

## 1. Introduction

### 1.1 Ara Tūhono Pūhoi to Wellsford Road of National Significance

Ara Tūhono Pūhoi to Wellsford (P-W) Road of National Significance (RoNS) covers the State Highway 1 (SH1) corridor from the Northern Gateway Toll Road at the Johnstone's Hill tunnels, to just north of Wellsford. The name reflects "the connecting pathways" and has been adopted by the New Zealand Transport Agency (NZTA) with the endorsement of local iwi groups.

### 1.2 Roads of National Significance

The Government has identified seven essential State highways that are linked to New Zealand's economic prosperity. Improvements are required to these highways to provide for the safe and efficient movement of people and freight between and within New Zealand's five main centres. These highway projects are being delivered by the NZTA over a 10 year period from the announcement of the RoNS in 2009. The Government anticipates that the RoNS will be largely completed by the year 2020.

The RoNS programme represents one of New Zealand's biggest infrastructure investments and is a key part of the Government's National Infrastructure Plan and its Policy Statement on Land Transport Funding. These documents provide the basis of the investment priorities outlined in NZTA's National Land Transport Programme (NLTP).

### 1.3 The Project

The Pūhoi to Warkworth section (the Project) is the first of two stages of the Ara Tūhono P-W RoNS. The Warkworth to Wellsford section of the Ara Tūhono P-W RoNS will be progressed as a separate project, which is not precluded by the Project.

The Project will provide a new and alternative alignment to the existing SH1 route between the northern termination of the Northern Gateway Toll Road (NGTR) at the Johnstone's Hill tunnels, and SH1 just south of the Kaipara Flats Road intersection, which lies to the north of Warkworth.

The Project will be separate from the existing SH1 (ie off-line), traversing land to the west of the existing State highway and will bypass Warkworth on the western side. The existing SH1 will remain as an alternative route to the new motorway.

The total length of the Project's indicative alignment is 18.5km and will comprise a four-lane dual carriageway motorway. The carriageways will be divided by a central median with a safety barrier, and will be built to motorway design standards.

Refer to Figure 1-1 below for a map of the indicative alignment.

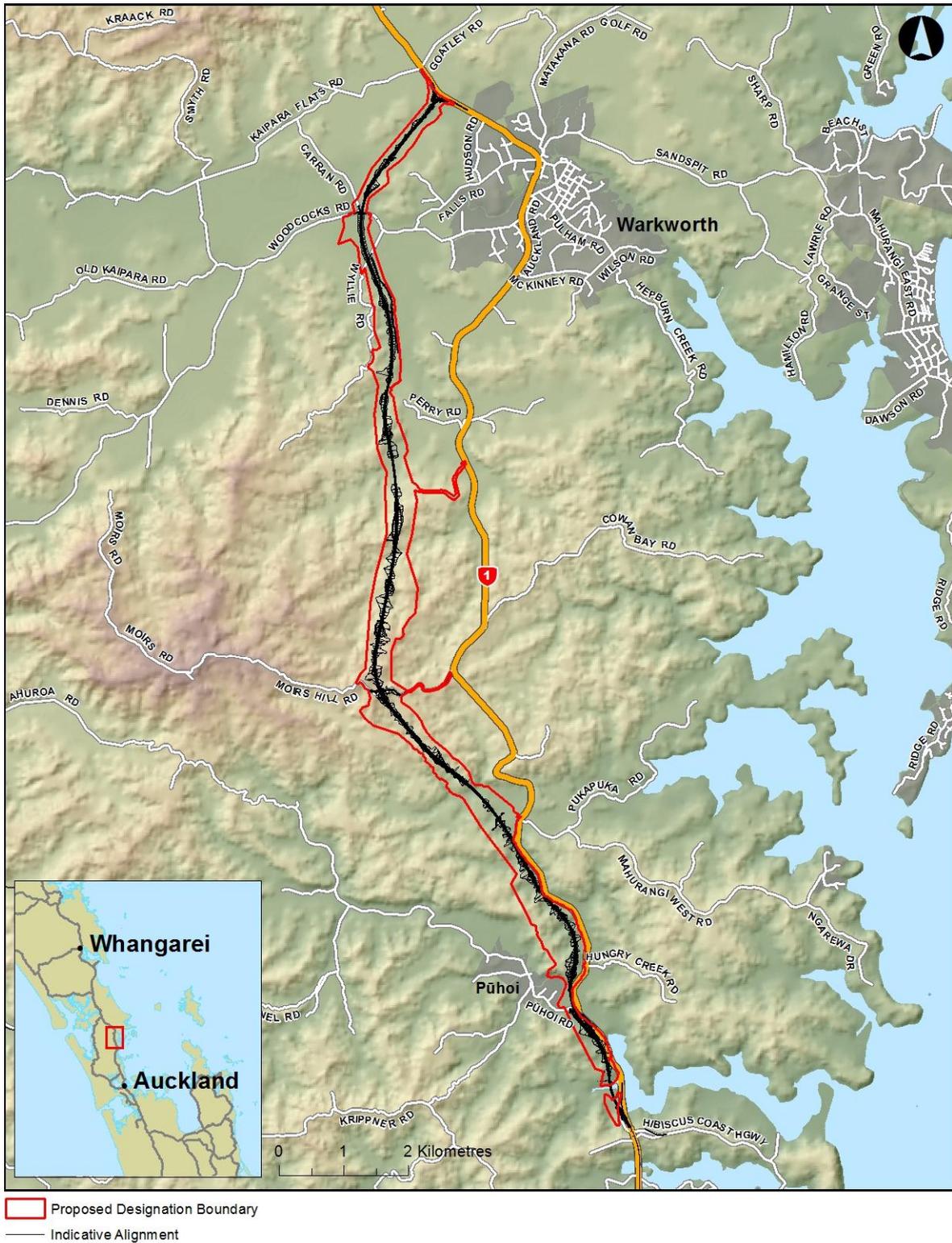


Figure 1-1: Indicative alignment

A full description of the Project is contained in Section 5 of this Report.

#### 1.4 The New Zealand Transport Agency (NZTA)

The NZTA, as a network utility operator under the Resource Management Act 1991 (RMA), is a requiring authority as defined by section 166 of the RMA. The Gazette Notice reference confirming NZTA's status as a requiring authority under section 167 of the RMA is contained in **Appendix A** to this report. The NZTA replaced Transit New Zealand as the requiring authority approved by this Gazette Notice under clause 29 of Schedule 2 of the Land Transport Management Amendment Act 2008.

The NZTA, in its capacity as a requiring authority, is lodging Notices of Requirement (NORs) and resource consent applications for the construction, operation and maintenance of the Project. These matters are being lodged with the Environmental Protection Authority (EPA) as the NZTA consider them to be part of a proposal of national significance.

#### 1.5 Functions of the NZTA

The functions of the NZTA are defined in section 95(1) of the Land Transport Management Act 2003 (LTMA), and those of relevance to the Project include:

Section 95(1)(a) - *"to contribute to an effective, efficient, and safe land transport system in the public interest"* and

Section 95(1)(c) - *"to manage the State highway system, including planning, funding, design, supervision, construction, and maintenance and operations, in accordance with this Act and the Government Roadway Powers Act 1989."*

In undertaking these functions, the NZTA is required under section 96 of the LTMA to exhibit a sense of social and environmental responsibility, use revenue in a way that seeks value for money, and ensure that revenue and expenditure are accounted for in a transparent manner.

#### 1.6 Assessment methodology

This report, and the supporting information contained in the Assessment Reports (Volume 3) and Drawings (Volume 4), has been prepared in accordance with the requirements of sections 88 and 168 and the Fourth Schedule of the RMA to support the NORs and resource consent applications for the operation, construction and maintenance of the Project.

The Assessment of Environmental Effects (AEE) and Assessment Reports have been derived from detailed investigations to identify an appropriate corridor and indicative alignment, environmental and engineering investigation, public and stakeholder consultation and refinements of design to accommodate environmental constraints in a manner that will ensure that any adverse effects, within reason, are minor or able to be appropriately mitigated within the boundary of the proposed designation.

The indicative alignment is an alignment that can be constructed within the designation, including all ancillary components, such as spoil locations and stormwater wetland treatment devices. The

alignment constructed will be confirmed at the detailed design stage, will comply with the conditions of consent and designation, and will need to go through the RMA's outline plan of works process. The Assessment Reports have been prepared in consideration of the OPW process and reflect an assessment of the alignment in the indicative configuration, with due consideration including sensitivity testing for alternate positions within the proposed designation boundary.

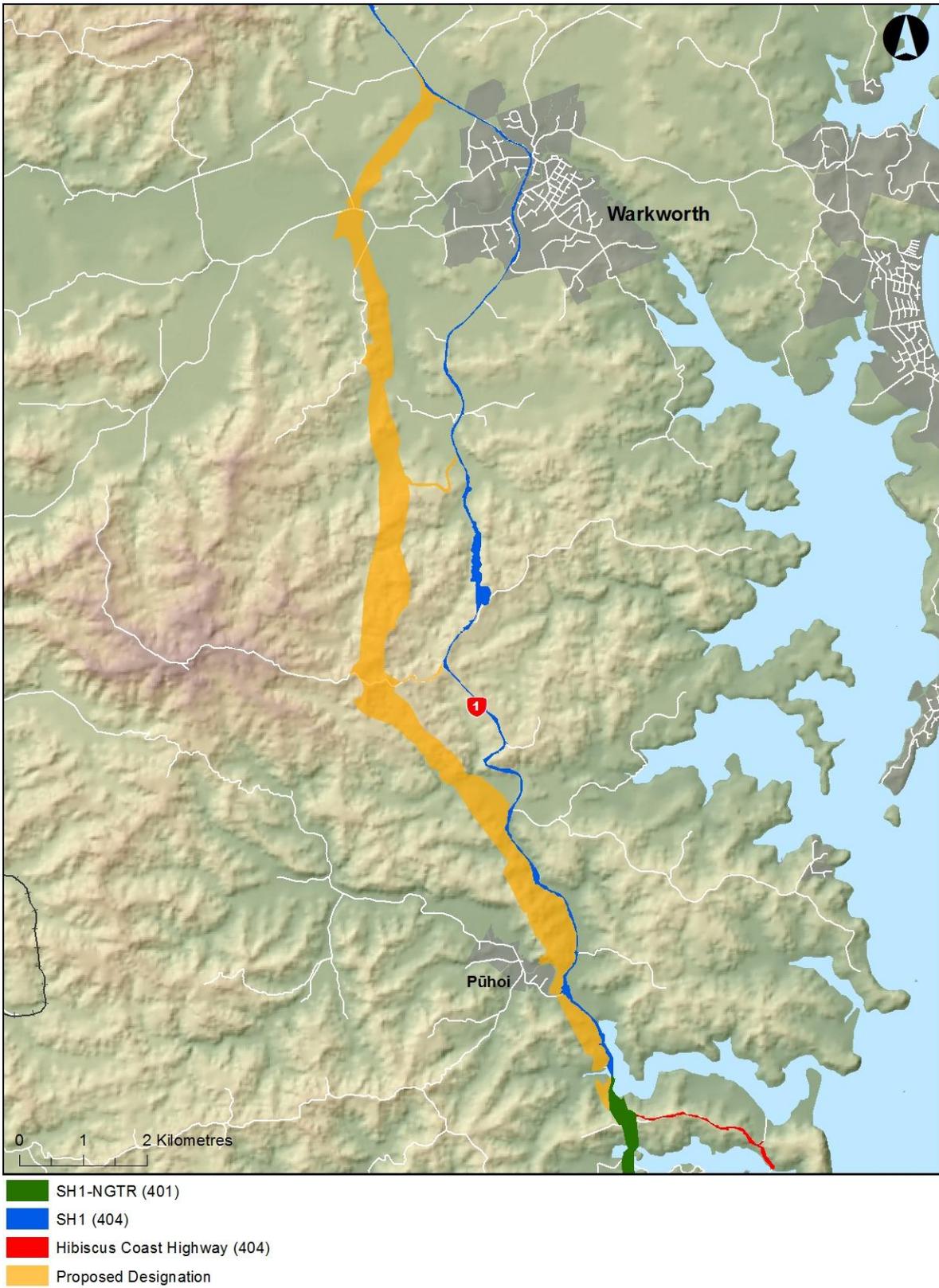
## 1.7 The Notices of Requirement

The NZTA is lodging two NORs:

1. One for the new designation from the Johnstone's Hill tunnels to just south of the Kaipara Flats Road intersection, north of Warkworth. The extent of the designation proposed is sufficient to construct the Project, and includes land for access to construction sites and construction yards. Once the Project is operational the NZTA will rationalise the designation boundary; and
2. One to alter the existing SH1 designation (Auckland Council District Plan – Operative Rodney Section 2011 (ACDP) reference 401) at the Johnstone's Hill tunnels to accommodate the Project's tie-ins to the Hibiscus Coast Highway and to ensure on-going compliance with the designation conditions in the ACDP reference 401.

Designation 401 and the proposed designation are shown on Figure 1-2. The existing NZTA designations are shown for completeness. A full set of plans showing the designation boundaries and other drawing details is contained in Volume 4 of this AEE (refer Drawings R-100 – R-115).

SH1 has an existing designation (ACDP reference 404). The new designation will sit immediately adjacent to the existing SH1 designation until the indicative alignment heads inland at approximately Mahurangi West Road intersection. Some short lengths the existing designation will overlap the new designation for construction purposes, for example at the Pūhoi Viaduct where the current designation alignment cannot be relied on to facilitate the construction of the piers. There are no conditions attached to Designation 404.



**Figure 1-2: Existing and proposed designations**

## 1.8 Resource consents

Resource consents are required pursuant to the following Regional Plans:

- Auckland Regional Plan: Air, Land and Water 2012 (ARP:ALW)
- Auckland Regional Plan: Coastal (ARP:C); and
- Auckland Regional Plan: Sediment Control (ARP:SC).

The NZTA is applying for resource consents for the construction, operation and maintenance of the Project as follows:

- Project wide consent for bulk earthworks;
- Catchment consents for discharge of stormwater from the operation of the built motorway (construction and operation);
- Catchment wide consents for stream works (construction and operation);
- Coastal Consents (construction, use and occupation) and mangrove clearance;
- Site specific consents for the discharge of contaminants from an industrial or trade process.
- Site specific consents for stormwater treatment and discharge from Moirs Hill Road; and
- Site specific consents for access from SH1 into construction area (just south of Perry Road).

Table 1- 1 outlines the groups of activities for which resource consent is sought.

**Table 1-1: Resource consents sought for the Project**

| EPA ref number | Consent type  | Activity  | Regional rule          | Activity class                    |
|----------------|---|---|------------------------|-----------------------------------|
| 33/003         | Land use consent (s9 RMA)                             | The use of land for land disturbing activities, including earthworks, roading, tracking and trenching   | ARP:SC<br>Rule 5.4.3.1 | Restricted Discretionary Activity |
| 33/004         | Discharge permit (s15 RMA)                            | The discharge of stormwater to water as a result of activities undertaken by a highway network operator within the Pūhoi catchment  | ARP:ALW<br>Rule 5.5.13 | Discretionary Activity            |
| 33/005         | Land use consent (s13 RMA) and water permit (s14 RMA) | Use, placement and erection of structures in, on, under, or over the bed of the Pūhoi River and its tributaries for the purposes of a river crossing(s), pipe culverts, bridges and associated erosion control structures and stormwater outlet structures, and any associated diversion of water | ARP:ALW<br>Rule 7.5.12 | Discretionary Activity            |
| 33/006         | Water permit (s14 RMA)                                | Diversion of groundwater  | ARP:ALW<br>Rule 6.5.77 | Restricted Discretionary Activity |
| 33/007         | Discharge permit (s15 RMA)                            | The discharge of stormwater to water as a result of activities undertaken by a highway network operator within the Mahurangi catchment  | ARP:ALW<br>Rule 5.5.13 | Discretionary Activity            |

| EPA ref number | Consent type  | Activity  | Regional rule                   | Activity class                    |
|----------------|---|---|---------------------------------|-----------------------------------|
| 33/008         | Land use consent (s13 RMA) and water permit (s14 RMA) | Use, placement and erection of structures in, on, under, or over the bed of the Mahurangi River and its tributaries for the purposes of a river crossing(s), pipe culverts, bridges and associated erosion control structures and stormwater outlet structures, and any associated diversion of water | ARP:ALW Rule 7.5.12             | Discretionary Activity            |
| 33/009         | Coastal permit (s12 RMA)                              | Erection, placement, alteration, extension, removal or demolition of structures or any part of a structure that is fixed in, on, under or over the foreshore or seabed within the coastal marine area   | ARP:C Rule 12.5.22              | Non-complying Activity            |
| 33/010         | Coastal permit (s12 RMA)                              | Undertake an activity, being the operation of the state highway   | ARP:C Rule 11.5.5               | Discretionary Activity            |
| 33/011         | Coastal permit (s12 RMA)                              | Occupation of part of the coastal marine area   | ARP:C Rule 10.5.10              | Non-complying Activity            |
| 33/012         | Coastal Permit (s12 RMA)                              | Disturbance including removal of mangroves in the CPA1 and use of motor vehicles in CPA1  | ARP:C Rules 16.5.23 and 16.5.24 | Non-complying Activity            |
| 33/013         | Water permit (s14 RMA) and discharge permit (s15 RMA) | Augmenting existing culverts draining road side drains under SH1 in vicinity of Hungry Creek  | ARP:ALW Rule 5.5.13             | Discretionary Activity            |
| 33/014         | Water permit (s14 RMA) and discharge permit (s15 RMA) | Widening of Moirs Hill Road and increasing impervious surface by between 5,000m <sup>2</sup> and 10,000m <sup>2</sup>   | ARP:ALW Rule 5.5.3              | Restricted Discretionary Activity |
| 33/015         | Water permit (s14 RMA) and discharge permit (s15 RMA) | Discharge from construction access through 1509 State Highway 1 (Lot 1 DP321568) from SH1 just south of Perry Road into the alignment   | ARP:ALW Rule 5.5.13             | Discretionary Activity            |
| 33/016         | Discharge permit (s15 RMA)                            | Discharge of contaminants to land and/or water from an industrial or trade premises being a precast concrete yard   | ARP:ALW Rule 5.5.18             | Restricted Discretionary Activity |
| 33/017         | Discharge permit (s15 RMA)                            | Discharge of contaminants to air from a mobile rock crusher   | ARP:ALW Rule 4.5.58             | Restricted Discretionary Activity |

### 1.9 Outline plan of works

The possible construction methodology for the Project (refer to Section 6) demonstrates that the Project works can be undertaken within the proposed designation. The final design for the Project will be developed when a contractor is procured to undertake the works. At the completion of detailed design and prior to construction starting, the NZTA will submit an outline plan of works (OPW) to Auckland Council under section 176A of the RMA that will outline the detailed design elements of the Project.

An OPW will detail the following information in accordance with section 176(3) of the RMA:

- the height, shape, and bulk of the public work, project, or work;
- the location on the site of the public work, project, or work;
- the likely finished contour of the site;
- the vehicular access, circulation, and the provision for parking;
- the landscaping proposed; and
- any other matters to avoid, remedy, or mitigate any adverse effects on the environment.

The OPW will provide details of the potential effects and proposed mitigation measures in relation to (but not limited to) the following:

- Construction noise;
- Operational noise (including any mitigation measures necessary to achieve relevant noise standards);
- Vibration (including where precondition surveys are proposed to be undertaken);
- Visual and landscape (including design plans and mitigation); and
- Construction traffic.

The OPW approach will allow for a more comprehensive confirmation of the mitigation of any potential effects once design has progressed and a construction methodology has been finalised.

NZTA is proposing to engage with specific communities prior to finalising the detail to be submitted in the OPW. This engagement will enable community consideration (at a local level) of landscaping and urban design details, noise mitigation (if any needed) and information relating to communication during construction.

The OPW may be submitted in stages, or to represent specific elements of the Project, and therefore there may be multiple OPWs. The detail within any OPW will have to address the actual or potential effects of the works and how they will be mitigated. For example, the detailed design will necessitate a specific assessment of potential visual effects especially if new structures are introduced and specific mitigation recommended to address these effects. Currently, the assessment is based on generic design elements with generic responses, but with the knowledge that the potential effects can be adequately mitigated.

On lodgement of the OPW, Auckland Council will review the details as provided and may request changes before construction is commenced. Auckland Council would typically request changes to ensure that conditions of designation are met. The NZTA may then accept or reject the requested changes. The Council has a right of appeal to the Environment Court if the changes are not accepted.

### **1.10 Additional consents**

As the AEE is based on an indicative alignment and a possible construction methodology with a contractor yet to be procured and detailed design undertaken, additional approvals may be required. Such approvals could include:

- Consents for surface and/or groundwater water take and use for dust suppression or other water use required for the construction of the Project;
- Consents required for a concrete batching plant, such as the discharge of contaminants to air, land or water from an industrial or trade process;
- Consents for the discharge of sewage wastewater from site offices and work sites;
- Consent for the discharge of contaminants to land or water from contaminated land that is undergoing disturbance or remediation;
- Consent for the disturbance of contaminated land under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health;
- Historic Places Act Authority from the New Zealand Historic Places Trust to damage or modify any registered archaeological sites;
- Wildlife Act Authority to relocate any protected species prior to the commencement of construction; and
- Authority under the Freshwater Fisheries Regulations relating to fish passage.

### 1.11 Structure of this report

The documentation to support the NORs and resource consent applications is contained within four volumes. These are:

- Volume 1: NORs and resource consent applications
- Volume 2: Assessment of Environmental Effects (this Volume)
- Volume 3: Assessment Reports
- Volume 4: Drawing Set

A complete glossary of terms and acronyms used in this AEE is attached in **Appendix B**.