

Mt Messenger Bypass in progress

The bypass route for the Mt Messenger section of State Highway 3 (SH3) announced at the end of August is a prime focus of improvements for the treacherous 58km stretch from Awakino Gorge to Mt Messenger.

The 6km bypass route (Option C in the June 2017 public engagement) runs east of the existing highway and includes a bridge, about 120m in length over an important wetland and a tunnel, about 230m long, under the ridgeline southeast of Mt Messenger. The route is almost 1km shorter than the existing route.

The bypass is part of a suite of SH3 improvements which also include a two-bridge bypass of the Awakino Tunnel and general safety improvements.

NZ Transport Agency Director Regional Relationships Central North Island, Parekawhia McLean says: "The bypass is the optimal solution for the Mt Messenger section of highway. It will help connect and develop the region while improving safety,

resilience, and route availability that meets the public and the Transport Agency's desired outcomes. It's also the most cost-effective solution at around \$200 million."

She says the route selection takes into account the important environmental and cultural considerations in very challenging terrain.

Five potential routes were investigated and assessed and this route was selected following a robust process involving key stakeholders, the community and technical specialists.

"The new bypass will be more resilient than the existing route and the other proposed bypass options because it avoids large areas of unstable land, which currently contribute to lengthy road closures and delays for

customers. It is also lower providing a less steep, faster route with significant benefits for heavy vehicles.

"It passes through areas with relatively lower ecological values than the proposed route options located west of SH3.

"The bridge significantly reduces and controls the route's impact on the wetland's ecological values.

"While the route affects private and iwi-owned land containing native vegetation, the area has been considerably damaged by animal pests. There are some significant opportunities for improving the area," says Ms McLean.

She says the Transport Agency is committed to ongoing engagement with the community and affected property owners as the project progresses.

In parallel the project team is working on the Mt Messenger Bypass resource consents to present to the local councils and they expect to lodge these soon. In the New Year council will notify the public and call for submissions on the Transport Agency's applications.

Construction on the new bypass is expected to start in late 2018 and be completed in 2021.



Investigations inform bypass design

The last few months have seen intensive investigations along the proposed Mt Messenger Bypass route to understand the underlying ground conditions, which is critical to its safe and cost-effective design.

A team of engineering geologists has drilled around 35 boreholes (85mm in diameter) to take rock samples up to 100m underground along with 70 cone penetrometer tests. These involve pushing a specialised steel cone into the ground to indicate the soil types present up to 35m below ground level. They've also excavated a number of trial pits and set up groundwater monitoring devices.

Mt Messenger Alliance Manager Duncan Kenderdine says: "The work has been carefully orchestrated given the site's steep,

inaccessible terrain and high ecological values.

"Team members have had to carry heavy and bulky testing equipment to many locations, while helicopters have delivered drill rigs to the more remote sites."

The operation has strict protocols to protect the environment, involving close cooperation between the field geologists, contractors and representatives from Ngati Tama, Department of Conservation and landowners.



Environmental investigations ongoing

A team of specialists have been working around Mt Messenger this year to better understand the ecological values of the area to inform the design of the new bypass and develop ways to help restore and improve the environment.

Mt Messenger Alliance Environmental Manager Dr Brett Ogilvie says the work supports the project's approach of treading as lightly on the land as possible.

"The team has carried out investigations for a variety of wildlife and plants, with comprehensive surveys of vegetation, streams and wetlands.

"We're developing solutions that respect the area's environment. For example, the road's design avoids the kahikatea swamp on the southern side of Mt Messenger.

"Where ecological effects are unavoidable, the team has developed additional fencing, planting, animal relocation and pest management proposals for the wider project area. These will mean the ecological values of the area are protected or improved compared to the present time," says Dr Ogilvie.

Mitigation measures to help restore and improve the area's ecology include 9km of streambank planting, replanting 9ha of vegetation, creating 6ha of swamp forest habitat, and pest management across 560ha of nearby native forest.



Safety improvements under way on high-risk highway

Work to make the section of State Highway 3 between Awakino Gorge and Mt Messenger safer is progressing well.

The work includes adding roadside safety barriers to prevent vehicles running off the road, removing trees and bushes to make it easier to see the road ahead, new signs and creating a pull over area for drivers to rest or let other vehicles pass.

Electronic warning signs will be introduced to four high-risk locations. It is expected that installation of these signs will be completed before the Christmas holiday period. The road south of Mokau is particularly risky for motorcyclists so the barriers here were fitted with a special rail at road level that helps protect motorcyclists if they crash.

Project Manager Campbell McKegg says the highway between Awakino and Mt Messenger is a high-risk stretch of road where 11 people have died and 45 have been seriously injured in crashes between 2007 and 2017.

“Most of these crashes resulted from people losing control of their vehicle and running off the road or crashing head-on,” he says.

“We’ve worked closely with the local community and other road users to understand the issues with the road. Locals support our plans and have provided valuable design input. We’ve also looped in local whitebaiters to make sure the safety barrier we plan to install wouldn’t stop



them accessing their whitebaiting stands,” says Mr McKegg.

The current works are expected to be completed in April 2018. They pave the way for more extensive work next year, which will include adding passing lanes at the western end of Awakino Gorge and north of Tongaporutu to make it safer for vehicles

to pass and reduce driver frustration. Slow vehicle bays will also be created within the Awakino Gorge to allow vehicles to safely pass trucks and other slow-moving vehicles.

Further information about the next stage of work will be announced in the near future. Construction of the first site is planned for summer 2017/2018.

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Work continues ahead of construction

Work continues ahead of a 2018 construction start of the Awakino Tunnel Bypass.

The Awakino Tunnel Bypass is part of the SH3 programme of improvements, which also includes a new route at Mt Messenger and safety and resilience work now under way along this rugged section of SH3.

Earlier this year the preferred option to improve safety and efficiency at the Awakino Tunnel was agreed: it is a bypass involving two bridges over the nearby Awakino River.

Community feedback saw this option emerge as a clear favourite.

Design work continues, and the applications for resource consents and other approvals are about to be lodged. The design and construct tender process is under way and full construction is likely from October 2018-May 2020.

The bypass will take traffic away from the one-lane tunnel and existing narrow section of riverside road, which has been problematic with rockfalls and slips.



More information

For programme updates please visit nzta.govt.nz/ag2mm

If you would like to join our database for e-newsletter updates, please email SH3@nzta.govt.nz

