Executive Summary

The NZ Transport Agency (Transport Agency) has lodged a Notice of Requirement (NoR) and applications for resource consent for the Mt Messenger Bypass (the Project). The Project involves the construction and ongoing operation of a new section of SH3, generally between Uruti and Ahititi to the north of New Plymouth. This new section of SH3 will bypass the existing approximately 7.4km steep, narrow and winding section of highway at Mt Messenger.

SH3 has the key purpose of connecting the Taranaki region through to the Waikato region, and then on to key economic and transportation hubs at Hamilton, Tauranga and Auckland. Although most of the 240km length of SH3 between New Plymouth and Hamilton traverses open country, with average travel speeds between 75 and 85km/h, the Mt Messenger section of SH3 is of a markedly lower standard. The operational characteristics of the existing Mt Messenger section of SH3 include:

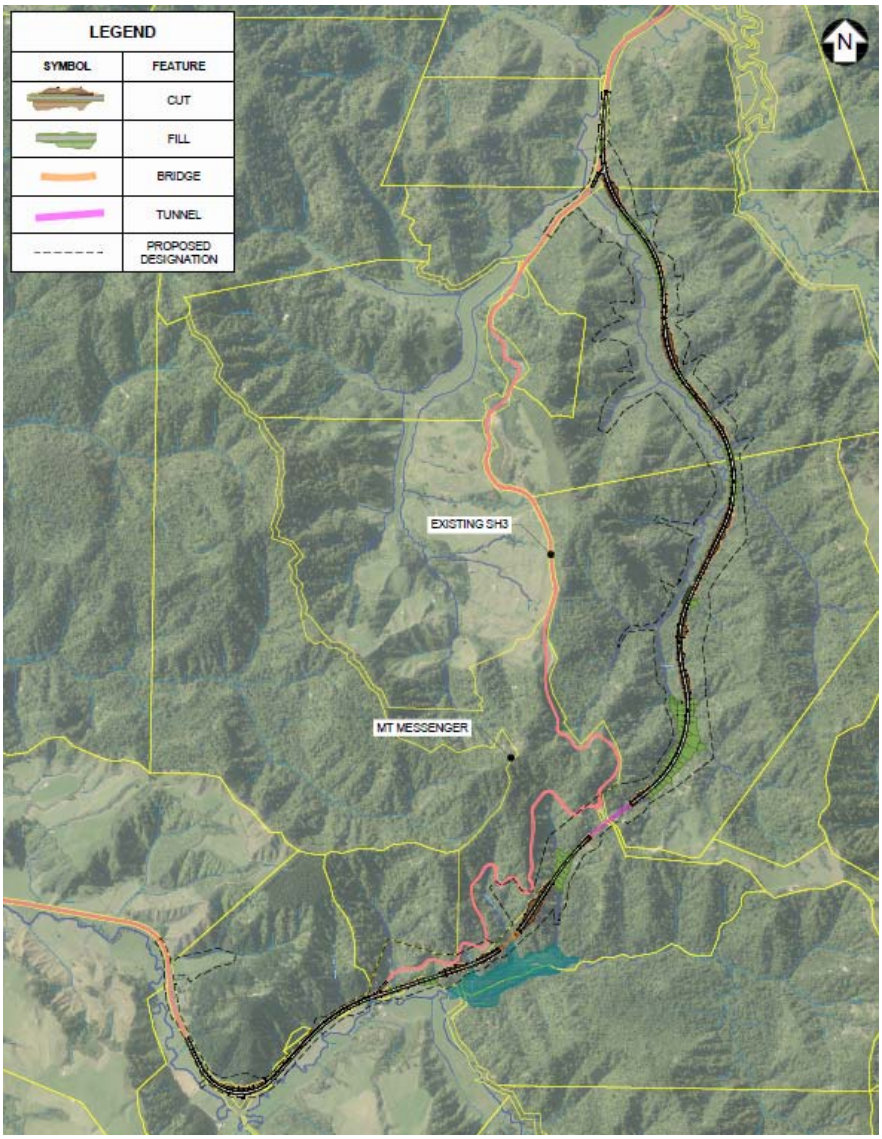
- steep grades, a tortuous alignment and restricted forward visibility;
- significant lengths with no or only limited shoulders;
- a narrow tunnel at the summit; and
- a vulnerability to interruption of service by breakdowns, crashes, landslips and rockfalls. When service is interrupted, alternative route options are limited, and require significantly longer travel times (especially for freight).

These constraints translate to problems with safety, route resilience (road closures with no suitable alternatives), poor road geometry and low speeds. These factors combined mean the road is no longer fit for purpose.

The Project will establish a new section of SH3 that will remedy the existing operational problems at Mt Messenger. The Project includes the following key aspects:

- A two lane road alignment (one traffic lane in each direction) with tie-ins to the existing SH3 corridor at the north and south of the alignment;
- A tunnel (approximately 240m in length) through the ridgeline near the existing Mt Messenger rest area, with an associated tunnel control building and emergency water-supply tanks;
- A 120m long bridge over a wetland on a tributary of the Mimi River;
- Ten rock cuttings up to a depth of about 60m and along a combined distance of approximately 2.6km (including the tunnel portals);
- Thirteen earth embankments up to about 40m in height (but typically less than 5m high), along a combined distance of approximately 2.5km;
- Retaining walls and mechanically stabilised earth (MSE) embankments;
- Stormwater treatment and attenuation facilities (including stormwater retention ponds, swales and road drainage network); and
- Comprehensive environmental mitigation and biodiversity offset measures.

The Project is shown in the Figure below.



Effects of the Project

The Project will provide:

- A modern, high-standard highway, with significantly improved geometry, forward visibility, and sight distances. This will be reflected in an increase in safety rating from 2 Star to 3 Star. The end result will be reduced driver frustration and a significantly safer road compared to the existing situation.
- Improved resilience of the Mt Messenger section of SH3, and therefore the robustness of the broader regional transport network linking Taranaki to the north. This improvement will result from enhanced resilience to natural hazards, along with enhanced safety conditions resulting in fewer crashes and an improved ability to recover from incidents.
- Significant improvements in the reliability of journey time to road users of SH3. Journey reliability is important for all road users, and particularly for those members

of the community that need to have confidence in the network so that their choice of transport maximises their productivity. The reliability of the transport network is an important factor underpinning economic performance.

- Journey time savings for all vehicles (of 4 to 5 minutes on average), and for trucks in particular (saving 6 minutes 40 seconds on average).

These positive effects will in turn contribute to positive local and regional economic growth and productivity effects. The Project will also deliver significant positive social and community effects to Taranaki's way of life, growth and development, and wellbeing.

Ngāti Tama are mana whenua for this area and also own a significant proportion of the land through which the Project will be constructed. There have been detailed discussions between the Transport Agency and Ngāti Tama in developing the Project, including during the assessment of alternative route options for the Project and during the development of the Project designs described in this AEE. The Transport Agency acknowledges that the land, known to Ngāti Tama as Parininihi, has high cultural values and was returned to the Iwi as part of its Treaty Settlement. The process of identifying methods for mitigating the cultural effects of the Project will be iterative, and involve ongoing consultation and collaboration between Ngāti Tama and the Transport Agency on land acquisition, design development, mitigation, construction and operation.

The Project sits within a wider area of forested indigenous native vegetation running from the coastal margins inland to the lowland mountains. The Parininihi land to the west of SH3 has been described as the 'best example of primary coastal hardwood-podocarp forest on the west coast of the North Island'. The ecological health and integrity of this area has improved significantly with the pest management work undertaken by Ngāti Tama. Kōkako have recently been released into this area.

Unlike the Parininihi land to the west of SH3, the area which the Project traverses has not had consistent pest control and as a result, the ecological condition of this area is diminished. The quality of the habitat varies along the alignment. Within the Mangapepeke Stream catchment, vegetation communities have been affected by long-term stock grazing, fire and logging, with the result being a transition to large open and grazed rushlands and poor quality pastureland further down the valley.

Despite this, the habitats which the Project traverses are of high ecological value. In particular, the Mimi swamp forest is of ecological value. This sequence within the northern tributary of the Mimi River represents a full range of swamp forest, scrub and non-forest wetland communities that would once have been more common throughout this area.

Avoidance of ecological effects, as far as practicable for a lineal road, has been inherent in the design process. The route selection process has avoided the high ecological values of the Parininihi land to the west of SH3. Along the Project alignment all vegetation types and significant trees have been mapped and delineated to identify the affected vegetation types and their values. Where it has been possible the Project alignment has been designed to avoid significant trees.

Construction of the Project will result in the removal of a corridor of vegetation and will affect the associated habitats and flora and fauna. In total, vegetation loss due comprises:

- 19.5ha of primary indigenous forest;

- 13.8ha of secondary indigenous forest; and
- 11.1ha of rushland and sedgeland vegetation, which is a mixture of indigenous and exotic vegetation in the rough pastureland in the valley floors.

This vegetation removal includes 15 large emergent old podocarp trees. Construction also involves diverting and altering watercourses along the Project footprint, and will result in the permanent loss of some 3.47km of stream length.

The Transport Agency has worked proactively to address the ecological effects of the Project. A core element of the Project design is a comprehensive mitigation and biodiversity offset package. This package is focused on achieving a net gain in biodiversity within 10 – 15 years of the completion of construction. The package comprises:

- Intensive, multi-species pest management over an area of 560ha, with the focus being on controlling rats, possums, mustelids, feral cats, feral pigs and goats to very low densities, and fencing to exclude livestock. This management will continue in perpetuity (or until such time as pest management in its current form is no longer necessary to sustain the levels of biodiversity created).
- Restoration planting of 6ha of swamp forest.
- Planting of 200 seedlings of the same species for every significant tree that has to be felled.
- Riparian planting and livestock exclusion of approximately 8.9km of existing stream. Planted riparian margins of at least 10m each side of the channel will be created.
- Restoration planting of all secondary scrub areas along the footprint plus temporary construction areas such as access tracks and storage areas that retain conditions suitable for planting, being approximately 9ha in total.

The package will achieve significantly positive biodiversity outcomes that will continue on into the future.

While the Regionally Significant Landscape of Parininihi land to the west of SH3 has been avoided through route selection, the construction of the Project will nevertheless introduce a highway into what is currently a remote and generally undeveloped landscape setting. The vegetation clearance, earthworks, fill disposal areas and crossing, filling and diversions of streams required for the Project will all have effects on landscape and natural character.

However, the design of the Project seeks to minimise and mitigate these effects. The overall design concept for the Project is an alignment that is integrated with the landscape and delivers an outstanding scenic highway. A range of measures that mitigate landscape, natural character and visual effects of the Project have been introduced through this design process. A Landscape and Environment Design Framework (LEDF) is being implemented, which addresses how landscape outcomes are incorporated into the design process, and includes collaboration with Ngāti Tama.

During construction there will also be a range of temporary adverse effects, including effects on the traffic environment, effects associated with construction noise and dust, possible contaminated land effects, local effects on neighbouring land owners and the local community, and effects associated with land disturbance.

Managing the effects of the Project

The Project's potential adverse effects on the environment have been addressed through a detailed route selection and design process, a comprehensive set of proposed designation and resource consent conditions, and a suite of management plans. Many of the management plans have already been prepared are included with the application documents.

A range of potential adverse effects have been avoided through the route selection and Project design process. In particular, the significant adverse effects that construction of a highway through the western Parininihi land would have caused were avoided through route selection, while effects on the high-value Mimi valley swamp forest have largely been avoided through the use of a bridge to span the wetland area.

In summary, key measures developed to avoid, remedy, mitigate or offset effects of the Project are:

- A comprehensive mitigation and biodiversity offset package;
- An overarching construction environmental management plan (CEMP) to address both designation and resource consent matters related to construction of the Project;
- A series of specific management plans that detail the measures that will be in place to avoid, remedy, mitigate or offset environmental effects, including construction water management, ecology and landscape management, pest control, contaminated land management, construction traffic management dust, and construction noise management;
- Site or activity specific components of the CEMP and management plans to manage particular effects during construction (e.g. detailed Specific Construction Water Management plans);
- An accidental discovery protocol to address the management of any unexpected discovery of archaeological sites; and

Protocols, outlined as part of the CEMP, to communicate with the local community and stakeholders for the duration of construction of the Project on construction