZ Transport Agency (NZTA) and Hamilton City Council have worked together to enhance the environment of the Waitawhiriwhiri Gully on the corner of Lincoln Street and Forest Lake Road.

Over 5000 native trees, shrubs and other native plants have been planted and the gully has been cleared of noxious weeds and unsightly debris, including a car wreck.



WAITAWHIRIWHIRI GULLY. Significant restoration works have been undertaken in the Waitawhiriwhiri Gully to help recreate its natural forest habitat.

Printed on environmentally sustainable paper. Please recycle.

Contact details

For more information please contact:

Raj Rajagopal
Project Manager, NZTA

Phone: (07) 903 5132
Email: raj.rajagopal@nzta.govt.nz

George Rogan
Consulting Engineer, Opus International Consultants

Phone: (07) 838 9344
Email: george.rogan@opus.co.nz

Or visit our website at www.transit.govt.nz/projects/avalondrive/

New Zealand Government



OCTOBER 2008

AVALON DRIVE BYPASS

October Opening for Bypass

The State Highway 1 Avalon Drive Bypass will be officially opened on 29 October. The new two kilometre bypass will provide a free flowing route that will reduce congestion, improve safety, and separate inter-regional state highway traffic from internal city traffic in the Nawton area of Hamilton city.

The Avalon Drive Bypass consists of:

- A new four-leg roundabout at Rotokauri Road to connect the bypass to Avalon Drive and Crawford Street.
- A new five-leg roundabout at Norton Road to connect the bypass to Lincoln Street, Norton Road and Rifle Range Road.
- Underpasses at the roundabouts to allow safe passage of pedestrians and cyclists away from road traffic.
- A new railway bridge to carry the North Island Main Trunk line over Norton Road.
- Noise walls along Avalon Drive north and the length of the bypass.
- A new overbridge to carry bypass traffic over Forest Lake Road.

NZ Transport Agency (NZTA) Regional Manager Kaye Clark says, "The completion of the Avalon Drive Bypass marks a significant achievement in the planned upgrade of the SH1 western corridor for greater Hamilton."



RIFLE RANGE ROAD ROUNDABOUT & NORTON ROAD RAIL BRIDGE CONSTRUCTION. This photo, taken on 28 May 2008, shows the Rifle Range Road Roundabout and the Norton Road rail bridge under construction. The complex construction sequence for the roundabout and rail bridge involved extensive collaboration between NZTA and ONTRACK and included the temporary relocation of Lincoln Street, the lowering of the entire Rifle Range Road Roundabout area by over three metres, the temporary diversion of two railway tracks, construction of a new rail bridge and the lowering of Norton Road by over seven metres to pass under the rail bridge.

The western corridor through Hamilton serves the city's commercial and industrial hub and provides connections to the Crawford Street Rail Village from the Rotokauri Roundabout. It also links to SH23 to Raglan and SH3 to Taranaki. The upgrade earlier this year of the Wairere Drive/Avalon Drive/Te Rapa Road intersection near The Base to a signalised

intersection was part of the ongoing improvements to this corridor. Future planned projects include the SH1 Te Rapa Bypass, which will connect onto the northern end of the Avalon Drive Bypass, and the upgrading of two city intersections: Greenwood Street/Killarney Road and Kahikatea Drive/Ohaupo Road/Lorne Street.

KEY CONSTRUCTION MILESTONES

The combined effort of the NZ Transport Agency (NZTA), contractors Brian Perry Civil, engineering consultants Opus International Consultants, and ONTRACK has enabled the Avalon Drive Bypass to be completed several months ahead of schedule. The bypass will be officially opened on 29 October 2008.

1

Rotokauri Roundabout

The Avalon Drive Bypass project started in February 2007 with the clearing of the area for the new Rotokauri Roundabout. Earthworks were carried out during late summer and early winter and the new roundabout was opened on 30 September 2007.



3

Rotokauri Road Extension

The new Rotokauri Road extension was opened to traffic on 17 December 2007. The extension has separated residences from Avalon Drive and provided safe access to the Rotokauri Roundabout from Breckons Avenue and Rotokauri Road.



5

Rifle Range Road Roundabout

The Norton Road connection to Lincoln Street was closed on 14 January 2008 to enable construction of the Rifle Range Road Roundabout, and Lincoln Street traffic was diverted closer to Rifle Range Road. The new roundabout opened to southbound traffic on 16 May, and was completed 21 July 2008.



6

Norton Road Rail Bridge

Work on the Norton Rail Bridge started on 18 February 2008 following the completion of the temporary rail diversion by ONTRACK. The crossing of the new Norton Road rail bridge by ONTRACK's Parliamentary Special steam train on 8 August 2008 marked the official opening of the bridge.



2

New Crawford Street Connection

Crawford Street was connected to the Rotokauri Roundabout on 22 October 2007. The new connection has improved road safety and sped up turnaround times for trucks by providing a new high capacity link between SH1 and the rail container terminal, which serves as an inland port.



4

Forest Lake Road Overbridge

A new 33 metre-long overbridge was constructed alongside the existing rail bridge to carry bypass traffic over Forest Lake Road. Piling began on 27 June 2007 and the concrete work was completed by 22 November 2007. The overbridge was used by construction traffic prior to the bypass being opened.



7

Excavation of Norton Road

Excavation to lower Norton Road over seven metres to pass under the new rail bridge began in August 2008, and road pavement construction followed. Approximately 20,000 cubic metres of material was removed from rail bridge area, which is enough to fill seven Olympic-sized swimming pools. Norton Road was opened to traffic on 27 September 2008.

