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1 Overview

1.1 Introduction

The Te Rapa Bypass (the Bypass) is located at the north-western corner of Hamilton City and is intended to provide relief to the existing and future transportation system within the Te Rapa area. In recent years, this area has experienced significant development adjacent to the existing State Highway One (SH1) corridor and Hamilton City Council has significant plans for future growth as part of the development of the Rotokauri Structure Plan. In addition, Waikato District Council is proposing the development of a significant industrial area as part of the Horotiu Structure Plan.

The Bypass designation has been developed to protect and provide a strategically significant land transport corridor, which is:

- **Safe** – provides a safe and forgiving corridor environment for all transport users, which considers health, safety and personal security for all people, including users, workers, and operators

- **Responsive** – provides a suitable level of service through a range of traffic conditions

- **Sustainable** – focuses on improving the transport network system in ways that enhance economic, social and environmental well-being, and that promote resilience and flexibility. It also takes account of the needs of future generations, while being guided by medium and long-term costs and benefits

- **Integrated** - provides suitable connectivity with the existing and future development community and the future transportation network including consideration of a multi-modal solution

The Bypass will form a vital part of the overall Greater Hamilton Western Transport Corridor and covers two distinct sections:

- Section 1 is the green fields route between Bern Road (connecting with the future Ngaruawahia Bypass) and Avalon Drive/Gilchrist Street – a length of 6km

- Section 2 provides for additional widening of the existing Avalon Drive corridor, between Gilchrist Street and Rotokauri Road (start of Avalon Drive Bypass) – a length of approximately 1.6km

The Western Transport Corridor (including Te Rapa Bypass) is included in Transit's future network “concepts” for Hamilton (National State Highway Strategy June 2007).

There will be many benefits associated with progressing the Bypass, including:

- Reduced congestion on the State highway and local road network, which results in travel time, vehicle operating, and safety benefits

- Providing an efficient and effective State highway link between the Waikato Expressway (when completed) and the western employment node of Hamilton City
• Optimising the potential for much needed Industrial land use development in the Rotokauri/Te Rapa/Horotiu areas and allowing the development to occur in a staged manner

• Assisting in defining and integrating the function of the adjacent local transport network

• Providing significant opportunity for complementary transport modes, including public transport, walking, cycling, and rail freight

1.2 Terminology

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2 Form 18 - Notice of Requirement for Designation

Section 168 Resource Management Act 1991

To: Hamilton City Council
    Private Bag 3010
    Hamilton

And Waikato District Council
    Private Bag 544
    Ngaruwahia

1 Transit New Zealand, a requiring authority pursuant to section 167 of the Resource Management Act 1991 and having financial responsibility for this proposed public work, gives notice to both Waikato District and Hamilton City Council's of a requirement for a designation for “Te Rapa Bypass”.

Designation Purpose: Road Purposes – State Highway

Designation Lapse Period: 20 Years

A 20 year lapse period is sought to provide greater long term certainty and protection for this strategic transport corridor. While it is Transit's current expectation that TRB will have substantial construction by 2011, there are still design and construction stages together with funding approvals to be sought before Transit can be certain of the funding and delivery programme.

There are significant landuse changes occurring in and around the designation as forecasted in the Rotokauri Structure Plan, and a 20 year lapse period is needed to provide an appropriate level of protection during a period where conflicting land uses could impede a strategically important transport corridor in the future.

Other Waikato Expressway projects in the vicinity (including Ngaruwahia Bypass) have a 20 year lapse period and it is considered reasonable in the circumstances to treat the TRB consistently with those.

Transit expects that it will provide an Outline Plan to Council when design is complete and prior to construction.

2 The site to which the requirement applies is as follows:

The proposed designation lies within both the Hamilton City Council (HCC) and Waikato District Council (WDC) boundaries on the northwest boundary of Hamilton. This land is legally described in the “Schedule of Affected Properties” included in Section 5: The Project, attached to, and forming part of, this notice of requirement (NOR).
Land identified on the Designation Plans attached as Appendix B of this notice of requirement, to be designated “Road Purposes - State highway”. All roads that are necessary as part of the project are designated. Following completion of the project construction, some roads which form a purely local function will be placed in the ownership of the territorial local authorities. These are likely to include:

- Bern Road reconstruction
- Te Kowhai Rd to Onion Rd link
- Gilchrist Street realignment
- Avalon Dr between Gilchrist Street and Wairere Drive intersection.

Further details regarding the site, are included in Section 5: The Project, attached to, and forming part of, this NOR.

3 The nature of the proposed public work is:

The works required for the Bypass are described in detail in Section 5: The Project, attached to, and forming part of, this NOR. In summary they are:

- Construction of a new transport corridor from Horotiu to Avalon Drive to facilitate the new alignment of SH1 (length of new State highway road is approximately 6km) – the actual number of lanes constructed will be subject to development of appropriate funding strategies

- Construction of additional traffic lanes (to a total of four lanes) along the existing SH1 (Avalon Drive) between Gilchrist Street and Rotokauri Road (a length of approximately 1.6km) – see footnote below¹

- Construction of an at-grade roundabout at the junction of the Bypass and SH1 (immediately south of Horotiu and adjacent to Ngaruawahia Bypass designation). The NOR provides for this roundabout to be grade-separated when Ngaruawahia Bypass is constructed

- Construction of a new box culvert crossing at the site of the existing Bern Road drain crossing

- Construction of new Bern Road Bridge over the bypass to maintain access to Bern Road properties

- Embankment construction for crossing over North Island Main Trunk Rail (NIMTR), including bridge structure over railway. The embankment height varies, but with a maximum height above existing ground level of approximately 11m.

¹ The Avalon Drive Four-laning project has been identified as a required transportation project, which is complimentary to the Te Rapa Bypass project. Although the designation for the Bypass includes the land required for the Avalon Drive Four-laning, the timing for its construction is subject to development of appropriate funding strategies
The height of the bridge over the railway line is approximately 9.5m (provides 6.5m clearance)

- Embankment construction between NIMTR and Onion Road (including small cutting through Onion Road Hill). This includes a bridge structure for the Bypass over Onion Road. The height of the bridge over Onion Road is approximately 8.5m (providing a 6m clearance)

- Construction of new minor arterial road between Te Kowhai Road and Onion Road. This includes construction of a three lane bridge over the Bypass. The NOR includes provision for constructing north and south facing ramps, when required as part of the future Central Junction development. The junctions at either end of the new road will consist of a roundabout (Te Kowhai Rd) and standard “Tee” junction at Onion Rd.

- Construction of a fill embankment from immediately south of existing Te Kowhai Road to Avalon Drive (south of Gilchrist Street) – a length of approximate 2.7km. The height of the embankment ranges between 7-9m above the existing ground level. This will accommodate construction of the local roads which are likely to be above existing ground level (up to 1m) to make provision for drainage culverts. This embankment will facilitate the connectivity of local roads (a realignment of Te Kowhai Rd and a new local road) across the Bypass without a need for direct connection to the bypass. Two bridge structures on the Bypass have been included in the embankment to provide these crossings. In addition, a bridge structure is provided for the crossing of the Avalon Drive/Gilchrist Street intersection (described below)

- Construction of an at-grade traffic signalised junction at the intersection of Avalon Drive/Gilchrist Street/new Rotokauri Structure Plan collector link.

- Construction of south facing ramps between the Avalon/Gilchrist intersection and the Bypass (where the embankment joins back onto Avalon Drive)

- Construction of the realigned Gilchrist Street, which will provide access to existing properties on Gilchrist Street and Ormsby Lane

- Potential installation of traffic signals at the intersection of Foreman Road and Avalon Drive if the Foreman Road to Crawford Street link is not constructed (separate project)

- Road closures at Ruffell and Te Kowhai Roads (either side of the Bypass). Closure of existing Avalon Drive/Gilchrist Street, and Avalon Drive/Tasman Road intersections. Closure of the Avalon Drive/WINTEC Access to Motor Vehicular traffic only (pedestrian and cyclist access to remain)

- The establishment of a stormwater system to manage the drainage within the corridor. This includes the construction of kerb and channel, installation of a culvert network and storm-water swales.
The establishment of temporary construction areas, including sediment control areas, temporary stockpile areas, storage/lay down areas and haulage routes during the construction phases of the Bypass.

Other ancillary works and mitigation measures, including the relocation of services, landscaping and planting, crash and noise barriers.

4 The nature of the proposed restrictions that would apply are:

The land required will be used for the construction, operation, and maintenance of the project. Once constructed, access to the formed Bypass will be restricted (through segregation strips) and controlled to provide for the safe and efficient movement of traffic and any associated activities such as mitigation works that may be required. This will be undertaken as part of the legalisation survey. In addition, access to the corridor will be controlled by reducing the number of existing intersections and accesses, including: the closure of Avalon Drive/Gilchrist Street, and Avalon Drive/Tasman Road intersections; and the closure of Avalon Drive/WINTEC Access (to Motor Vehicular traffic only).

The designation ensures sufficient width to undertake construction. Upon completion of the works, the designation may be drawn back pursuant to s182 Resource Management Act 1991 (RMA) to a location sufficient to protect the route and enable ongoing operation and maintenance.

As noted above, some roads which form a purely local function will be placed in the ownership of the territorial local authorities. These are shown on the designation plans with crosses (symbol) and are likely to include:

- Bern Road reconstruction.
- Te Kowhai Rd to Onion Rd
- Gilchrist Street realignment
- Avalon Dr between Gilchrist Street and Wairere Drive intersection.

Areas of existing SH that are covered by this NOR are denoted with diagonal hatching on the designation plans.

5 The effects that the public work will have on the environment and the ways in which any adverse effects will be mitigated, are:

An Assessment of Environmental Effects is described in detail in Section 8: Assessment of Environmental Effects (AEE), attached to, and forming part of, this NOR. The AEE incorporates information supplied on 1 November 2007, 9 November 2007, 30 November 2007 and 7 December 2007 in response to s92 request dated 9 October 2007. The AEE considers the existing environment, actual or potential environmental effects and proposed mitigation associated with the Bypass designation. The assessment includes:
6 Alternative sites have been considered to the following extent:

An extensive assessment of alternative route options has been carried out since 2004.

The process undertaken to assess these alternatives is described in detail in Section 7: Assessment of Alternatives, attached to, and forming part of, this NOR.

7 The public work and designation are reasonably necessary for achieving the objectives of the requiring authority because:

The overall project objective is to determine, protect, and provide the road transport corridor components of an integrated, safe, responsive and sustainable land transport system for the Te Rapa/Rotokauri/Horotiu area. The particular project objectives are to:

- consider the current and future capacity problems on State Highway 1 and the local road network in the area,
- provide an efficient and effective State highway link between the Waikato Expressway and the western areas of Hamilton City that includes only strategic connections with the local road network

- optimise the industrial zoning potential in the Rotokauri/Te Rapa/ Horotiu area

- assist in defining the shape and function of the Rotokauri growth area primary road network

- consider opportunities for other complementary transport modes, including public transport, walking and cycling and rail freight, and


The designation is needed to enable the construction and ongoing maintenance of the Bypass. As a requiring authority in terms of section 167 RMA, Transit may use the designation as a mechanism to construct, operate and maintain State highways and motorways.

The principal reasons for adopting the designation process to facilitate this Project are:

- The designation is needed for Transit to achieve its statutory objective of operating the State highway system in a way that contributes to an integrated, safe, responsive, and sustainable land transport system.

- It is also necessary to achieve the specific project objectives that relate to:
  - congestion relief
  - safety for all transport users
  - connectivity with adjacent transportation network
  - integration with complementary transport modes
  - complimenting the land transport network required to support the planned growth within the Hamilton City and Waikato District Western Corridor.

- The designation will allow Transit and or its authorised agents to undertake the Bypass in accordance with the designation, notwithstanding anything to the contrary in the district plans.

- The designation will allow land required for the project to be identified in the relevant plans (which already include land shown as designated). This will provide a clear indication of the intended use of the land to District Plan users, and provides the opportunity to manage (or avoid) reverse sensitivity issues by signalling Transit's intention to undertake the Bypass to landowners/developers.
The designation enables the planning, construction, and staging of the bypass to be undertaken in a comprehensive and integrated manner, including those portions of the new road network which will ultimately be placed in the ownership of the territorial local authorities.

It protects the corridor from future development, which may preclude the construction of the project by:

- reducing the risk of "build-out"
- by preventing any person from doing anything in relation to the designated land that would prevent or hinder the Bypass, without first obtaining Transits’s written consent

8 The following resource consents are likely to be needed for the proposed activity:

Resource consents from Environment Waikato are likely to be required for the following activities:

(a) Earthworks

Large-scale earthworks including temporary discharge of stormwater will be required to construct the project. The total quantities include approximately:

- 50,000m³ of cut to fill
- 70,000m³ of cut to waste (unsuitable material for construction)
- 1,600,000m³ of imported fill (this could be reduced during the detailed design phase by reducing the bypass embankment heights south of Te Kowhai Road, once the Rotokauri Structure Plan roading is more defined)

(b) Place structures in the bed of a river

The Bypass will cross Te Rapa stream (near Bern Road) and a number of existing drains. As a result, construction of eight culverts will be required to maintain the existing water courses.

(c) Long-term stormwater disposal

Resource consent will be required for the disposal of stormwater: The project adopts a system of grassed swales with low flow pipes beneath to treat stormwater

Transit is in discussion with Environment Waikato confirming the specific requirements for resource consents.

9 The following consultation has been undertaken with parties that are likely to be affected:
A statement regarding the consultation undertaken with parties likely to be affected by the Bypass is included in Section 8.18: Consultation, attached to, and forming part of, this notice of requirement.

10 The following information required to be included in this notice by the district plan, regional plan, or any regulations made under the Resource Management Act 1991: No additional information is required by the relevant Regional or District Plans or regulations.

[Signature]
Barry Dowsett
Deputy Regional Manager
Under delegated authority and
Pursuant to an authority by Transit New Zealand

Dated at Hamilton, this .......... day of January 2008

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