

UNITARY PLAN UPDATE REQUEST MEMORANDUM

TO Warren MacLennan, Manager Planning – Regional, North, West, and Islands

FROM Jo Hart, Senior Policy Planner, Planning – Regional, North, West and Islands.



DATE 13 November 2023

SUBJECT **Designation in accordance with s168 of the Resource Management Act of the Auckland Unitary Plan(AUP) Operative in part (15 November 2016)**



This memorandum requests an update to Auckland Unitary Plan Operative in part

Reason for update – new designation	
Chapter	K – Schedules and Designations
Section	New Zealand Transport Agency – Schedule and Designation
Designation only	
Designation #	New Zealand Transport Agency
Locations:	Various between Warkworth and north of Te Hana (as shown on the GIS map viewer)
Lapse Date	15 years from the date on which it is included in the AUP
Purpose	Construction, operation and maintenance of a new state highway and associated activities between Warkworth and north of Te Hana
Changes to text (shown in underline and strikethrough)	Refer to Attachment B – as per the Environment Court Consent Order (dated 9 November 2023)
Changes to diagrams	
Changes to spatial data	Refer to Attachment C
Attachments	Attachment A: Environment Court Consent Order (dated 9 November 2023) Attachment B: Conditions Attachment C: Amended designation boundary (in accordance with the Environment Court Consent Order)

Prepared by: Jo Hart Senior Policy Planner	Text Entered by: Sarah El Karamany Planning Technician
Signature: 	Signature: 
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Signature:	Signature:



P Vari

Signed off by:

Warren MacLennan
Manager Planning – North/ West

Signature:



**Attachment A: Environment Court Consent Order
(dated 9 November 2023)**

**IN THE ENVIRONMENT COURT
AT AUCKLAND**

**I TE KŌTI TAIAO O AOTEAROA
KI TĀMAKI MAKĀURAU**

Decision [2023] NZEnvC 242

IN THE MATTER OF appeals under section 120 the Resource
Management Act 1991

AND appeals under section 174 of the
Resource Management Act 1991

BETWEEN WAKA KOTAHI NEW ZEALAND
TRANSPORT AGENCY

(ENV-2021-AKL-000040)

DIANNE CIVIL

(ENV-2021-AKL-000042)

(ENV-2021-AKL-000095)

DIRECTOR-GENERAL OF
CONSERVATION

(ENV-2021-AKL-000071)

PURIRI SPRINGS TRUST

(ENV-2021-AKL-000069)

Appellant

AND AUCKLAND COUNCIL

WAKA KOTAHI NEW ZEALAND
TRANSPORT AGENCY

Respondents

AND WAKA KOTAHI NEW ZEALAND
TRANSPORT AGENCY

Applicant



Court: Environment Judge MJL Dickey sitting alone pursuant to s 279 of the Act

Date of Order: 9 November 2023

Date of Issue: 9 November 2023

CONSENT ORDER

A: Under section 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, orders that:

- (1) the Regional Resource Consents (LUC60354952, LUC60355185, WAT60355184, WAT60356979, DIS60354954, DIS603551896, LUS60354955, WAT60354953) relating to the Ara Tūhono Warkworth to Wellsford project be amended as set out in Annexure 1;
- (2) the Designation conditions relating to the Ara Tūhono Warkworth to Wellsford project be amended as set out in Annexure 2;
- (3) the Project designation boundary over the property at 109 Kaipara Flats Road (ROT 764798) be adjusted as shown in the updated designated land maps and plan attached at Annexure 3, and Sheets 03 and 04 of the designated land maps attached to the recommendation and decision for the Project be replaced with Sheet 03 and 04 of the updated designated land maps attached at Annexure 4 to reflect that adjustment;
- (4) a consolidated set of Regional Resource Consent conditions (clean version) is at Annexure 5. A consolidated set of Designation conditions (clean version) is at Annexure 6; and
- (5) this order resolves appeals ENV-2021-AKL-000040, ENV-2021-AKL-000042, ENV-2021-AKL-000069, ENV-2021-AKL-000071 and ENV-2021-AKL-000095 in full.

B: Under section 285 of the Resource Management Act 1991, there is no order as to costs.

REASONS

Introduction

[1] This order relates to the following appeals lodged in respect of the Ara Tūhono Warkworth to Wellsford project (**Project**):

- (a) ENV-2021-AKL-00040 Waka Kotahi New Zealand Transport Agency v Auckland Council – resource consent appeal.
- (b) ENV-2021-AKL-000042 Civil v Auckland Council – resource consent appeal;
- (c) ENV-2021-AKL-000069 Puriri Springs Trust¹ v Auckland Council – resource consent and notice of requirement (**NOR**) appeal;
- (d) ENV-2021-AKL-00071 Director-General of Conservation v Waka Kotahi NZ Transport Agency – NOR appeal; and
- (e) ENV-2021-AKL-000095 Civil v Waka Kotahi New Zealand Transport Agency – NOR appeal.

[2] The resource consent appeals were lodged in relation to the Auckland Council's decision to grant regional resource consents² for the construction and operation of the Project (**Regional Resource Consents**).

[3] The NOR appeals was lodged in relation to Waka Kotahi New Zealand Transport Agency's (**Waka Kotahi**) decision to confirm the notice of requirement for a designation for the construction, operation and maintenance of the Project (**Designation**), subject to conditions.

¹ Denis Lyn Civil, Ian Donald Shepherd Civil and Michael Charles Tisdall as trustees.

² LUC60354952, LUC60355185, WAT60355184, WAT60356979, DIS60354954, DIS603551896, LUS60354955, WAT60354953.

- [4] Consent memoranda have been filed as follows:
- (a) on 3 March 2023 in relation to the appeals by Ms Dianne Civil;
 - (b) on 23 March 2023 in relation to the appeals by Waka Kotahi and the appeal by the Director-General of Conservation (**DOC**); and
 - (c) on 17 October 2023 in relation to the appeal lodged by Puriri Springs Trust.

Interested parties

[5] Channel Infrastructure NZ Limited and the Director-General of Conservation (**DOC**) gave notice of intention to become parties under s 274 RMA to ENV-2021-AKL-000040.

[6] Ian Civil, Michael Tisdall and Denise Civil as trustees of Puriri Springs Trust, and Southway gave notice of intention to become parties under s 274 RMA to ENV-2021-AKL-000042.

[7] Auckland Council gave notice of intention to become a party under s 274 RMA to ENV-2021-AKL-000069, ENV-2021-AKL-000071 and ENV-2021-AKL-000095.

Appeal points and agreement reached

ENV-2021-AKL-000042 Civil v Auckland Council and ENV-2021-AKL-000095 Civil v Waka Kotahi New Zealand Transport Agency

[8] The parties have agreed changes to the conditions of the Regional Resource Consents and the Designation for the Project. The changes relate to:

- (a) amendments to Condition RC 54 of the Regional Resource Consents to address the concerns raised in relation to the effects of the Project on terrestrial and freshwater ecology. The proposed amendments clarify that vegetation loss should be minimised as far as practicable where

works intrude into the riparian margins of the Mahurangi River, as well as the Hōteio River;

- (b) amendments to Condition 49A and 49B of the Designation to address the concerns raised in the NOR Appeal in relation to visual screening, consultation and the development of Urban and Landscape Design Management Plans (**ULDMP**). The proposed amendments to Condition 49A strengthen the requirements in respect of landowner input into the ULDMP, requiring the ULDMP report submitted by Waka Kotahi to describe how landowner input has or has not been incorporated into the ULDMP, and increasing the timeframe for landowners to respond to Waka Kotahi in respect of the ULDMP from 10 to 20 days; and
- (c) amendments to Condition 49B requiring Waka Kotahi to provide a copy of the feedback report on the ULDMP to the landowners, and to include in that report information on how the landscape mitigation and screen planting has been given regard to, and if relevant, why visual screening was not practicable; and
- (d) a consequential amendment has been made to Condition 49(b)(xiv) to clarify its interpretation in light of an inconsistency identified by the parties during discussions.

ENV-2021-AKL-00040 Waka Kotahi New Zealand Transport Agency v Auckland Council and ENV-2021-AKL-00071 Director-General of Conservation v Waka Kotahi NZ Transport Agency

Ecology conditions

[9] As outlined in its appeal, Waka Kotahi proposed an integrated mitigation and offset approach for the Project. This approach included a biodiversity ratio offset method for calculating the offset and mitigation requirements in relation to the Project's terrestrial vegetation and wetlands effects (**Ratio Approach**), as well as a range of other mitigations and offsets for fauna disturbance and ecological

fragmentation effects. Collectively, these mitigation and offsets were designed to offset and mitigate the effects of the Project in an integrated manner.

[10] However, Council's reporting officer was concerned that the Ratio Approach lacked certainty as to whether it would achieve "no net loss". The Council therefore preferred the use of accounting model to calculate offsets (**Accounting Approach**), to confirm that residual adverse ecological effects will be offset or compensated in a "like for like" manner, to achieve "no net loss". The Commissioners preferred the Council's approach and made a number of changes to the suite of ecology conditions proposed by Waka Kotahi to require an Accounting Approach.

[11] The Council's reporting officer was also concerned that adverse effects arising from stream diversions associated with soil disposal for the Project had not been sufficiently assessed by Waka Kotahi, and therefore queried whether these activities should be excluded from the scope of the Regional Resource Consents. The Hearing Panel agreed with those concerns.

[12] In the NOR appeal, DOC raised concerns about the certainty and adequacy of conditions (in the Designation or Regional Resource Consents) regarding the maintenance and protection of mitigation plantings.

[13] Over the course of numerous discussions (involving technical specialists from Council, DOC and Waka Kotahi) and following the completion of further assessment work by Waka Kotahi, the parties have agreed on a "hybrid" approach to address the ecology-related concerns raised by the Council and DOC.

[14] The hybrid approach requires an audit of the Ratio Approach to be undertaken using the Accounting Approach. The hybrid approach will enable Waka Kotahi to achieve the desired landscape level, integrated mitigation strategy for the Project, while at the same time providing certainty that residual adverse ecological effects will be offset or compensated in a "like for like" manner, to achieve "no net loss".

[15] The parties have agreed various changes to the suite of ecology related conditions in the Regional Resource Consent conditions to give effect to the agreed

hybrid approach and resolve the concerns raised in the Appeals (including in relation to soil disposal and mitigation planting).

Resource consent conditions 25, 26 and 81

[16] Waka Kotahi sought relatively minor technical changes to conditions regarding erosion and sediment control management (conditions RC 25 and RC 26), and stormwater management system design (condition RC 81).

[17] Following discussions between the parties and further consideration of the relevant conditions by Waka Kotahi and Council technical specialists, the parties have agreed changes to the Regional Resource Consent conditions to address Waka Kotahi's concerns in relation to RC 25, RC 26, and RC 81.

Agreed changes

[18] The changes relate to amendments to various conditions of the Regional Resource Consents, in particular:

- (a) amendments to RC conditions 54C, 54D, 54F, 54G, 54H, 54I, 54IA, 54J, 54K, 54KAA, 54KA, 54KB, 54KC, 54L, 54M, 54N, 54O, 54T, 54V, 55, 56B, 58, 63, 68A, 77, 77A, 78, 78A, 78B and 78C to impose a Ratio Approach and to introduce an "audit" of the Ratio Approach using an Accounting Approach;
- (b) the addition of a new condition RC 105 to ensure adequate maintenance and protection of landscape, mitigation and offset planting and works;
- (c) amendments to the third advice note to clarify the scope and extent of the consents for reclamation and diversion of watercourses;
- (d) amendments to Conditions 25(a)(ii) and RC 26(c) to clarify the purpose and requirements of flocculation system design and design certification requirements;
- (e) amendment to condition RC 81 to allow for alternatives to stormwater management wetlands to be considered in circumstances where wetlands

are not practicable, and to remove replication of the requirements of condition RC 97 in relation to the preparation of a Stormwater Operation and Maintenance Plan; and

- (f) various consequential amendments, clarifications and minor corrections.

Puriri Springs Trust

[19] The Puriri Springs Trust appeal raised various concerns with the Designation and Regional Resource Consents. Common to the matters raised was the Trust's overarching concern with the potential impacts of the Project on the land owned and farmed by the Trust at 109 Kaipara Flats Road, Warkworth (**Land**).

[20] Part of the Land is subject to the Designation and within the currently proposed Warkworth interchange area of the Project. Following relevant Public Works Act processes and detailed design, the Project will divide the Land into separate parcels and will likely result in the removal of existing mature Kauri trees on the Land. The Trust is particularly concerned about those two aspects as well as more generally about the extent of the Designation over the Land.

[21] For wider context, it is noted that the Land was also impacted by an earlier phase of the State Highway's development – the Ara Tūhono Puhoi to Warkworth project, which was recently completed and opened for public use. Through that project, the Trust's original farm holding was severed and some of it was acquired by the Crown under the Public Works Act. Waka Kotahi was required by Condition D80 (imposed by the Board of Inquiry) to construct a farm access beneath the Puhoi to Warkworth motorway alignment to enable the Trust's remaining land holdings to continue to be accessible. That access has been constructed as required by the designation condition and is presently used by the Civils to access the severed portions of their farm on either side of the new motorway.

[22] However, the Project requires a further area of Civil land which would likely block the use of the recently constructed motorway underpass constructed to link the already severed portions of the farm. This is addressed in more detail under "access" below.

[23] Earlier in the discussions between the parties, the Civils engaged a traffic engineer who produced alternative designs for the on/off ramps the subject of the Designation that in his opinion were suitable for their intended function. The Civils preferred those designs on the basis of requiring considerably less of their land, retaining access between the severed land areas using the motorway underpass and avoiding effects on the river and trees. Those alternatives were not however, acceptable to Waka Kotahi. Waka Kotahi's view was that they did not achieve its Project objectives and had a number of other material engineering flaws.

[24] The Parties have subsequently focussed on a reduction of the designation boundary, other mitigation measures that are able to be employed for the land as well as the difficult issue of access between severed portions of the land resulting from the Designation for the motorway ramps.

Designation boundary

[25] The Appeal raised concerns about the extent of the Designation over the Land. Following discussions between the Parties regarding the particular areas of concern, Waka Kotahi procured its technical engineers to undertake further investigations of the Land (including site visits and walkovers). Based on those investigations, Waka Kotahi has completed a review of the extent and location of the Designation and determined it is able to adjust the boundary to reduce the area of the Land subject to the Designation.

Access

[26] The Appeal raised particular concerns about how access would continue to be provided between the Land as a result of the Project. Waka Kotahi has engaged its technical engineers to support these discussions. Waka Kotahi and the Trust have discussed several options to enable ongoing access and have discussed other legislative processes that will apply. The options considered highlight a range of significant challenges to providing that access.

[27] The challenges are in part due to the significant area of the Land currently proposed to be needed for the Project's Warkworth interchange. Based on current

expectations and subject to the Public Works Act processes, the interchange will substantially reduce the size of the Trust's land holding. It will also impact on the current farm access arrangements. Waka Kotahi's current technical advice is that the options to enable ongoing access are severely limited due to a range of technical and feasibility constraints. Further, the future use of some areas of the Trust's wider land holdings are uncertain due to their current zoning as future urban land. In addition, the Project's detailed design has not yet commenced.

[28] As a result of all of these factors, at this stage of the project Waka Kotahi is unable to confirm arrangements for future access between the Land or whether it will be able to provide that access at all.

[29] To assist in managing some of this uncertainty and to acknowledge the Trust's unique circumstance in having been impacted by two state highway projects in relatively short order, the parties have agreed a set of conditions which establish a process for Waka Kotahi to consider access arrangements for the Land at the detailed design stage of the Project. These conditions provide two pathways. The first is that an access is provided, the design of which would be determined by a suitably qualified expert. Appropriate consultation with the Trust as to the nature and form of that access would also occur. The second, alternative pathway allows Waka Kotahi to opt out of providing access if one of a list of exceptions is met. These exceptions record that the access arrangement is personal to the trustees and the children of Joan Colleen Civil, Ian Donald Shepherd Civil and Denise Lyn Civil. They also provide for the currently known challenges of providing access.

Kauri trees

[30] In terms of kauri tree matter, Waka Kotahi is obliged to meet ecological mitigation planting conditions imposed on the Regional Resource Consents for the Project. The consent memorandum for the Waka Kotahi and DOC appeals resolves appeals on those conditions.

[31] However, in view of the complex history and specific features of the Trust's Land, the parties have agreed to an additional requirement involving replacement of Kauri trees on the Land at a ratio of eight new kauri trees to one tree lost.

Summary of agreed amendments

[32] The Designation conditions have been amended by:

- (a) adding definitions of Civil Landholding Owners, Existing Underpass, Northern Civil Land, Southern Civil Land and Urban Zoning; and
- (b) adding conditions 88F, 88G, 88H, 88I.

[33] The Project designation boundary over the property at 109 Kaipara Flats Road (ROT 764798) has been adjusted as shown in updated designated land maps and plan.

[34] The Regional Resource Consent conditions have been amended by adding Augier condition 54Y.

Consideration

[35] The parties have discussed and agreed changes to the conditions of the Regional Resource Consents and the Designation for the Project to resolve the Appeals. The parties agree that the Appeals are able to be resolved by consent in full.

[36] The conditions offered by Waka Kotahi in relation to the Puriri Springs Trust appeal are done so on an *Augier* basis.

[37] The Court has now read and considered the consent memoranda of the parties dated 3 March 2023, 23 March 2023 and 17 October 2023.

[38] The Court is making this order under section 279(1) of the Act, such order being by consent, rather than representing a decision or determination on the merits pursuant to section 297. The Court understands for present purposes that:

- (a) all parties to the proceedings have executed the memorandum requesting this order;
- (b) all parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction, and conform to the relevant requirements and objectives of the Act including, in particular, Part 2.

Order

[39] Therefore, the Court orders, by consent, that:

- (a) the regional resource consents (LUC60354952, LUC60355185, WAT60355184, WAT60356979, DIS60354954, DIS603551896, LUS60354955, WAT60354953) relating to the Ara Tūhono Warkworth to Wellsford project be amended as set out in **Annexure 1**;
- (b) the Designation conditions relating to the Ara Tūhono Warkworth to Wellsford project be amended as set out in **Annexure 2**;
- (c) the Project designation boundary over the property at 109 Kaipara Flats Road (ROT 764798) be adjusted as shown in the updated designated land maps and plan attached at **Annexure 3**, and Sheets 03 and 04 of the designated land maps attached to the recommendation and decision for the Project be replaced with Sheet 03 and 04 of the updated designated land maps attached at **Annexure 4** to reflect that adjustment;
- (d) a consolidated set of Regional Resource Consent conditions (clean version) is at **Annexure 5**. A consolidated set of Designation conditions (clean version) is at **Annexure 6**;
- (e) this order resolves appeals ENV-2021-AKL-000040, ENV-2021-AKL-000042, ENV-2021-AKL-000069, ENV-2021-AKL-000071 and ENV-2021-AKL-000095 in full; and
- (f) there are no issues as to costs.



MJL Dickey
Environment Judge



THE RESOURCE CONSENTS ARE SUBJECT TO THE FOLLOWING CONDITIONS

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Cumulative Sediment	Total sediment (tonnes) discharged from Project Works above the Cumulative Threshold(s) over the total Project construction period minus any Acute Event Sediment	
Cumulative Threshold	Catchment	Cumulative Threshold (tonnes)
	Hōteō Catchment	9000 [x total years of Construction Works]
	Mahurangi Catchment	4300 [x total years of Construction Works]
	Oruawharo Catchment	3300 [x total years of Construction Works]
Day(s)	Has the same meaning as “working day” under section 2 of the RMA	
DEB	Decanting earth bund	
<u>Designated Land</u>	<u>The land subject to the Designation</u>	
Designation	The designation for the Project included in the AUP(OP)	
EMP	Ecology Management Plan	
Ecological Site	The areas described in Appendix A as identified on Maps 18 – 20	
Ecological Value	The value of an Ecological Site (i.e. Low-Moderate or High-Very High) identified using the criteria in the EIANZ Guidelines	
EIANZ Guidelines	Ecological Impact Assessment Guidelines for New Zealand 2nd Edition, EIANZ, 2018, or any subsequent version.	
Enabling Works	Preliminary construction activities as follows: <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments); • formation of access for geotechnical investigations; • establishment of site yards, site offices, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and screen planting) 	
Erosion Prone Stream	Streams with soft beds (not rock) that are predicted to be subject to flow changes of >15% to peak 2-year and 10-year ARI flows compared to predevelopment	
ESCP	Erosion and Sediment Control Plan	

EWCEMP	Enabling Works Construction Environmental Management Plan
EWCESCP	Enabling Works Construction Erosion Sediment Control Plan
EWCTMP	Enabling Works Construction Traffic Management Plan
Fauna	Indigenous fauna of NZ, excluding fauna as defined in Avifauna above
<u>FHFMA</u>	<u>Fauna Habitat and Flyway Mitigation Area</u>
GD01	Auckland Council Guideline Document 2017/001: Stormwater Management Devices in the Auckland Region (December 2017), or any subsequent version
GD05	Auckland Council Guideline Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (June 2016), Incorporating Amendment 1, or any subsequent version
Highly Sensitive Receiver (HSR)	Residential dwellings within: <ul style="list-style-type: none"> • 200m of the Designation boundary; • 50m of sealed access roads used for Project Works up to 500 m outside of the Designation boundary; and • 100m of unsealed access roads used for Project Works outside of the Designation boundary.
Hōkai Nuku	The iwi collective being comprised of the representatives for Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Ngāti Whātua o Kaipara and Ngāti Whātua.
Incident	A release of contaminants (including sediment) or materials into a waterbody that exceeds typical background levels
Iwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition 9G.
Kourawhero Wetland Complex	The wetland complex associated with the Kourawhero Stream as identified on Map 17
Intermittent Stream	As defined in the AUP(OP)
Manager	The Team Manager – Compliance Monitoring, of Auckland Council, or authorised delegate
Mana Whenua	Māori who can demonstrate customary rights through occupation to resources within the Project area, and who have responsibilities as kaitiaki over their tribal lands, waterways and other taonga

Stabilisation	The activity to achieve a Stabilised Area
Stabilised, Stabilised Area	<p>Refers to an area inherently resistant to erosion such as rock or an area that has been stabilised after earthworks and is excluded from the definition of Maximum Open Earthworks Area.</p> <p>Stabilisation methods may include use of mulch and/or other woody organic matter, geotextile, the use of hard fill material and exposing rock as set out in GD05 or as approved through conditions or certified CESCPS.</p> <p>Where vegetation is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once an 80% vegetation cover has been established.</p>
Stage(s)	A specific works area or new land disturbing activity associated with construction of the Project as nominated by the Consent Holder.
Stormwater Management Wetland	A permanent stormwater management device in the form of a constructed wetland designed to manage stormwater runoff volume, flow and/or contaminant loads prior to discharge
Suitably Qualified and Experienced Person or SEQP	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence
Trigger Event	<p>An event in which the following occurs:</p> <ul style="list-style-type: none"> • Greater than 25mm of rainfall over any 24-hour period (as measured by the automatic onsite rainfall devices) where Project Works subject to a CESCPS are not Stabilised; or • Greater than 15mm of rainfall within an hour period where Project Works subject to a CESCPS are not Stabilised
TSS	Total Suspended Solids
Watercourse	Permanent and intermittent rivers and streams but not ephemeral streams or Wetlands.
Wetland(s)	Includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions, excluding Stormwater Management Wetlands.
<u>WEEMP</u>	<u>Wetland Ecological Effects Management Plan</u>

Incident management

- k. Identification of the process to ensure compliance with Condition 48 and 49.

Chemical Treatment Management

25. The Consent Holder shall prepare a Chemical Treatment Management Plan (ChemTMP). The ChemTMP shall be prepared by a Suitably Qualified and Experienced Person and shall include:
- a. Specific design details of the flocculation treatment system which shall include:
 - i. a rainfall or flow activated flocculation system excluding flocculation socks for all sediment retention ponds (SRPs) and decanting earth bunds (DEBs) for areas that have a contributing catchment greater than 500m²;
 - ii. all rainfall activated flocculation systems to incorporate robust design, construction and operation systems including provision of sufficient chemical at a minimum in accordance with GD05 and sufficient to meet the overall ESC Outcomes of Condition 21 and to minimise the effects of any malfunction of the rainfall activated flocculation systems; and
 - iii. a rainfall activated flocculation system (including flocculation socks) for all other DEBs and any other sediment detention or flow device system as may be employed on site.
 - b. Monitoring, maintenance (including post storm) and a contingency programme (including a record sheet) for the flocculation treatment system;
 - c. Results of any initial treatment trials and details of optimum dosage (including assumptions) specific to a given CЕСSР;
 - d. Consideration of the use of organic flocculants where practicable, provided that the most effective flocculent in terms of sediment removal is selected based on the results of any initial treatment trials;
 - e. A spill contingency plan;
 - f. Details of the person or bodies that will hold responsibility for the operation and maintenance of the chemical treatment system and the organisational structure which will support this system; and
 - g. Details for the checking and calibration of dosing and monitoring equipment.

Erosion and sediment control standards

26. The Consent Holder shall design and construct all erosion and sediment control measures and devices to achieve compliance with Conditions 22 and 24 and shall include the following design requirements:
- a. All Sediment Retention Ponds and decanting earth bunds shall be designed, constructed and maintained at a volume equivalent to or greater than 3% of the catchment area (i.e., 300m³ per 1ha of contributing catchment) unless otherwise varied through an approved CЕСSР;
 - b. Silt fence design and super silt fence design shall be in accordance with TP90 and NZ Transport Agency Erosion and Sediment Control Guidelines for State Highway Infrastructure (Sept 2014), or any subsequent version, with a return upslope to provide robustness of the device;

- c. Clean and dirty water diversion channels, shall be sized to accommodate the flow from a 100 year ARI storm event where practicable, but if this sizing cannot be achieved, an alternative design shall be provided including reasons why the 100 year sizing criterion cannot be achieved and this alternative design will need to be approved certified through the CESP CESCP;
- d. Sufficient and safe access to enable monitoring and maintenance (including forebay clean out) shall be provided at all times to all Sediment Retention Ponds and decanting earth bunds.

Construction Erosion and Sediment Control Plans for Stages

27. The Consent Holder shall prepare CESCPs for each Stage of the Project, or a specific activity to set out how the requirements of the certified ESCP and the ESC standards in Condition 26 will be met for that Stage or activity.
28. The CESCPs shall be prepared by a Suitably Qualified and Experienced Person and shall include:
 - a. Methods of achieving the ESC Outcomes.
 - b. Identify how the requirements of the certified ESCP and the standards in Condition 26 will be met (where applicable).
 - c. Include a schedule of current and planned open earthworks areas as applicable to that CESCP catchment location at the time of preparation of that CESCP.
 - d. Identify alternative Stabilisation measures based on Project specific field trials to demonstrate its effectiveness in Stabilisation. The Project specific trials and results must be submitted to the Manager in that CESCP.
 - e. Confirm catchment boundaries.
 - f. Confirm the location of the Construction Works, and the boundary and extent of works for that specific CESCP.
 - g. Provide design criteria, typical and site-specific details of ESC measures, including supporting calculations, contributing catchment area, retention volume of structure, dimensions of structure and design drawings of erosion and sediment controls.
 - h. Provide identification of risk and sensitive area locations and the details of management (including contingency measures) around these aspects.
 - i. Confirm chemical treatment design and details consistent with the ChemTMP certified under the ESCP.
 - j. Provide a programme for managing ongoing non-Stabilised Areas.
 - k. Provide design details for managing the treatment, disposal and/or discharge of contaminants (e.g. concrete wash water).
 - l. Provide an estimated sediment yield for the Stage of work.
 - m. Provide details of construction methods to be employed, including timing and duration. This shall include:
 - i. Streamworks methodologies;
 - ii. Programme for managing exposed area, including progressive Stabilisation considerations;
 - iii. Identification of areas susceptible to erosion and sediment generation or high-risk areas including specific measures for managing this risk;

51. If an area is not subject to earthworks activity (including cut and fill batters) for a 14-Day period, or time otherwise certified with the Manager within a CESCP, the area shall be Stabilised. The Manager shall take into account the following when determining a change to this 14-day period:
- a. The duration of the extension;
 - b. Any interim Stabilisation;
 - c. Risk of the change as identified in the CESCP;
 - d. Topography;
 - e. Extent of open area;
 - f. Reason for the extension of duration; and
 - g. Environmental effects of extension.

The 14-Day period (or otherwise agreed) will apply to all earthworks and will include parts of larger earthwork footprint locations.

Completion or abandonment of works

52. Upon completion or abandonment of earthworks on the Project site, the Consent Holder shall stabilise all areas of bare earth against erosion to the satisfaction of the Manager.

Condition 53 is intentionally left blank

WORKS IN A WATERCOURSES AND WETLANDS ANDECLOGY

Crossing watercourses – Location of bridge structures

54. The Consent Holder shall design and construct the Project to include bridge structures with no piers in the Bed of the following Watercourses (as identified on Maps 14 – 16):
- a. Mahurangi River (Left Branch), and the riparian margins where practicable;
 - b. Hōteō River and the riparian margins where practicable;
 - c. Waitaraire Stream; and
 - d. Maeneene Stream.

Biosecurity Plan

- 54A. Prior to Project Works commencing, the Consent Holder shall prepare a Biosecurity Plan in consultation with the Operations Manager and Department of Conservation. The kauri management aspects of the Biosecurity Plan shall apply to all areas in the Designation within 3 times the radius of the canopy drip line of any New Zealand kauri. The purpose of the Biosecurity Plan is to set out the procedures to be used to prevent the introduction and/or spread of kauri dieback disease, and other biosecurity hazards such as Myrtle rust, Argentine ants and plague skink.
- 54B. The Biosecurity Plan shall be prepared by a Suitably Qualified and Experienced Person to meet the purpose in Condition 54A and, as a minimum, shall:
- a. be consistent with “Hygiene Procedures for Kauri Dieback”, “Land disturbance activities (including earthworks) around kauri”, “Vehicle and

Heavy Machinery Hygiene”, “Landfill Disposal of Contaminated Material” and “Procedures for Tree Removal and Pruning” and any other relevant guidelines published by the Ministry for Primary Industries Kauri Dieback Management Programme, or any subsequent revision which can be found at www.kauridieback.co.nz or copies can be obtained from Auckland Council;

- b. contain measures that address the removal of any material (including soil) from within the “kauri contamination zone” and safe disposal thereof;
- c. contain best practice biosecurity protocols to respond to any other identified biosecurity risk (e.g. Myrtle Rust) where required to do so by legislation; and
- d. contain methods for updating the Biosecurity Plan in the event of significant changes in scientific knowledge relating to the effective management of kauri dieback or other biosecurity risks that occur after the plan is approved.

Ecological outcomes

Ecological Outcomes

54C. In designing and managing the construction and operation of the Project, the Consent Holder shall achieve the following “Ecological Outcomes” (Ecological Outcomes):

- a. Limit encroachment of Project Works into Ecological Sites where practicable to do so, and otherwise minimise impacts on such areas;
- b. Protect Fauna and Avifauna from harm or mortality resulting from the Project as far as practicable through adopting best practice capture and relocation protocols;
- c. Avoid intrusion into the Kourahwero Wetland Complex where practicable and where not practicable minimise any such intrusion into the Kourawhero Wetland Complex;
- d. Avoid the escarpment feature in the Dome Valley Forest Section identified on Map 21;
- e. Avoid, where practicable the Significant Ecological Area at the Hōteo River crossing where practicable and where not practicable minimise any encroachment into this area;
- f. Restore, maintain or enhance ecology and habitat affected by the Project by designing and implementing restoration planting and habitat rehabilitation to:
 - i. Connect and enhance existing naturalecosystems;
 - ii. Establish ecological connectivity between the Mahurangi River (left branch) catchment and the Upper Kourawhero Streamcatchment;
 - iii. Enhance Fauna and Avifauna habitat within the Mitigation Sites, the Fauna hhHabitat and ffElyway mmMitigation aaArea (FHFMA) and other planting areas; and
 - iv. Provide restoration of habitats within the Designated Land Designation that are resilient through minimising edge effects and other factors causing degradation, and which are protected and managed in perpetuity to maintain the Ecological Outcomes identified above.

54D. At least 6 months prior to start of Project Works, the Consent Holder shall prepare an Ecology Management Plan (*EMP*) to identify how the Ecological Outcomes will

be ~~achieved as part of the Project Works met~~. The EMP shall be prepared by a Suitably Qualified and Experienced Person and shall be provided to the Manager for certification and shall include the following topic sections:

Ecological Outcomes

- a. Provide detail as to how the Project design and management of the construction of the Project will achieve the Ecological Outcomes. This shall, as a minimum, include a description of how:
 - i. How the Project responds to each element of the Ecological Outcomes;
 - ii. How the Ecological Outcomes are achieved in each subtopic (b), (c), (d) and (e) of the Ecology Management Plan.
 - ~~iii. The performance measures and standards used to inform the design of the Ecological Outcomes;~~
 - ~~iv. Ecological performance monitoring to evaluate progress in achieving the Ecological Outcomes against the performance measures and standards;~~
 - ~~v. Measures to address any shortfalls on expected ecological performance;~~
 - ~~vi. Revised areas of impact of ecological areas based on final design alignment;~~
 - ~~vii. Revised ecological values of all Ecological Sites within the Designation; and~~
 - ~~iii.viii. The ecological areas that will be directly affected by the Project Works.~~

Ecological Sites

- b. Recommended measures to be adopted to limit encroachment of Project Works into Ecological Sites including:
 - i. The steps taken to reduce the footprint of Project Works in such areas and documenting the reasons where it is not practicable to do so; and
 - ii. Measures to fence off or otherwise clearly demarcate such areas during Project Works to protect those sites from accidental damage during Project Works;

Fauna habitat and flyway mitigation area

- c. The confirmed location and measures for the Fauna habitat and flyway mitigation area under protection and ongoing maintenance and enhancement of the FHFMA required under Conditions 54F-54I.

Restoration planting and habitat rehabilitation

- d. The locations and measures for the restoration planting and habitat rehabilitation required under Conditions 54J and - 54N.

Fauna relocation protocols and sites

- e. The locations and measures for the Fauna and Avifauna relocation required under Conditions 54Q-54R.

54E. In preparing the EMP and the relevant topic sections the Consent Holder shall engage with Mana Whenua and consult with:

- a. Auckland Council;
- b. Department of Conservation; and
- c. The owner of the commercial plantation forest (Mahurangi Forest) located west of SH1, with respect to ecological management activities which directly interface with forestry operations.

If the Consent Holder has not received any comment from such parties within 20 Days of providing the EMP to them, the Consent Holder may consider that the relevant party has no comment.

Fauna habitat and flyway mitigation area

- 54F. ~~At least 6 months prior to the start of Project Works the Consent Holder shall confirm by survey the location and extent of the FHFMA provide a Fauna habitat and flyway mitigation area at the area identified on Map 13, to achieve the following “Fauna Habitat and flyway mitigation area” outcomes: The confirmed FHFMA shall be certified by a Suitably Qualified and Experienced Person as suitable to achieve the following Fauna habitat and flyway mitigation area outcomes (FHFMA Outcomes):~~
- a. Provides a suitable location for the relocation of some or all fauna captured and relocated under Conditions 54Q–54X;
 - b. Maintains an east-west link across the Designated Land Designation to allow for the movement of fauna and dispersal of seeds;
 - c. Maintains a flyway for Avifauna and long-tailed bats to move across and along the Designated Land Designation; and
 - d. Contains mature vegetation suitable for long-tailed bat roosts and bat and avifauna breeding sites.
- 54G. If, in the opinion of a Suitably Qualified and Experienced Person, the area identified on Map 13 will not achieve the Fauna habitat and flyway mitigation area FHFMA Outcomes, an alternative area(s) for mitigation shall be identified by a Suitably Qualified and Experienced Person within the Designation Designated Land that will achieve those outcomes and included within the FHFMA to be confirmed under Condition 54F.
- 54H. The Consent Holder shall fence off (or otherwise clearly demarcate) the FHFMA Fauna habitat and flyway mitigation area during Project Works to prevent access and any accidental damage during adjacent construction activities, ~~provided that~~ apart from access for pest animal and pest plant management and restoration planting and habitat rehabilitation works shall be allowed.
- 54I. The Consent Holder shall include the location and measures for the Fauna habitat and flyway mitigation area in a topic section in the EMP.
- 54IA. The Consent Holder shall not undertake any Project Works above ground within the escarpment feature identified on Map 21.
- ~~**Terrestrial Restoration planting and habitat rehabilitation**~~
- 54J. Prior to commencing Enabling Works, the Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct surveys of ~~those areas~~ areas within the Designated Land where of Project Works will occur to determine the areas of (i) terrestrial vegetation with at least ‘Low’ Ecological Value, and (ii) Wetland(s) with at least ‘Low’ Ecological Value, that are will be impacted by the Project Works. ~~The Consent Holder shall provide a report on the surveys undertaken and the survey results to the Manager.~~
- 54K. The Consent Holder shall undertake restoration planting and habitat rehabilitation to mitigate/offset the effects of Project Works on areas of (i) terrestrial vegetation with at least ‘Low’ Ecological Value, and (ii) Wetland(s) with at least ‘Low’

~~Ecological Value, that are impacted by Project Works, as assessed on a like for like basis (in regard to ecosystem type) so as to ensure that, as a minimum, the Project achieves no net loss of ecological values. The quantum of offset restoration planting and habitat rehabilitation and its design and location shall be determined~~ by a Suitably Qualified and Experienced Person to achieve: using best practice transparent and quantified offset accounting methods that ensure that:

- ~~a.~~ Like for like replacement having regard to ecosystem type; and
- ~~a.b.~~ No net loss of the ecological value of the impacted Wetland(s) and terrestrial vegetation.
- ~~c.~~ The potential value of the impacted ecology (fauna and flora) is accounted for;
- ~~d.~~ The relative ecological gain at the proposed offset site is accounted for;
- ~~e.~~ An appropriate suite of ecological attributes are included in the offset accounting method; and
- ~~b.f.~~ Time lag is accounted for.

54KAA. To achieve 54K a Suitably Qualified and Experienced Person shall:

- a. Calculate the quantum of restoration planting and habitat rehabilitation required in accordance with the following replanting ratios:
 - i. For Wetlands with at least 'Low' Ecological Value, mitigation/offsetting shall be provided at a ratio of 6:1 of the area impacted by the Project Works;
 - ii. For Ecological Sites, mitigation/offsetting shall be provided at a ratio of 6:1 of the area impacted by the Project Works;
 - iii. For other areas of Low to Moderate Ecological Value, mitigation/offsetting shall be provided at a ratio of 3:1 of the area impacted by the Project Works; and
- b. Assess whether the calculation in (i) will achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation using a best practice offset accounting method or other such method certified by Council; and
- c. If the calculation in (i) does not achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation, the Suitably Qualified and Experienced Person shall add to the calculation any Project landscape mitigation planting that, once mature, will achieve at least moderate Ecological Value and which is not designed solely for screening residential properties; and
- d. If the calculation in (iii) does not achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation, the Suitably Qualified and Experienced Person shall determine any such further restoration planting and habitat rehabilitation required to achieve that outcome, using a best practice offset accounting method or other such method certified by the Council.
- e. The Consent Holder shall provide to Council for certification a report outlining the proposed best practice offset accounting method to be used to

assess no net loss of Ecological Value. At a minimum the report shall include:

- i. The proposed offset accounting framework;
- ii. The parameters used to measure Ecological Value of both Wetland and terrestrial environments; and
- iii. How time lag is accounted for.

54KA The Consent Holder shall locate the restoration planting and habitat rehabilitation required by condition 54K at each of the “ecology vegetation mitigation” areas shown on Maps 1-6 where practicable. Where it is not practicable to locate such restoration planting and habitat rehabilitation in those areas, a similar location shall be determined by a Suitably Qualified and Experienced Person.

Fauna habitat and flyway mitigation area

54KB In addition to restoration planting and habitat rehabilitation required by other conditions, the Consent Holder shall undertake restoration planting and habitat rehabilitation as designed by a Suitably Qualified and Experienced Person at the Fauna habitat and flyway mitigation area identified under conditions 54F-54L where the Suitably Qualified and Experienced Person determines such works are necessary to achieve the outcomes in condition 54F.

Fragmentation sites

54KC In addition to restoration planting and habitat rehabilitation required by other conditions the Consent Holder shall locate restoration planting and habitat rehabilitation at areas identified as “Mitigation for fragmentation” as shown in Maps 1-6 where practicable. Where it is not practicable to locate such restoration planting and habitat rehabilitation in those areas, a similar location as determined shall be by a Suitably Qualified and Experienced Person to minimise fragmentation effects of the Project.

54L. The Consent Holder shall provide the restoration planting and habitat rehabilitation required by Condition 54K at the following locations:

- a. The Mitigation Sites;
- b. The FHFMA, where a Suitably Qualified and Experienced Person determines such works are necessary to achieve the outcomes in condition 54F;
- c. Areas identified as “Mitigation for fragmentation” on Maps 1-6 where practicable, or at similar locations to minimise fragmentation effects of the Project as determined by a Suitably Qualified and Experienced Person.
- d. Any other Fauna or Avifauna relocation sites established under Conditions 54R, 54T and 54V;
- e. Other sites recommended by a Suitably Qualified and Experienced Person where there is insufficient area in areas (a)-(c) for the required restoration planting and habitat rehabilitation; and
- f. Areas identified as opportunities for restoration and enhancement of Mauri and Mahinga kai in Condition 9(f).

Condition 54L is intentionally left blank

Detailed planting and habitat rehabilitation plans

54M. ~~The design of the restoration planting and habitat rehabilitation to be undertaken in accordance with Condition 54K shall be undertaken by Consent Holder shall instruct a Suitably Qualified and Experienced Person to prepare a topic section to be included in the EMP describing and illustrating the proposed restoration planting and habitat rehabilitation required by conditions 54K-54KC, that includes, included in the EMP and provide the following information:~~

- ~~a. A report on the surveys undertaken under condition 54J and the survey results, including:
 - ~~i. the location, the total area (delineated using best practice) and types of (i) terrestrial vegetation with at least 'Low' Ecological Value, and (ii) Wetland(s) with at least 'Low' Ecological Value, impacted by Project Works and the Ecological Value of those Wetland(s) and terrestrial vegetation;~~~~
- ~~b. The calculations and related evidence, for the restoration planting and habitat rehabilitation quantum required by Condition 54KAA and a statement as to how the quantum achieves Condition 54K, and if any landscape mitigation planting is included in the calculation;~~
- ~~b. Details of the ecological offset sites, the existing ecology of these sites and the enhancement values;~~
- ~~c. Details of how best ecological practice will be implemented;~~
- ~~d. Details of how the restoration planting and habitat rehabilitation will be integrated where practicable with the wetland restoration planting and habitat rehabilitation required under the other conditions of this consent;~~
- ~~a-c. The extent design and locations of the restoration planting and habitat rehabilitation required under Conditions 54K-54KC;~~
- ~~b-d. A statement as to how the restoration planting and habitat rehabilitation will achieve the Ecological Outcomes at Condition 54C(f);~~
- ~~e-e. A planting schedule containing a mix of native plants including genetic sourcing of native plants from the Rodney Ecological District;~~
- ~~f. Site specific enhancement plans for the proposed offset sites that:~~
- ~~g. Detail how the anticipated outcomes used in the offset calculations will be achieved;~~
- ~~h. Detail the planting to be carried out, including a list of species, numbers to be planted, their common and botanical names, method of planting, planting locations, plant grades, planting densities and local sourcing of plants;~~
- ~~i. Detail the timing of works and techniques of weed and plant management measures for a period of no less than 5 years or until canopy closure is achieved;~~
- ~~j. Detail the works and techniques for animal pest control for a period of no less than 5 years or until canopy closure is achieved;~~

- ~~e.f.~~ Detail of the monitoring methods and frequency to ensure planting and habitat rehabilitation survives, including a minimum annual reporting to Council for a period of no less than 5 years or until canopy closure is achieved;
- g. Methods to ensure restoration planting and habitat rehabilitation is resilient and self-sustaining on track to achieve the outcomes of Condition 54K and any anticipated outcomes used in the offset calculations at Condition 54KAA, including but not limited to:
 - i. A statement of the anticipated progress towards achieving those outcomes at a date that is 5 years from completion of the relevant planting and habitat rehabilitation works (year 5);
 - ii. Monitoring at year 5 to assess that progress;
 - ~~h.~~ iii. A response plan and any further works required should progress towards achieving the expected targets in the rehabilitation process not be met, including monitoring of those further works in accordance with condition 54M(f).
- ~~h.~~ monitoring, monitoring frequency, expected targets and a response plan should expected targets in the rehabilitation process not be met;
- e.h. A statement as to how the AUP(OP) Appendix 16: Guideline for native revegetation plantings has been taken into account;
- f.i. Proposed pest animal and pest plant management of restoration planting and habitat rehabilitation areas for a period of no less than five years or until canopy closure is achieved, including:
 - i. Timing and implementation;
 - ii. Methods for survey and monitoring to establish presence and abundance of pest animals and pest plants;
 - iii. Pest control methods;
 - iv. Performance monitoring;
 - v. Maintenance periods.
- g.j. Detail as to how any landscape planting to be established through an “Urban and Landscape Design Management” as defined in the Designation or other Project planting has been integrated;
- ~~h.~~ k. A statement as to how cultural values relating to restoration planting and habitat rehabilitation restoration identified through the Cultural Engagement Plan, have been acknowledged where feasible and practicable to do so; and
- i.l. Methods to exclude stock where necessary.

54N. The Consent Holder shall commence restoration planting and habitat rehabilitation for the translocation of species as soon as areas become available for that planting and shall complete all the restoration planting and habitat rehabilitation in accordance with the EMP by no later than 2 years from the date of the Project becoming operational or as otherwise specified in these conditions.

Long-tailed bats

54O. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct long-tailed bat habitat and presence surveys within the Designated Land Designation in the period of 6 months prior to start of works before construction of Project Works in areas where long-tailed bat may be impacted by Project Works.

conduct habitat and presence surveys within the Designation 6 months prior to the start of Project Works in areas that may be impacted by Project Works for the following species:

- a. land snail (*Amborhytida spp*, *Paryphanta spp*);
- b. all native skinks (eg copper skink); and
- c. all native geckos (eg. forest gecko).

54T. In the event that the surveys confirm the presence of any such species, the Consent Holder shall:

- a. instruct a Suitably Qualified and Experienced Person to recommend best practice methods to capture and relocate the species to the [FHFMA Fauna habitat and flyway mitigation area](#) or other suitable site, provided the site with the required habitat, has been subject to predator control measures for at least 6 months prior to the first transfer and will receive ongoing predator control for three years after the last transfer;
- b. undertake capture and relocation under the supervision of a Suitably Qualified and Experienced Person;
- c. where practicable, relocate land snails along with their leaf-litter habitat;
- d. Not relocate land snails captured within 30 metres of any kauri to a site within 30 metres of another kauri; and
- e. Provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person's recommendations in the relevant topic section of the EMP.

Advice Note: *Land snail, copper skink and forest gecko capture and relocation will be carried out in accordance with a Wildlife Act Authority.*

Hochstetter's frogs

54U. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct habitat and presence surveys within the Designation 6 months prior to the start of Project Works in all waterways and areas where suitable Hochstetter's frog (*Leiopelma aff. Hochstetteri*) habitat exists and may be impacted by Project Works.

54V. In the event that the surveys confirm the presence of Hochstetter's frogs, the Consent Holder shall:

- a. instruct a Suitably Qualified and Experienced Person to recommend best practice methods to capture and relocate frogs to a suitable site, including by:
 - i. applying the Department of Conservation document "Native frog hygiene and handling protocols" (DOCDM-214757) or any subsequent revision to reduce the potential for pathogen transmission and infection;
 - ii. using destructive searches during frog capture; and
 - iii. setting out post-release monitoring protocols to evaluate the success of the relocations and any further steps required to maintain and enhance the relocated populations
- b. consult with the Operations Manager, Department of Conservation regarding

- the Suitably Qualified and Experienced Person's recommendations for capture and relocation of frogs;
- c. undertake capture and relocation under the supervision of a Suitably Qualified and Experienced Person;
 - d. instruct a Suitably Qualified and Experienced Person to recommend methods to maintain or enhance Hochstetter's frog habitats within the Designated Land Designation and any other relocation sites, including but not limited to measures to reduce stream sedimentation and pest animal control; and
 - e. Provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person's recommendations in the relevant topic section of the EMP.

Advice Note: *Hochstetter's frog capture and relocation will be carried out in accordance with a Wildlife Act Authority.*

Reporting on salvage and relocation

54W. The Consent Holder shall report the results of capture and relocation programmes for Fauna and Avifauna to the Manager following implementation, including:

- a. Location of any species salvaged;
- b. Species types and numbers salvaged;
- c. Where salvaged species have been relocated to;
- d. Timing of salvage and relocations; and
- e. Pest animal and pest plant management implemented.

At Risk or Threatened flora and fauna discovery protocol

54X. In the event that a Suitably Qualified and Experienced Person discovers any At Risk or Threatened flora and fauna (as defined in the current version of the New Zealand Threat Classification System) within the Designation that is not covered by conditions 54K-54V, the Consent Holder shall immediately notify the Operations Manager, Department of Conservation and Mana Whenua. The Consent Holder shall have regard to any advice provided by the Department of Conservation and Mana Whenua in determining the appropriate course of action to be undertaken with respect to the discovered flora or fauna (eg further surveys, avoidance and/or capture and relocation).

Advice Note: *The Consent Holder will comply with all relevant provisions of the Wildlife Act 1953.*

Augier condition specific to circumstances of 109 Kaipara Flats Road

54Y. The Requiring Authority shall plant kauri trees at a ratio of 8:1 of no less than 1.5m in height for each kauri tree identified on the plan attached at Appendix E to be removed as a result of the Project as follows:

- a. The Requiring Authority shall consult with the Civil Landholding Owners or their appointed representatives as to their preferred location for the replacement planting either within the designation or on Section 19 and Section 23 SO495251 (CT 764798) where written agreement from the Civil Landholding Owners is provided (such consultation to be undertaken over a period of no less than 40 working days during the detailed design phase of the Project).
- b. The replacement planting design, location and appropriate fencing to protect the

trees shall be determined by a Suitably Qualified and Experienced Person having regard to the consultation feedback from the Civil Landholding Owners.

c. The replacement planting shall be established as soon as practicable following its design and location being confirmed.

d. The replacement planting shall be sourced from the Rodney Ecological District.

e. The Requiring Authority shall summarise in the Outline Plan(s) prepared for the Project all consultation undertaken under this condition, the replanting locations considered, and whether the Civil Landholding Owners' feedback has been incorporated into the final detailed design and if not, the reasons for that.

Advice Note: Condition 54Y applies in addition to and separate from Ecology Conditions 54J to 54N.

Crossing of the Kourawhero Stream and Kourawhero Wetland Complex

55. A Suitably Qualified and Experienced Person shall monitor over a three year period (or a shorter period as agreed with the Manager), prior to starting Project Works, the Kourawhero Wetland Complex (as identified in Map 17) to confirm pre-construction water table levels, ecological condition and Wetland extent. The monitoring shall include descriptions of:

- a. The methods for monitoring water table levels;
- b. The number and locations of water level sampling sites;
- c. The methods for delineating the Wetland extents in accordance with best practice;
- d. The methods for assessing Wetland condition in accordance with best practice; and
- e. The timing and frequency of monitoring events.

The results of the monitoring shall be provided to the Manager for information.

56. The Consent Holder shall design and construct bridges, structures, culverts and embankments to cross the Kourawhero Stream to minimise change to the Kourawhero Wetland Complex and to maintain the pre-construction water table level, Wetland extent, and Wetland condition, as far as practicable, which shall include:

- a. A bridge over the Kourawhero Stream with no piers in the Bed in the section of stream identified on Map 17 as "Section of Kourawhero Stream to be bridged"; and
- b. Minimising intrusion of diversion channels into or through the Kourawhero Wetland Complex.

56A. All Project works involving impacts on the Kourawhero Stream shall be designed and implemented to avoid any adverse effects on breeding koura females in the stream.

56B. A Suitably Qualified and Experienced Person shall undertake annual monitoring of the Kourawhero Wetland Complex until 3 years following completion of the Project Works. Should the monitoring indicate an unanticipated loss in the Kourawhero Wetland Complex extent or condition directly attributed to the Project Works, the Consent Holder shall provide further mitigation and/or offset works to manage the

additional adverse effects in accordance with Condition 54K and 54KAA. The results of the monitoring including any unanticipated loss and further offsets where applicable must be provided annually to the Manager for information. ~~by reviewing the Wetland Ecological Effects Management Plan (WEEMP) prepared under Condition 78B and providing for additional wetland enhancement to ensure the objectives of the WEEMP are achieved for the Kourawhero Wetland Complex.~~

Watercourse design requirements

57. The Consent Holder shall design and construct all permanent Project Works in or over any Watercourse (for example, all permanent bridges, culverts and stream diversions) to allow for capacity for 100-year ARI flood event with minimal scour and erosion to road structures e.g. culverts, bridges and embankments.
58. The Consent Holder shall design and construct all Watercourse diversions to have natural Watercourse forms and riparian planting where the diverted streams are permanent and supporting fish habitats. The Watercourse diversions shall be designed by a Suitably Qualified and Experienced Person(s). The diversions shall be designed to achieve, as far as practicable, the following outcomes:
- a. At least equivalent ecological function and habitat value to that of the potential values of the Watercourse being diverted, demonstrated using the Stream Ecological Valuation methods (Auckland Council Technical Report 2016/023 and Technical Report 2011/009);
 - b. Being like for like in regard to Watercourse hydrological conditions and substrate; and
 - c. Including riparian vegetation extending 10m on either side of the channel; and ;
 - d. Where the any diversions are unable to achieve (a)-(c), the residual loss of ecological function and habitat value shall be offset in accordance with Condition 76.

Advice Note: *Condition 58 does not apply to cut off drains and vertically lifted channels.*

Permanent culvert design

59. The Consent Holder shall design and construct permanent culverts to:
- a. Minimise the risks of non-performance of the culvert, such as blockage, taking into account the risk of a vegetation/soil/rock debris flow; and
 - b. Incorporate energy dissipation and erosion control to minimise the occurrence of bed scour and bank erosion in receiving environments.

Temporary culvert design

60. The Consent Holder shall design and construct temporary culverts in any Watercourse (for example, all temporary bridges, culverts and stream diversions) to allow for the 100-year ARI event (by primary structure or overland flow paths) with minimal scour and erosion unless otherwise certified by the Manager.

Culvert design – fish passage and migrating fish

61. The Consent Holder shall provide fish passage in accordance with best practice in all temporary and permanent culverts unless deemed unnecessary or impracticable by a Suitably Qualified and Experienced Person.

62. Where fish passage is deemed unnecessary or impracticable, appropriate data and rationale for the decision shall be provided for certification by the Manager.

Design certification – permanent structures in Watercourses and Wetlands

63. The Consent Holder shall provide drawings of the detailed design of permanent bridges, culverts to be constructed in or over Watercourses and Wetlands, and Watercourse diversions, to the Manager for certification at least 30 Days prior to the start of construction of the relevant structures. The drawings shall be accompanied by a written report prepared by a Suitably Qualified and Experienced Person setting out how the design requirements of Conditions 54 and 56 to 61 have been met and the rationale for any departures from those requirements. The Consent Holder shall construct the Project in general accordance with the certified design.

Erosion Prone Streams: Pre-construction monitoring

64. The Consent Holder shall instruct a Suitably Qualified and Experienced Person to undertake pre-construction monitoring to identify all Erosion Prone Streams within the Project area prior to the start of Construction Works.

65. The pre-construction monitoring of Erosion Prone Streams shall include an inspection of all Erosion Prone Streams to record all erosion areas (supported by photographs and/or video footage). The purpose of monitoring Erosion Prone Streams is to identify the pre-construction condition of the Erosion Prone Stream to be used as a baseline against which to measure construction effects and identify any post-construction remedial measures.

66. The Consent Holder shall provide the results of the pre-construction baseline surveys and monitoring to the Manager for information, prior to the start of Construction Works.

Erosion Prone Streams: Post-construction monitoring

67. The Consent Holder shall undertake monitoring of Erosion Prone Streams at six-month intervals for 24 months following completion of Construction Works. The monitoring shall consist of walkovers of Erosion Prone Streams and recording of erosion-prone areas, including photographs.

68. If monitoring identifies new erosion that a Suitably Qualified and Experienced Person deems to be attributable to the Project based on the pre-construction condition of the Erosion Prone Stream, rehabilitation and/or remedial action, such as stabilisation of the stream bank or Bed, shall be implemented in accordance with the Suitably Qualified and Experienced Person's recommendations.

68A. The All rehabilitation and/or remedial actions implemented in accordance with Condition 68 shall be monitored at six-month intervals for a further 24 months to determine if the actions have been successful as determined by a Suitably Qualified and Experienced Person. If these specific remedial actions are deemed not to be successful, not, Condition 68 will apply, as will this condition until the remedial actions are confirmed as successful to minimise ongoing

~~erosion in that location. remedial actions are confirmed as successful to minimise ongoing erosion in that location. Erosion Prone Stream(s) are successfully rehabilitated to avoid ongoing erosion.~~

Diverting Watercourses

69. Prior to Project Works within a Watercourse, including the filling of the Bed, the Consent Holder shall put in place a diversion or diversions around the area of Project Works for all flows with a primary capacity up to the 20-year ARI flood event, unless an alternative design is certified by the Manager.
70. During weather events in excess of the 20-year ARI flood event, up to the 100-year ARI flood event (i.e., flows are greater than the capacity of the existing diversion), the Consent Holder shall put in place a Stabilised flow path to minimise the potential for scour or erosion and allow flows to pass safely around or through the area of Project Works with minimum nuisance, damage and sediment generation or discharge.

As-built certification

71. The Consent Holder shall provide as-Built Plans certified by a Chartered Professional Engineer confirming that permanent structures in and over Watercourses have been constructed in accordance with the certified design under Condition 63 to the Manager within 90 Days of completion of the Construction Works.

FRESHWATER ECOLOGY

Freshwater ecology: Pre-construction monitoring

72. The Consent Holder shall survey the Representative Watercourses or other Watercourse determined by Condition 73 for one summer and one winter period prior to Project Works commencing. The survey shall be undertaken and recorded by a Suitably Qualified and Experienced Person in accordance with the requirements of Stream Ecological Valuation: Application to Intermittent Streams (Auckland Council Technical Report 2016/023) or Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland streams (Auckland Council Technical Report 2011/009), depending on the Watercourse classification.
73. In the event that a Suitably Qualified and Experienced Person considers a Representative Watercourse is not representative of general Watercourse characteristics within the Project area, the justification and an alternative Representative Watercourse must be provided to the Manager for certification. The Consent Holder shall survey such other Watercourse recommended by a Suitably Qualified and Experienced Person, and certified by the Manager, using the same process in Condition 77.
74. The Consent Holder shall provide to the Manager the results of the pre-construction freshwater monitoring within 30 Days of the final pre-construction monitoring being undertaken.

Freshwater ecology: Recording of Watercourses affected by the Project

75. The Consent Holder shall instruct a Suitably Qualified and Experienced Person to

identify and record all Watercourses that will be affected by Project Works, prior to the start of Project Works, including:

- a. Location;
- b. Length;
- c. Width;
- d. Intermittent or permanent status; and
- e. Which of the Representative Watercourses surveyed under Conditions 72 and 73 the Watercourse is most similar to.

This information shall be provided to the Manager for certification of the matters at paragraph (e).

Freshwater ecology: Replacement works for loss of Watercourse ecological value and function

76. The Consent Holder shall mitigate and/or offset for loss of Watercourse ecological value and function in accordance with the requirements of the following technical reports prior to completion of Project Works:

- a. Stream Ecological Valuation: application to intermittent streams (Auckland Council Technical Report 2016/023) or any subsequent version; and
- b. Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland streams (Auckland Council Technical Report 2011/009) or any subsequent version.

Stream Ecological Effects Management Plan

77. The quantum of Watercourse mitigation and/or offset and its design and location shall be set out in a Stream Ecological Effects Management Plan. The SEEMP shall be prepared by a Suitably Experienced and Qualified Person and shall:

- a. Confirm the Watercourses that will be directly affected by the Project;
- b. Outline the method to extrapolate the SEV calculations for the Representative Watercourses to apply to all Watercourses affected by Project Works;
- c. Calculate the quantum and location of mitigation and/or offset provided in accordance with SEV requirements as set out in Condition 76; and
- d. Demonstrate that the proposed mitigation and/or offset is like for like in regard to Watercourse hydrology and substrate;
- e. Integrate the mitigation and/or offset planting with the restoration planting and habitat rehabilitation required in the Ecology Management Plan where practicable; and
- f. Provide site specific enhancement plans for the proposed mitigation and/or offset sites that:
 - i. Detail how the anticipated outcomes used in the SEV calculations will be achieved;
 - ii. Assess the risk of stream bank erosion and the likely successful establishment of proposed riparian planting;
 - iii. Detail the planting to be carried out, including a list of species, numbers to be planted, their common and botanical names, method of planting, planting locations and densities;

- iv. Detail the timing of works and techniques of weed and plant management measures for a period of no less than 5 years or until canopy closure of planted areas is achieved;
- v. Details of monitoring methods and frequency, including annual reporting to the Manager for a period of no less than 5 years or until canopy closure of planted areas is achieved; and
- vi. Have had regard to the AUP(OP) Appendix 16: Guideline for native revegetation plantings.

77A. The Consent Holder shall complete the Watercourse mitigation and/or offset in accordance with the SEEMP by no later than 2 years from the date of the Project becoming operational or as otherwise specified in these conditions.

78. The works outlined in the certified SEEMP shall be maintained in accordance with the SEEMP until canopy closure of the planted areas has been achieved. The Consent Holder shall provide a report prepared by a Suitably Qualified and Experienced Person to the Manager for certification when:
- a. Canopy closure has been achieved;
 - b. No more than 10% loss in plant numbers has occurred;
 - c. Weed control has been carried out to a level where no mature fruiting or flowering weed species are present within the planting areas and no weed species that will impact on the growth rates of the planted trees and/or the potential for native regeneration are present within the planting area; and
 - d. All works have been undertaken in accordance with the certified SEEMP.

Freshwater ecology: Recording of Wetlands affected by the Project

- ~~78. The Consent Holder shall engage a Suitably Qualified and Experienced Person to identify and record all Wetlands that will be affected by Project Works, prior to the start of Project Works, including:~~
- ~~a. Location of Wetlands affected by Project Works;~~
 - ~~b. Total area of Wetlands impacted by the Project Works, delineated using best practice;~~
 - ~~c. Wetlands type; and~~
 - ~~d. Ecological value.~~

Freshwater ecology: replacement works for loss of Wetland ecological value and function

- ~~78A. The Consent Holder shall undertake Wetland rehabilitation and/or enhancement works to offset the effects of the Project Works on the ecological value and function of Wetlands impacted by the Project Works so as to ensure that, as a minimum, the Project achieves no net loss of Wetland ecological value and function. The quantum of Wetland offset rehabilitation and enhancement works and their design and location shall be determined by a Suitably Qualified and Experienced Person and included in a Wetland Ecological Effects Management Plan (WEEMP). The WEEMP must:~~
- ~~a. Confirm all the Wetlands that will be directly affected by the Project Works;~~
 - ~~b. Demonstrate that the quantum and location of offset to be provided has been calculated using best practice transparent and quantified offset accounting methods to achieve a no net loss of ecological value outcome and that:~~
 - ~~i. The potential value of the impacted wetland is accounted for;~~
 - ~~ii. The relative ecological gain at the proposed offset site is accounted for;~~

- iii. ~~An appropriate suite of ecological attributes are included in the offset accounting methods; and~~
- iv. ~~Time lag is accounted for;~~
- c. ~~Demonstrate that the proposed offset is like for like in regard to wetland type and hydrology;~~
- d. ~~Demonstrate how the offset planting will be integrated where practicable with the restoration planting and habitat rehabilitation required in the EMP; and~~
- e. ~~Provide site specific enhancement plans for the proposed offset sites that:~~
 - i. ~~Detail how the anticipated outcomes used in the offset calculations will be achieved.~~
 - ii. ~~Detail the planting to be carried out, including a list of species, numbers to be planted, their common and botanical names, method of planting, planting locations and densities;~~
 - iii. ~~Detail the timing of works and techniques of weed and plant management measures for a period of no less than 5 years or until canopy closure is achieved;~~
 - iv. ~~Detail the works and techniques for animal pest control for a period of no less than 5 years or until canopy closure is achieved;~~
 - v. ~~Detail the monitoring methods and frequency, including at a minimum annual reporting to Council for a period of no less than 5 years or until canopy closure is achieved; and~~
 - vi. ~~Is in accordance with AUP:OP Appendix 16: Guideline for native revegetation plantings.~~

Freshwater ecology: Mitigation and offset implementation

~~78B. All freshwater ecology mitigation and/or offset enhancement works are to be carried out in accordance with the certified SEEMP and WEEMP required by Conditions 77 and 78A.~~

~~Prior to 30 June each year following the start of Project Works the Consent Holder shall submit to Council for certification an Annual Mitigation and Offset Plan (AMOP). The AMOP must:~~

- a. ~~Detail the extent of Watercourses and Wetlands that have been directly affected by the Project Works over the previous 12 months; and~~
- b. ~~In general accordance with the certified SEEMP and WEEMP required by Conditions 77 and 78B, detail the quantum of mitigation and offset works required to address the effects detailed in the AMOP.~~

~~The Consent Holder shall undertake the works outlined in each AMOP within two (2) years of the AMOP being certified by Council.~~

~~Written confirmation shall be provided to Council within 30 days of the works outlined in each AMOP being completed confirming that all works have been completed in accordance SEEMP and WEEMP required by Conditions 77 and 78A.~~

Freshwater ecology: Maintenance of Watercourse and Wetland offset sites

~~78C. Offset rehabilitation and enhancement works outlined in the certified SEEMP and WEEMP required by Conditions 77 and 78A shall be maintained in accordance with the SEEMP and WEEMP for a period of no less than 5 years or until canopy closure has been achieved, whichever is longer.~~

~~Prior to the completion of the maintenance period the Consent Holder shall seek certification from the Council that:~~

- a. ~~Canopy closure has been achieved;~~
- b. ~~No more than 10% loss in plant numbers has occurred;~~
- c. ~~Weed control has been carried out to a level where no mature fruiting or flowering weed species are present within the planting areas and no weed species that will impact on the growth rates of the planted trees and/or the potential for native~~

~~regeneration are present within the planting area; and~~
~~d. All works have been undertaken in accordance with the certified SEEMP and WEEMP required by Conditions 77 and 78B.~~

Native fish capture and release

78.79. Prior to any Wetland or Watercourse activity commencing, the Consent Holder shall submit a Native Freshwater Fish Capture and Relocation Plan, prepared by a Suitably Qualified and Experienced Person. This plan must detail how native fish will be salvaged prior to works commencing and must include but not be limited to:

- a. Methodologies and timing to capture fish, and kakahi and koura, within the impacted Watercourse and Wetland habitats, or justification there is no habitat for native fish present at the time of earthworks;
- b. Fishing effort;
- c. Details of the relocation site;
- d. Fish exclusion fencing to prevent fish movement to the Watercourse reach where works will occur;
- e. Placement of appropriate fish screens on the inlets of any pumps used;
- f. Methods to manage streamworks during September to November inclusive of any year, to minimise impacts on fish during the fish spawning season;
- g. Storage and transport measures including prevention of predation and death during capture; and
- h. Euthanasia methods for diseased or pest species.

79.80. The Consent Holder shall engage a Suitably Qualified and Experienced Person to confirm and implement the NFFCRP required by condition 79 and provide a report on the surveys undertaken and the results to the Manager.

STORMWATER DISCHARGE

80.81. The Consent Holder shall ensure that:

- a. All stormwater from the impervious roadway of the Project is captured, treated and discharged through offline Stormwater Management Wetlands, except as otherwise provided for in Condition 81(c); and
- b. All stormwater management devices and controls are designed to:
 - i. Include adaptation for 100-years of climate change (from the date that the Project becomes operational);
 - ii. Provide treatment in accordance with GD01;
 - iii. Remove gross litter and floatables such as oil and volatile hydrocarbons;
 - iv. Provide for the conveyance of 100 year ARI event, including provision for overland flow up to and including this event; and
 - v. Minimise changes to the water flow into the Kourawhero Wetland Complex and to maintain the pre-construction water table level to the extent practicable if located upstream of the Kourawhero Wetland Complex.
- c. In the event that the creation of an offline stormwater management wetland is not practicable, the consent holder must submit, prior to commencement of the construction of the stormwater management device, the design and

details of an alternative stormwater management option, which achieves the same outcomes specified in Conditions 81(b)(i)-(v), for certification by council. The details must include justification for the need to implement the alternative option.

81-82. The Consent Holder shall ensure that stormwater outfalls are designed to include erosion control to minimise the occurrence of bed scour and bank erosion at the point of discharge in accordance with TR2013/018 and GD01.

82-83. The Consent Holder shall ensure that cut off drains are designed to:

- a. Incorporate grassed or rock lining to prevent erosion;
- b. To prevent erosion in the 100 year- ARI rainfall event;
- c. Provide for the 100-year ARI rainfall event for the upstream catchment and discharge to existing streams or new culverts or where not reasonably practicable discharge to the road edge conveyance system; and
- d. Minimise bed scour and bank erosion at the point of discharge.

83-84. The Consent Holder shall ensure that sediment traps (or similar alternative devices) are designed to minimise sediment eroded off rock cuts entered stormwater systems.

84-85. The Consent Holder shall design Stormwater Management Wetlands that will be:

- a. Located offline from existing Watercourses;
- b. Located outside of the 100-year ARI floodplain if practicable;
- c. Capable of providing detention for the 95th percentile 24-hour rainfall event in accordance with GD01;
- d. Shown to include:
 - i. Forebays and submerged or baffled low flow outlets so that floatables and litter can be trapped at the main outlet;
 - ii. Planting in emergent, littoral, riparian zones except in some areas of deep zone that are to remain plant free; and
 - iii. Valves on low-level Wetland outlets to enable valves to be closed in the event of a spill to contain spilt material in Wetland. The treatment systems shall incorporate a minimum 20 cubic metre volume that can be isolated in the event of a spillage on the road.

85-86. The Consent Holder shall use pre-treatment measures where higher sediment loads are anticipated, such as sediment traps for sediment eroded off rock cuts.

86-87. The Consent Holder shall ensure that the Project stormwater system is designed so that water can be collected from tunnels following tunnel washdown, accidental spill, or firefighting activities, and disposed of to a facility consented to receive contaminated water.

87-88. The Consent Holder shall ensure that stormwater management devices associated with local roads altered by the Project convey water runoff via vegetated and/or rock lined swales adjacent to the road prior to discharge to existing streams.

88-89. The Consent Holder shall maintain stormwater treatment devices to ensure that

relevant to rock crushing activities.

103A. The Consent Holder shall ensure that the rock crushing activity is undertaken in accordance with the RCMP and minimises dust generation as far as practicable.

GROUNDWATER

104. The Consent Holder shall not undertake Project Work excavations of more than 10m depth within 300m of any of the following lawfully established activities existing as at the date of this resource consent:

- a. groundwater extractions;
- b. buildings;
- c. infrastructure

unless it can be demonstrated by a Hydrogeological model to the satisfaction of the Manager that such excavations will not create material drawdown effects or settlement effects (greater than 1m of drawdown) causing damage to buildings or infrastructure.

Damage Avoidance

104A. All excavation, dewatering systems and works associated with the taking and diversion of groundwater shall be designed, constructed and maintained so as to avoid damage to buildings, structures and services, or impacts on lawful groundwater or surface water takes, outside that considered as part of the application process unless otherwise agreed in writing with the asset owner.

Settlement Contingency Actions

104B. If the Consent Holder becomes aware of any damage to buildings, structures or services potentially caused wholly, or in part, by the exercise of this consent, the Consent Holder must:

- a. Notify the Manager and the asset owner within two Days of the Consent Holder becoming aware of the damage;
- b. Provide a report prepared by a Suitably Qualified and Experienced Person (engaged by the Consent Holder at their cost) that describes the damage; identifies the cause of the damage; identifies methods to remedy and/or mitigate the damage that has been caused; identifies the potential for further damage to occur, and describes actions that will be taken to avoid further damage; and
- c. Provide a copy of the report prepared under (b) above, to the Manager and the asset owner within 10 Days of notification under (a) above.

Advice Note: *It is anticipated the Consent Holder will seek the permission of the damaged / affected asset owner to access the property and asset to enable the inspection/investigation. It is understood that if access is denied the report will be of limited extent.*

MAINTENANCE OF LANDSCAPE, MITIGATION AND OFFSET PLANTING AND WORKS

105. The Consent Holder shall procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the following areas are protected on an ongoing basis prior to any

transfer from the Crown of ownership/tenure:

- a. The area identified as the Fauna Habitat and Flyway Mitigation under conditions 54F- 54I;
- b. The ecology vegetation mitigation and mitigation for fragmentation areas identified under conditions 54KA and 54KC; and
- a. The terrestrial mitigation and/or offsets completed in areas identified under conditions 77 and 78 of the Resource Consent.

ADVICE NOTES

The scope of these consents does not include:

- Land use activities requiring resource consents under the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 or contaminant discharges under Chapter E30 of the Auckland Unitary Plan (Operative in Part).
- ~~Plantation forest activities defined by the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 and related activities in the commercial plantation forest (Mahurangi Forest) located west of SH1.~~
- ~~_____~~
- Reclamation ~~or diversion~~ of any Watercourse for soil disposal where such reclamation or diversion is not associated with Project structures (for example, embankments, earth bunds, bridges and other structures).
However, the scope of the consent includes the diversion of a Watercourse for the purpose of enabling soil disposal whether associated with Project structures or not.
- Reclamation or diversion of any Wetland(s) for soil disposal where such reclamation or diversion is not associated with Project structures (for example, embankments, earth bunds, bridges and other structures).
-

**APPENDIX E – PLAN SHOWING KAURI TREES
PURSUANT TO CONDITON 54Y**



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DEFINITIONS

The table below defines the acronyms and terms used in the conditions. Defined terms are capitalised throughout the conditions.

Acronym / Term	Definition / Meaning
Auckland Transport	The Chief Executive of Auckland Transport or authorised delegate
AUP(OP)	Auckland Unitary Plan Operative in Part
Best Practicable Option or BPO	Best Practicable Option as defined in section 2 of the Resource Management Act 1991.
Building-Modification Mitigation	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
CAQMP	Construction Air Quality Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CIR	Cultural Indicators Report
<u>Civil Landholding Owners</u>	<u>the owners specified in the Northern Civil Land and the Southern Civil Land definitions or the children of Joan Colleen Civil, Ian</u>

	<u>Donald Shepherd Civil and Denise Lyn Civil.</u>
Acronym / Term	Definition / Meaning
Construction Works	Activities undertaken to construct the Project excluding Enabling Works
COPTTM	NZ Transport Agency Code of Practice for Temporary Traffic Management, or any subsequent version
CTMP	Construction Traffic Management Plan
Day(s)	Has the same meaning as “working day” under section 2 of the RMA
Designation	The designation included in the AUP(OP)
EICMP	Electricity Infrastructure Construction Management Plan
Enabling Works	Preliminary construction activities as follows: <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments) • formation of access for geotechnical investigations • establishment of site yards, site offices, site entrances and site access points and fencing • constructing and sealing site access roads • demolition or removal of buildings and structures • relocation of services • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and screen planting)
EWCTMP	Enabling Works Construction Traffic Management Plan
<u>Existing Underpass</u>	<u>the existing underpass between the Northern Civil Land and the Southern Civil Land as illustrated on the drawing at Attachment B</u>
Habitable Space	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
HHMP	Historic Heritage Management Plan
Heavy Vehicle	A motor vehicle having a gross laden weight exceeding 3500 kg
HEN-MPE-A	Transpower’s Henderson to Maungatapere A (HEN-MPE-A) 110kV high voltage transmission line assets, which include: <ul style="list-style-type: none"> • the existing HEN-MPE-A transmission line Spans 199-204 and support structures/Towers 200-203; and • any proposed new or relocated high voltage transmission line assets (spans and/or support structures) required as a result of the Project Works.

Acronym / Term	Definition / Meaning
Highly Sensitive Receiver (HSR)	Residential dwellings within: <ul style="list-style-type: none"> • 200m of the Designation boundary; • 50m of sealed access roads used for Project Works up to 500 m outside of the Designation boundary; and 100m of unsealed access roads used for Project Works outside of the Designation boundary.
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Hōkai Nuku	The iwi collective being comprised of the representatives for Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Ngāti Whātua o Kaipara and Ngāti Whātua.
Iwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition 19D.
Manager	The Team Manager – Compliance Monitoring, of Auckland Council, or authorised delegate
Mana Whenua	Māori who can demonstrate customary rights through occupation to resources within the Project area, and who have responsibilities as kaitiaki over their tribal lands, waterways and other taonga
Mitigation Sites	The mitigation planting sites identified on Maps 1 to 6 included with the Designation
Network Utility Operation(s)/Operator(s)	As defined in section 166 of the RMA, for the avoidance of doubt this includes the North Albertland Community Water Supply Association
NMP	Noise Mitigation Plan
Noise Criteria Categories	The groups of preference for sound levels established in accordance with New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> when determining the BPO for noise mitigation (Categories A, B and C)
<u>Northern Civil Land</u>	<u>the land or parts thereof located at 109 Kaipara Flats Road (ROT 764798) legally described as CT 764798 and owned by Denise Lyn Civil, Ian Donald Shepherd Civil and Michael Charles Tisdall, as illustrated in green on the drawing at Attachment C.</u>
NZS 6803	New Zealand Standard 6803:1999: <i>Acoustics – Construction Noise</i> , or any subsequent version
NZS 6806	New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> , or any subsequent version

Acronym / Term	Definition / Meaning
PPF	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Project	The construction, maintenance and operation of the Ara Tūhono Warkworth to Wellsford Project, which extends from Warkworth to north of Te Hana
Project Liaison Person	The person or persons appointed for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work
Project Works	All activities undertaken to construct the Project (Project Construction Works and Enabling Works) and including ecological and landscape mitigation activities, but excluding operation of the highway
Resource Consent	Those consents granted to the Requiring Authority by Auckland Council to undertake the Project
RMA	Resource Management Act 1991
SECMP	Stakeholder Engagement and Communications Management Plan
SH1	State Highway 1
<u>Southern Civil Land</u>	<u>the land or parts thereof at 141 Carran Road (ROT 758198) legally described as CT 758198 and owned by Joan Colleen Civil and Ian Donald Shepherd Civil as to a ½ share as Executors and Joan Colleen Civil as to a ½ share, as illustrated in blue on the drawing at Attachment B</u>
SSTMP	Site Specific Traffic Management Plan
Stage(s)	A specific works area or new land disturbing activity associated with construction of the Project as nominated by the Requiring Authority
Structural Mitigation	As defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence
Threatened Species	Species listed as per the Department of Conservation's <i>New Zealand Threat Classification System</i> (NZTCS)
TTM	Temporary Traffic Management
ULDF	Urban and Landscape Design Framework
ULDMP	Urban and Landscape Design Management Plan
<u>Urban Zoning</u>	<u>an urban zoning identified in an operative planning map within the Auckland Unitary Plan or any replacement statutory planning document from time to time and excludes</u>

	<u>a future urban zoning or deferred development zoning.</u>
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GENERAL

1. As soon as practicable following completion of construction of the Project, the Requiring Authority shall give notice to Auckland Council in accordance with section 182 of the RMA for removal of those parts of the Designation that are not required for the long-term operation, maintenance and mitigation of effects of the State highway.

Lapse

2. The Designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.

Construction conditions

3. Conditions 4 to 88E relate to construction of the Project and only apply to construction activities. Once construction of the Project is complete these conditions will no longer apply and can be removed, except for conditions that specify an obligation which continues after construction. Management and outline plan process
4. The Requiring Authority shall prepare, submit to Auckland Council, and implement the Designation management plans in accordance with Table 1 and the specific management plan conditions.
5. The Requiring Authority may prepare management plans in parts or in Stages to address specific activities or to reflect the staged implementation of the Project Works.
6. The Requiring Authority shall not commence Project Works within the area to which a management plan applies until the Outline Plan of Works has been considered in accordance with s176A of the RMA or the required management plan(s) has been certified or otherwise provided to the Council for information.

Table 1: Management Plan Table

Management Plan	Decision Pathway	When to submit	Response time from Manager	Duration for implementation
Stakeholder Engagement and Communications	To Manager for information	At least 6 months prior to the start of the Requiring Authority's nominated date for detailed design	N/A	Duration of Project Works
Construction Noise and Vibration	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works

45. The ULDF shall:
- a. Confirm the overall key design principles and sector outcomes for the Project, as set out in the descriptions of those principles and outcomes in the Planning Version of the ULDF (2019);
 - b. Identify individual urban and landscape design sectors within the Project area;
 - c. Identify highly sensitive locations, which may include properties in close proximity to the Designation, requiring particular urban and landscape design treatment; and
 - d. Identify opportunities to integrate landscape planting under a ULDMP with restoration planting and habitat rehabilitation or other planting required for the Project.
46. The Requiring Authority shall prepare the ULDF in engagement with Mana Whenua and in consultation with:
- a. Auckland Council;
 - b. Rodney Local Board;
 - c. Auckland Transport for areas within and adjoining local roads; and
 - d. HNZPT for areas next to identified heritage sites.
47. The ULDF shall include a summary of the consultation undertaken and shall document how input from the parties listed in Condition 46 has or has not been incorporated in the ULDF or supporting information. If the Requiring Authority has not received any comment from such parties within 20 Days of providing the ULDF to them, the Requiring Authority may consider the relevant party has no comment.

Urban and Landscape Design Management Plan(s)

48. The Requiring Authority shall prepare an Urban and Landscape Design Management Plan (ULDMP) for each individual urban and landscape design sector within the Project area, in engagement with Mana Whenua, prior to the start of Construction Works within each sector. The purpose of the ULDMP(s) is to identify, how for the relevant sector:
- a. the key design principles and sector outcomes identified in the ULDF will be met by the permanent Project Works;
 - b. the landscape and visual requirements (Conditions 49 to 50) have been incorporated; and
 - c. landscape planting is to be integrated with restoration planting and habitat rehabilitation or other planting required for the Project.
49. The ULDMP(s) shall be prepared by a Suitably Qualified and Experienced Person and shall include the following details for the sector to which the plan applies:
- a. A plan describing and illustrating the overall landscape and urban design concept and rationale.
 - b. Detailed design drawings of the landscape and urban design features, including the following:
 - i. Road design including elements such as earthworks contouring including cut and fill batters to integrate with adjacent landform, benching (to be

avoided if practicable), treatment of rock cuts, and spoil disposal sites; median width and treatment; borrow pits/areas; roadside width and treatment.

- ii. Appropriate surface treatment of cut slopes such as grassing, revegetation or leaving an exposed rock face.
- iii. Roadside elements including elements such as lighting, sign gantries and signage, guard rails, fences, central and median barriers etc.
- iv. Urban design and landscape treatment of:
 - a. all major structures, including viaducts, bridges and associated infrastructure, retaining walls, ancillary buildings;
 - b. any Structural Mitigation required by Condition 90;
 - c. roadside furniture, such as lighting, sign gantries and signage, guard rails, fences and median barriers; and
 - d. hardscape material, (e.g. rock rip rap, sealed shoulders, kerbs, roundabouts) and interchanges.
- v. Land use re-instatement.
- vi. Landscape treatment/rehabilitation of construction yards and haul roads following completion of construction.
- vii. The integration of landscape planting with restoration planting and habitat rehabilitation or other planting required for the Project (including by resource consent conditions) where applicable, as further specified by Condition 50.
- viii. Landscape design input to the form of stormwater ponds and swales to assist with landscape integration.
- ix. Pedestrian and cycle facilities including paths along local roads where these facilities are directly affected by Project Works.
- x. Features (such as interpretive signage) for identifying and interpreting cultural heritage, built heritage, archaeology, geological heritage and ecology.
- xi. Noise barriers, and structures, walking and cycling facilities (including bridges, underpasses and associated retaining walls) which are identified in the ULDF as being in highly sensitive locations.
- xii. The design of the tunnel portals, which shall be integrated with the adjacent landform through the use of sloping portal structures and revegetation works. Any ancillary structures associated with the tunnels shall be located and designed so they are recessive in form and colour.
- xiii. Context-sensitive landscape design and planting at Interchanges to create a local gateway, wayfinding and promote a sense of place that reflects the destination accessed via the interchange.
- xiv. New planting, or other measures where ~~they are~~ practicable, to provide visual screening of the permanent Project Works from dwellings with direct line of sight to the Project, in particular from the following properties:
 - (i) 111 Kaipara Flats Road
 - (ii) 211 Kaipara Flats Road
 - (iii) 214 Kaipara Flats Road
 - (iv) 215 Kaipara Flats Road
 - (v) 542 SH1
 - (vi) 250 Silver Hill Road

- (vii) 263 Silver Hill Road
 - (viii) 199 Shepherd Road
 - xv. Design and landscape features to acknowledge cultural values relating to landscape design identified through the Cultural Engagement Plan.
 - xvi. Design and landscape features to acknowledge the recommendations of the Cultural Artworks Plan (if prepared), where feasible and practicable to do so.
 - c. Environmental design measures to support crime prevention (CPTED or superseding industry standard) principles.
- 49A. Prior to the completion of the relevant ULDMP, the Requiring Authority shall provide drafts of the detailed design drawings required by Condition 49(b)(xiv) to the current landowner(s) of the properties identified in that condition and invite their feedback on the new planting or other screening measures proposed for their property. The Requiring Authority shall consider any feedback received when preparing the relevant ULDMP. ~~If no the Requiring Authority has not received any feedback is received~~ within ~~2010~~ days of the ~~detailed design drawings~~~~drafts~~ being provided, the Requiring Authority may assume that no feedback is to be provided. The final ULDMP shall be submitted with a report describing how any feedback has been considered when preparing the relevant ULDMP and how any input from the landowner(s) of the properties has or has not been incorporated in the ULDMP.
- 49B. Within 10 days of the relevant ULDMP being confirmed, the Requiring Authority shall provide a copy of any final ULDMP that addresses visual screening for the properties listed in Condition 49(b)(xiv) to the current landowner(s) of those properties including:
- a) information as to how the landscape mitigation and screen planting in Maps 1-6 and their feedback has been given regard to and (if relevant) why visual screening was not practicable, and
 - b) A copy of the report describing how the feedback has or has not been incorporated in the ULDMP.
 - a) _____.
- 49C. In addition to the requirements of Condition 49(b)(xiv), prior to the commencement of Construction Works the Requiring Authority shall provide and plant a 15m wide planting area along the western boundary of the blue hatched area shown on the map at Attachment A for the purpose of providing visual screening of the permanent Project Works for the property at 39 Phillips Road (Lot 1 DP 103533). The Requiring Authority shall not undertake any Project Works (except for the planting and related activities) within the blue hatched area shown on the map at Attachment A.
- 49D. The Requiring Authority shall procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the planting required by Condition 49C is protected on an ongoing basis prior to any transfer of ownership/tenure from the Crown.
50. The ULDMP(s) shall include the following planting and vegetation management details:
- a) Planting design details, including:

- 88B. Where a property owner/occupier has accepted the offer of potable water under Condition 88A(iii), the Requiring Authority shall offer to temporarily disconnect from roof collection the relevant potable water tanks on the property (and divert the rainwater flow to a tank overflow system or a suitable alternative drainage path), and internally clean any such tank before delivering the first load of potable water. At the end of Construction Works within 500m of the relevant property, the Requiring Authority shall reconnect the water tank to roof collection.
- 88C. The Requiring Authority shall offer by mail or email to the persons referred to in Condition 88A(i) and (ii) to conduct a soft wash with a non-toxic washing liquid of any surface used to collect potable water on the properties referred to in Condition 88A(i) and (ii), at the conclusion of Construction Works within 500m of the relevant property.
- 88D. If the Requiring Authority has not received a response from a landowner or occupier identified in Condition 88A(i) or (ii) within 20 Days of making an offer under Condition 88A or Condition 88C, that landowner or occupier will be deemed to have rejected the offer. The Requiring Authority shall undertake the activities under Conditions 88A, 88B or 88C within 30 Days of obtaining agreement, subject to access being provided.
- 88E. The Requiring Authority shall keep a record of all offers made under Conditions 88A, 88B or 88C, any response from the property owner/occupier, and a note as to whether the offer was taken up.

Physical connection between 109 Kaipara Flats Road (ROT 764798) and 141 Carran Road (ROT 758198) (Augier condition)

88F. Unless one of the circumstances in condition 88G applies, the Requiring Authority will, provide a physical connection between the Northern Civil Land and the Southern Civil Land (either via the Existing Underpass or an alternative physical connection). The design of any new physical connection shall be determined by a Suitably Qualified and Experienced Person:

- i. on the basis of a farming use of the same or similar nature as at 9 November 2023 (generally including grazing animals) and considering the land area that will be available for farming of the Northern Civil Land and the Southern Civil Land; and
- ii. having regard to consultation with the Civil Landholding Owners or their appointed representatives as to the proposed physical connection (such consultation to be undertaken over a period of no less than 40 working days by the Requiring Authority during the detailed design phase of the Project). The Requiring Authority shall summarise in the Outline Plan(s) prepared for the Project all consultation undertaken under this condition, the physical connection options considered, and whether the Civil Landholding Owners' feedback has been incorporated into the final detailed design and if not, the reasons for that.

The completed physical connection shall be made available to the Civil

Landholding Owners when the Project becomes operational unless the Requiring Authority determines it is able to provide the completed connection earlier.

88G. The Requiring Authority is not required to provide the physical connection in 88F if at any time up to the date the Project becomes operational:

- i. The Northern Civil Land and/or the Southern Civil Land are not owned by the Civil Landholding Owners; or
- ii. The Northern Civil Land and/or the Southern Civil Land will not be owned by the Civil Landholding Owners once the Project becomes operational; or
- iii. The Civil Landholding Owners have or intend to cease farming activity on the Northern Civil Land or the Southern Civil Land (as evidenced by written notice from the Civil Landholding Owners to the Requiring Authority); or
- iv. The Requiring Authority determines not to provide a physical connection between the Northern Civil Land and the Southern Civil Land and the Public Works Act 1981 process has been commenced or concluded by the Crown and the loss of the connection will be or has been taken into consideration as potential injurious affection; or
- v. The Requiring Authority has made reasonable attempts over a 40 working day period to consult with the Civil Landholding Owners under condition 88F(ii), and has been unable to receive feedback on the preferred connection; or
- vi. The Southern Civil Land has an Urban Zoning.

88H. Where the Requiring Authority considers during detailed design that condition 88G applies, it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

88I. Where the Requiring Authority has committed to provide a physical connection under condition 88F, but subsequently one of the criteria in 88G applies before the connection has been completed and made available for use by the Civil Landholding Owners, the Requiring Authority may elect to no longer provide the physical connection and it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

MAINTENANCE AND OPERATIONAL CONDITIONS

Operational Noise

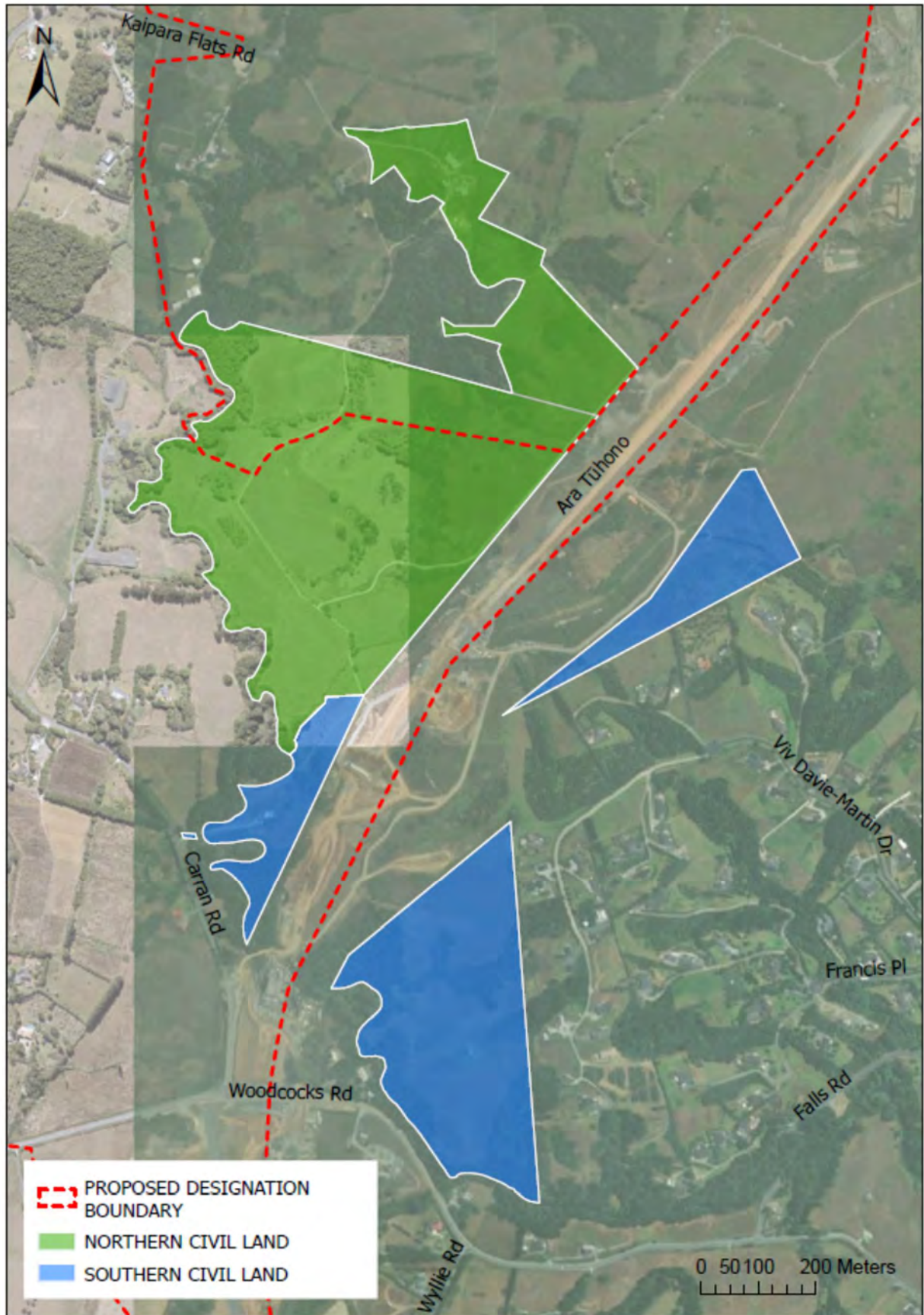
Noise Criteria Categories

89. The Requiring Authority shall design and construct the Project to ensure that the operational State highway achieves the predicted Noise Criteria Categories identified in Table 2 at each of the identified PPFs adopting the Best Practicable Option. Compliance with the Noise Criteria Categories shall be based on a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed

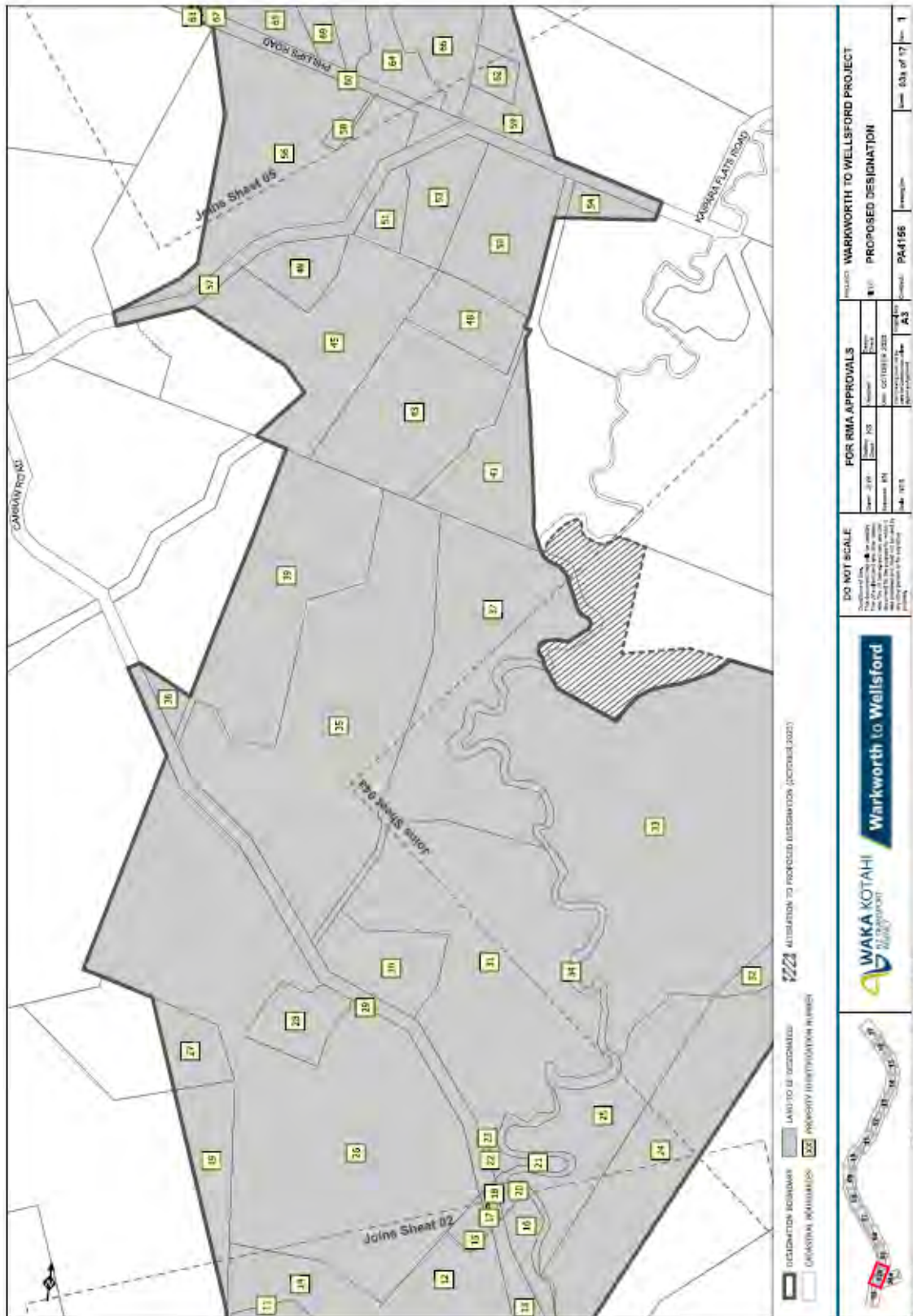
Attachment B – Plan showing existing underpass



Attachment C – Illustrating the Northern and Southern Civil Land



ANNEXURE 3 – PLANS SHOWING CHANGES IN DESIGNATION BOUNDARY



ATTENTION TO PROPOSED DESIGNATION (PROPOSED 2023)

- DESIGNATION BOUNDARY
- LAND TO BE DESIGNATED
- PROPERTY IDENTIFICATION NUMBER



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FOR RMA APPROVALS	
Case No:	2023/001
Section No:	753
Section No:	814
Section No:	815
Section No:	816
Section No:	817
Section No:	818
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Section No:	900

PROJECT: WARKWORTH TO WELLSFORD PROJECT	
PROPOSED DESIGNATION	PA4156
PROJECT NO.	AS
DATE	03/17/23
SCALE	1:1



DESIGNATION BOUNDARY LAND TO BE DESIGNATED

 CADASTRAL BOUNDARIES PROPERTY IDENTIFICATION NUMBER

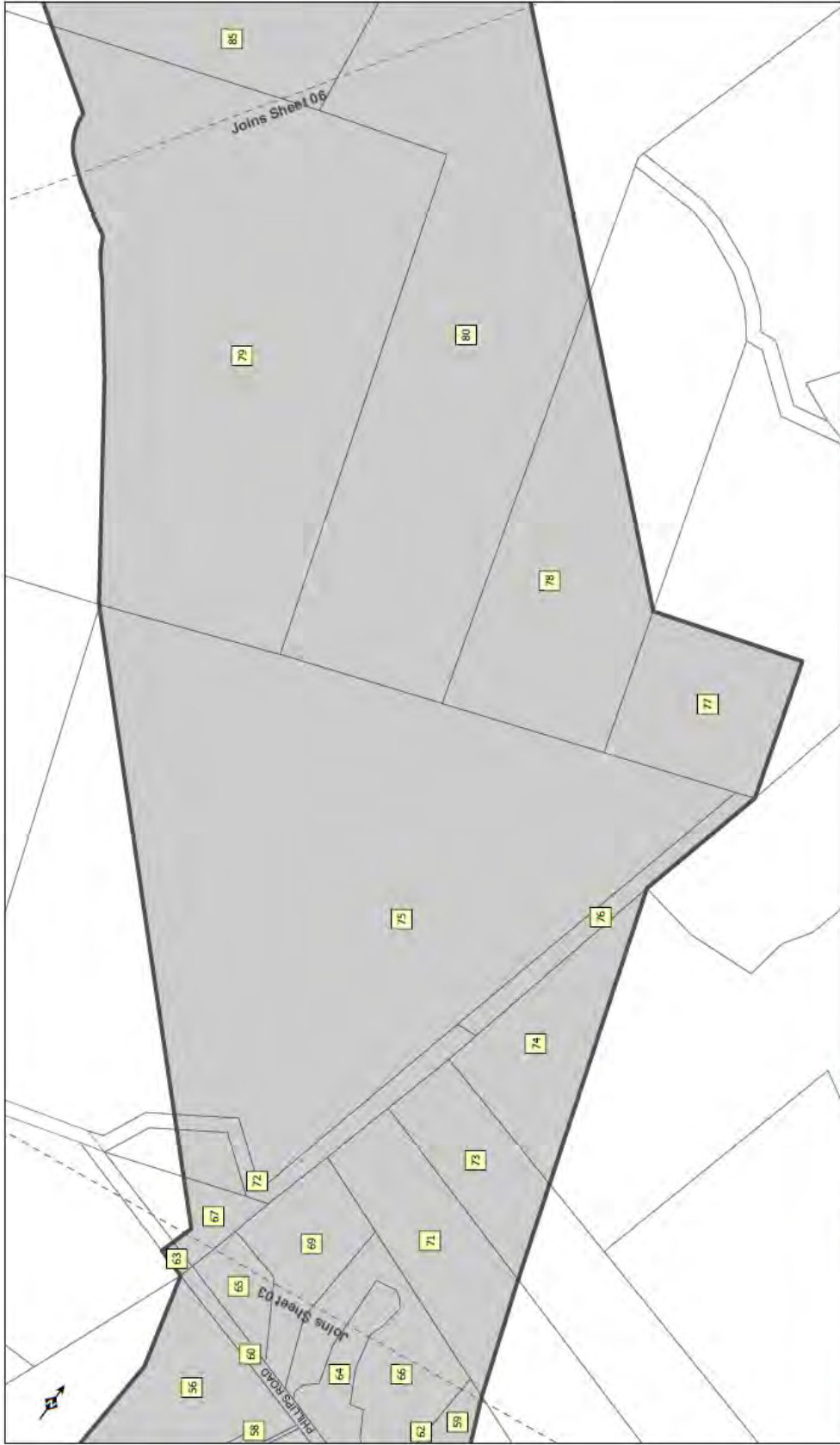


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 AGENCY

Warkworth to Wellsford

FOR RMA APPROVALS Drawn: JJJ/ Date: OCTOBER 2023 Proposed: BN Issue: NTS No. Sheets: 16 of 16 Sheet No. in Volume: A3		PROJECT: WARKWORTH TO WELLSFORD PROJECT TITLE: PROPOSED DESIGNATION Contract: PA4156 Drawing No.: 02 of 17
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Issue: NTS	Issue: NTS	Issue Date: -	Issue No: -

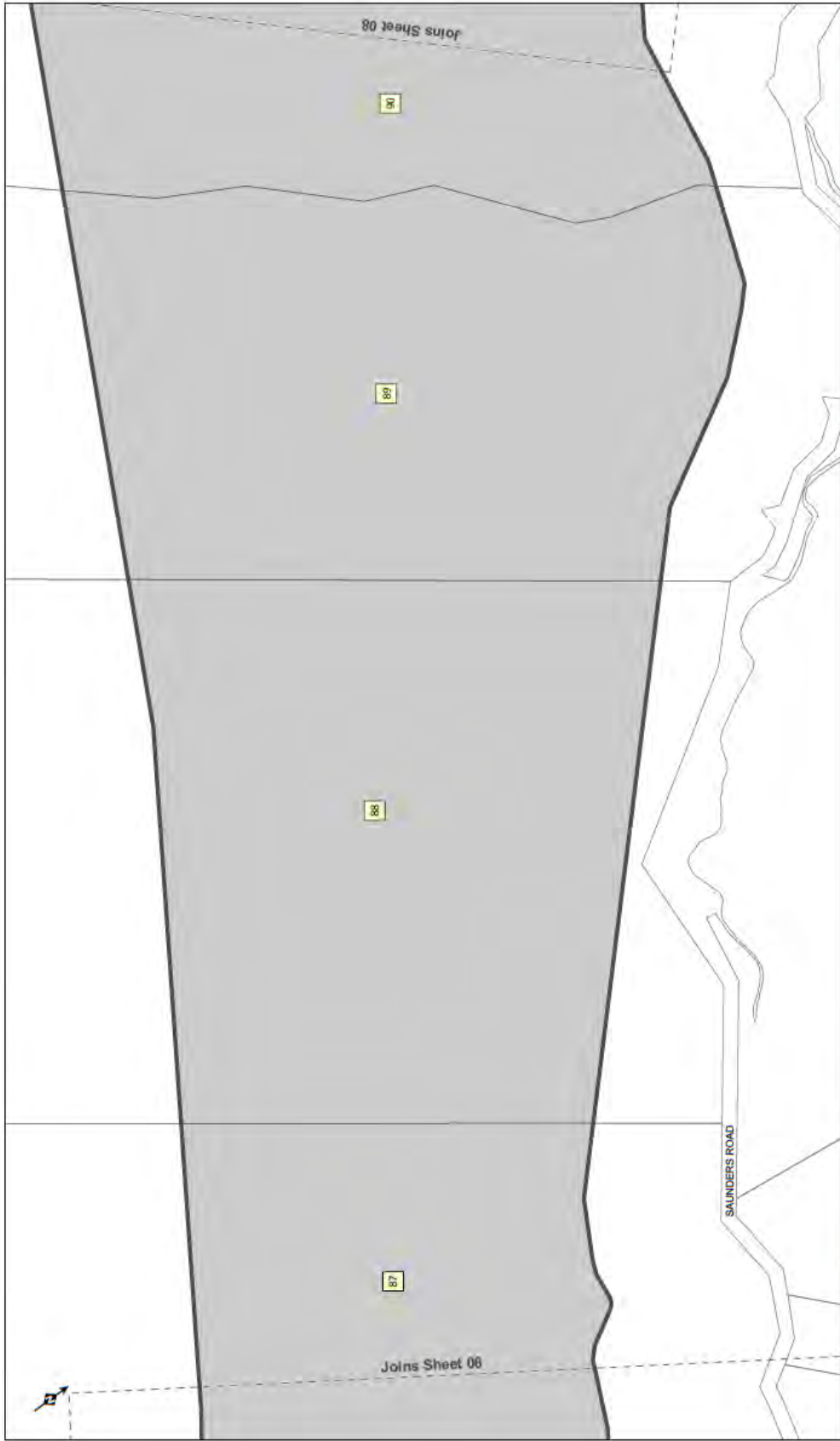
PROJECT: WARKWORTH TO WELLSFORD PROJECT

TITLE: PROPOSED DESIGNATION

Contract: PA4156 Drawing No: - Issue: 05 of 17 No: 1

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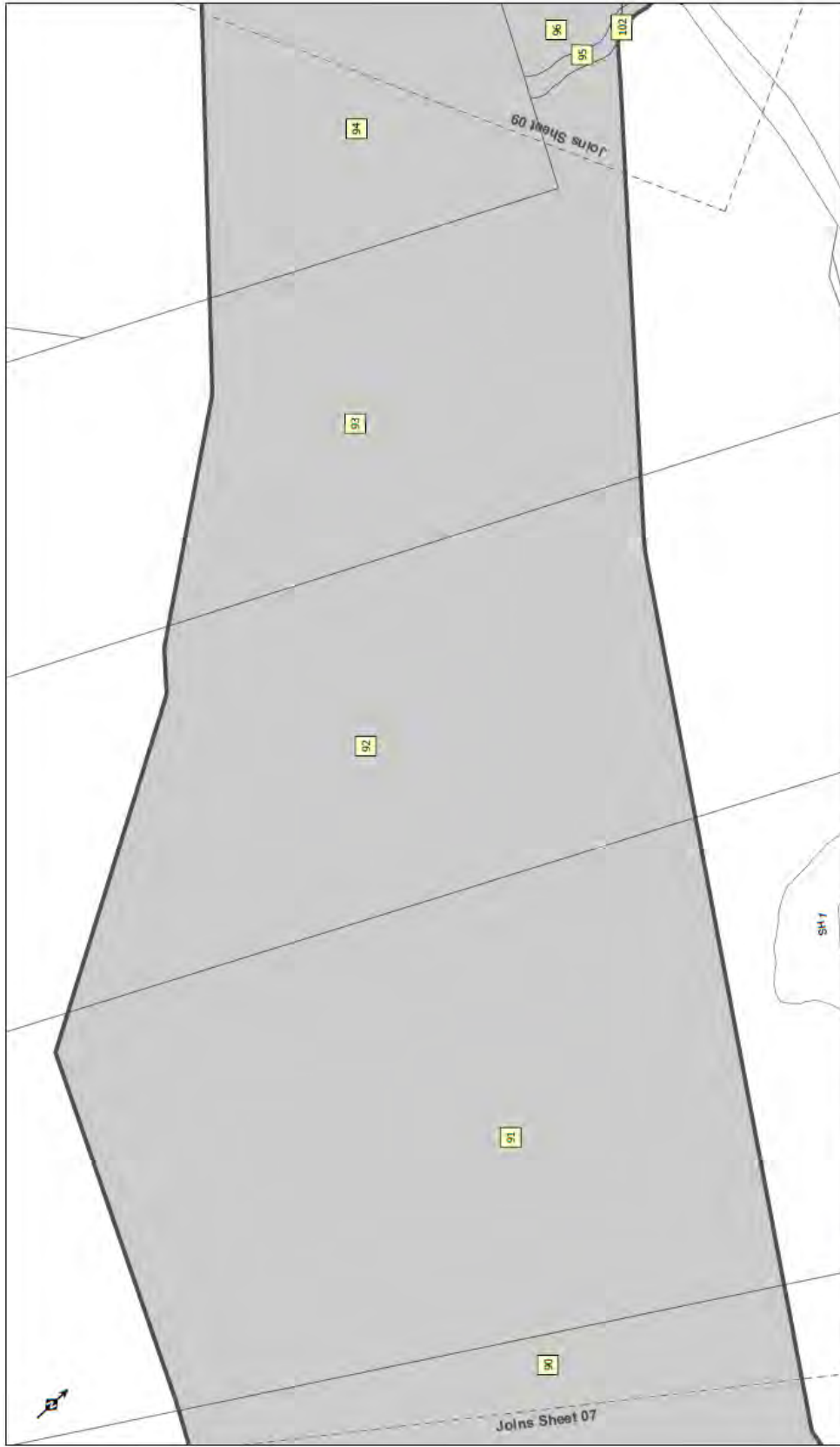


Warkworth to Wellisford

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Issue Date	Issue No	Issue Date	Issue No
15/08/2023	15	15/08/2023	15
Issue Date	Issue No	Issue Date	Issue No
15/08/2023	15	15/08/2023	15

PROJECT: WARKWORTH TO WELLSFORD PROJECT
 TITLE: PROPOSED DESIGNATION
 Contract: PA4156
 Drawing No: 07 of 17
 Sheet: 1



DESIGNATION BOUNDARY
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 COASTAL BOUNDARIES
 PROPERTY IDENTIFICATION NUMBER



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 100 The Esplanade, Auckland
 09 308 9178



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 Title: PROPOSED DESIGNATION

Author: JLV
 Date: 27 OCTOBER 2023

Scale: NTS
 Date: 27 OCTOBER 2023

Sheet: 10 of 17



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Warkworth to Wellsford

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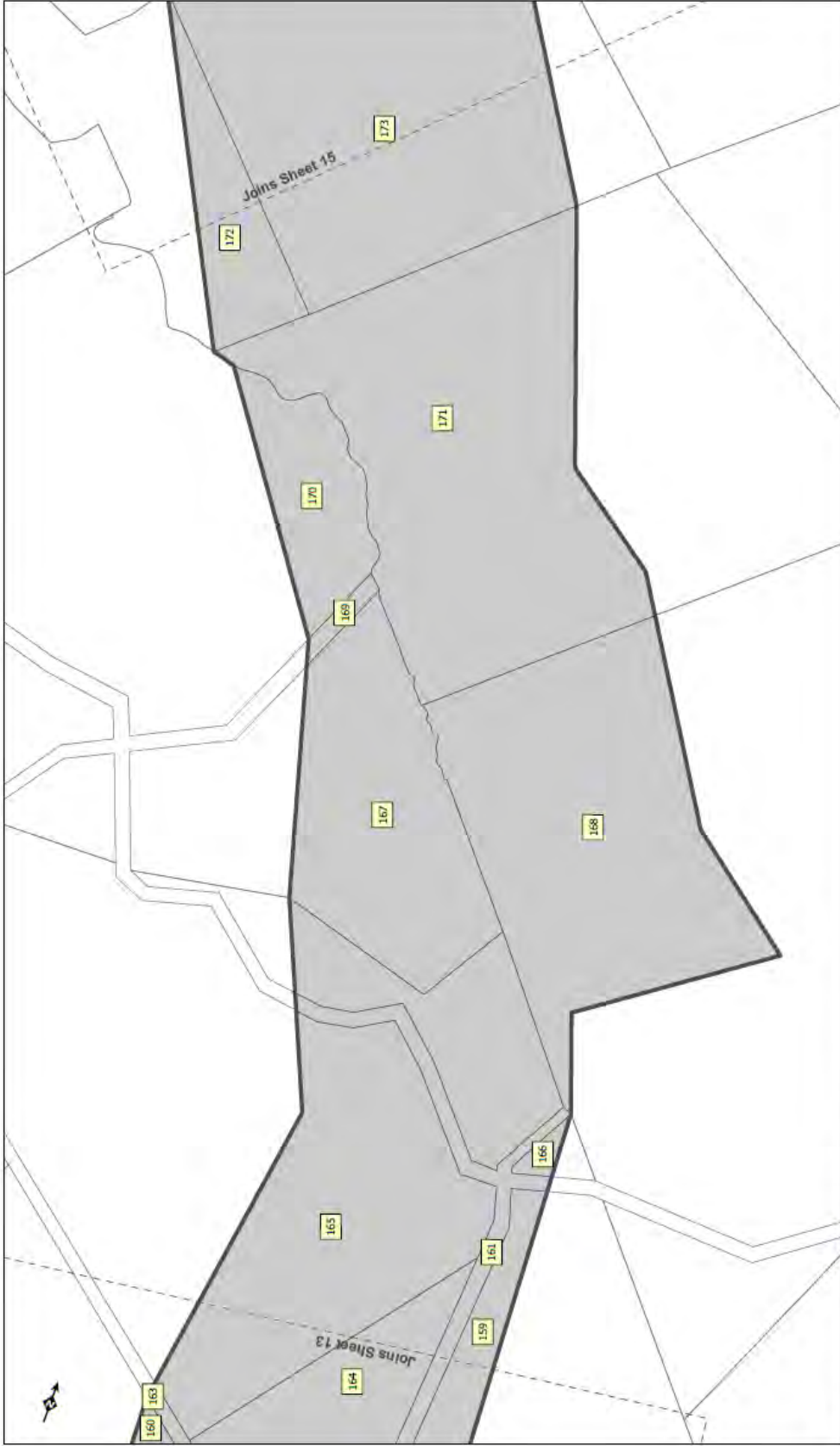
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TITLE: PROPOSED DESIGNATION

Contract: PA4156 Drawing No: Sheet: 12 of 17 Rev: 1

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AGENCY



Warkworth to Wellsford

PROJECT: **WARKWORTH TO WELLSFORD PROJECT**

TITLE: **PROPOSED DESIGNATION**

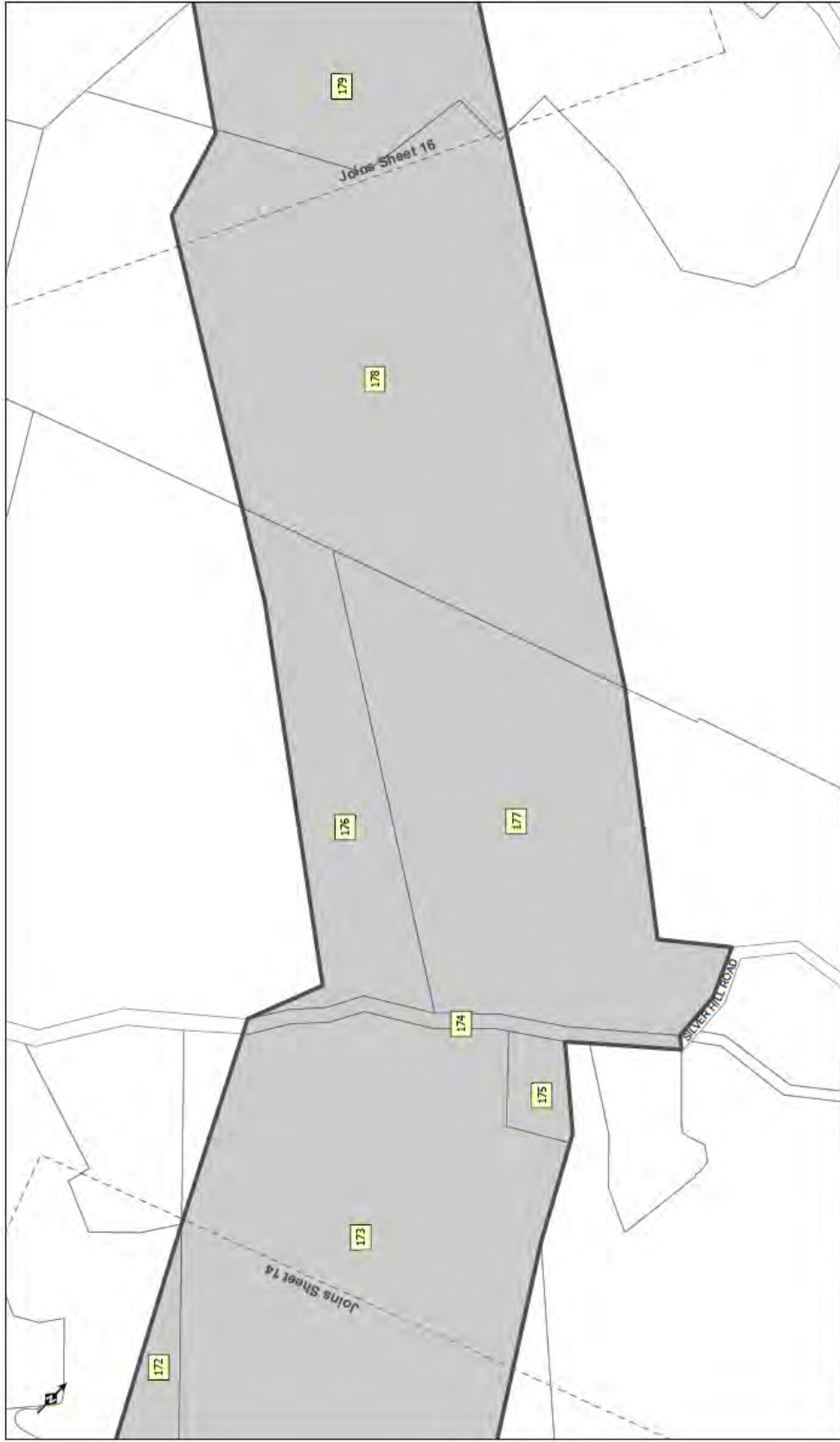
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Approved: BN	Date: OCTOBER 2023	Map to be used for the purpose of the RMA: AS	Scale: 1:500
Issue: NTS	Map to be used for the purpose of the RMA: AS	Scale: 1:500	Scale: 1:500



-  DESIGNATOR BOUNDARY
-  CADASTRAL BOUNDARIES
-  LAND TO BE DESIGNATED
-  PROPERTY IDENTIFICATION NUMBER



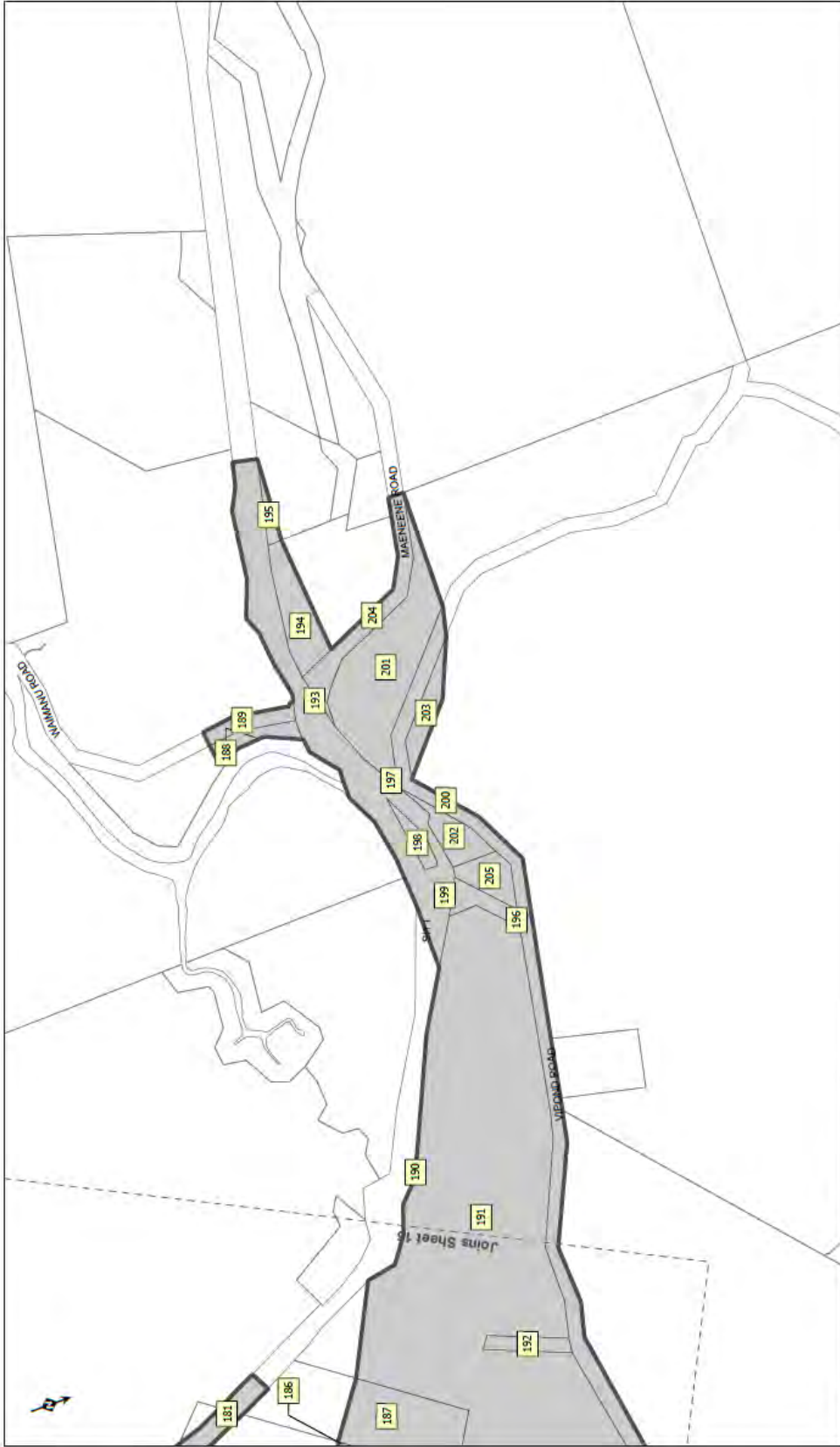
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Scale: NTS	Sheet: A3	Contract: PM4156	Project No: 15 of 17

FOR RMA APPROVALS
PROJECT: WARKWORTH TO WELLSFORD PROJECT
TITLE: PROPOSED DESIGNATION





DESIGNATION BOUNDARY
 LAND TO BE DESIGNATED
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 PROPERTY IDENTIFICATION NUMBER



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FOR RMA APPROVALS	PROJECT: WARKWORTH TO WELLSFORD PROJECT
Issue: JULY 2023	Version: 1
Issue: OCTOBER 2023	Version: 2
Issue: NTS	Version: A3
Issue: NTS	Version: PA4156
Issue: NTS	Version: 17 of 17

SCHEDULE B

RESOURCE CONSENTS GRANTED

The following resource consents are granted to Waka Kotahi – The New Zealand Transport Agency under the Resource Management Act 1991 and Auckland Unitary Plan (Operative in Part) to undertake the construction, operation and maintenance of a state highway and associated activities between Warkworth and north of Te Hana within the Designation.

Land use consent (s9)

E26 Infrastructure (LUC60354952)

- To create stormwater detention/retention ponds and wetlands associated with the project as a controlled activity under rule E26.2.3.1(A55).
- The removal and alteration of vegetation that does not comply with standards E26.3.5.1 to E26.3.5.4 as a restricted discretionary activity under rule E26.3.3.1 (A77).
- Earthworks activity greater than 50,000m² where land has a slope less than 10 degrees outside the Sediment Control Protection Area as a restricted discretionary activity under rule E26.5.3.2(A103).
- Earthworks activity greater than 2,500m² where the land has a slope equal to or greater than 10 degrees as a restricted discretionary activity under rule E26.5.3.2 (A106).
- Earthworks activity greater than 2,500m² within the Sediment Control Protection Area as a restricted discretionary activity under rule E26.5.3.2 (A107).
- Earthworks activity between 10m² - 2500m² and from 5m³ - 2500m³ within an SEA as a restricted discretionary activity under rule E26.6.3.1(A117).
- Earthworks activity greater than 2500m² or 2500m³ within a SEA as a discretionary activity under rule E26.6.3.1(A118).

E9 Stormwater quality – High contaminant generating car parks and high use roads (LUC60355185)

- Development of a new or redevelopment of an existing high use road greater than 5000m² as a controlled activity under Rule E9.4.1(A7).

Streamworks (ss 13 & 14)

E3 Lakes, rivers, streams and wetlands

- Diversion of a stream with associated disturbance and sediment discharge outside of any overlays as a discretionary activity under rule E3.4.1(A19).
- Any activities not complying with the general permitted activity standards in E3.6.1.1 or the specific standards in E3.6.1.10 – E3.6.1.13 (outsideoverlays) as a discretionary activity under rule E3.4.1 (A26).
- Temporary structures that comply with the standards within E3.6.1.15 within overlays, as a discretionary activity under E3.4.1(A27).

- Bridges or pipe bridges within overlays that comply with the standards in E3.6.1.16 as a discretionary activity under rule E3.4.1 (A29).
- Culverts more than 30m in length when measured parallel to the direction of water flow outside of any overlay as a discretionary activity under rule E3.4.1 (A33).
- Erosion control structures within an overlay that is less than 30m in length when measured parallel to the direction of water flow and complies with the standards in E3.6.1.14 as a discretionary activity under rule E3.4.1 (A34).
- Stormwater outfalls within an overlay that comply with the standards in E3.6.1.14 as a discretionary activity under rule E3.4.1 (A39).
- Activities outside of any overlay not complying with the general permitted activity standards in E3.6.1.1 or the specific activity standards in E3.6.1.14 to E3.6.1.23 as a discretionary activity under rule E3.4.1 (A44).

Water Permits (s14)

E7 Taking, using, damming and diversion of water and drilling (WAT60355184)

- Dewatering and groundwater level control for the long-term operation of the road cuts, not complying with standards E7.6.1.6(2) and (3) as a restricted discretionary activity under rule E7.4.1 (A20).
- Excavations for the road alignment will exceed 1ha in total area and 6m depth below natural ground level and the diversion cannot comply with standard E7.6.1.10(2), requiring consent as a restricted discretionary activity under rule E7.4.1 (A26).

E8 Stormwater – Discharge and diversion (WAT60356979)

- Diversion of stormwater runoff from new impervious surface areas which exceeds 5000m² and which does not comply with standards E8.6.1 and E8.6.4.1 as a discretionary activity under Rule E8.4.1 (A10).

Discharge Permits (s15)

E8 Stormwater – Discharge and diversion (DIS60354954)

- Discharge of stormwater runoff from new impervious surface areas which exceeds 5000m² and which does not comply with standards E8.6.1 and E8.6.4.1 as a discretionary activity under Rule E8.4.1 (A10).

E14 Air Quality (DIS603551896)

- Temporary crushing of aggregates greater than 60 tonnes per hour where the activity complies with permitted standards in E14.6.1.13, as a restricted discretionary activity under rule E14.4.1 (A94).

THE RESOURCE CONSENTS ARE SUBJECT TO THE FOLLOWING CONDITIONS

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DEFINITIONS

The table below defines the acronyms and terms used in the conditions. Defined terms are capitalised throughout the conditions.

Acronym / Term	Definition / Meaning		
Active Roost Site	An area within the home range of a bat population and where there is potential for bats to be roosting in any suitable tree or cluster of trees		
Acute Event Threshold	Catchment	Acute Event (events equal to or greater than)	Acute Event Threshold (tonnes/Acute Event)
	Hōteo Catchment	24 hour 10-year ARI event	512
	Mahurangi Catchment	24 hour 30-year ARI event	600
Acute Event Sediment	Total sediment (tonnes) discharged from Project Works over the total Project construction period (excluding total sediment generated by a greater than or equal to 100-year ARI event) above the Acute Event Threshold(s)		
AMP	Adaptive Monitoring Plan		
AMOP	Annual Monitoring and Offset Plan		
ARI	Average Return Interval		
AUP(OP)	Auckland Unitary Plan Operative in Part		
Avifauna	Indigenous bird species of NZ		
Bed	As defined in the RMA		
CEMP	Construction Environmental Management Plan		
CESCP	Construction Erosion and Sediment Control Plan		
CIR	Cultural Indicators Report		
CMA	Coastal Marine Area		
Construction Works	Activities undertaken to construct the Project excluding Enabling Works		
CTMP	Construction Traffic Management Plan		

Cumulative Sediment	Total sediment (tonnes) discharged from Project Works above the Cumulative Threshold(s) over the total Project construction period minus any Acute Event Sediment	
Cumulative Threshold	Catchment	Cumulative Threshold (tonnes)
	Hōteao Catchment	9000 [x total years of Construction Works]
	Mahurangi Catchment	4300 [x total years of Construction Works]
	Oruawharo Catchment	3300 [x total years of Construction Works]
Day(s)	Has the same meaning as “working day” under section 2 of the RMA	
DEB	Decanting earth bund	
Designation	The designation for the Project included in the AUP(OP)	
EMP	Ecology Management Plan	
Ecological Site	The areas described in Appendix A as identified on Maps 18 – 20	
Ecological Value	The value of an Ecological Site (i.e. Low-Moderate or High-Very High) identified using the criteria in the EIANZ Guidelines	
EIANZ Guidelines	Ecological Impact Assessment Guidelines for New Zealand 2nd Edition, EIANZ, 2018, or any subsequent version.	
Enabling Works	<p>Preliminary construction activities as follows:</p> <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments); • formation of access for geotechnical investigations; • establishment of site yards, site offices, site entrances and fencing; • constructing and sealing site access roads; • demolition or removal of buildings and structures; • relocation of services; and • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and screen planting) 	
Erosion Prone Stream	Streams with soft beds (not rock) that are predicted to be subject to flow changes of >15% to peak 2-year and 10-year ARI flows compared to predevelopment	
ESCP	Erosion and Sediment Control Plan	
EWCEMP	Enabling Works Construction Environmental Management Plan	

EWCESCP	Enabling Works Construction Erosion Sediment Control Plan
EWCTMP	Enabling Works Construction Traffic Management Plan
Fauna	Indigenous fauna of NZ, excluding fauna as defined in Avifauna above
GD01	Auckland Council Guideline Document 2017/001: Stormwater Management Devices in the Auckland Region (December 2017), or any subsequent version
GD05	Auckland Council Guideline Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (June 2016), Incorporating Amendment 1, or any subsequent version
Highly Sensitive Receiver (HSR)	Residential dwellings within: <ul style="list-style-type: none"> • 200m of the Designation boundary; • 50m of sealed access roads used for Project Works up to 500 m outside of the Designation boundary; and • 100m of unsealed access roads used for Project Works outside of the Designation boundary.
Hōkai Nuku	The iwi collective being comprised of the representatives for Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Ngāti Whātua o Kaipara and Ngāti Whātua.
Incident	A release of contaminants (including sediment) or materials into a waterbody that exceeds typical background levels
Iwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition 9G.
Kourawhero Wetland Complex	The wetland complex associated with the Kourawhero Stream as identified on Map 17
Intermittent Stream	As defined in the AUP(OP)
Manager	The Team Manager – Compliance Monitoring, of Auckland Council, or authorised delegate
Mana Whenua	Māori who can demonstrate customary rights through occupation to resources within the Project area, and who have responsibilities as kaitiaki over their tribal lands, waterways and other taonga
Maximum Open Earthworks Area	Maximum area of earthworks allowed to be open (unstabilised) at any one time

Mitigation Sites	The 'Ecology vegetation mitigation' areas identified on Maps 1 – 6
NFFCRP	Native Freshwater Fish Capture and Relocation Plan
Permanent stream	As defined in the AUP(OP)
Project	The construction, maintenance and operation of the Ara Tūhono Warkworth to Wellsford Project, which extends from Warkworth to north of Te Hana
Project Liaison Person	The person or persons appointed for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work
Project Works	All activities undertaken to construct the Project (both Construction Works and Enabling Works) and including ecological and landscape mitigation activities) but excluding operation of the highway
Representative Watercourses	The watercourses set out in Maps 7-12.
RMA	Resource Management Act 1991
RCMP	Rock Crusher Management Plan
SCMP	Stakeholder and Communications Management Plan
SEEMP	Streamworks Ecological Effects Management Plan
Sediment Reduction Activity	Works or activities that reduce sediment discharging into the CMA. Such works or activities may include any Project Works, land retirement (e.g. retirement of commercial plantation forest and/or pasture), planting or other sediment reduction works or activities.
Sediment Reduction Factors	Tonnes of sediment per hectare discharging into the CMA that will be reduced by a Sediment Reduction Activity.
SH1	State Highway 1
SOMP	Stormwater Operations and Maintenance Plan
SRP	Sediment Retention Pond
SSTMP	Site Specific Traffic Management Plan
Stabilisation	The activity to achieve a Stabilised Area

Stabilised, Stabilised Area	<p>Refers to an area inherently resistant to erosion such as rock or an area that has been stabilised after earthworks and is excluded from the definition of Maximum Open Earthworks Area.</p> <p>Stabilisation methods may include use of mulch and/or other woody organic matter, geotextile, the use of hard fill material and exposing rock as set out in GD05 or as approved through conditions or certified CESCPS.</p> <p>Where vegetation is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once an 80% vegetation cover has been established.</p>
Stage(s)	A specific works area or new land disturbing activity associated with construction of the Project as nominated by the Consent Holder.
Stormwater Management Wetland	A permanent stormwater management device in the form of a constructed wetland designed to manage stormwater runoff volume, flow and/or contaminant loads prior to discharge
Suitably Qualified and Experienced Person or SEQP	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence
Trigger Event	<p>An event in which the following occurs:</p> <ul style="list-style-type: none"> • Greater than 25mm of rainfall over any 24-hour period (as measured by the automatic onsite rainfall devices) where Project Works subject to a CESCPS are not Stabilised; or • Greater than 15mm of rainfall within an hour period where Project Works subject to a CESCPS are not Stabilised
TSS	Total Suspended Solids
Watercourse	Permanent and intermittent rivers and streams but not ephemeral streams or Wetlands.
Wetland(s)	Includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions, excluding Stormwater Management Wetlands.

GENERAL CONDITIONS

1. These consents authorise the activities described in Table 1 for the purposes of the construction, operation and maintenance of the Project within the Designation.

Consent Lapse and Expiry

- 1A. Pursuant to sections 123 and 125(1) of the RMA (and where relevant in accordance with section 116 of the RMA), the lapse and expiry dates for the various resource consents are as set out in Table 1 unless they have been given effect to, surrendered or been cancelled at an earlier date.

Table 1: Resource consent lapse and expiry dates

Ref.	Resource consents	Lapse date	Expiry date
Land disturbance activities			
LUC60354952	Land use (s.9(2)) – earthworks	15 years	Unlimited duration
LUC60354952	Land use (s.9(2)) – vegetation alteration and removal.	15 years	Unlimited duration
LUC60354952	Land use (s.9(2)) – construction of stormwater detention/retention ponds	15 years	Unlimited duration
Works in watercourses and wetlands			
LUS60354955	Land use (s.13) - new structures in, on, under or over the bed of rivers, streams (including intermittent streams) and wetlands.	15 years	35 years from the date of commencement
LUS60354955	Water permit (s.14) - diversion and temporary damming of water	15 years	35 years from the date of commencement
WAT60354953	Water permit (s.14) - diversion of intermittent and permanent watercourses and associated disturbance and sediment discharge throughout the Project area during construction and operation.	15 years	35 years from the date of commencement
Diversion of groundwater			
WAT60355184	Water permit (s.14) - diversion of groundwater and dewatering construction and operation.	15 years	35 years from the date of commencement

Ref.	Resource consents	Lapse date	Expiry date
Diversion and discharge of stormwater			
WAT60356979	Water permit (s.14) - diversion of stormwater associated with new permanent impervious surfaces.	15 years	35 years from the date of commencement
DIS60354954	Discharge permit (s.15) - discharge of stormwater runoff from new permanent impervious surfaces into or onto land or water.	15 years	35 years from the date of commencement
LUC60355185	Land use (s.9(2)) – development of all new impervious surfaces for high use roads within the Project area.	15 years	Unlimited duration
Discharges to air			
DIS60355186	Discharge permit (s.15) – temporary discharges to air during construction	15 years	15 years from the date of commencement

Review

2. These conditions may be reviewed by the Manager under section 128 of the Act, by giving notice pursuant to section 129 of the Act, at any time within six months of the first, second, third, fourth, and fifth anniversaries of the date of commencement of the construction of the Project authorised by this consent:
 - a. To deal with any adverse effect on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - b. To review the adequacy of any monitoring.

Management plans

3. The Consent Holder shall prepare, submit to the Manager, have certified, and implement the resource consent management plans in accordance with Table 2 and the specific resource consent conditions which apply to each management plan.
4. The Consent Holder may prepare management plans in parts or in stages to address specific activities or to reflect the staged implementation of the Project Works.

Condition 5 is intentionally left blank

6. The Consent Holder shall not commence Project Works within the area to which a management plan applies until the required management plan(s) has been certified.
7. The Consent Holder may seek to amend a management plan in accordance with the Decision Pathway prescribed for the plan in Table 2.

7A. The Consent Holder shall make each management plan publicly available online once a management plan is finalised and if it is amended or updated, and for the duration of Project Works.

Table 2: Management Plan Table

Management Plan	Decision Pathway	When to submit	Duration for implementation
Construction Environmental	To Manager for Information	At least 20 Days prior to start of Construction Works	Duration of Construction Works
Enabling Works Construction Environmental	To Manager for Information	At least 20 Days prior to start of Enabling Works	Duration of Enabling Works
Erosion and Sediment Control	Certified by Manager	Prior to start of Construction Works	Duration of Construction Works
Chemical Treatment	Certified by Manager	Prior to start of Construction Works	Duration of Construction Works
Construction Erosion and Sediment Control	Certified by Manager	Prior to start of Construction Works for specific area and/or activity	Duration of specific works and/or activity
Enabling Works Construction Erosion and Sediment Control	Certified by Manager	Prior to start of Enabling Works	Duration of Enabling Works
Adaptive Monitoring	Certified by Manager	Prior to start of Construction Works	Duration of Construction Works
Sediment Reduction Factors methodology	Certified by Manager	Prior to start of Construction Works	N/A
Ecological	Certified by	At least 6 months prior to start of	As specified in the EMP
Management Plan	Manager	Project Works	

Management Plan	Decision Pathway	When to submit	Duration for implementation
Biosecurity Plan	Certified by Manager	Prior to start of Project Works	Duration of Project Works
Streamworks Ecological Effects Management Plan	Certified by Manager	Prior to start of Construction Works	N/A
Native Freshwater Fish Capture and Relocation Plan	Certified by Manager	Prior to any Wetland or Watercourse activity commencing	Prior to Construction/ Enabling Works period
Stormwater Operations and Maintenance	Provided to Manager for information	Prior to operation of stormwater treatment devices	Throughout operation of Project
Rock Crusher	Certified by Manager	Prior to start of Construction Works	Duration of Construction Works
Cultural Engagement	To the Manager for information	At least 1 month prior to the start of Project Works	Throughout the Project Works
Wetland Ecological Effects Management Plan	Certified by Manager	Prior to start of Construction Works	Throughout the Project Works and for 3 years following completion of the Project Works
Annual Mitigation and Offset Plan	Certified by Manager	30 June annually	Throughout the Project Works

MANA WHENUA

Cultural Indicators Report

8. At least 12 months prior to the Consent Holder's nominated start date for detailed design of the Project, the Consent Holder shall invite Mana Whenua to prepare a Cultural Indicators Report for the Project, or to nominate a person or organisation to prepare a Cultural Indicators Report on their behalf. To assist with preparation of any Cultural Indicators Report, the Consent Holder shall provide access to Crown owned land within the Project Area for Mana Whenua to undertake surveys. The purpose of any Cultural Indicators Report is to assist with the protection and management of Ngā Taonga Tuku Iho (treasures handed down by our ancestors) during Construction Works.

9. Any Cultural Indicators Report should be completed and provided to the Consent Holder at least 6 months prior to the Consent Holder's nominated start date for detailed design of the Project and should:
- a. Describe Mana Whenua's customary rights through occupation to resources within the Designation.
 - b. Identify and map cultural sites, landscapes and values that have the potential to be affected by Project Works;
 - c. Set out Mana Whenua's desired outcomes and recommended methods for management of potential effects on cultural values;
 - d. Identify cultural indicators of cultural stream health as relevant to the Project Works;
 - e. Set out recommended methods to measure the effects on identified cultural indicators during Project Works;
 - f. Identify opportunities for restoration and enhancement of Mauri and mahinga kai within the Designation; and
 - g. Identify cultural criteria that should be acknowledged in the development of the CEMP, SEEMP, the EMP, and the NFFCRP.

Cultural Engagement Plan

- 9A. At least 1 month prior to start of the Consent Holder's nominated start date for detailed design of the Project, the Consent Holder shall complete a Cultural Engagement Plan if it has received any Cultural Indicators Report(s) in accordance with Conditions 8 and 9. The purpose of the Cultural Engagement Plan is to identify:
- a. The measures and methods to implement the recommendations within the Cultural Indicators Report(s) where the Consent Holder considers it is practicable to do so.
 - b. Written reasons where the Consent Holder considers any recommendations in the Cultural Indicators Report(s) cannot be practicably implemented, for example due to the operational, technical, financial, health and safety or engineering needs of the Project.
 - c. The roles and responsibilities of Mana Whenua during the Project Works.
 - d. The roles and responsibilities of the Iwi Advisor, which shall include but not be limited to:
 - i. Engaging with the Consent Holder on the preparation of the CEMP, the SEEMP, the EMP, and the NFFCRP;
 - ii. Onsite monitoring of Project Works involving top soil removal up to 1.5m below ground level (as defined in the AUP(OP));
 - e. Requirements for formal dedication or cultural interpretation prior to the start of Construction Works in areas identified as having significance to Mana Whenua.
 - f. A written record of the engagement undertaken in accordance with Condition 9B.
- 9B. In preparing the Cultural Engagement Plan the Consent Holder shall engage with Mana Whenua who have prepared a Cultural Indicators Report over a period of not less than 3 months prior to the Consent Holder's nominated start date for detailed design of the Project to better understand any Cultural Indicators Report and to discuss the recommendations in it.

9C. The Consent Holder shall implement the Cultural Engagement Plan throughout the Project Works.

Iwi Advisor

9D. At least 12 months prior to commencement of Construction Works, the Consent Holder shall invite Hōkai Nuku to appoint an Iwi Advisor or other nominated kaitiaki (*Iwi Advisor*) to undertake the roles and responsibilities set out, or to be set out in the Cultural Engagement Plan.

9E. Conditions 9A to 9C will cease to apply if Mana Whenua have been invited to prepare a Cultural Indicators Report in accordance with Condition 8 and have not provided that report within six months of the Consent Holder's nominated start date for detailed design of the Project.

Conditions 10-15 are intentionally left blank

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

16. The Consent Holder shall prepare a Construction Environmental Management Plan (*CEMP*) prior to commencement of Construction Works to set out management procedures and methods to be implemented to ensure ongoing compliance with these conditions and to address complaints and Incidents in a timely manner during Construction Works.

17. The CEMP shall be prepared, having regard to the NZ Transport Agency Guideline for Preparing Environmental and Social Management Plans (April 2014), or any subsequent version. The CEMP shall include, but not be limited to:

- a. Roles and responsibilities of construction management staff, including the overall manager responsible for environmental management.
- b. An outline construction programme, proposed staging, proposed hours of work and methods to inform the Manager of upcoming Construction Works, which shall occur at annual intervals or key construction times throughout the duration of Construction Works.
- c. Contact details of the site supervisor or Project manager and the Project Liaison Person (telephone number and email or other contact address).
- d. Methods and systems to inform and train all persons working on the site of potential environmental sensitivities and how to comply with these conditions.
- e. Measures to be adopted to maintain the land affected by Construction Works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar activities.
- f. The location of construction site infrastructure including site offices, site amenities, contractors' yard access, equipment unloading and storage areas, contractor car parking and security.
- g. Means of providing for the health and safety of the general public.
- h. Procedures for the refuelling and maintenance of plant and equipment to avoid discharges of fuels or lubricants to Watercourses.

- i. Measures to address the storage of fuels, lubricants, hazardous and/or dangerous materials, along with contingency procedures to address emergency spill response(s) and clean up.
 - j. Procedures for responding to complaints about Construction Works.
 - k. Procedures for Incident management.
 - l. Methods for updating the CEMP as required.
18. The CEMP shall be prepared in engagement with Mana Whenua and in consultation with the owner of the commercial plantation forest (Mahurangi Forest) located west of SH1, with respect to construction activities which directly interface with forestry operations. If the Consent Holder has not received any comment from the owner of the Mahurangi Forest within 20 Days of providing the CEMP to them, the Consent Holder may consider the relevant party has no comments.

Enabling Works Construction Environmental Management Plan

19. Where Enabling Works are to be undertaken, the Consent Holder shall prepare a site or activity specific Enabling Works Construction Environmental Management Plan (*EWCEMP*) prior to commencing the relevant Enabling Works.
20. The EWCEMP shall be prepared in general accordance with Condition 17, with the scope modified to be commensurate with the scale and effects of the proposed enabling works.

EROSION AND SEDIMENT CONTROL

Erosion and Sediment Control Outcomes

21. The Consent Holder shall design and construct the Project to achieve the following erosion and sediment control (*ESC*) Outcomes (*ESC Outcomes*):
- a. Prioritise minimisation of sediment generation by:
 - i. minimising the volume and area of the proposed earthworks required for the Project through earthworks design appropriate to slope and expected soil types and geology;
 - ii. maximising the effectiveness of ESC measures associated with earthworks by minimising potential for sediment generation and sediment yield; and
 - iii. Minimisation of discharges of all construction water related contaminants.
 - b. Monitor sediment yields and assess and remedy effects on freshwater and marine environments at the prescribed thresholds in Conditions 34 to 42.
22. The Consent Holder shall develop, construct and maintain all ESC plans and devices to achieve the requirements of GD05, except where otherwise certified by the Manager or a specific standard is detailed in a condition of this consent, in which case the specific standard shall apply.

Erosion and Sediment Control Plan

23. The Consent Holder shall prepare an Erosion and Sediment Control Plan (*ESCP*) for the Construction Works for the entire Project prior to Construction Work

identifying the construction water management measures to be used on the Project to meet the ESC Outcomes.

24. The ESCP shall be prepared by a Suitably Qualified and Experienced Person and shall include the following:

General

- a. Methods of achieving the ESC Outcomes;
- b. Identification of a suite of appropriate structural and non-structural erosion and sediment control measures to be installed prior to and during all Construction Works for representative parts of the Project, including earthworks, and works within Watercourses;
- c. Identification of a process and methods to ensure that offsite (clean) water runoff is prevented from entering active work areas, including the use of clean water diversion (CWD) channels and/or bunds to divert runoff;
- d. Identification of a process, methods and measures to ensure that any sediment laden runoff will be captured and directed to an appropriate sediment control device, including the use of dirty water diversion (DWD) channels and/or bunds;
- e. The approach and procedures for ensuring advance warning of a rainfall event;
- f. The procedures for decommissioning the erosion and sediment control measures;
- g. The procedures for determining staging and sequencing of earthworks to minimise the length of time and extent of exposed/disturbed soil and the details of progressive stabilisation of these earthwork areas;
- h. A procedure to establish and define minor changes to erosion and sediment control, which would not require further certification by the Manager prior to implementation; and
- i. Methods for amending and updating the ESCP as required.

Responsibilities

- j. Identification of:
 - i. Appropriately qualified and experienced staff to manage the erosion and sediment control devices, associated maintenance procedures and monitoring requirements;
 - ii. Staff directly responsible for supervising installation, maintenance and decommissioning of erosion and sediment control devices and the associated works;
 - iii. A chain of responsibility for both the Project and its Stages, including the overall manager (with authority to stop works), for managing erosion and sediment control on site;
 - iv. An erosion and sediment control management team (including representatives from the contractor, Council and the Consent Holder) to meet and review erosion and sediment control practices and procedures as required; and
 - v. Training requirements for staff to assist with their understanding of the environmental effects that need to be managed and the requirements of the consent conditions, including specific training at the start of Construction Works in any Stage.

Incident management

- k. Identification of the process to ensure compliance with Condition 48 and 49.

Chemical Treatment Management

25. The Consent Holder shall prepare a Chemical Treatment Management Plan (ChemTMP). The ChemTMP shall be prepared by a Suitably Qualified and Experienced Person and shall include:
- a. Specific design details of the flocculation treatment system which shall include:
 - i. a rainfall or flow activated flocculation system excluding flocculation socks for all sediment retention ponds (SRPs) and decanting earth bunds (DEBs) for areas that have a contributing catchment greater than 500m²;
 - ii. all rainfall activated flocculation systems to incorporate robust design, construction and operation systems including provision of sufficient chemical at a minimum in accordance with GD05 and sufficient to meet the overall ESC Outcomes of Condition 21 and to minimise the effects of any malfunction of the rainfall activated flocculation systems; and
 - iii. a rainfall activated flocculation system (including flocculation socks) for all other DEBs and any other sediment detention or flow device system as may be employed on site.
 - b. Monitoring, maintenance (including post storm) and a contingency programme (including a record sheet) for the flocculation treatment system;
 - c. Results of any initial treatment trials and details of optimum dosage (including assumptions) specific to a given CЕСSР;
 - d. Consideration of the use of organic flocculants where practicable, provided that the most effective flocculent in terms of sediment removal is selected based on the results of any initial treatment trials;
 - e. A spill contingency plan;
 - f. Details of the person or bodies that will hold responsibility for the operation and maintenance of the chemical treatment system and the organisational structure which will support this system; and
 - g. Details for the checking and calibration of dosing and monitoring equipment.

Erosion and sediment control standards

26. The Consent Holder shall design and construct all erosion and sediment control measures and devices to achieve compliance with Conditions 22 and 24 and shall include the following design requirements:
- a. All Sediment Retention Ponds and decanting earth bunds shall be designed, constructed and maintained at a volume equivalent to or greater than 3% of the catchment area (i.e., 300m³ per 1ha of contributing catchment) unless otherwise varied through an approved CЕСSР;
 - b. Silt fence design and super silt fence design shall be in accordance with TP90 and NZ Transport Agency Erosion and Sediment Control Guidelines for State Highway Infrastructure (Sept 2014), or any subsequent version, with a return upslope to provide robustness of the device;

- c. Clean and dirty water diversion channels, shall be sized to accommodate the flow from a 100 year ARI storm event where practicable, but if this sizing cannot be achieved, an alternative design shall be provided including reasons why the 100 year sizing criterion cannot be achieved and this alternative design will need to be certified through the CESCPC;
- d. Sufficient and safe access to enable monitoring and maintenance (including forebay clean out) shall be provided at all times to all Sediment Retention Ponds and decanting earth bunds.

Construction Erosion and Sediment Control Plans for Stages

27. The Consent Holder shall prepare CESCPCs for each Stage of the Project, or a specific activity to set out how the requirements of the certified ESCPC and the ESC standards in Condition 26 will be met for that Stage or activity.
28. The CESCPCs shall be prepared by a Suitably Qualified and Experienced Person and shall include:
 - a. Methods of achieving the ESC Outcomes.
 - b. Identify how the requirements of the certified ESCPC and the standards in Condition 26 will be met (where applicable).
 - c. Include a schedule of current and planned open earthworks areas as applicable to that CESCPC catchment location at the time of preparation of that CESCPC.
 - d. Identify alternative Stabilisation measures based on Project specific field trials to demonstrate its effectiveness in Stabilisation. The Project specific trials and results must be submitted to the Manager in that CESCPC.
 - e. Confirm catchment boundaries.
 - f. Confirm the location of the Construction Works, and the boundary and extent of works for that specific CESCPC.
 - g. Provide design criteria, typical and site-specific details of ESC measures, including supporting calculations, contributing catchment area, retention volume of structure, dimensions of structure and design drawings of erosion and sediment controls.
 - h. Provide identification of risk and sensitive area locations and the details of management (including contingency measures) around these aspects.
 - i. Confirm chemical treatment design and details consistent with the ChemTMP certified under the ESCPC.
 - j. Provide a programme for managing ongoing non-Stabilised Areas.
 - k. Provide design details for managing the treatment, disposal and/or discharge of contaminants (e.g. concrete wash water).
 - l. Provide an estimated sediment yield for the Stage of work.
 - m. Provide details of construction methods to be employed, including timing and duration. This shall include:
 - i. Streamworks methodologies;
 - ii. Programme for managing exposed area, including progressive Stabilisation considerations;
 - iii. Identification of areas susceptible to erosion and sediment generation or high-risk areas including specific measures for managing this risk; and
 - iv. Access and maintenance provisions.

- n. Include plans showing contour information at suitable intervals, cut and fill operations, erosion and sediment controls, stream diversions, discharge points to Watercourses.
- o. Provide procedures for decommissioning of ESC measures.
- p. Contact details of the site supervisor or Project manager and the Project Liaison Person (telephone number and email or other contact address).

Advice Note: *In relation to Condition 28(h), risk will be confirmed for each specific CЕССР, however each specific CЕССР will need to include areas of earthworks adjacent to and within stream systems, on slopes greater than 15 degrees, the Kourawhero Stream, the Waiteraire Stream, the unnamed tributaries H1 and H2 of the Hōteо River (as shown on the map in Appendix D), and Te Hana Creek.*

CЕССР As-built certification

29. Prior to Construction Works in the Stage that the CЕССР applies commencing (excluding the construction of the erosion and sediment controls themselves) as-built plans signed by a Suitably Qualified and Experienced Person shall be submitted to the Manager for information and as confirmation that the erosion and sediment control measures for that CЕССР have been constructed in accordance with the certified CЕССР.

Enabling Works

30. The Consent Holder shall prepare specific CЕССРs for the Enabling Works for the Project. The CЕССРs shall be prepared by a Suitably Qualified and Experienced Person and shall address the requirements of a CЕССР under Conditions 27 and 28 but with the scope modified as appropriate to reflect the timing, location and scale of the Enabling Works.

Adaptive Monitoring Programme

31. Prior to Construction Works commencing, the Consent Holder shall prepare an Adaptive Monitoring Plan (AMP) with the purposes of:
- a. ensuring the ESC Outcomes are met;
 - b. setting out the methodology for calculating and recording sediment released in relation to the Acute Event and Cumulative Thresholds; and
 - c. ensuring continuous improvement as to the effectiveness of the erosion and sediment controls employed on site.
32. The AMP shall be prepared by a Suitably Qualified and Experienced Person and shall include methods to meet the purposes in Condition 31 for undertaking:
- a. Ongoing site visual assessments of all erosion and sediment devices;
 - b. Ongoing monitoring of devices and processes, including flocculation;
 - c. Identification of four representative SRPs or selected DEBs as approved by the Manager;
 - d. Automatic onsite rainfall monitoring using at least 2 rain gauges, including automatic notification of a Trigger Event occurring;
 - e. Pre-Trigger Event inspections including outlining maintenance procedures and installing any additional measures required in response to the severity of the forecasted Trigger Event (including Stabilisation);

- f. Trigger Event sampling, monitoring and response procedures in accordance with Condition 34;
 - g. Outflow monitoring (measured in m³/sec) of the discharges of a representative number (at least four SRPs or DEBs) with:
 - i. two SRPs or DEBs to best represent a high-risk location of the earthworks on the Project (steeper locations or those with a catchment greater than 5ha); and
 - ii. two SRPs to represent the design and construction for general earthwork activities.
 - h. Automatic sediment sampling at the same selected SRPs to measure outflow TSS (or an alternative water quality parameter that can be related to suspended solids concentrations).
 - i. Monitoring of TSS, or alternative water quality parameter that can be correlated to suspended solid concentrations, in the freshwater receiving environment, upstream and downstream of the most upstream and downstream discharges within the area of Project Works in each of the Hōteō, Mahurangi and Oruawharo catchments; and
 - j. An analysis of the monitoring detailed in Conditions 32(g) (flow) and 32(h) (TSS) to allow for calculation of Cumulative Sediment to the Hōteō, Mahurangi and Oruawharo catchments and for calculating Acute Sediment during the following events:
 - i. 24 hour 10-year or greater ARI event in the Hōteō Catchment (with a sediment load of >512 tonnes); and
 - ii. 24 hours 30-year or greater ARI event in the Mahurangi Catchment (with a sediment load of >600 tonnes).
 - k. Processes for collection of samples in the event grab sampling is not achievable due to health and safety risks.
33. The Consent Holder shall keep a record of implemented adaptation methods and provide the record to the Manager on request.

Trigger Event Procedures

34. Within 12 hours of a Trigger Event occurring, the Consent Holder shall complete a Trigger Event monitoring programme as detailed within the AMP which includes the collection of grab samples (unless it shall be unsafe or dangerous to do so) to measure TSS, or alternative water quality parameter that can be related to suspended solid concentrations, at discharge points of all SRPs and a selection of DEBs (a minimum of 50% of the operational DEBs) at the time of a discharge, and in the freshwater receiving environment, upstream and downstream of the area of Project Works in each of the Hōteō, Mahurangi and Oruawharo catchments.
- 34A. Within 12 hours of a Trigger Event occurring the Consent Holder shall instruct a Suitably Qualified and Experienced Person to undertake the following additional procedures:
- a. Inspect and record observations of the earthworks site and erosion and sediment control devices to identify any problems or activities likely to have contributed to an increased sediment discharge;

- b. Remedy any identified problems, and implement any further controls on activities or areas of the site that are likely to contribute to sediment discharge into the receiving environment to the extent practicable; and
 - c. Notify the Manager of the Trigger Event occurring, and any actions undertaken.
35. Within 2 weeks of Trigger Event procedures having been undertaken in accordance with Condition 34, the Consent Holder shall provide the Manager with an adaptive monitoring programme report, summarising the TSS results, or alternative water quality parameter that can be correlated to suspended solid concentrations of the automatic and grab samples collected during the Trigger Event, including any observations made and actions taken to remedy improper ESC device performance.

Condition 36 is intentionally left blank

Sediment reduction activities

37. Where there is Acute Event Sediment and/or Cumulative Sediment (greater than zero) (determined using the data collected from the representative SRPs or DEBs as required by Conditions 37 to 42, the Consent Holder shall:
- a. for Acute Event Sediment, implement Sediment Reduction Activities within the affected catchment to offset the effects of that sediment within 25 years of the date of the Acute Event that caused the Acute Event Sediment; and
 - b. For Cumulative Sediment, implement Sediment Reduction Activities within the affected catchment to offset the effects of that sediment within 25 years of the Project becoming operational.
38. A Suitably Qualified and Experienced Person shall prepare a methodology identifying:
- a. Sediment Reduction Factors for any Sediment Reduction Activities; and
 - b. Any measures necessary for the Sediment Reduction Activities to achieve the predicted sediment reduction over a 25-year period.
39. The Sediment Reduction Factors shall be calculated by the Suitably Qualified and Experienced Person using:
- a. The methodology set out in Appendix B; or
 - b. Other best practice methods for assessing sediment generation and identifying Sediment Reduction Factors.
40. The methodology for calculating Sediment Reduction Factors identified through Condition 38 for any Sediment Reduction Activities and related measures to achieve the predicted sediment reduction over a 25-year period, shall be provided to the Manager for certification prior to commencement of ConstructionWorks.
41. The following information shall be provided to the Manager on an annual basis to demonstrate how Condition 37(a) will be met:

- a. A record of the Acute Event Sediment including any exceedance beyond the Acute Event Thresholds for each catchment.
 - b. Documentation outlining the location where Sediment Reduction Activities have been applied and how they will offset the Acute Event Sediment within 25 years of the relevant Acute Event.
42. The following information shall be provided to the Manager within six months of the Project becoming operational to demonstrate how Condition 37(b) will be met:
- a. A record of the Cumulative Sediment, including any exceedance beyond the Cumulative Thresholds for each catchment.
 - b. Documentation outlining the location where Sediment Reduction Activities have been applied and how they will offset the Cumulative Sediment within 25 years of the Project becoming operational.

Advice note: For the avoidance of doubt, in the event that the Cumulative Threshold is less than the Acute Event Sediment for which Sediment Reduction Activities have been provided under Condition 37, no further Sediment Reduction Activities will be required for the Project

Earthworks Season Restrictions

43. The Consent Holder shall not undertake earthworks activities between 1 May and 30 September (winter period) in any one year unless otherwise approved by the Manager.

Maximum Open Earthwork Area limits

44. Unless otherwise approved in writing by the Manager following provision of the information required by Condition 46, the Maximum Open Earthworks Area for Project Works:
- a. within the Hōteu catchment at any one time is 75ha;
 - b. within the Oruawhoro catchment at any one time is 25ha; and
 - c. within the Mahurangi catchment at any one time is 43.3ha.

Condition 45 is intentionally left blank

46. Any request to the Manager for approval to open an earthworks area that is greater than the limits stated in Condition 44 shall include the following information:
- a. The proposed earthworks programme and ESC measures implemented;
 - b. A comparison showing the modelled sediment yields compared to the actual sediment yields generated to date;
 - c. A minimum of 12 months monitoring data to support an increased earthworks area. This must include water quality results from the automated sampling devices that gathered data from a comparable catchment; and
 - d. Identification of areas for continuous improvement opportunities (e.g., modifications to current ESC practice) for future earthworks to support the new open areas.

Operational effectiveness and efficiency

47. The Consent Holder shall maintain all ESC measures to ensure they continue to achieve their design function throughout the duration of land disturbance and earthworks activity, and until the relevant site is Stabilised.

Construction Incident Management

48. The Consent Holder shall notify the Manager within one Day or as soon as practicable after identifying that any contaminants (including sediment) or materials that exceed typical background levels have been released in the undertaking of the work and which have entered any water body due to any of the following incidents:
- a. discharges from non-Stabilised Areas that are not treated by erosion and sediment control measures as required under this consent;
 - b. failure of any erosion and sediment control measures;
 - c. discharge of a hazardous substances, including cement, to a waterbody;
 - d. failure of any temporary stream diversion;
 - e. un-consented removal, loss or damage to vegetation or other habitats;
 - f. any other Incident which either directly or indirectly causes, or is likely to cause, adverse ecological effects in any water body that is not authorised by a resource consent held by the Consent Holder;
 - g. Any other Incident which is likely to adversely affect the quality of the water used for public reticulated water purposes, including notifying Watercare Services Limited within 48 hours of an Incident if the spill is within the Water Intake Catchment shown in Appendix C.

This notification shall be either by telephone or email, or via an alternative method as agreed with the Manager.

49. If any of the incidents identified in Condition 48 occur, the Consent Holder shall:
- a. re-establish control measures where these have failed or have not been implemented in accordance with the relevant management plan as soon as practicable;
 - b. liaise with the Manager to establish what remediation or rehabilitation is required and whether such remediation or rehabilitation is practical to implement;
 - c. carry out any remedial action as required by and to the satisfaction of the Manager; and
 - d. maintain a permanent record of the Incidents at the site, which shall include the date and time of the incident, the nature, manner and cause of the release of the contaminants, weather conditions at the time of the Incident and the steps taken to prevent any further Incidents and to remedy any adverse effects.

This notification (if not in person) shall be either by telephone or email, or via an alternative method as agreed with the Manager.

Stabilisation and decommissioning

50. The Consent Holder shall stabilise sites against erosion as soon as practicable, and in a progressive manner, as earthworks are completed over various areas of Project Works.

51. If an area is not subject to earthworks activity (including cut and fill batters) for a 14-Day period, or time otherwise certified with the Manager within a CЕССР, the area shall be Stabilised. The Manager shall take into account the following when determining a change to this 14-day period:
- a. The duration of the extension;
 - b. Any interim Stabilisation;
 - c. Risk of the change as identified in the CЕССР;
 - d. Topography;
 - e. Extent of open area;
 - f. Reason for the extension of duration; and
 - g. Environmental effects of extension.

The 14-Day period (or otherwise agreed) will apply to all earthworks and will include parts of larger earthwork footprint locations.

Completion or abandonment of works

52. Upon completion or abandonment of earthworks on the Project site, the Consent Holder shall stabilise all areas of bare earth against erosion to the satisfaction of the Manager.

Condition 53 is intentionally left blank

WORKS IN A WATERCOURSES AND WETLANDS ANDECOCLOGY

Crossing watercourses - Location of bridge structures

54. The Consent Holder shall design and construct the Project to include bridge structures with no piers in the Bed of the following Watercourses (as identified on Maps 14 – 16):
- a. Mahurangi River (Left Branch), and the riparian margins where practicable;
 - b. Hōteo River and the riparian margins where practicable;
 - c. Waitaraire Stream; and
 - d. Maeneene Stream.

Biosecurity Plan

- 54A. Prior to Project Works commencing, the Consent Holder shall prepare a Biosecurity Plan in consultation with the Operations Manager and Department of Conservation. The kauri management aspects of the Biosecurity Plan shall apply to all areas in the Designation within 3 times the radius of the canopy drip line of any New Zealand kauri. The purpose of the Biosecurity Plan is to set out the procedures to be used to prevent the introduction and/or spread of kauri dieback disease, and other biosecurity hazards such as Myrtle rust, Argentine ants and plague skink.
- 54B. The Biosecurity Plan shall be prepared by a Suitably Qualified and Experienced Person to meet the purpose in Condition 54A and, as a minimum, shall:
- a. be consistent with “Hygiene Procedures for Kauri Dieback”, “Land disturbance activities (including earthworks) around kauri”, “Vehicle and

- Heavy Machinery Hygiene”, “Landfill Disposal of Contaminated Material” and “Procedures for Tree Removal and Pruning” and any other relevant guidelines published by the Ministry for Primary Industries Kauri Dieback Management Programme, or any subsequent revision which can be found at www.kauridieback.co.nz or copies can be obtained from Auckland Council;
- b. contain measures that address the removal of any material (including soil) from within the “kauri contamination zone” and safe disposal thereof;
 - c. contain best practice biosecurity protocols to respond to any other identified biosecurity risk (e.g. Myrtle Rust) where required to do so by legislation; and
 - d. contain methods for updating the Biosecurity Plan in the event of significant changes in scientific knowledge relating to the effective management of kauri dieback or other biosecurity risks that occur after the plan is approved.

Ecological outcomes

Ecological Outcomes

- 54C. In designing and managing the construction of the Project, the Consent Holder shall achieve the following “Ecological Outcomes”:
- a. Limit encroachment of Project Works into Ecological Sites where practicable to do so, and otherwise minimise impacts on such areas;
 - b. Protect Fauna and Avifauna from harm or mortality resulting from the Project as far as practicable through adopting best practice capture and relocation protocols;
 - c. Avoid where practicable and where not practicable minimise any such intrusion into the Kourawhero Wetland Complex;
 - d. Avoid the escarpment feature in the Dome Valley Forest Section identified on Map 21;
 - e. Avoid, where practicable the Significant Ecological Area at the Hōteo River crossing and where not practicable minimise any encroachment into this area;
 - f. Restore, maintain or enhance ecology and habitat affected by the Project by designing and implementing restoration planting and habitat rehabilitation to:
 - i. Connect and enhance existing natural ecosystems;
 - ii. Establish ecological connectivity between the Mahurangi River (left branch) catchment and the Upper Kourawhero Streamcatchment;
 - iii. Enhance Fauna and Avifauna habitat within the Mitigation Sites, the Fauna habitat and flyway mitigation area and other planting areas; and
 - iv. Provide restoration of habitats within the Designation that are resilient through minimising edge effects and other factors causing degradation, and which are protected and managed in perpetuity to maintain the Ecological Outcomes identified above.
- 54D. At least 6 months prior to start of Project Works, the Consent Holder shall prepare an Ecology Management Plan (*EMP*) to identify how the Ecological Outcomes will be met. The *EMP* shall be prepared by a Suitably Qualified and Experienced Person and shall be provided to the Manager for certification and shall include the following topic sections:

Ecological Outcomes

- a. Provide detail as to how the Project design and management of the construction of the Project will achieve the Ecological Outcomes. This shall, as a minimum, include a description of how:
 - i. the Project responds to each element of the Ecological Outcomes;
 - ii. the Ecological Outcomes are achieved in each subtopic (b), (c), (d) and (e) of the Ecology Management Plan.

Ecological Sites

- b. Recommended measures to be adopted to limit encroachment of Project Works into Ecological Sites including:
 - i. The steps taken to reduce the footprint of Project Works in such areas and documenting the reasons where it is not practicable to do so; and
 - ii. Measures to fence off or otherwise clearly demarcate such areas during Project Works to protect those sites from accidental damage during Project Works;

Fauna habitat and flyway mitigation area

- c. The location and measures for the Fauna habitat and flyway mitigation area under Conditions 54F-54I.

Restoration planting and habitat rehabilitation

- d. The locations and measures for restoration planting and habitat rehabilitation under Conditions 54J-54N.

Fauna relocation protocols and sites

- e. The locations and measures for the Fauna and Avifauna relocation required under Conditions 54Q-54R.

54E. In preparing the EMP and the relevant topic sections the Consent Holder shall engage with Mana Whenua and consult with:

- a. Auckland Council;
- b. Department of Conservation; and
- c. The owner of the commercial plantation forest (Mahurangi Forest) located west of SH1, with respect to ecological management activities which directly interface with forestry operations.

If the Consent Holder has not received any comment from such parties within 20 Days of providing the EMP to them, the Consent Holder may consider that the relevant party has no comment.

Fauna habitat and flyway mitigation area

54F. At least 6 months prior to the start of Project Works the Consent Holder shall provide a Fauna habitat and flyway mitigation area at the area identified on Map 13, to achieve the following “Fauna Habitat and flyway mitigation area” outcomes:

- a. Provides a suitable location for the relocation of some or all fauna captured and relocated under Conditions 54Q–54X;

- b. Maintains an east-west link across the Designation to allow for the movement of Fauna and dispersal of seeds;
- c. Maintains a flyway for Avifauna and long-tailed bats to move across and along the Designation; and
- d. Contains mature vegetation suitable for long-tailed bat roosts and bat and avifauna breeding sites.

54G. If, in the opinion of a Suitably Qualified and Experienced Person, the area identified on Map 13 will not achieve the Fauna habitat and flyway mitigation area outcomes an alternative area(s) for mitigation shall be identified by a Suitably Qualified and Experienced Person within the Designation that will achieve those outcomes.

54H. The Consent Holder shall fence off (or otherwise clearly demarcate) the Fauna habitat and flyway mitigation area during Project Works to prevent access and any accidental damage during adjacent construction activities apart from access for pest animal and pest plant management and restoration planting and habitat rehabilitation works.

54I. The Consent Holder shall include the location and measures for the Fauna habitat and flyway mitigation area in a topic section in the EMP.

54IA. The Consent Holder shall not undertake Project Works above ground within the escarpment feature identified on Map 21.

Restoration planting and habitat rehabilitation

54J. Prior to commencing Enabling Works, the Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct surveys of areas of Project Works to determine the areas of (i) terrestrial vegetation with at least 'Low' Ecological Value, and (ii) Wetland(s) with at least 'Low' Ecological Value, that are impacted by the Project Works.

54K. The Consent Holder shall undertake restoration planting and habitat rehabilitation to mitigate/offset the effects of Project Works on areas of (i) terrestrial vegetation with at least 'Low' Ecological Value, and (ii) Wetland(s) with at least 'Low' Ecological Value, that are impacted by Project Works, as assessed by a Suitably Qualified and Experienced Person to achieve:

- a. Like for like replacement having regard to ecosystem type; and
- b. No net loss of the ecological value of the impacted Wetland(s) and terrestrial vegetation.

54KAA. To achieve 54K a Suitably Qualified and Experienced Person shall:

- a. Calculate the quantum of restoration planting and habitat rehabilitation required in accordance with the following replanting ratios:
 - i. For Wetlands with at least 'Low' Ecological Value, mitigation/offsetting shall be provided at a ratio of 6:1 of the area impacted by the Project Works;
 - ii. For Ecological Sites, mitigation/offsetting shall be provided at a ratio of 6:1 of the area impacted by the Project Works;

- iii. For other areas of Low to Moderate Ecological Value, mitigation/offsetting shall be provided at a ratio of 3:1 of the area impacted by the Project Works; and
- b. Assess whether the calculation in (i) will achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation using a best practice offset accounting method or other such method certified by Council; and
- c. If the calculation in (i) does not achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation, the Suitably Qualified and Experienced Person shall add to the calculation any Project landscape mitigation planting that, once mature, will achieve at least moderate Ecological Value and which is not designed solely for screening residential properties; and
- d. If the calculation in (iii) does not achieve no net loss of the Ecological Value of the impacted Wetland(s) and terrestrial vegetation, the Suitably Qualified and Experienced Person shall determine any such further restoration planting and habitat rehabilitation required to achieve that outcome, using a best practice offset accounting method or other such method certified by the Council.
- e. The Consent Holder shall provide to Council for certification a report outlining the proposed best practice offset accounting method to be used to assess no net loss of Ecological Value. At a minimum the report shall include:
 - i. The proposed offset accounting framework;
 - ii. The parameters used to measure Ecological Value of both Wetland and terrestrial environments; and
 - iii. How time lag is accounted for.

54KA The Consent Holder shall locate the restoration planting and habitat rehabilitation required by condition 54K at each of the “ecology vegetation mitigation” areas shown on Maps 1-6 where practicable. Where it is not practicable to locate such restoration planting and habitat rehabilitation in those areas, a similar location shall be determined by a Suitably Qualified and Experienced Person.

Fauna habitat and flyway mitigation area

54KB In addition to restoration planting and habitat rehabilitation required by other conditions, the Consent Holder shall undertake restoration planting and habitat rehabilitation as designed by a Suitably Qualified and Experienced Person at the Fauna habitat and flyway mitigation area identified under conditions 54F-54L where the Suitably Qualified and Experienced Person determines such works are necessary to achieve the outcomes in condition 54F.

Fragmentation sites

54KC In addition to restoration planting and habitat rehabilitation required by other conditions the Consent Holder shall locate restoration planting and habitat rehabilitation at areas identified as “Mitigation for fragmentation” as shown in Maps 1-6 where practicable. Where it is not practicable to locate such restoration planting and habitat rehabilitation in those areas, a similar location as determined shall be by a Suitably Qualified and Experienced Person to minimise fragmentation effects of the Project.

Condition 54L is intentionally left blank

Detailed planting and habitat rehabilitation plans

- 54M. The Consent Holder shall instruct a Suitably Qualified and Experienced Person to prepare a topic section to be included in the EMP describing and illustrating the proposed restoration planting and habitat rehabilitation required by conditions 54K-54KC, that includes:
- a. A report on the surveys undertaken under condition 54J and the survey results, including:
 - i. the location, the total area (delineated using best practice) and types of (i) terrestrial vegetation with at least 'Low' Ecological Value, and (ii) Wetland(s) with at least 'Low' Ecological Value, impacted by Project Works and the Ecological Value of those Wetland(s) and terrestrial vegetation;
 - b. The calculations and related evidence, for the restoration planting and habitat rehabilitation quantum required by Condition 54KAA and a statement as to how the quantum achieves Condition 54K, and if any landscape mitigation planting is included in the calculation;
 - c. The design and locations of the restoration planting and habitat rehabilitation required under Condition 54K-54KC;
 - d. A statement as to how the restoration planting and habitat rehabilitation will achieve the Ecological Outcomes at Condition 54C(f);
 - e. A planting schedule containing a mix of native plants including genetic sourcing of native plants from the Rodney Ecological District;
 - f. Detail of monitoring methods and frequency to ensure planting and habitat rehabilitation survives, including annual reporting to Council for a period of no less than 5 years or until canopy closure is achieved;
 - g. Methods to ensure restoration planting and habitat rehabilitation is on track to achieve the outcomes of Condition 54K and any anticipated outcomes used in the offset calculations at Condition 54KAA, including but not limited to:
 - i. A statement of the anticipated progress towards achieving those outcomes at a date that is 5 years from completion of the relevant planting and habitat rehabilitation works (*year 5*);
 - ii. Monitoring at year 5 to assess that progress;
 - iii. A response plan and any further works required should progress towards achieving the expected targets in the rehabilitation process not be met, including monitoring of those further works in accordance with condition 54M(f).
 - h. A statement as to how the AUP(OP) Appendix 16: Guideline for native revegetation plantings has been taken into account;
 - i. Proposed pest animal and pest plant management of restoration planting and habitat rehabilitation areas for a period of no less than five years or until canopy closure is achieved, including:
 - i. Timing and implementation;
 - ii. Methods for survey and monitoring to establish presence and abundance of pest animals and pest plants;

- iii. Pest control methods;
- iv. Performance monitoring;
- v. Maintenance periods.
- j. Detail as to how any landscape planting to be established through an “Urban and Landscape Design Management” as defined in the Designation or other Project planting has been integrated;
- k. A statement as to how cultural values relating to restoration planting and habitat rehabilitation identified through the Cultural Engagement Plan, have been acknowledged where feasible and practicable to do so; and
- l. Methods to exclude stock where necessary.

54N. The Consent Holder shall complete the restoration planting and habitat rehabilitation in accordance with the EMP by no later than 2 years from the date of the Project becoming operational or as otherwise specified in these conditions.

Long-tailed bats

54O. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct long-tailed bat habitat and presence surveys within the Designation in the period of 6 months prior to start of works before construction of Project Works in areas where long-tailed bat may be impacted by Project Works.

54P. In the event that the surveys confirm long-tailed bat habitat or presence, the Consent Holder shall:

- a. Instruct a Suitably Qualified and Experienced Person to undertake surveys of the relevant areas prior to Project Works to identify Active Roost Sites that may be affected by Project Works and to recommend vegetation clearance methods that will avoid injury or mortality of bats associated with Project Works around Active Roost Sites;
- b. Instruct a Suitably Qualified and Experienced Person to recommend methods to mitigate Project effects on long-tailed bat habitat through maintaining or enhancing long-tailed bat roost habitat and flyways in the Designation, having regard to Appendix D: Bat management framework for linear transport infrastructure projects of the Transport Agency research report 623 (Smith et al., 2017) and any other best practice guide; and
- c. Provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person’s recommendations in the relevant topic section of the EMP.

Advice Note: *long-tailed bats management will be carried out in accordance with a Wildlife Act Authority.*

Avifauna

54Q. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct Avifauna habitat and presence surveys within the Designation 6 months prior to the start of Project Works in areas that may be impacted by Project Works. The Suitably Qualified and Experienced Person shall, in particular, survey Wetland bird species (including banded rail, fernbird, Australasian bittern, marsh crane and spotless crane) in Wetlands WN_W_Koura_02 and WN_W_Koura_05 (refer Map 18) at the beginning of the bird breeding season prior to Project Works commencing in those locations.

- 54R. In the event that the surveys confirm Avifauna habitat or presence, the Consent Holder shall:
- a. Not undertake vegetation clearance of the relevant areas (excluding clearance of pasture) during breeding season, September to December inclusive of any year, unless a Suitably Qualified and Experienced Person confirms there are no nesting Avifauna likely to be impacted by Project Works;
 - b. In relation to Wetland bird species (including banded rail, fernbird, Australasian bittern, marsh crane and spotless crane) in all impacted Wetlands including WN_W_Koura_02 and WN_W_Koura_05 (refer Map 18) instruct a Suitably Qualified and Experienced Person to identify and implement best practice methods to capture and relocate these species prior to commencement of Project Works; and
 - c. provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person's recommendations in the relevant topic section of the EMP.

Land snails, copper skinks, forest geckos

- 54S. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct habitat and presence surveys within the Designation 6 months prior to the start of Project Works in areas that may be impacted by Project Works for the following species:
- a. land snail (*Amborhytida spp*, *Paryphanta spp*);
 - b. all native skinks (eg copper skink); and
 - c. all native geckos (eg. forest gecko).

- 54T. In the event that the surveys confirm the presence of any such species, the Consent Holder shall:
- a. instruct a Suitably Qualified and Experienced Person to recommend best practice methods to capture and relocate the species to the Fauna habitat and flyway mitigation area or other suitable site, provided the site with the required habitat has been subject to predator control measures for at least 6 months prior to the first transfer and will receive ongoing predator control for three years after the last transfer;
 - b. undertake capture and relocation under the supervision of a Suitably Qualified and Experienced Person;
 - c. where practicable, relocate land snails along with their leaf-litter habitat;
 - d. Not relocate land snails captured within 30 metres of any kauri to a site within 30 metres of another kauri; and
 - e. Provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person's recommendations in the relevant topic section of the EMP.

Advice Note: Land snail, copper skink and forest gecko capture and relocation will be carried out in accordance with a Wildlife Act Authority.

Hochstetter's frogs

- 54U. The Consent Holder shall engage a Suitably Qualified and Experienced Person to conduct habitat and presence surveys within the Designation *6 months* prior to the start of Project Works in all waterways and areas where suitable Hochstetter's frog (*Leiopelma aff. Hochstetteri*) habitat exists and may be impacted by ProjectWorks.
- 54V. In the event that the surveys confirm the presence of Hochstetter's frogs, the Consent Holder shall:
- a. instruct a Suitably Qualified and Experienced Person to recommend best practice methods to capture and relocate frogs to a suitable site, including by:
 - i. applying the Department of Conservation document "Native frog hygiene and handling protocols" (DOCDM-214757) or any subsequent revision to reduce the potential for pathogen transmission and infection;
 - ii. using destructive searches during frog capture; and
 - iii. setting out post-release monitoring protocols to evaluate the success of the relocations and any further steps required to maintain and enhance the relocated populations
 - b. consult with the Operations Manager, Department of Conservation regarding the Suitably Qualified and Experienced Person's recommendations for capture and relocation of frogs;
 - c. undertake capture and relocation under the supervision of a Suitably Qualified and Experienced Person;
 - d. instruct a Suitably Qualified and Experienced Person to recommend methods to maintain or enhance Hochstetter's frog habitats within the Designation and any other relocation sites, including but not limited to measures to reduce stream sedimentation and pest animal control; and
 - e. Provide a report on the surveys undertaken and the results and the Suitably Qualified and Experienced Person's recommendations in the relevant topic section of the EMP.

Advice Note: *Hochstetter's frog capture and relocation will be carried out in accordance with a Wildlife Act Authority.*

Reporting on salvage and relocation

- 54W. The Consent Holder shall report the results of capture and relocation programmes for Fauna and Avifauna to the Manager following implementation, including:
- a. Location of any species salvaged;
 - b. Species types and numbers salvaged;
 - c. Where salvaged species have been relocated to;
 - d. Timing of salvage and relocations; and
 - e. Pest animal and pest plant management implemented.

At Risk or Threatened flora and fauna discovery protocol

- 54X. In the event that a Suitably Qualified and Experienced Person discovers any At Risk or Threatened flora and fauna (as defined in the current version of the New Zealand Threat Classification System) within the Designation that is not covered

by conditions 54K-54V, the Consent Holder shall immediately notify the Operations Manager, Department of Conservation and Mana Whenua. The Consent Holder shall have regard to any advice provided by the Department of Conservation and Mana Whenua in determining the appropriate course of action to be undertaken with respect to the discovered flora or fauna (eg further surveys, avoidance and/or capture and relocation).

Advice Note: *The Consent Holder will comply with all relevant provisions of the Wildlife Act 1953.*

Augier condition specific to circumstances of 109 Kaipara Flats Road

54Y. The Requiring Authority shall plant kauri trees at a ratio of 8:1 of no less than 1.5m in height for each kauri tree identified on the plan **attached at Appendix E** to be removed as a result of the Project as follows:

- a. The Requiring Authority shall consult with the Civil Landholding Owners or their appointed representatives as to their preferred location for the replacement planting either within the designation or on Section 19 and Section 23 SO495251 (CT 764798) where written agreement from the Civil Landholding Owners is provided (such consultation to be undertaken over a period of no less than 40 working days during the detailed design phase of the Project).
- b. The replacement planting design, location and appropriate fencing to protect the trees shall be determined by a Suitably Qualified and Experienced Person having regard to the consultation feedback from the Civil Landholding Owners.
- c. The replacement planting shall be established as soon as practicable following its design and location being confirmed.
- d. The replacement planting shall be sourced from the Rodney Ecological District.
- e. The Requiring Authority shall summarise in the Outline Plan(s) prepared for the Project all consultation undertaken under this condition, the replanting locations considered, and whether the Civil Landholding Owners' feedback has been incorporated into the final detailed design and if not, the reasons for that.

Advice Note: *Condition 54Y applies in addition to and separate from Ecology Conditions 54J to 54N.*

Crossing of the Kourawhero Stream and Kourawhero Wetland Complex

55. A Suitably Qualified and Experienced Person shall monitor over a three year period (or a shorter period as agreed with the Manager), prior to starting Project Works, the Kourawhero Wetland Complex (as identified in Map 17) to confirm pre- construction water table levels, ecological condition and Wetland extent. The monitoring shall include:

- a. The methods for monitoring water table levels;
- b. The number and locations of water level samplingsites;
- c. The methods for delineating the Wetland extents in accordance with best practice;
- d. The methods for assessing Wetland condition in accordance with best practice; and
- e. The timing and frequency of monitoring events.

The results of the monitoring shall be provided to the Manager for information.

56. The Consent Holder shall design and construct bridges, structures, culverts and embankments to cross the Kourawhero Stream to minimise change to the Kourawhero Wetland Complex and to maintain the pre-construction water table level, Wetland extent, and Wetland condition, as far as practicable, which shall include:

- a. A bridge over the Kourawhero Stream with no piers in the Bed in the section of stream identified on Map 17 as “Section of Kourawhero Stream to be bridged”; and
- b. Minimising intrusion of diversion channels into or through the Kourawhero Wetland Complex.

56A. All Project works involving impacts on the Kourawhero Stream shall be designed and implemented to avoid any adverse effects on breeding koura females in the stream.

56B. A Suitably Qualified and Experienced Person shall undertake annual monitoring of the Kourawhero Wetland Complex until 3 years following completion of the Project Works. Should the monitoring indicate an unanticipated loss in the Wetland extent or condition directly attributed to the Project Works, the Consent Holder shall provide further mitigation and/or offset to manage the additional adverse effects in accordance with Condition 54K and 54KAA. The results of the monitoring including any unanticipated loss and further offsets where applicable must be provided annually to the Manager for information.

Watercourse design requirements

57. The Consent Holder shall design and construct all permanent Project Works in or over any Watercourse (for example, all permanent bridges, culverts and stream diversions) to allow for capacity for 100-year ARI flood event with minimal scour and erosion to road structures e.g. culverts, bridges and embankments.

58. The Consent Holder shall design and construct all Watercourse diversions to have natural Watercourse forms and riparian planting where the diverted streams are permanent and supporting fish habitats. The Watercourse diversions shall be designed by a Suitably Qualified and Experienced Person(s). The diversions shall be designed to achieve, as far as practicable, the following outcomes:

- a. At least equivalent ecological function and habitat value to that of the potential values of the Watercourse being diverted, demonstrated using the Stream Ecological Valuation methods (Auckland Council Technical Report 2016/023 and Technical Report 2011/009);
- b. Being like for like in regard to Watercourse hydrological conditions and substrate;
- c. Including riparian vegetation extending 10m on either side of the channel; and
- d. Where the diversions are unable to achieve (a)-(c), the residual loss of ecological function and habitat value shall be offset in accordance with Condition 76.

Advice Note: Condition 58 does not apply to cut off drains and vertically lifted

channels.

Permanent culvert design

59. The Consent Holder shall design and construct permanent culverts to:
- a. Minimise the risks of non-performance of the culvert, such as blockage, taking into account the risk of a vegetation/soil/rock debris flow; and
 - b. Incorporate energy dissipation and erosion control to minimise the occurrence of bed scour and bank erosion in receiving environments.

Temporary culvert design

60. The Consent Holder shall design and construct temporary culverts in any Watercourse (for example, all temporary bridges, culverts and stream diversions) to allow for the 100-year ARI event (by primary structure or overland flow paths) with minimal scour and erosion unless otherwise certified by the Manager.

Culvert design – fish passage and migrating fish

61. The Consent Holder shall provide fish passage in accordance with best practice in all temporary and permanent culverts unless deemed unnecessary or impracticable by a Suitably Qualified and Experienced Person.
62. Where fish passage is deemed unnecessary or impracticable, appropriate data and rationale for the decision shall be provided for certification by the Manager.

Design certification – permanent structures in Watercourses and Wetlands

63. The Consent Holder shall provide drawings of the detailed design of permanent bridges, culverts to be constructed in or over Watercourses and Wetlands, and Watercourse diversions, to the Manager for certification at least 30 Days prior to the start of construction of the relevant structures. The drawings shall be accompanied by a written report prepared by a Suitably Qualified and Experienced Person setting out how the design requirements of Conditions 54 and 56 to 61 have been met and the rationale for any departures from those requirements. The Consent Holder shall construct the Project in general accordance with the certified design.

Erosion Prone Streams: Pre-construction monitoring

64. The Consent Holder shall instruct a Suitably Qualified and Experienced Person to undertake pre-construction monitoring to identify all Erosion Prone Streams within the Project area prior to the start of Construction Works.
65. The pre-construction monitoring of Erosion Prone Streams shall include an inspection of all Erosion Prone Streams to record all erosion areas (supported by photographs and/or video footage). The purpose of monitoring Erosion Prone Streams is to identify the pre-construction condition of the Erosion Prone Stream to be used as a baseline against which to measure construction effects and identify any post-construction remedial measures.
66. The Consent Holder shall provide the results of the pre-construction baseline surveys and monitoring to the Manager for information, prior to the start of Construction Works.

Erosion Prone Streams: Post-construction monitoring

67. The Consent Holder shall undertake monitoring of Erosion Prone Streams at six-month intervals for 24 months following completion of Construction Works. The monitoring shall consist of walkovers of Erosion Prone Streams and recording of erosion-prone areas, including photographs.
68. If monitoring identifies new erosion that a Suitably Qualified and Experienced Person deems to be attributable to the Project based on the pre-construction condition of the Erosion Prone Stream, rehabilitation and/or remedial action, such as stabilisation of the stream bank or Bed, shall be implemented in accordance with the Suitably Qualified and Experienced Person's recommendations.
- 68A. The rehabilitation and/or remedial actions implemented in accordance with Condition 68 shall be monitored at six-month intervals for a further 24 months to determine if the actions have been successful as determined by a Suitably Qualified and Experienced Person. If these specific remedial actions are deemed not to be successful, Condition 68 will apply, as will this condition until the remedial actions are confirmed as successful to minimise ongoing erosion in that location.

Diverting Watercourses

69. Prior to Project Works within a Watercourse, including the filling of the Bed, the Consent Holder shall put in place a diversion or diversions around the area of Project Works for all flows with a primary capacity up to the 20-year ARI flood event, unless an alternative design is certified by the Manager.
70. During weather events in excess of the 20-year ARI flood event, up to the 100-year ARI flood event (i.e., flows are greater than the capacity of the existing diversion), the Consent Holder shall put in place a Stabilised flow path to minimise the potential for scour or erosion and allow flows to pass safely around or through the area of Project Works with minimum nuisance, damage and sediment generation or discharge.

As-built certification

71. The Consent Holder shall provide as-Built Plans certified by a Chartered Professional Engineer confirming that permanent structures in and over Watercourses have been constructed in accordance with the certified design under Condition 63 to the Manager within 90 Days of completion of the Construction Works.

FRESHWATER ECOLOGY

Freshwater ecology: Pre-construction monitoring

72. The Consent Holder shall survey the Representative Watercourses or other Watercourse determined by Condition 73 for one summer and one winter period prior to Project Works commencing. The survey shall be undertaken and recorded by a Suitably Qualified and Experienced Person in accordance with the requirements of Stream Ecological Valuation: Application to Intermittent Streams (Auckland Council Technical Report 2016/023) or Stream Ecological Valuation

(SEV): a method for assessing the ecological functions of Auckland streams (Auckland Council Technical Report 2011/009), depending on the Watercourse classification.

73. In the event that a Suitably Qualified and Experienced Person considers a Representative Watercourse is not representative of general Watercourse characteristics within the Project area, the justification and an alternative Representative Watercourse must be provided to the Manager for certification. The Consent Holder shall survey such other Watercourse recommended by a Suitably Qualified and Experienced Person, and certified by the Manager, using the same process in Condition 77.
74. The Consent Holder shall provide to the Manager the results of the pre-construction freshwater monitoring within 30 Days of the final pre-construction monitoring being undertaken.

Freshwater ecology: Recording of Watercourses affected by the Project

75. The Consent Holder shall instruct a Suitably Qualified and Experienced Person to identify and record all Watercourses that will be affected by Project Works, prior to the start of Project Works, including:
- a. Location;
 - b. Length;
 - c. Width;
 - d. Intermittent or permanent status; and
 - e. Which of the Representative Watercourses surveyed under Conditions 72 and 73 the Watercourse is most similar to.

This information shall be provided to the Manager for certification of the matters at paragraph (e).

Freshwater ecology: Replacement works for loss of Watercourse ecological value and function

76. The Consent Holder shall mitigate and/or offset for loss of Watercourse ecological value and function in accordance with the requirements of the following technical reports prior to completion of Project Works:
- a. Stream Ecological Valuation: application to intermittent streams (Auckland Council Technical Report 2016/023) or any subsequent version; and
 - b. Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland streams (Auckland Council Technical Report 2011/009) or any subsequent version.

Stream Ecological Effects Management Plan

77. The quantum of Watercourse mitigation and/or offset and its design and location shall be set out in a Stream Ecological Effects Management Plan. The SEEMP shall be prepared by a Suitably Experienced and Qualified Person and shall:
- a. Confirm the Watercourses that will be directly affected by the Project;
 - b. Outline the method to extrapolate the SEV calculations for the Representative Watercourses to apply to all Watercourses affected by

Project Works;

- c. Calculate the quantum and location of mitigation and/or offset provided in accordance with SEV requirements as set out in Condition 76; and
- d. Demonstrate that the proposed mitigation and/or offset is like for like in regard to Watercourse hydrology and substrate;
- e. Integrate the mitigation and/or offset planting with the restoration planting and habitat rehabilitation required in the Ecology Management Plan where practicable; and
- f. Provide site specific enhancement plans for the proposed mitigation and/or offset sites that:
 - i. Detail how the anticipated outcomes used in the SEV calculations will be achieved;
 - ii. Assess the risk of stream bank erosion and the likely successful establishment of proposed riparian planting;
 - iii. Detail the planting to be carried out, including a list of species, numbers to be planted, their common and botanical names, method of planting, planting locations and densities;
 - iv. Detail the timing of works and techniques of weed and plant management measures for a period of no less than 5 years or until canopy closure of planted areas is achieved;
 - v. Details of monitoring methods and frequency, including annual reporting to the Manager for a period of no less than 5 years or until canopy closure of planted areas is achieved; and
 - vi. Have had regard to the AUP(OP) Appendix 16: Guideline for native revegetation plantings.

77A. The Consent Holder shall complete the Watercourse mitigation and/or offset in accordance with the SEEMP by no later than 2 years from the date of the Project becoming operational or as otherwise specified in these conditions.

78. The works outlined in the certified SEEMP shall be maintained in accordance with the SEEMP until canopy closure of the planted areas has been achieved. The Consent Holder shall provide a report prepared by a Suitably Qualified and Experienced Person to the Manager for certification when:
- a. Canopy closure has been achieved;
 - b. No more than 10% loss in plant numbers has occurred;
 - c. Weed control has been carried out to a level where no mature fruiting or flowering weed species are present within the planting areas and no weed species that will impact on the growth rates of the planted trees and/or the potential for native regeneration are present within the planting area; and
 - d. All works have been undertaken in accordance with the certified SEEMP.

Native fish capture and release

79. Prior to any Wetland or Watercourse activity commencing, the Consent Holder shall submit a Native Freshwater Fish Capture and Relocation Plan, prepared by a Suitably Qualified and Experienced Person. This plan must detail how native fish will be salvaged prior to works commencing and must include but not be limited to:

- a. Methodologies and timing to capture fish, and kakahi and koura, within the impacted Watercourse and Wetland habitats, or justification there is no habitat for native fish present at the time of earthworks;
 - b. Fishing effort;
 - c. Details of the relocation site;
 - d. Fish exclusion fencing to prevent fish movement to the Watercourse reach where works will occur;
 - e. Placement of appropriate fish screens on the inlets of any pumps used;
 - f. Methods to manage streamworks during September to November inclusive of any year, to minimise impacts on fish during the fish spawning season;
 - g. Storage and transport measures including prevention of predation and death during capture; and
 - h. Euthanasia methods for diseased or pest species.
80. The Consent Holder shall engage a Suitably Qualified and Experienced Person to confirm and implement the NFFCRP required by condition 79 and provide a report on the surveys undertaken and the results to the Manager.

STORMWATER DISCHARGE

81. The Consent Holder shall ensure that:
- a. All stormwater from the impervious roadway of the Project is captured, treated and discharged through offline Stormwater Management Wetlands, except as otherwise provided for in Condition 81(c); and
 - b. All stormwater management devices and controls are designed to:
 - i. Include adaptation for 100-years of climate change (from the date that the Project becomes operational);
 - ii. Provide treatment in accordance with GD01;
 - iii. Remove gross litter and floatables such as oil and volatile hydrocarbons;
 - iv. Provide for the conveyance of 100 year ARI event, including provision for overland flow up to and including this event; and
 - v. Minimise changes to the water flow into the Kourawhero Wetland Complex and to maintain the pre-construction water table level to the extent practicable if located upstream of the Kourawhero Wetland Complex.
 - c. In the event that the creation of an offline stormwater management wetland is not practicable, the consent holder must submit, prior to commencement of the construction of the stormwater management device, the design and details of an alternative stormwater management option, which achieves the same outcomes specified in Conditions 81(b)(i)-(v), for certification by council. The details must include justification for the need to implement the alternative option.
82. The Consent Holder shall ensure that stormwater outfalls are designed to include erosion control to minimise the occurrence of bed scour and bank erosion at the point of discharge in accordance with TR2013/018 and GD01.
83. The Consent Holder shall ensure that cut off drains are designed to:
- a. Incorporate grassed or rock lining to prevent erosion;

- b. To prevent erosion in the 100 year- ARI rainfall event;
 - c. Provide for the 100-year ARI rainfall event for the upstream catchment and discharge to existing streams or new culverts or where not reasonably practicable discharge to the road edge conveyance system; and
 - d. Minimise bed scour and bank erosion at the point of discharge.
84. The Consent Holder shall ensure that sediment traps (or similar alternative devices) are designed to minimise sediment eroded off rock cuts entered stormwater systems.
85. The Consent Holder shall design Stormwater Management Wetlands that will be:
- a. Located offline from existing Watercourses;
 - b. Located outside of the 100-year ARI floodplain if practicable;
 - c. Capable of providing detention for the 95th percentile 24-hour rainfall event in accordance with GD01;
 - d. Shown to include:
 - i. Forebays and submerged or baffled low flow outlets so that floatables and litter can be trapped at the main outlet;
 - ii. Planting in emergent, littoral, riparian zones except in some areas of deep zone that are to remain plant free; and
 - iii. Valves on low-level Wetland outlets to enable valves to be closed in the event of a spill to contain spill material in Wetland. The treatment systems shall incorporate a minimum 20 cubic metre volume that can be isolated in the event of a spillage on the road.
86. The Consent Holder shall use pre-treatment measures where higher sediment loads are anticipated, such as sediment traps for sediment eroded off rock cuts.
87. The Consent Holder shall ensure that the Project stormwater system is designed so that water can be collected from tunnels following tunnel washdown, accidental spill, or firefighting activities, and disposed of to a facility consented to receive contaminated water.
88. The Consent Holder shall ensure that stormwater management devices associated with local roads altered by the Project convey water runoff via vegetated and/or rock lined swales adjacent to the road prior to discharge to existing streams.
89. The Consent Holder shall maintain stormwater treatment devices to ensure that the criteria in Conditions 81 to 88 of this Consent are achieved.
- Planting of stormwater management devices***
90. The Consent Holder shall prepare planting plan(s) for all planted stormwater management devices (including treatment/conveyance swales). The planting plans shall be prepared by a Suitably Qualified and Experienced Person and shall include:
- a. Location, planting methodology and maintenance details;
 - b. Details of plant species, plant numbers, density and distribution; and
 - c. Details of proposed pest plant management.

- d. Details of steps taken to integrate planting with other planting required for the Project where practicable.

Design certification – stormwater management devices

91. The Consent Holder shall submit the final detailed design of the stormwater management devices (ie excluding conveyance measures) to the Manager for certification at least 20 Days prior to the start of construction of the proposed stormwater management devices. The final detailed design shall include:
 - a. drawings;
 - b. specification design report(s); and
 - c. calculations and planting plans for the stormwater management devices.

Condition 92 is intentionally left blank

93. The Consent Holder shall carry out all permanent stormwater measures in general accordance with designs certified in Condition 91.
94. Stormwater management devices shall be fully operational prior to the discharge of water from any impervious area identified to discharge to each device.

As Built Plans – Stormwater management devices

95. The Consent Holder shall submit As-Built Plans for stormwater management devices to the Manager at least 20 Days prior to use of the relevant device for its intended operational purpose.
96. The As-Built Plans shall be certified by a Suitably Qualified and Experienced Person and shall include:
 - a. The surveyed locations and elevations of all stormwater devices which shall be measured to the nearest 0.02 metre with co-ordinates expressed in terms of the New Zealand Transverse Mercator Projection and DOSLI datum;
 - b. Stormwater management device details including locations, dimensions, volumes, flood levels, sections, treatment efficiencies, inlet, discharge rates and outlet structures;
 - c. Photographs at all stormwater systems outfall locations; and
 - d. Documentation of any differences between the certified design plans under Condition 91 and the As-Built Plans submitted under Condition 95.

Stormwater Operation and Maintenance Plan

97. The Consent Holder shall prepare a Stormwater Operation and Maintenance Plan (SOMP) prior to operation of the state highway to ensure the Project stormwater management devices are maintained to achieve their design function.
98. The SOMP shall be prepared by a Suitably Qualified and Experienced Person and shall:
 - a. Identify a procedure for monitoring and maintaining the Project stormwater management devices; and
 - b. Include the following:
 - i. Location map and access arrangements;

- ii. Inspection and maintenance requirements and frequency;
- iii. Routine and emergency contacts; and
- iv. As-built drawings and stormwater system information; and
- v. Spill incident management during operation of the road

99. In preparing the SOMP the Consent Holder shall consult with the owner of the commercial plantation forest (Mahurangi Forest) located west of SH1 with respect to permanent stormwater management activities which directly interface with forestry operations. If the Consent Holder has not received any comment from the owner of the Mahurangi Forest within 20 Days of providing the SOMP to them, the Consent Holder may consider the relevant party has no comments.

99A The Consent Holder shall notify Watercare of any large discharge of contaminants that occurs upstream of and could impact on Watercare's extraction and water treatment plant located at NZTM 174870 5970390 as soon as it becomes aware of the incident if the spill is within the Water Intake Catchment shown in Appendix C.

Flooding

100. The Consent Holder shall ensure that the design of the Project does not result in an increase in flooding for events up to and including the 100 year ARI event in either of the following situations:

- a. An increase in flooding levels greater than 100mm vertically outside the Designation
- b. An increase in flooding above floor level to any habitable building outside the Designation.

Compliance with this Condition shall be demonstrated by a hydraulic and hydrological model with the level of detail and reporting to be confirmed by a Suitably Qualified and Experienced Person for certification by the Manager. The peak flood levels and flood flows for pre-development and post-development of the Project shall be compared upstream and downstream at the Designation boundary.

100A. The Consent Holder shall ensure that the design of the Project in the Kourawhero catchment does not result in any more than a negligible increase in downstream peak flood levels and/or flood flow up to and including the 100 year ARI event. To determine whether the increase is negligible, the peak flood levels and flood flows for pre-development and post-development of the Project shall be compared at the western Designation boundary, upstream of 214 Kaipara Flats Road. Compliance with this Condition shall be demonstrated by the hydrological and hydraulic model to be confirmed by a Suitably Qualified and Experienced Person for certification by the Manager.

100B. The Consent Holder shall ensure that the design and construction of the Project avoids any increase in flooding of the Mahurangi River at 111 Kaipara Flats Road up to and including the 100 year ARI event due to the Project.

101. The Consent Holder shall demonstrate that any headwater ponding upstream of any Project culvert in the 100 year ARI event is contained within either:

- a. Land within the Designation at the time of construction; or
- b. An existing floodplain.

AIR QUALITY – ROCK CRUSHER

- 101A. There shall be no noxious, dangerous, objectionable or offensive dust, fumes or odour to the extent that it causes an adverse effect at or beyond the proposed designation boundary.
102. The Consent Holder shall prepare a Rock Crusher Management Plan (RCMP) to outline the measures to be adopted to meet condition 101A. The RCMP shall be prepared by a Suitably Qualified and Experienced Person and shall include as a minimum:
- a. A description of the works, and periods of time when emissions of odour, dust or fumes might arise from the rock crusher;
 - b. Identification of the location(s) of any mobile rock crusher for the duration of construction
 - c. Identification of HSRs that may be adversely affected by emissions of odour, dust or fumes from the rock crusher(s);
 - d. Methods for mitigating dust that may arise from rock crushing, potentially including minimum setbacks from HSRs where necessary, emissions control equipment (e.g. enclosure and/or water sprays at transfer points), and monitoring of weather conditions and visual inspections;
 - e. Methods for undertaking and reporting on the results of daily inspections of rock crushing activities that might give rise to odour, dust or fumes;
 - f. Methods for monitoring and reporting on the state of air quality during crushing activities, including wind speed, wind direction, air temperature and rainfall;
 - g. Construction operator training procedures;
 - h. Consideration of portable Total Suspended Particle measurement devices and associated levels; and
 - i. Contact details of the site supervisor or Project manager and the Project Liaison Person (telephone number and email or other contact address).
103. When preparing the RCMP the Suitably Qualified and Experienced Person shall have regard to the guidance contained in the Good Practice Guide for Assessing and Managing Dust, Ministry for Environment, 2016, or any subsequent version, and the NZ Transport Agency Guide to assessing air quality impacts from state highway projects (version 2.3, October 2019), or any subsequent version, as relevant to rock crushing activities.
- 103A. The Consent Holder shall ensure that the rock crushing activity is undertaken in accordance with the RCMP and minimises dust generation as far as practicable.

GROUNDWATER

104. The Consent Holder shall not undertake Project Work excavations of more than 10m depth within 300m of any of the following lawfully established activities existing as at the date of this resource consent:

- a. groundwater extractions;
- b. buildings;
- c. infrastructure

unless it can be demonstrated by a Hydrogeological model to the satisfaction of the Manager that such excavations will not create material drawdown effects or settlement effects (greater than 1m of drawdown) causing damage to buildings or infrastructure.

Damage Avoidance

- 104A. All excavation, dewatering systems and works associated with the taking and diversion of groundwater shall be designed, constructed and maintained so as to avoid damage to buildings, structures and services, or impacts on lawful groundwater or surface water takes, outside that considered as part of the application process unless otherwise agreed in writing with the asset owner.

Settlement Contingency Actions

- 104B. If the Consent Holder becomes aware of any damage to buildings, structures or services potentially caused wholly, or in part, by the exercise of this consent, the Consent Holder must:

- a. Notify the Manager and the asset owner within two Days of the Consent Holder becoming aware of the damage;
- b. Provide a report prepared by a Suitably Qualified and Experienced Person (engaged by the Consent Holder at their cost) that describes the damage; identifies the cause of the damage; identifies methods to remedy and/or mitigate the damage that has been caused; identifies the potential for further damage to occur, and describes actions that will be taken to avoid further damage; and
- c. Provide a copy of the report prepared under (b) above, to the Manager and the asset owner within 10 Days of notification under (a) above.

Advice Note: *It is anticipated the Consent Holder will seek the permission of the damaged / affected asset owner to access the property and asset to enable the inspection/investigation. It is understood that if access is denied the report will be of limited extent.*

MAINTENANCE OF LANDSCAPE, MITIGATION AND OFFSET PLANTING AND WORKS

105. The Consent Holder shall procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the following areas are protected on an ongoing basis prior to any transfer from the Crown of ownership/tenure:
- a. The area identified as the Fauna Habitat and Flyway Mitigation under conditions 54F- 54I;
 - b. The ecology vegetation mitigation and mitigation for fragmentation areas identified under conditions 54KA and 54KC; and
 - c. The terrestrial mitigation and/or offsets completed in areas identified under conditions 77 and 78 of the Resource Consent.

ADVICE NOTES

The scope of these consents does not include:

- Land use activities requiring resource consents under the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 or contaminant discharges under Chapter E30 of the Auckland Unitary Plan (Operative in Part).
- Plantation forest activities defined by the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 and related activities in the commercial plantation forest (Mahurangi Forest) located west of SH1.
- Reclamation of any Watercourse for soil disposal where such reclamation or diversion is not associated with Project structures (for example, embankments, earth bunds, bridges and other structures). However, the scope of the consent includes the diversion of a Watercourse for the purpose of enabling soil disposal whether associated with Project structures or not.
- Reclamation or diversion of any Wetland(s) for soil disposal where such reclamation or diversion is not associated with Project structures (for example, embankments, earth bunds, bridges and other structures).

APPENDIX A



Schedule of ecological sites

Table 1. Ecological areas included on Conditions Maps 18-20. Ecological values: VH = Very High; H =High; M = Moderate.

Ecological site	Attributes	Ecological value	Impacted by proposed Indicative Alignment (Y/N)
WN_T_Mahu_01	SEA_T_2287 Kauri, podocarp, broadleaved forest	M	N
WN_T_Koura_01a	Kahikatea, pukatea forest	H	Y
WN_W_Koura_01	Exotic wetland	M	Y
WN_W_Koura_02	Raupo reedland	VH	N
WN_W_Koura_03	Exotic wetland	M	Y
WN_W_Koura_04	Exotic wetland	M	N
WN_W_Koura_05	Raupo reedland	H	Y
WN_T_Koura_02	Kanuka forest	M	Y
DVF_W_Koura_01	Exotic wetland	M	N
DVF_T_Koura_02	Kauri, podocarp, broadleaved species scrub/forest	VH	Y
DVF_T_Hoteo_01	Kauri, podocarp, broadleaved forest	VH	Y
HN_T_Hoteo_02	SEA_T_683 Taraire, tawa, podocarp forest	VH	Y
HN_W_Hoteo_01	SEA_T_6854 Flaxland	H	Y
HN_W_Hoteo_02	SEA_T_685 Kahikatea forest	H	N
HN_T_Hoteo_03a	SEA_T_685 Kahikatea, pukatea forest	H	Y
HN_T_Hoteo_08	Kahikatea forest	H	Y

APPENDIX B

Methodology for calculation of sediment reduction factors and the effectiveness of sediment reduction activities

Subject Marine Mitigation Calculation Process **Project Name** Warkworth to Wellsford
Attention Justine Bennett **Project No.** IZ068000
From Kate Gray, Lyrita Dale
Date May 2019

1. Introduction

This note outlines a process to calculate the necessity and size of additional mitigation areas of land to be retired and planted to offset the quantum of sediment discharged during the project.

The quantum of sediment discharged from the Project during construction should be offset in one generation, which is nominally 25 years following the end of the Project, through land retirement and planting strategies. The types of land retirement and planting available for sediment mitigation are:

- Planting and stabilisation of riparian margins of streams.
- Retirement of pasture areas and planting with shrubs and trees.
- Retirement of plantation forest areas, which may remain as exotic forest or be replanted as native forest Retirement, and cease being harvested.

The Project already includes Landscape and Ecology (L&E) mitigation planting, which has the additional benefit of erosion reduction. If the L&E mitigation planting does not offset the full quantum of sediment discharged during construction, then additional sediment mitigation planting will be required.



2. Sediment Reduction Factors

The sediment offset of the indicative L&E planting has been estimated through modelling. This has enabled quantification of the average annual offset of different retirement and planting types within the Project Designation. These sediment reduction factors have been calculated for mitigation planting in different areas and are set out in Table 1.

Table 1 Estimated sediment reduction factors (average offset) associated with retirement and planting mitigation options over 25 years

Mitigation type	Options	Sediment reduction over 25 years
Planting and stabilisation of riparian margins of streams	Stream REC class 2-3	0.55 Tonnes/metre
	Stream REC 4+	*Not previously assessed
Retirement of pasture areas and planting with shrubs/trees	Flat slopes	1.11 Tonnes/hectare
	Flat to moderate slopes	1.55 Tonnes/hectare
	Moderate slopes	2.91 Tonnes/hectare
	Steep slopes	*Not previously assessed
Retirement of plantation forest	Retire after harvest in 2020	1.82 Tonnes/hectare
	Retire before harvest in 2020	3.64 Tonnes/hectare

Note: *The current proposed mitigation planting does not include these categories, should future planting be proposed for these typologies an appropriate Sediment Reduction factor will need to be derived.

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Water Management | Environment | Energy

It should be noted that the modelled indicative L&E mitigation planting, which is based on the indicative alignment and associated level of design, is subject to change as the Project progresses. Only areas within the proposed designation were modelled, therefore retirement and planting of steep areas of pasture and planting of higher order streams has not been modelled to date. The forest reduction factors are based on literature not modelling, so there is potential that retiring steeper areas of forestry could increase the sediment offset. Additionally, the modelling focussed on those catchments discharging to the Kaipara Harbour where the greatest sediment yields were predicted, and the Mahurangi was not modelled.

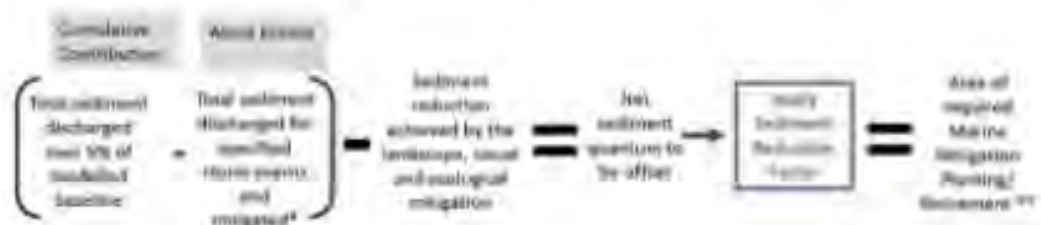
Therefore, these sediment reduction factors will need to be confirmed following detailed design as the quantum and location of the proposed landscape and ecological mitigation may change through that process.

3. Outline of Sediment Quantum Calculation Process

The steps and inputs to calculate the areas and types of planting and retirement necessary to mitigate the quantum of sediment discharged during construction are as follows:

1. Identify the quantum of sediment to be mitigated from the construction site in tonnes (to be provided by on site monitoring). This will include the sediment generated through large storm events and cumulative total of small rain fall events;
2. Calculate the quantum of sediment to be offset through the final Ecology and Landscape mitigation planting in a nominal 25-year timespan, as estimated with a modelling exercise;
3. Minus the L&E mitigation quantum (step 2) from the total sediment offset quantum (step 1), to calculate the net quantum of sediment to be offset through additional mitigation (e.g. land retirement and planting);
4. Based on the sediment reduction factor, calculate the area/length required of additional sediment mitigation planting.

Figure 1 below represents the process schematically:



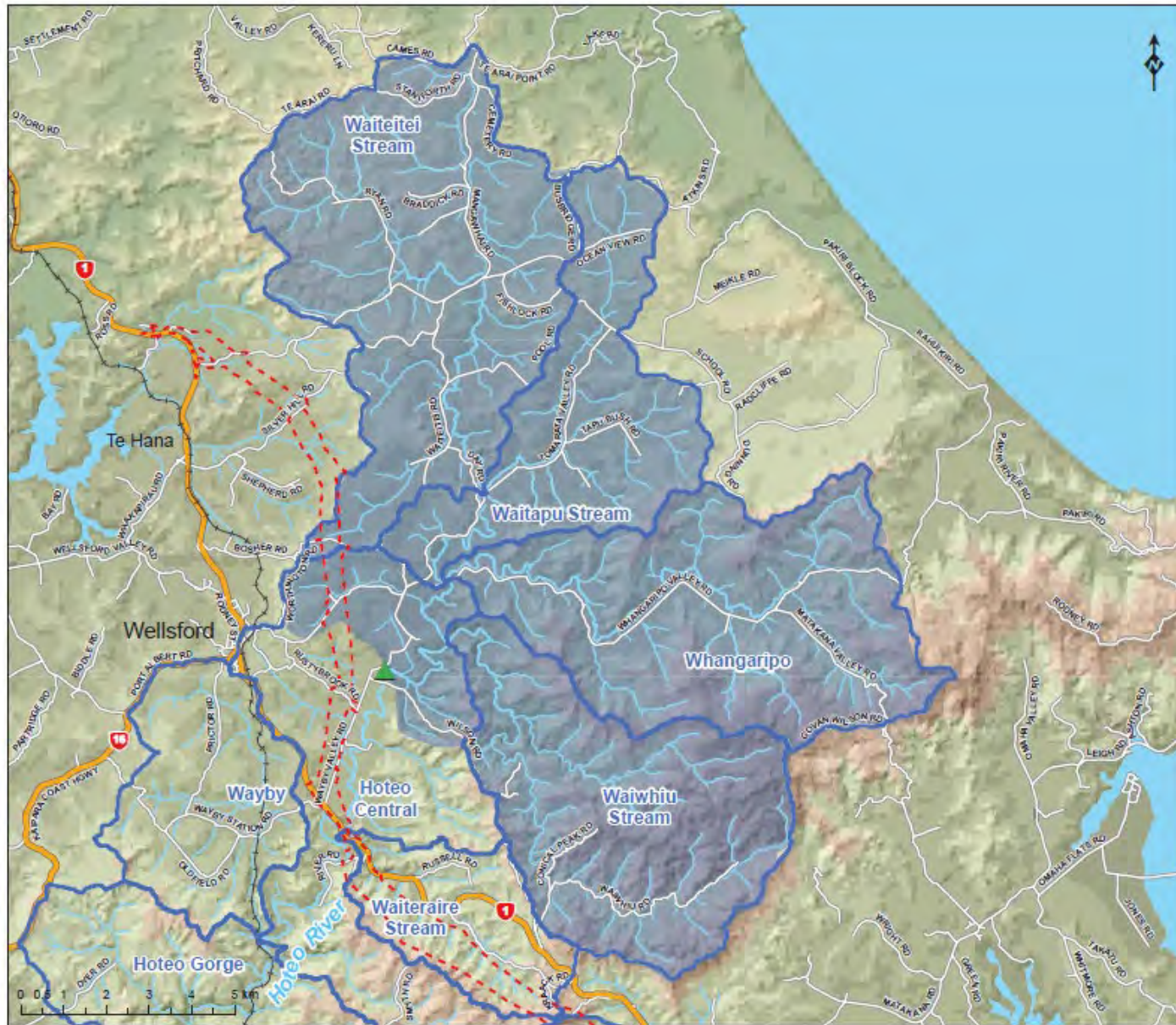
* Greater than 10 year ARI derived load in the Urewere Catchment
 ** Greater than 30 year ARI derived load in the Mahurangi Catchment
 ** To enable benefits to accrue within 25 Years (nominal)





Figure 1 Process to estimate area required for additional marine mitigation planting



APPENDIX C

Watercare Intake Catchment



-  Watercare Wellsford Water Treatment Plant (Intake)
-  Water intake catchment
-  Hotoe River Subcatchments
-  Proposed Designation

Appendix A



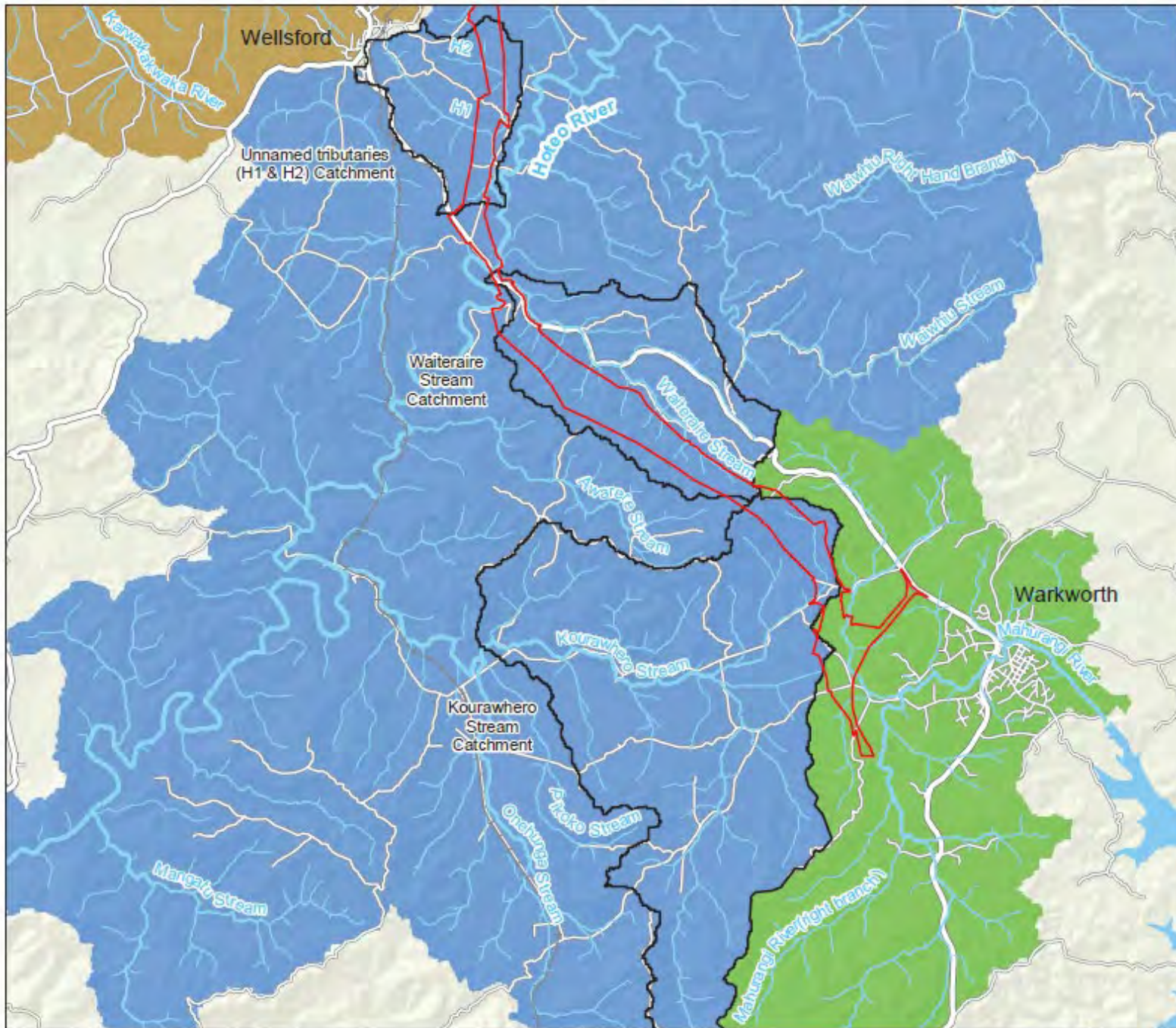
WARKWORTH TO WELLSFORD

WATERCARE INTAKE CATCHMENT

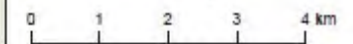


APPENDIX D

Unnamed Tributaries H1 and H2 of the Hōteu River



- Proposed designation boundary
- Minor Catchments
- Major Catchment**
- Hoteo River
- Mahurangi River
- Oruawhoro River



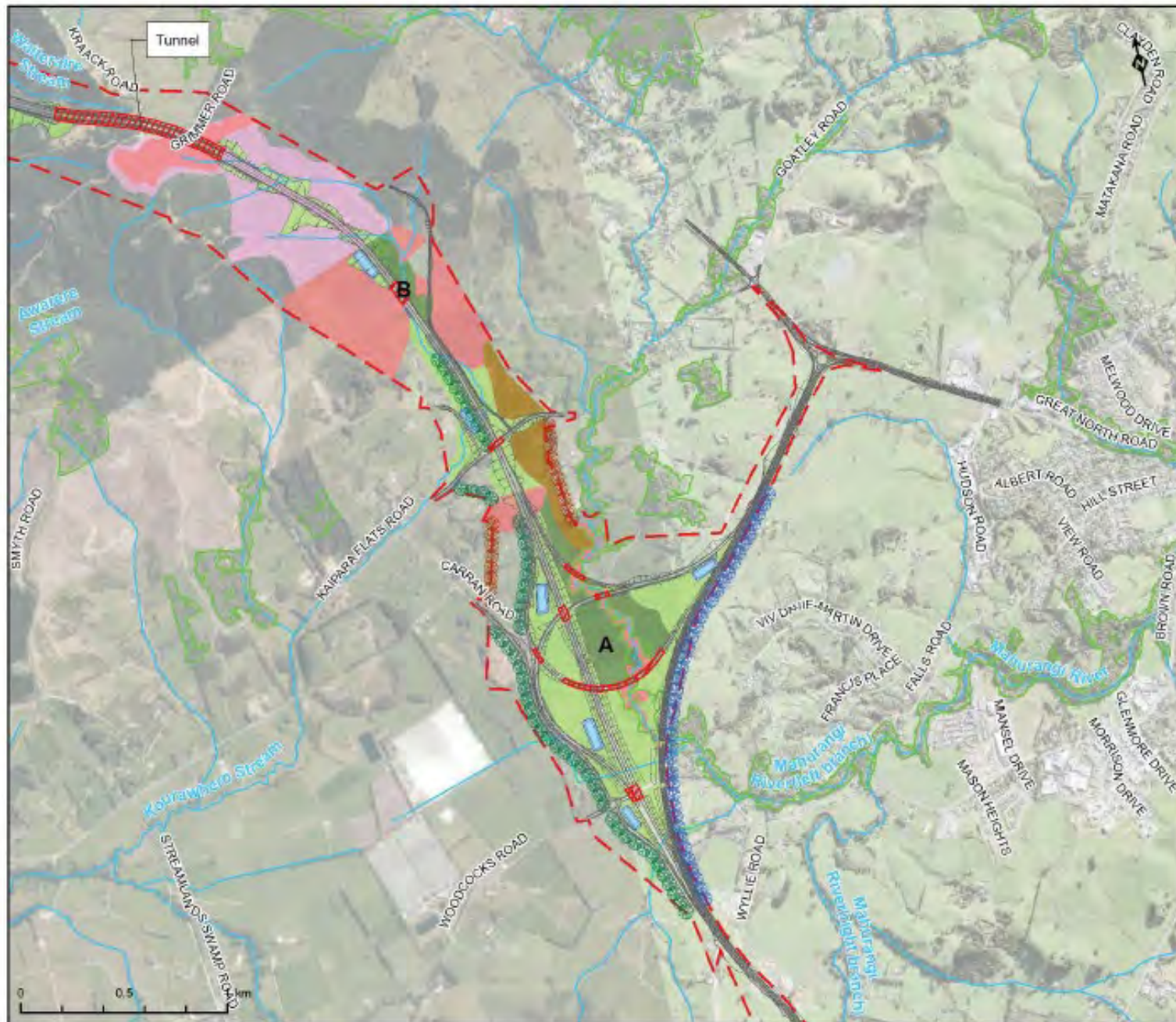
WARKWORTH TO WELLSFORD

HOTELO TRIBUTARIES



CONDITIONS MAPS

Maps 1-6	Mitigation Sites
Maps 7-12	Representative Watercourses
Map 13	Fauna Habitat and Flyway Mitigation Area
Map 14-16	Bridge Structures in Watercourses
Map 17	Crossing of the Kourawhero Stream and associated wetland complex Ecological Site
Maps 18-20	Ecological Sites
Map 21	Escarpment Feature



- Indicative Alignment
- ▭ Designation boundary
- ▭ Indicative bridge / tunnel
- P2W screen planting
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Fauna habitat and flyway mitigation
- Mitigation for fragmentation
- Significant ecological area -Terrestrial

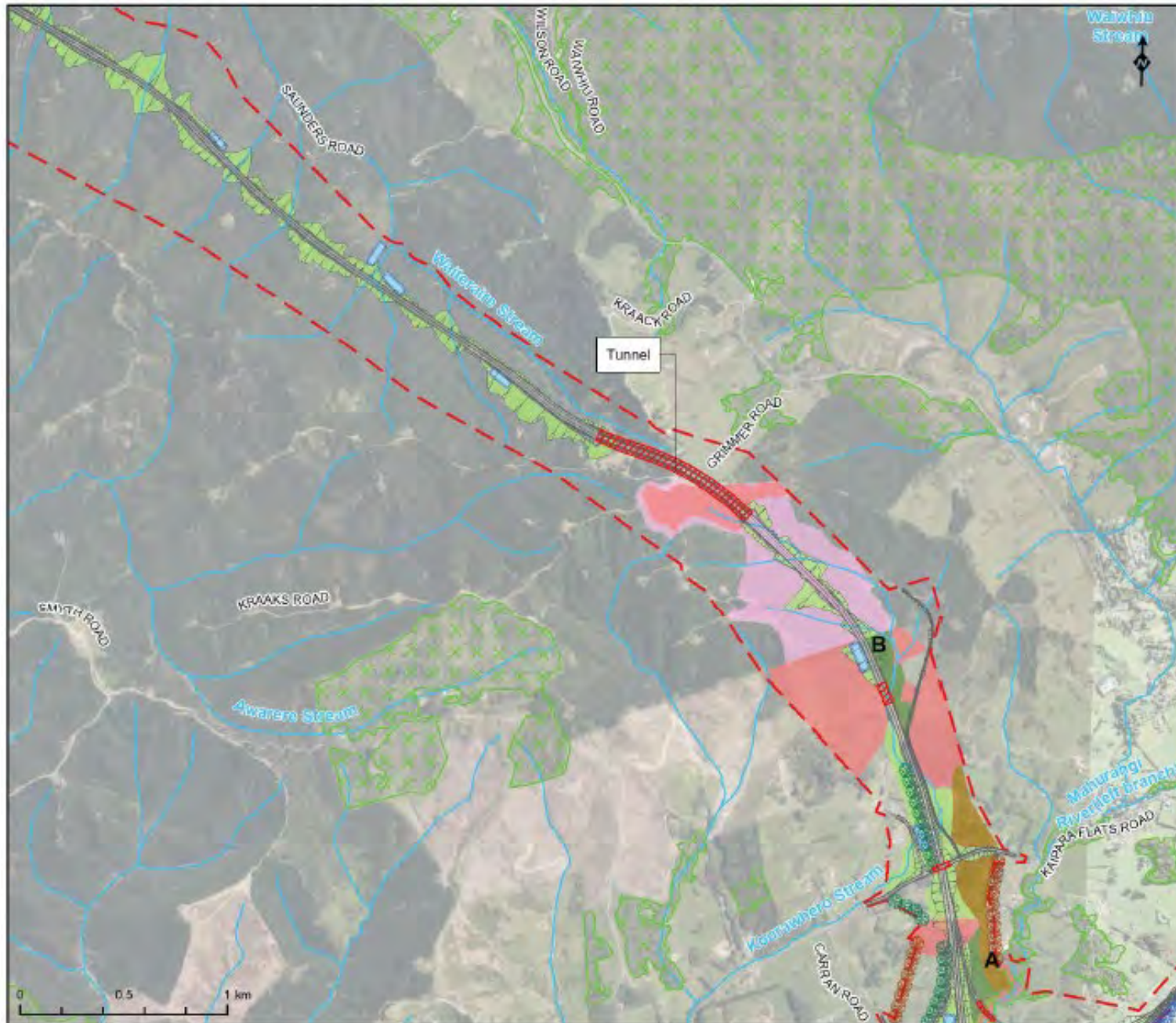
Conditions - Map 1



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- ⊙ P2W screen planting
- ⊙ Screen planting
- ⊙ Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Fauna habitat and flyway mitigation
- Mitigation for fragmentation
- Significant ecological area -Terrestrial

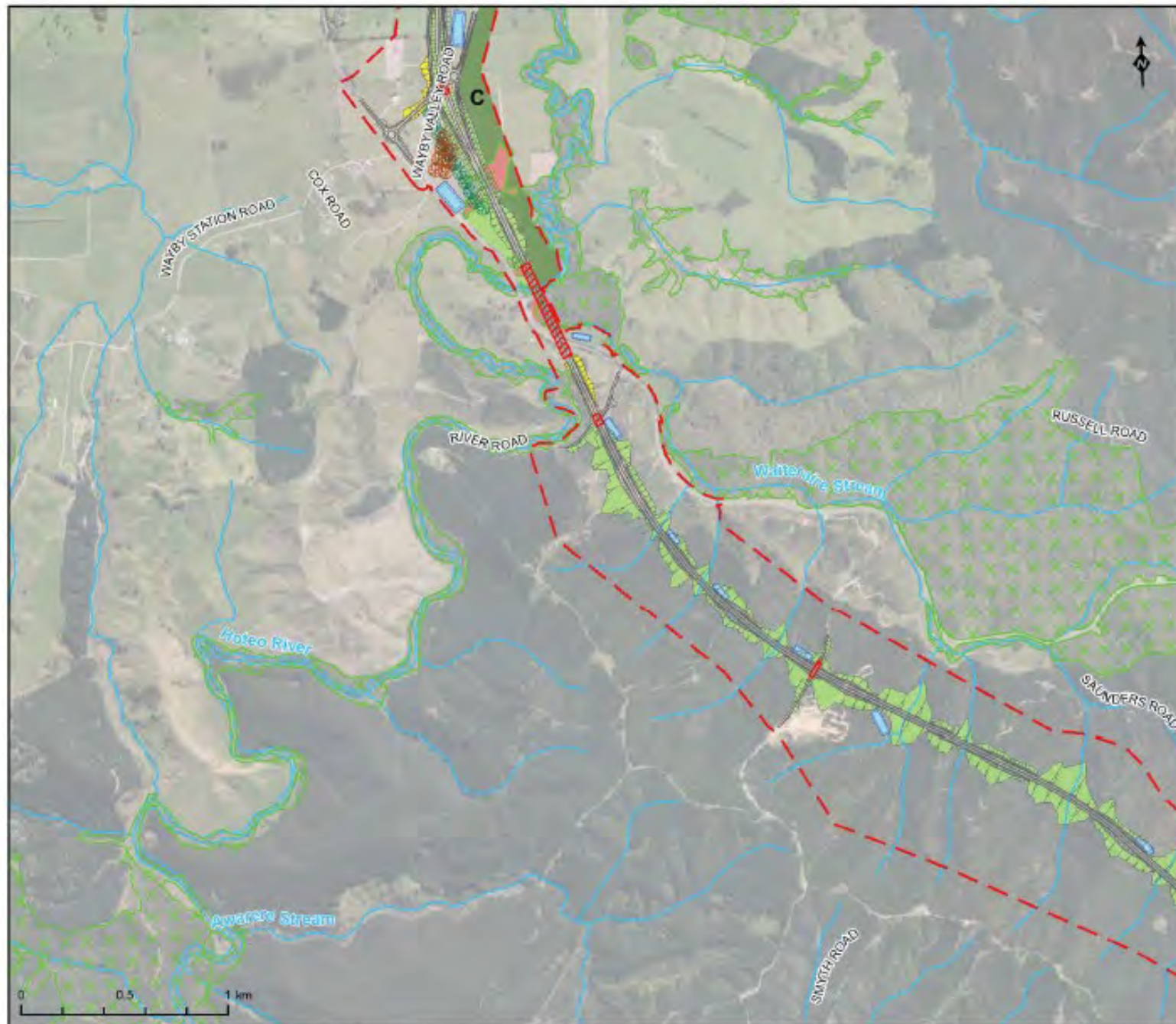
Conditions - Map 2



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- ⊗ Screen planting
- ⊗ Existing shelter belt
- ▭ Stormwater treatment wetlands - indicative locations
- Watercourse
- ▭ Landscape Mitigation Planting
- ▭ Indigenous vegetation
- ▭ Ecology vegetation mitigation
- ▭ Grass batter slopes
- ⊗ Significant ecological area -Terrestrial

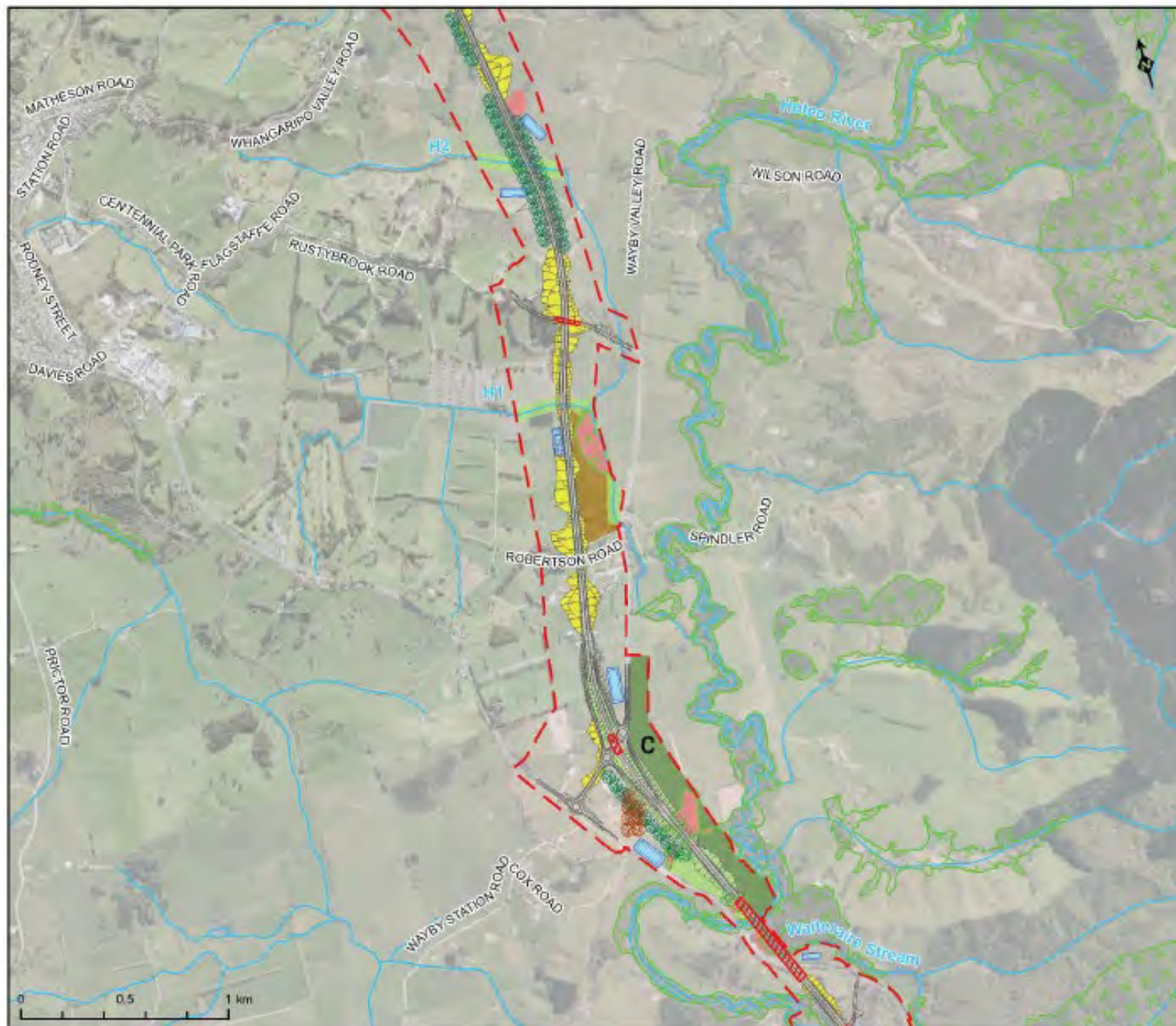
Conditions - Map 3



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- 🌳 Screen planting
- 🏠 Existing shelter belt
- 🟦 Stormwater treatment wetlands - indicative locations
- 🌊 Watercourse
- 🌿 Landscape Mitigation Planting
- 🟪 Indigenous vegetation
- 🌳 Ecology vegetation mitigation
- 🟫 Mitigation for fragmentation
- 🟡 Grass batter slopes
- 🌿 Significant ecological area -Terrestrial

Conditions - Map 4



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- 🌳 Screen planting
- 🌳 Existing shelter belt
- 🌊 Stormwater treatment wetlands - indicative locations
- Watercourse
- 🌿 Landscape Mitigation Planting
- 🌿 Indigenous vegetation
- 🌿 Ecology vegetation mitigation
- 🟡 Grass batter slopes
- 🌿 Significant ecological area -Terrestrial

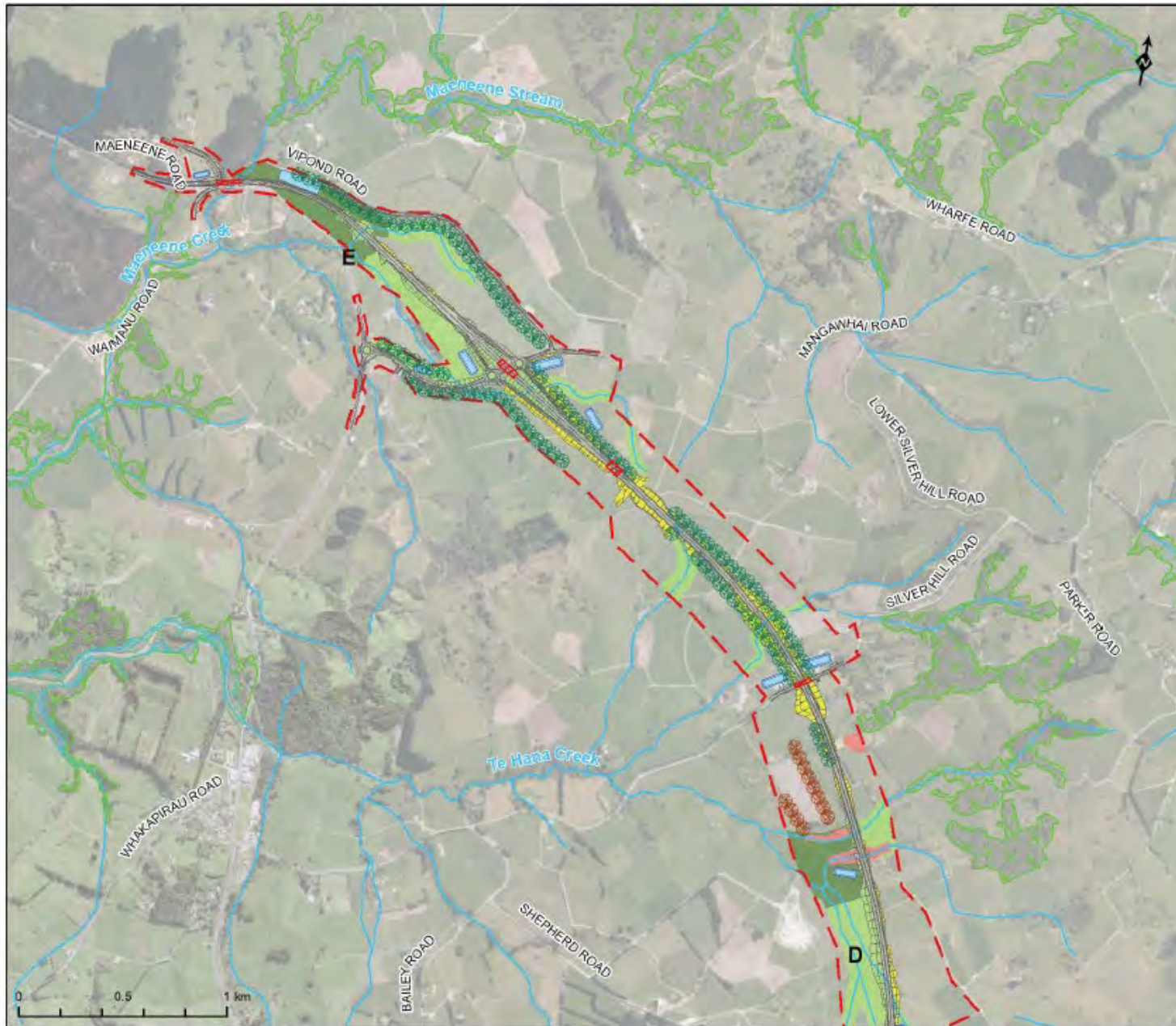
Conditions - Map 5



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- Screen planting
- Existing shelter belt
- ▭ Stormwater treatment wetlands - indicative locations
- Watercourse
- ▭ Landscape Mitigation Planting
- ▭ Indigenous vegetation
- ▭ Ecology vegetation mitigation
- ▭ Grass batter slopes
- ▭ Significant ecological area - Terrestrial
- ▭ Significant ecological area - Marine 2

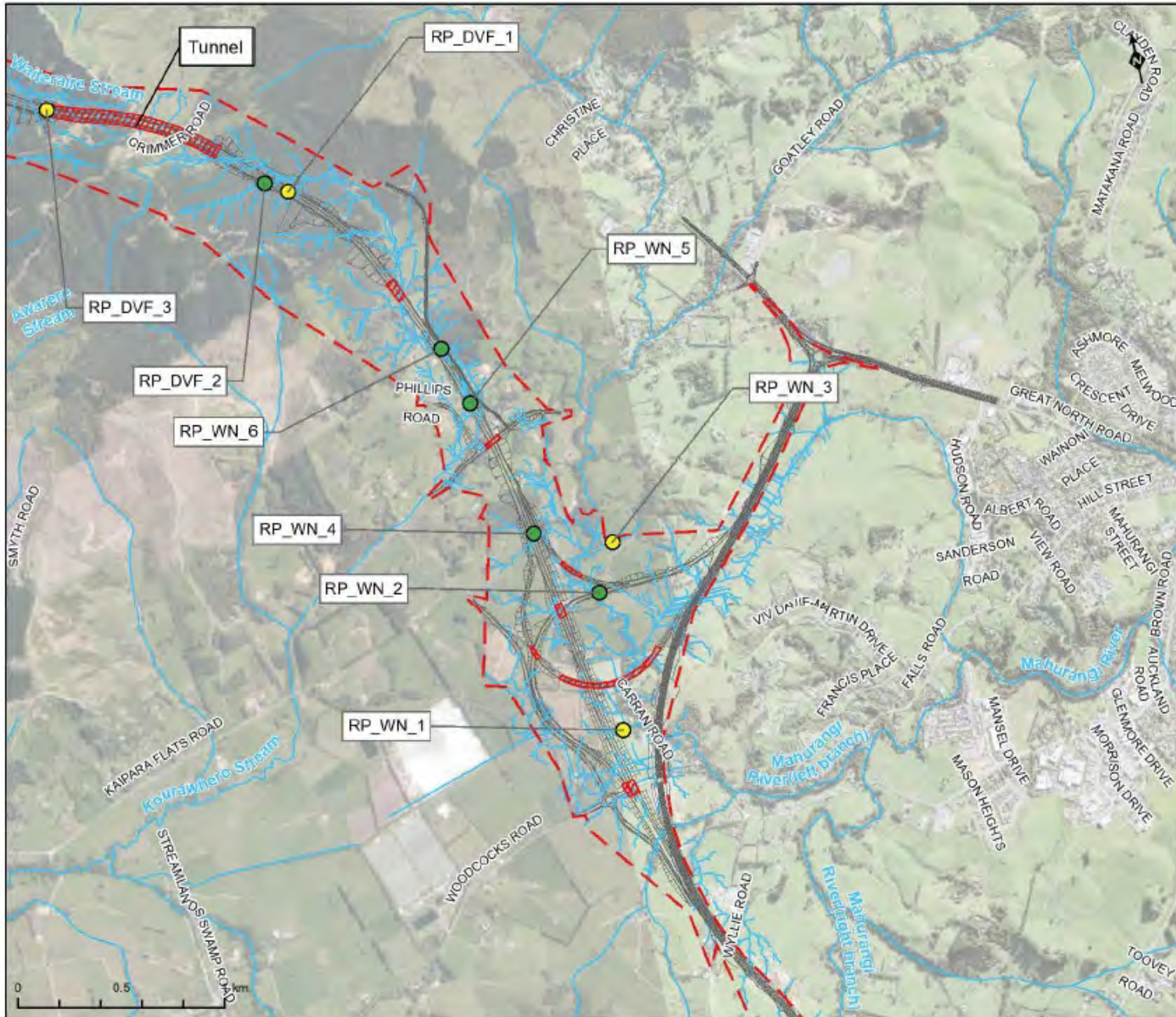
Conditions - Map 6



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
 - - - Designation boundary
 - ▨ Indicative bridge / tunnel
 - Watercourse
- Representative watercourses**
- Intermittent
 - Permanent

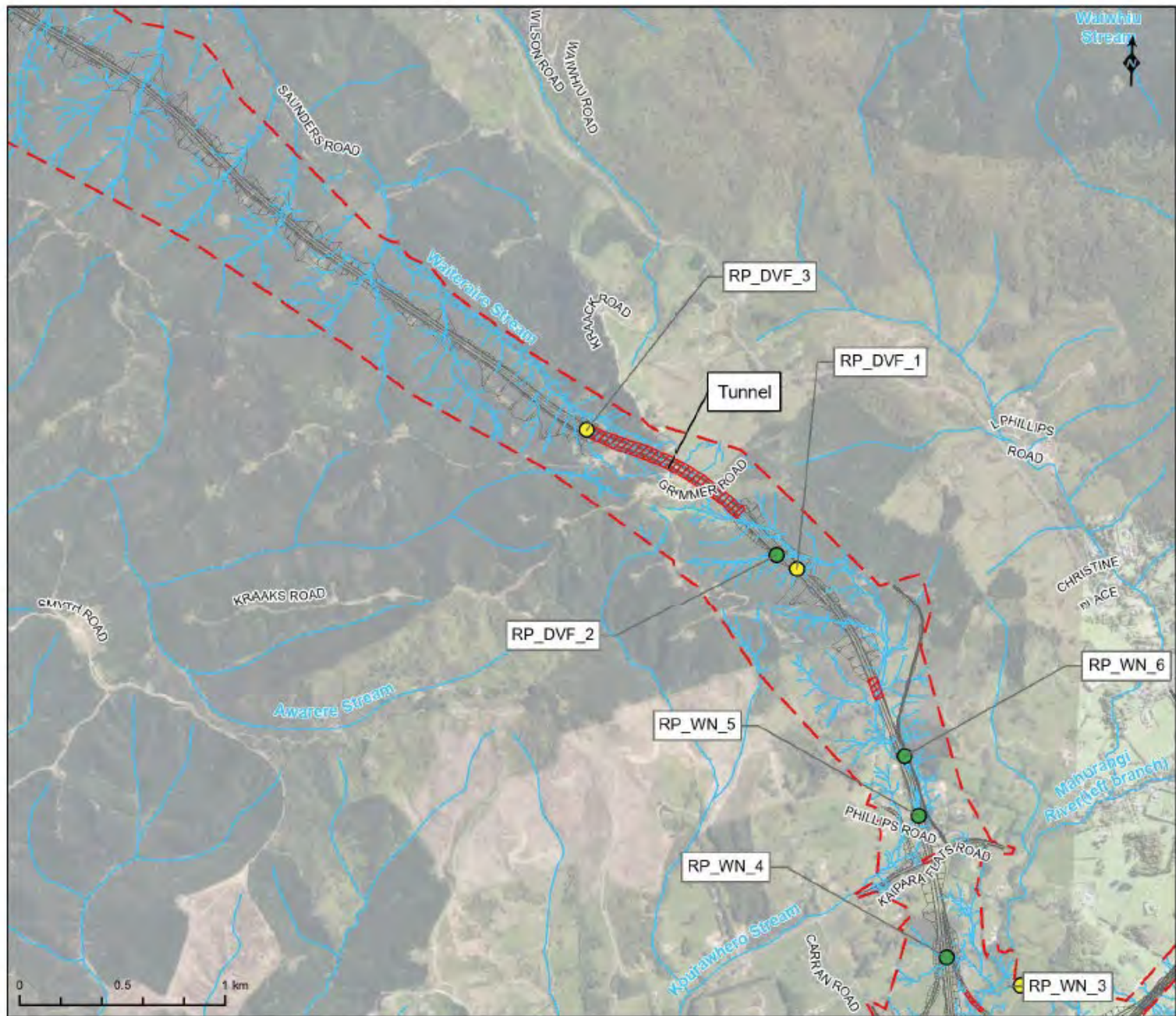
Conditions - Map 7



WARKWORTH TO WELLSFORD

REPRESENTATIVE WATERCOURSES





- Indicative Alignment
 - - - Designation boundary
 - ▨ Indicative bridge / tunnel
 - Watercourse
- Representative watercourses**
- Intermittent
 - Permanent

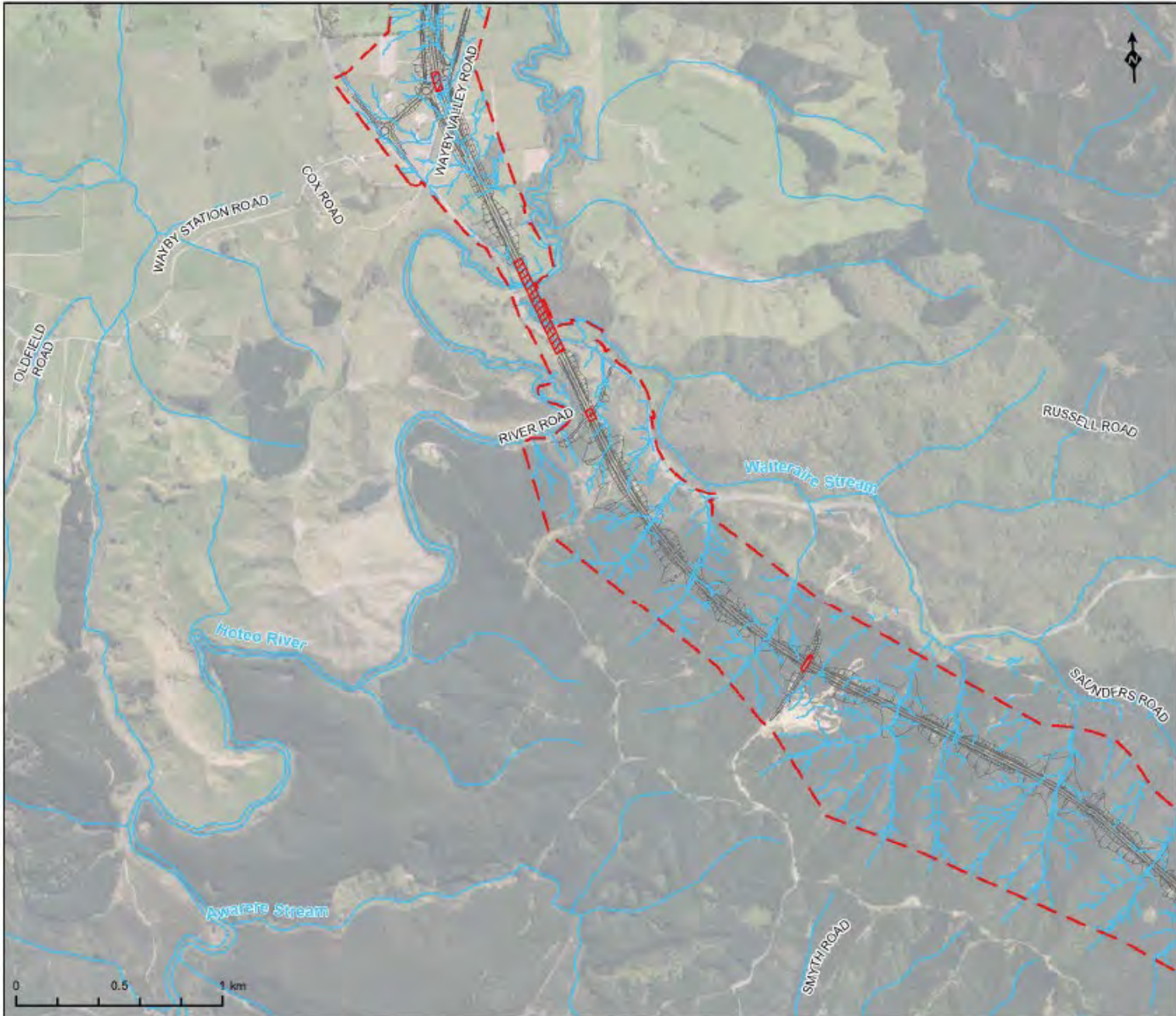
Conditions - Map 8

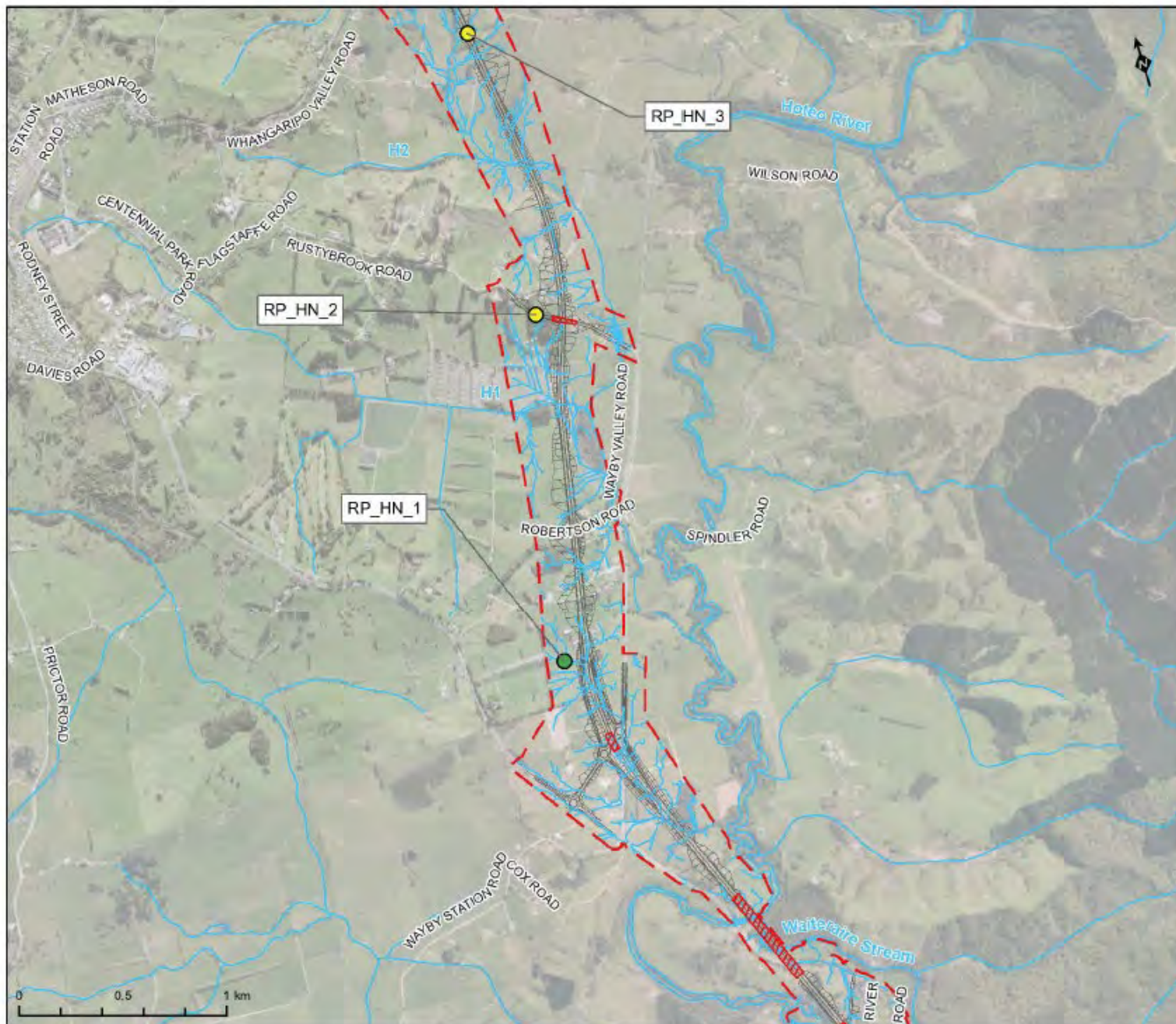


WARKWORTH TO WELLSFORD

REPRESENTATIVE WATERCOURSES







- Indicative Alignment
 - ▭ Designation boundary
 - ▨ Indicative bridge / tunnel
 - Watercourse
- Representative watercourses**
- Intermittent
 - Permanent

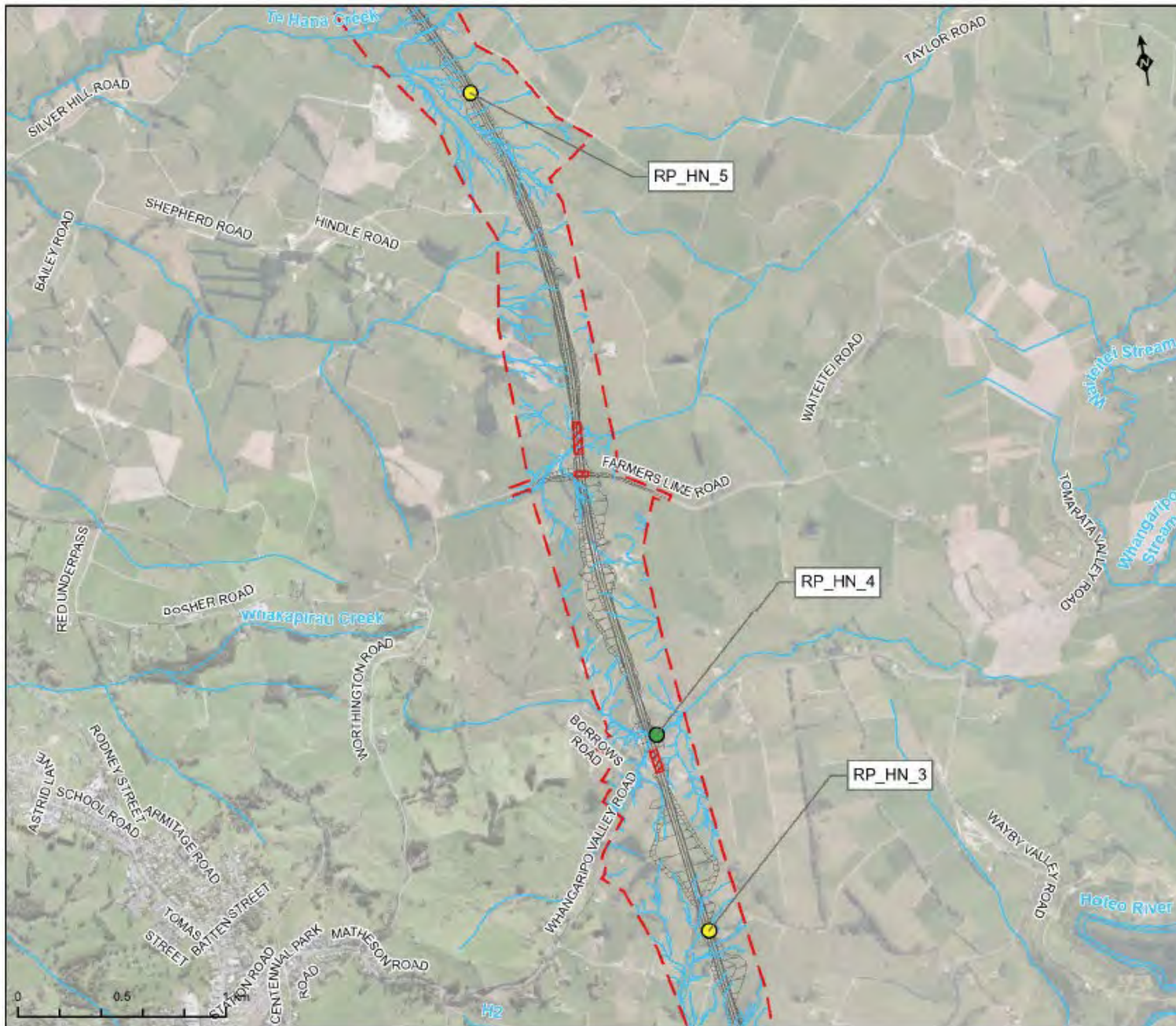
Conditions - Map 10



WARKWORTH TO WELLSFORD

REPRESENTATIVE WATERCOURSES





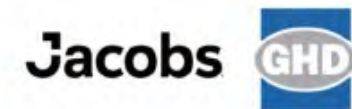
- Indicative Alignment
 - [] Designation boundary
 - [] Indicative bridge / tunnel
 - Watercourse
- Representative watercourses**
- Intermittent
 - Permanent

Conditions - Map 11



WARKWORTH TO WELLSFORD

REPRESENTATIVE WATERCOURSES





- Indicative Alignment
 - ▭ Designation boundary
 - ▨ Indicative bridge / tunnel
 - Watercourse
- Representative watercourses**
- Intermittent
 - Permanent

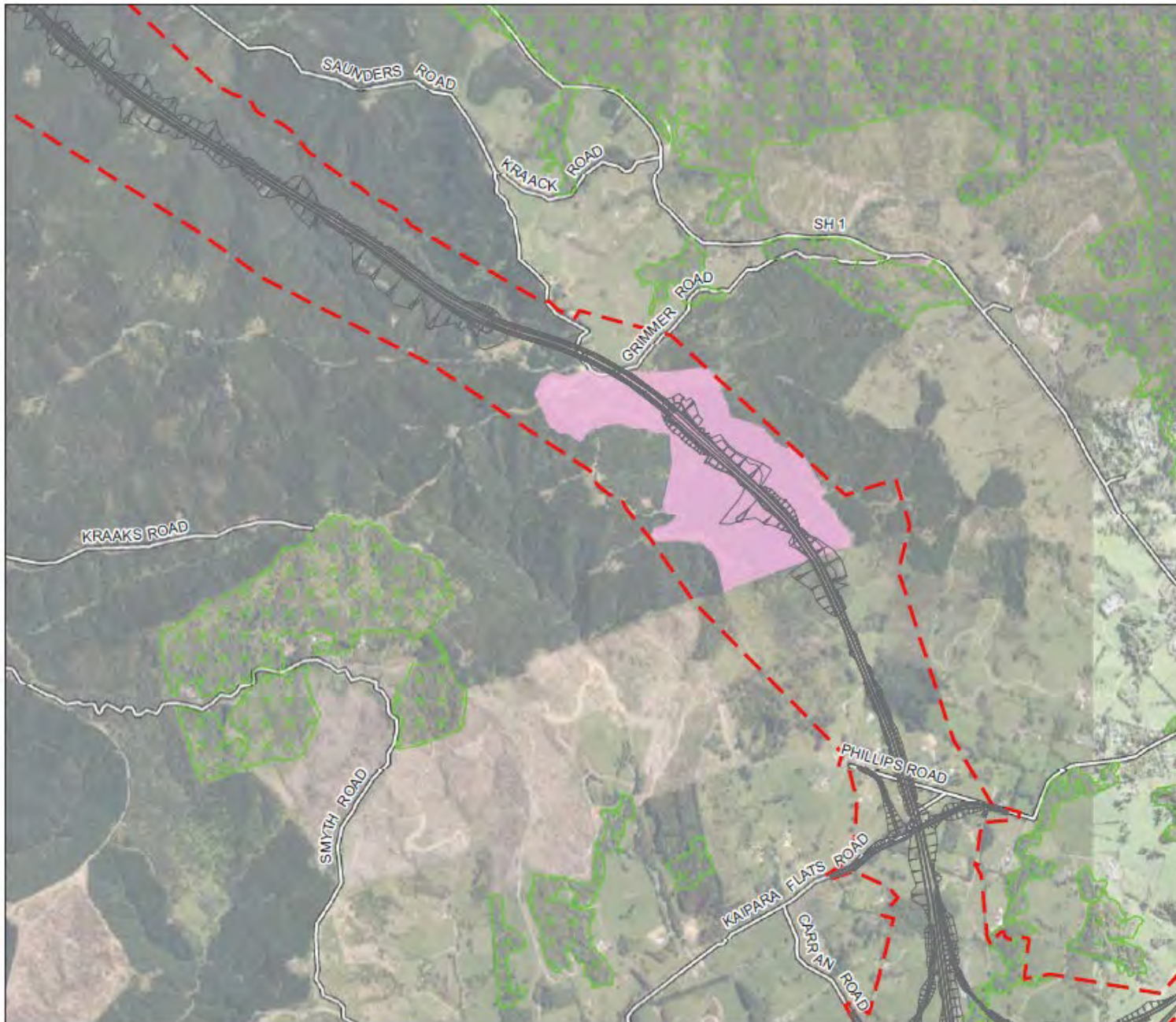
Conditions - Map 12



WARKWORTH TO WELLSFORD

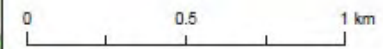
REPRESENTATIVE WATERCOURSES





- Indicative Alignment
- [- - -] Designation boundary
- Fauna habitat and flyway mitigation
- ⌘ Significant ecological area - Terrestrial

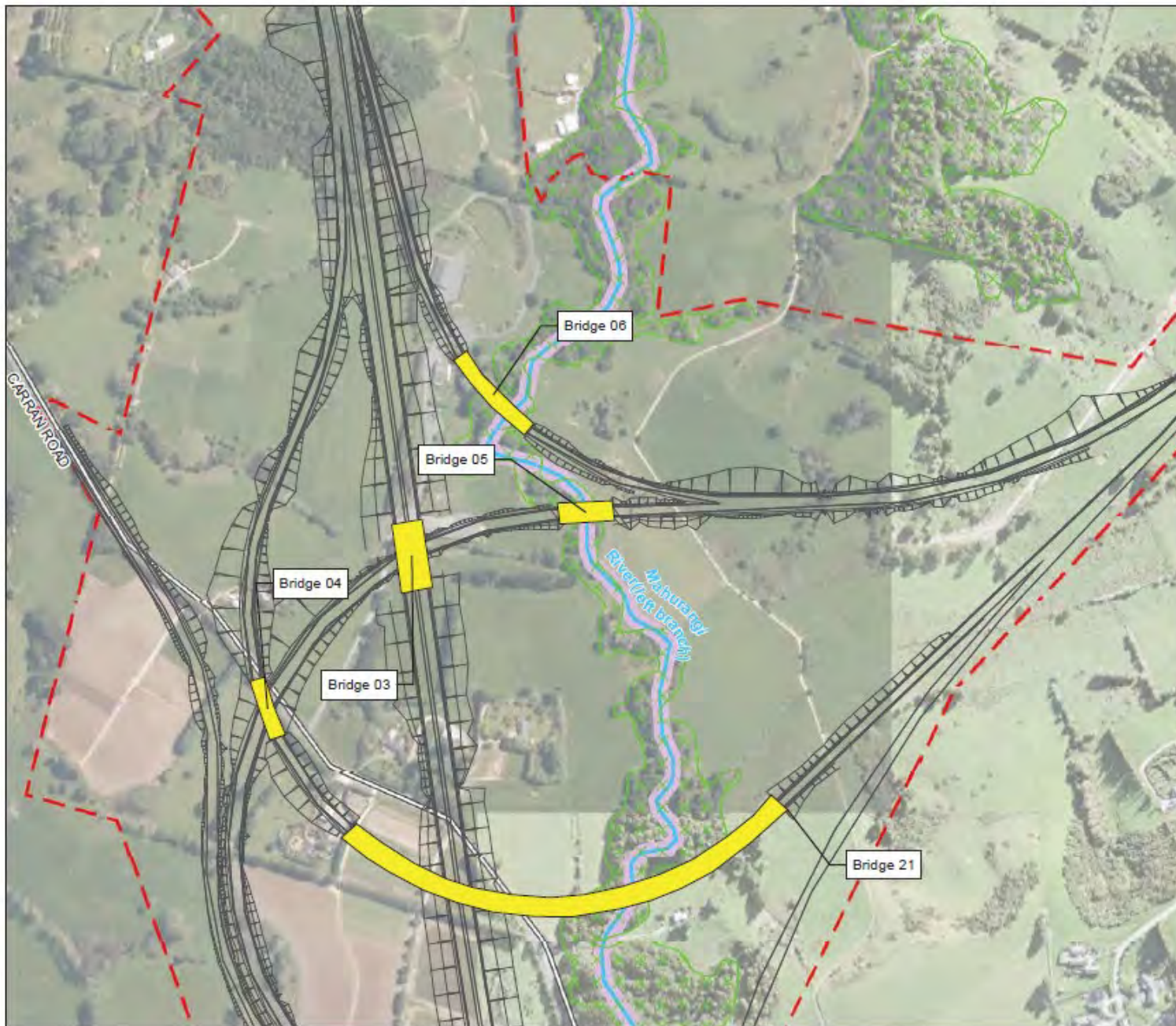
Conditions - Map 13



WARKWORTH TO WELLSFORD

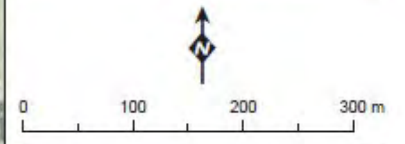
FAUNA HABITAT AND FLYWAY MITIGATION





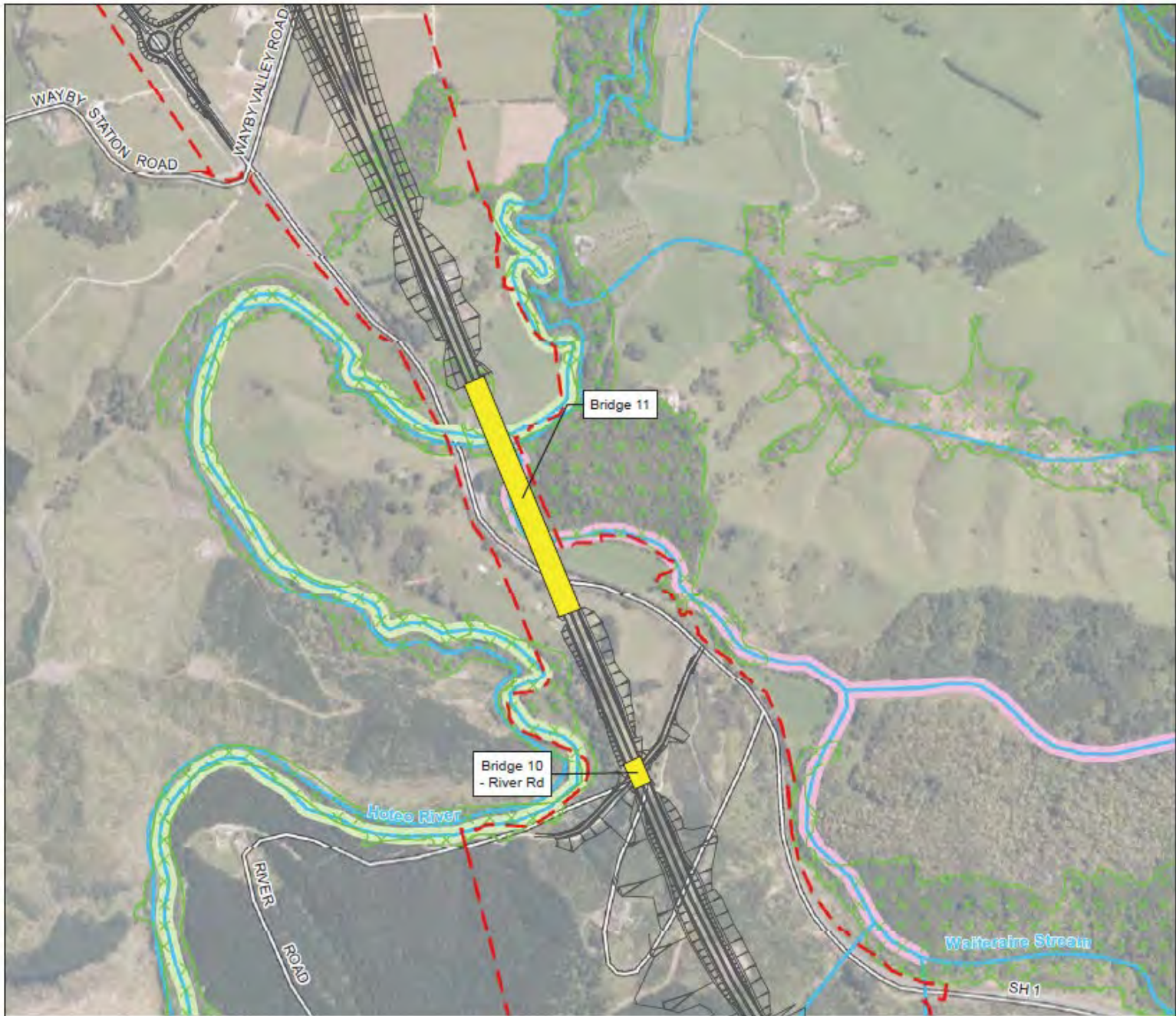
- Designation boundary
- Indicative Alignment
- Indicative bridge
- Mahurangi River (Left branch)
- Watercourse
- Significant ecological area - Terrestrial

Conditions - Map 14



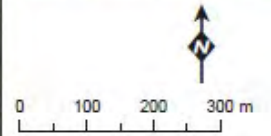
WARKWORTH TO WELLSFORD
BRIDGE STRUCTURES
IN WATERCOURSES





-  Designation boundary
-  Indicative Alignment
-  Indicative bridge
-  Hotoe River
-  Waiaraira Stream
-  Watercourse
-  Significant ecological area
- Terrestrial

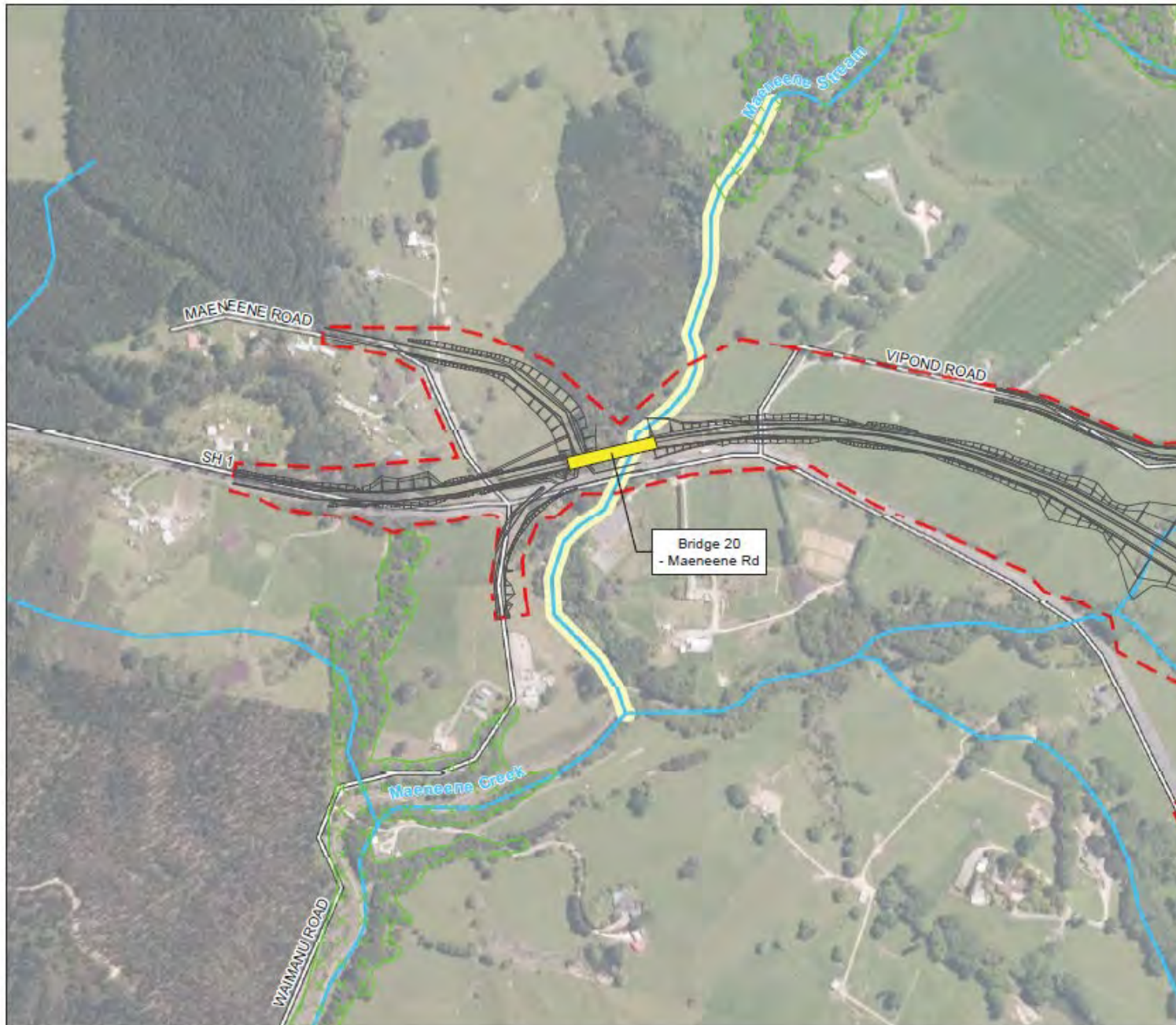
Conditions - Map 15









WARKWORTH TO WELLSFORD

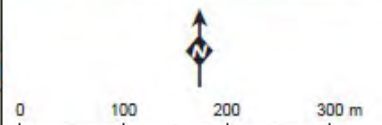
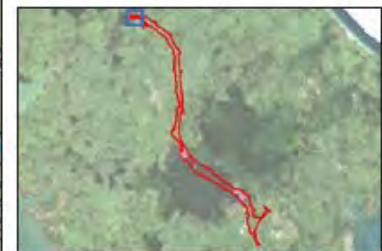
BRIDGE STRUCTURES IN WATERCOURSES





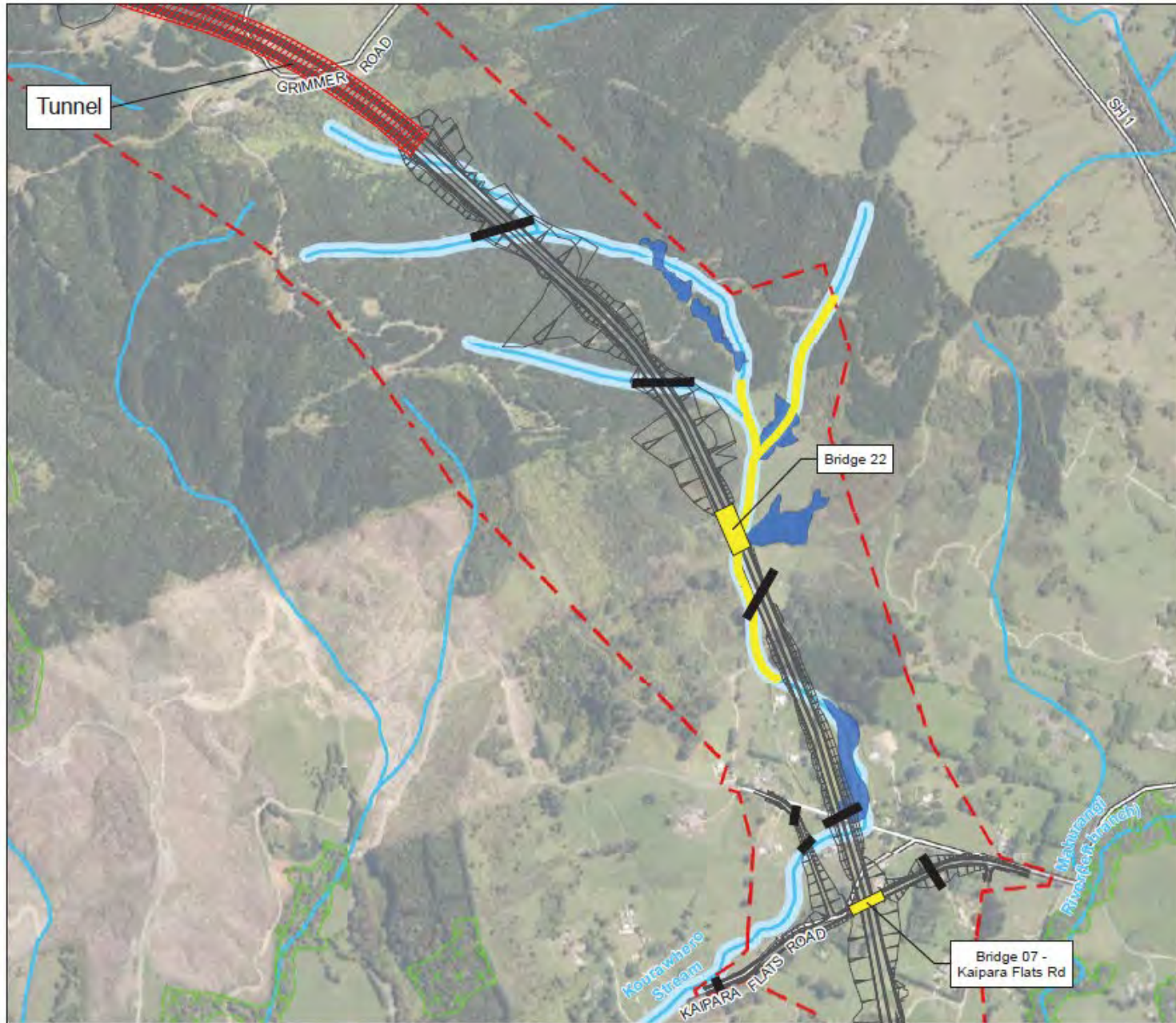
-  Designation boundary
-  Indicative Alignment
-  Indicative bridge
-  Maeneene Stream
-  Watercourse
-  Significant ecological area - Terrestrial

Conditions - Map 16



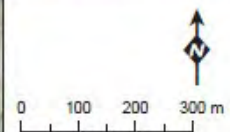
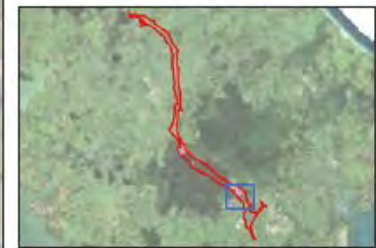
WARKWORTH TO WELLSFORD
 BRIDGE STRUCTURES
 IN WATERCOURSES





- Designation boundary
- Indicative Alignment
- Indicative bridge
- Kourawhero Stream
- Kourawhero Stream Section to be bridged
- Culvert
- Wetland complex
- Watercourse
- Significant ecological area - Terrestrial

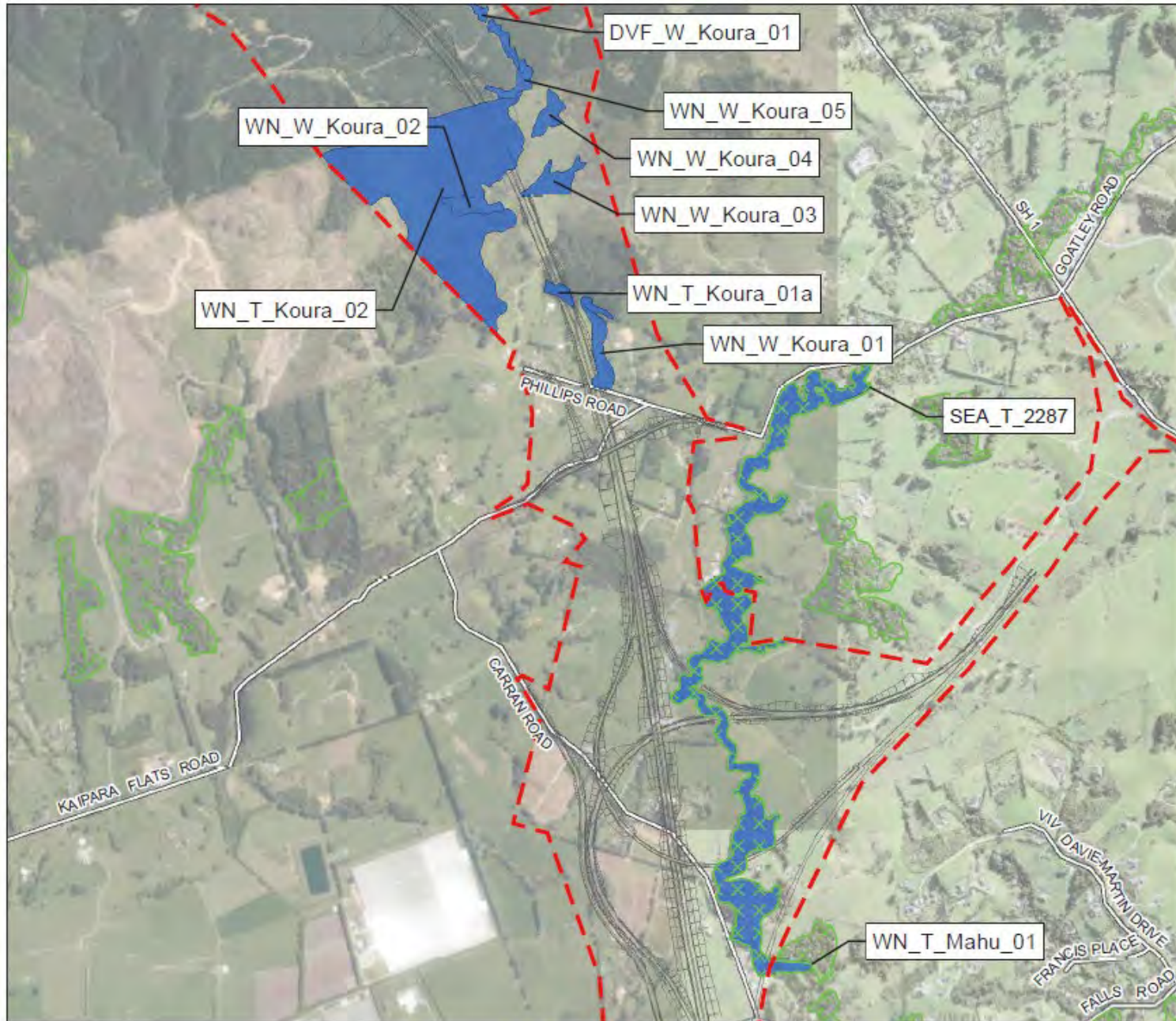
Conditions - Map 17



WARKWORTH TO WELLSFORD

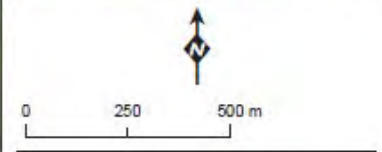
ECOLOGICAL SITES





- Indicative Alignment
- Ecological sites
- ▭ Designation boundary
- ▨ Significant ecological area - Terrestrial

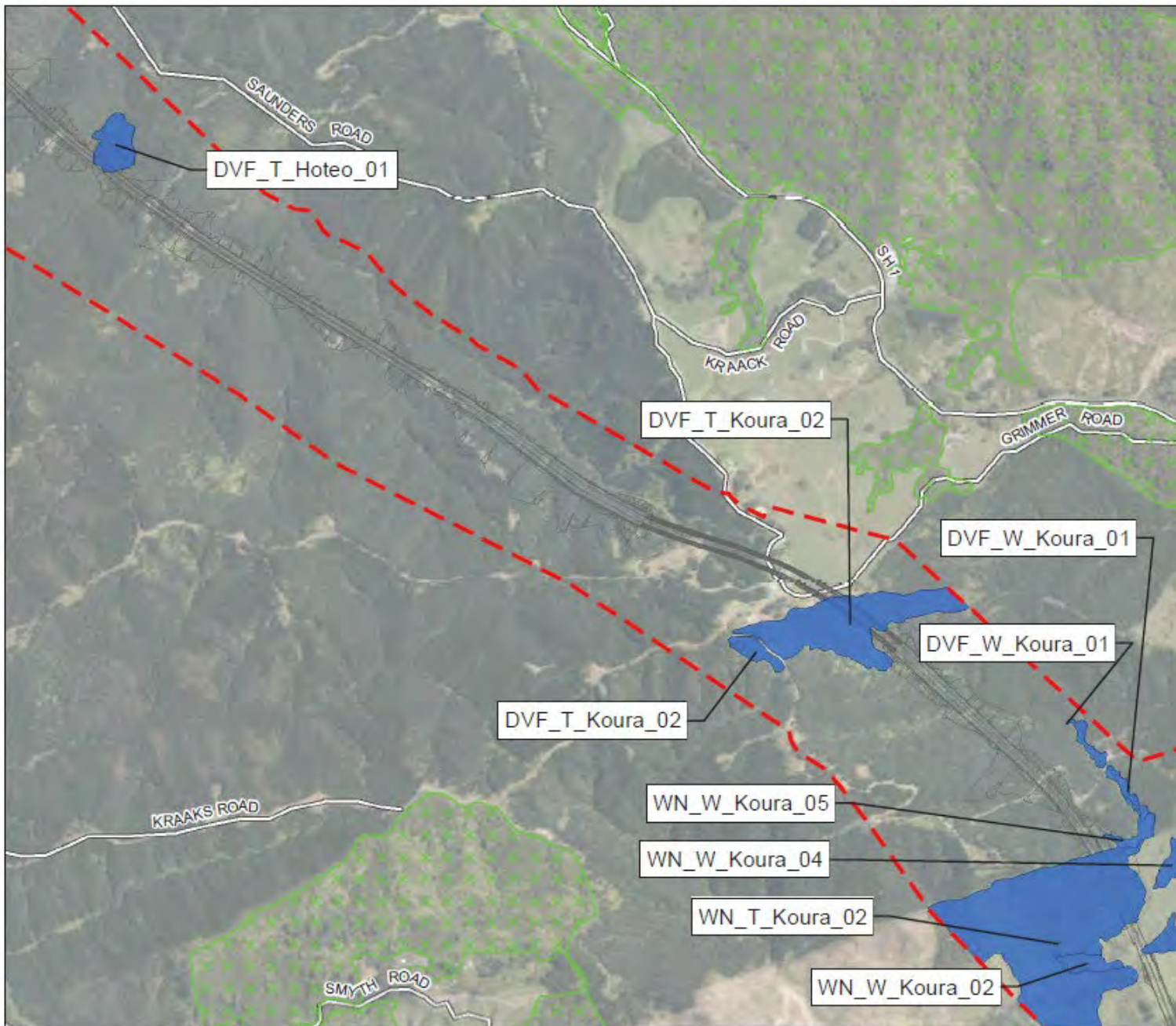
Conditions - Map 18



WARKWORTH TO WELLSFORD

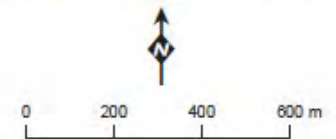
ECOLOGICAL SITES





- Indicative Alignment
- Ecological sites
- ▭ Designation boundary
- ⊗ Significant ecological area - Terrestrial

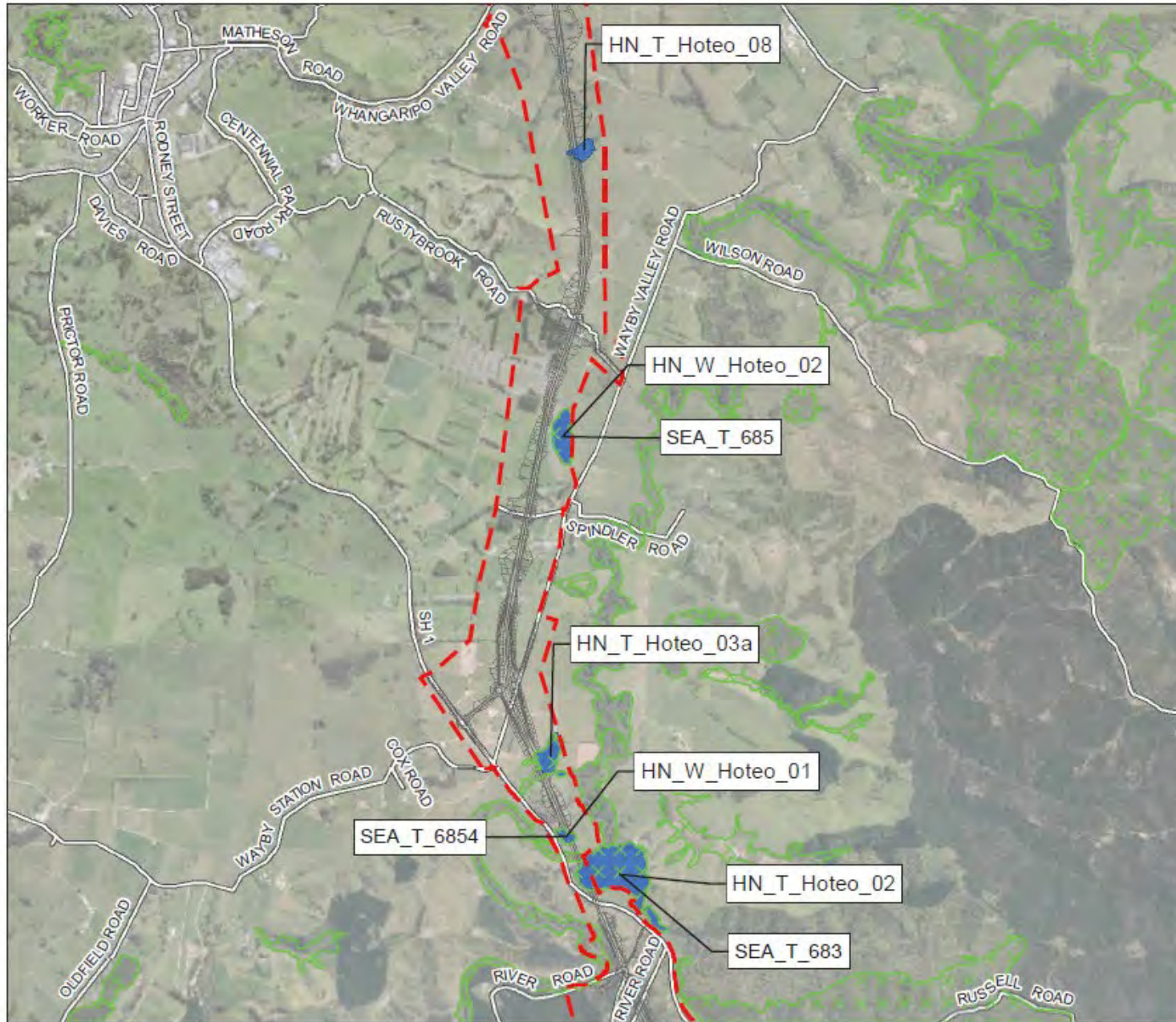
Conditions - Map 19



WARKWORTH TO WELLSFORD

ECOLOGICAL SITES





- Indicative Alignment
- Ecological sites
- ▭ Designation boundary
- ⊗ Significant ecological area - Terrestrial

Conditions - Map 20

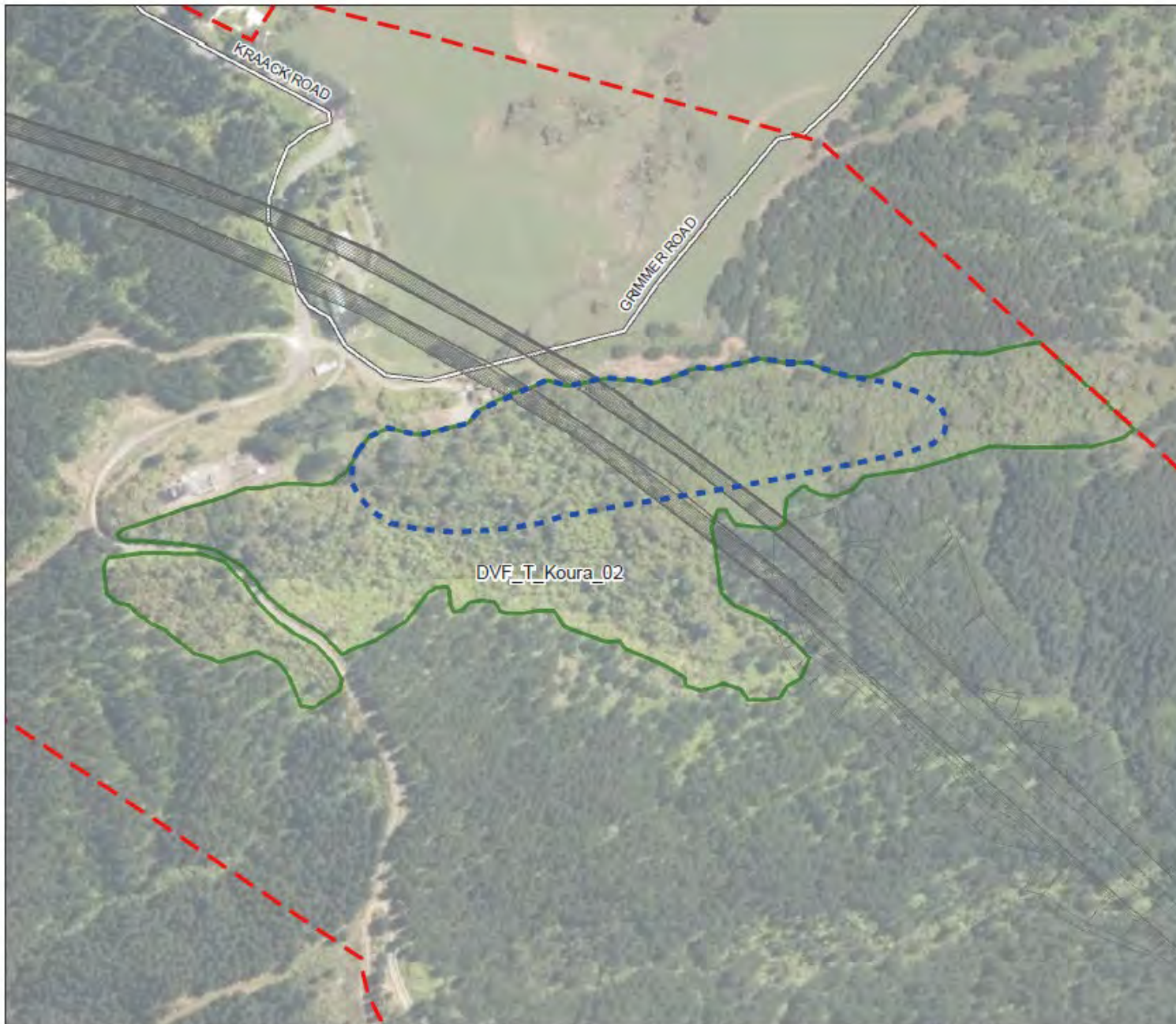


0 250 500 m

WARKWORTH TO WELLSFORD

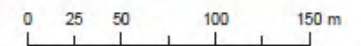
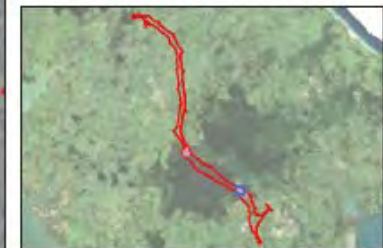
ECOLOGICAL SITES





- Indicative Alignment
- ▭ Designation boundary
- ▭ Ecological site
- ▭ Escarpment

Conditions - Map 21



WARKWORTH TO WELLSFORD

ESCARPMENT FEATURE



**APPENDIX E – PLAN SHOWING KAURI TREES
PURSUANT TO CONDITON 54Y**



CONDITIONS OF DESIGNATION

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Maps 1 – 6 Mitigation sites

DEFINITIONS

The table below defines the acronyms and terms used in the conditions. Defined terms are capitalised throughout the conditions.

Acronym / Term	Definition / Meaning
Auckland Transport	The Chief Executive of Auckland Transport or authorised delegate
AUP(OP)	Auckland Unitary Plan Operative in Part
Best Practicable Option or BPO	Best Practicable Option as defined in section 2 of the Resource Management Act 1991.
Building-Modification Mitigation	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
CAQMP	Construction Air Quality Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CIR	Cultural Indicators Report
Civil Landholding Owners	the owners specified in the Northern Civil Land and the Southern Civil Land definitions or the children of Joan Colleen Civil, Ian Donald Shepherd Civil and Denise Lyn Civil.

Construction Works	Activities undertaken to construct the Project excluding Enabling Works
COPTTM	NZ Transport Agency Code of Practice for Temporary Traffic Management, or any subsequent version
CTMP	Construction Traffic Management Plan
Day(s)	Has the same meaning as “working day” under section 2 of the RMA
Designation	The designation included in the AUP(OP)
EICMP	Electricity Infrastructure Construction Management Plan
Enabling Works	<p>Preliminary construction activities as follows:</p> <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments) • formation of access for geotechnical investigations • establishment of site yards, site offices, site entrances and site access points and fencing • constructing and sealing site access roads • demolition or removal of buildings and structures • relocation of services • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and screen planting)
EWCTMP	Enabling Works Construction Traffic Management Plan
Existing Underpass	the existing underpass between the Northern Civil Land and the Southern Civil Land as illustrated on the drawing at Attachment B
Habitable Space	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
HHMP	Historic Heritage Management Plan
Heavy Vehicle	A motor vehicle having a gross laden weight exceeding 3500 kg
HEN-MPE-A	<p>Transpower’s Henderson to Maungatapere A (HEN-MPE-A) 110kV high voltage transmission line assets, which include:</p> <ul style="list-style-type: none"> • the existing HEN-MPE-A transmission line Spans 199-204 and support structures/Towers 200-203; and • any proposed new or relocated high voltage transmission line assets (spans and/or support structures) required as a result of the Project Works.
Highly Sensitive Receiver (HSR)	<p>Residential dwellings within:</p> <ul style="list-style-type: none"> • 200m of the Designation boundary; • 50m of sealed access roads used for Project Works up to 500 m outside of the Designation boundary; and • 100m of unsealed access roads used for Project Works outside of the Designation boundary.
HNZPT	Heritage New Zealand Pouhere Taonga

Acronym / Term	Definition / Meaning
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Hōkai Nuku	The iwi collective being comprised of the representatives for Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Ngāti Whātua o Kaipara and Ngāti Whātua.
Iwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition 19D.
Manager	The Team Manager – Compliance Monitoring, of Auckland Council, or authorised delegate
Mana Whenua	Māori who can demonstrate customary rights through occupation to resources within the Project area, and who have responsibilities as kaitiaki over their tribal lands, waterways and other taonga
Mitigation Sites	The mitigation planting sites identified on Maps 1 to 6 included with the Designation
Network Utility Operation(s)/Operator(s)	As defined in section 166 of the RMA, for the avoidance of doubt this includes the North Albertland Community Water Supply Association
NMP	Noise Mitigation Plan
Noise Criteria Categories	The groups of preference for sound levels established in accordance with New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> when determining the BPO for noise mitigation (Categories A, B and C)
Northern Civil Land	the land or parts thereof located at 109 Kaipara Flats Road (ROT 764798) legally described as CT 764798 and owned by Denise Lyn Civil, Ian Donald Shepherd Civil and Michael Charles Tisdall, as illustrated in green on the drawing at Attachment C.
NZS 6803	New Zealand Standard 6803:1999: <i>Acoustics – Construction Noise</i> , or any subsequent version
NZS 6806	New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> , or any subsequent version
PPF	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Project	The construction, maintenance and operation of the Ara Tūhono Warkworth to Wellsford Project, which extends from Warkworth to north of Te Hana

Project Liaison Person	The person or persons appointed for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work
Project Works	All activities undertaken to construct the Project (Construction Works and Enabling Works) and including ecological and landscape mitigation activities, but excluding operation of the highway
Resource Consent	Those consents granted to the Requiring Authority by Auckland Council to undertake the Project
RMA	Resource Management Act 1991
SECMP	Stakeholder Engagement and Communications Management Plan
SH1	State Highway 1
Southern Civil Land	the land or parts thereof at 141 Carran Road (ROT 758198) legally described as CT 758198 and owned by Joan Colleen Civil and Ian Donald Shepherd Civil as to a ½ share as Executors and Joan Colleen Civil as to a ½ share, as illustrated in blue on the drawing at Attachment C
SSTMP	Site Specific Traffic Management Plan
Stage(s)	A specific works area or new land disturbing activity associated with construction of the Project as nominated by the Requiring Authority
Structural Mitigation	As defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence
Threatened Species	Species listed as per the Department of Conservation's <i>New Zealand Threat Classification System</i> (NZTCS)
TTM	Temporary Traffic Management
ULDF	Urban and Landscape Design Framework
ULDMP	Urban and Landscape Design Management Plan
Urban Zoning	an urban zoning identified in an operative planning map within the Auckland Unitary Plan or any replacement statutory planning document from time to time and excludes a future urban zoning or deferred development zoning.

GENERAL

1. As soon as practicable following completion of construction of the Project, the Requiring Authority shall give notice to Auckland Council in accordance with section 182 of the RMA for removal of those parts of the Designation that are not required for the long-term operation, maintenance and mitigation of effects of the State highway.

Lapse

- The Designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.

Construction conditions

- Conditions 4 to 88E relate to construction of the Project and only apply to construction activities. Once construction of the Project is complete these conditions will no longer apply and can be removed, except for conditions that specify an obligation which continues after construction.

Management and outline plan process

- The Requiring Authority shall prepare, submit to Auckland Council, and implement the Designation management plans in accordance with Table 1 and the specific management plan conditions.
- The Requiring Authority may prepare management plans in parts or in Stages to address specific activities or to reflect the staged implementation of the Project Works.
- The Requiring Authority shall not commence Project Works within the area to which a management plan applies until the Outline Plan of Works has been considered in accordance with s176A of the RMA or the required management plan(s) has been certified or otherwise provided to the Council for information.

Table 1: Management Plan Table

Management Plan	Decision Pathway	When to submit	Response time from Manager	Duration for implementation
Stakeholder Engagement and Communications	To Manager for information	At least 6 months prior to the start of the Requiring Authority's nominated date for detailed design	N/A	Duration of Project Works
Construction Noise and Vibration	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Noise Mitigation	Outline Plan of Works	Prior to the Project becoming operational	N/A	Throughout the operation of the State Highway
Construction Traffic	Outline Plan of Works	Prior to start of Construction Works	Within statutory timeframes	Duration of Construction Works

Enabling Works Traffic	To Road Controlling Authority for approval via COPTTM process	Prior to start of relevant Enabling Works	N/A	Duration of Enabling Works
Site Specific Traffic	To Road Controlling Authority for approval via COPTTM process	Prior to using the relevant public road	N/A	Duration of use of public road for construction activities.
Enabling Works Traffic	To Manager for Information (approval via COPTTM process)	Prior to start of relevant Enabling Works	N/A	Duration of Enabling Works
Urban and Landscape Design Framework	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Urban and Landscape Design Management Plan/s	Outline Plan of Works	Prior to start of Construction Works in relevant sector	Within statutory timeframes	Duration of Project Works
Historic Heritage	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Construction Air Quality	Outline Plan of Works	Prior to start of Construction Works	Within statutory timeframes	Duration of Construction Works
Cultural Engagement	To the Manager for information	Prior to the start of Project Works	N/A	Throughout the Project Works
Electricity Infrastructure Construction	To the Manager for information	Prior to the start of Project Works	N/A	Throughout the Project Works

CONSTRUCTION CONDITIONS

Stakeholder Engagement and Communications

Project Liaison Person

- The Requiring Authority shall appoint a Project Liaison Person for the duration of Project Works to be the main and readily accessible point of contact for persons interested in, or affected by, Project Works. The Project Liaison Person's contact details shall be readily available via the internet (e.g., via the Project website) and the Project Liaison Person shall be contactable at all times during Project Works.

Stakeholder Engagement and Communications Management Plan

8. The Requiring Authority shall prepare a Stakeholder Engagement and Communications Management Plan (SECMP) at least 6 months prior to the start of the Requiring Authority's nominated date for detailed design. The purpose of the SECMP is to set out how the Requiring Authority will communicate with the public and stakeholders for the duration of Project Works.
9. The SECMP shall set out the framework for how the Requiring Authority will:
 - a. Engage with stakeholders such as directly affected landowners and immediately adjoining landowners, educational facilities, iwi and hapū groups, community groups, local businesses and representative groups, residents' organisations, other interested groups and individuals, Auckland Council, Auckland Transport and adjacent local authorities, the Rodney Local Board, and Network Utility Operators about the Project Works;
 - b. Inform the communities of Warkworth, Wellsford and Te Hana of construction progress, including proposed hours of work;
 - c. Engage with the communities to foster good relationships and to provide opportunities for learning about the Project;
 - d. Provide information on key Project milestones;
 - e. Provide advance notice of the upcoming works programme, including intended hours of works and activities, to residents and businesses in proximity to the Project Works; and
 - f. Make each management plan listed in Table 1 publicly available online once it is finalised (and if it is amended or updated), and for the duration of the Project Works.
10. The Requiring Authority shall prepare the SECMP in consultation with:
 - a. Auckland Council, with respect to coordination of communications with the public and stakeholders; and
 - b. Auckland Transport, with respect to communications relating to Project Works or activities that interface with the local road network; and
 - c. shall engage with Mana Whenua, with respect to provisions that relate specifically to communications with iwi and hapū groups.

10A. At all times prior to and during Project Works, the Requiring Authority shall maintain a Project website with current information about the Project, including details of its current state of progress towards commencement, likely commencement timeframe and anticipated milestones in that regard. The website shall also include contact details (email and/or phone number) for any person seeking further information about the Project.

Complaints Management Process

11. The Requiring Authority shall keep and maintain a complaints record (*Complaints Record*), to record any complaints received in relation to Project Works for the duration of the Project Works.
12. The Complaints Record shall include:
 - a. The name and address (if known) of the complainant;
 - b. Details of the complaint;

- c. The date and time of the complaint, and the location, date and time of the alleged event giving rise to the complaint;
 - d. The weather conditions at the time of the complaint (as far as reasonably practicable), including wind direction and approximate wind speed if the complaint relates to air quality or noise and where weather conditions are relevant to the nature of the complaint;
 - e. Any other activities in the area, unrelated to the Project that may have contributed to the complaint, such as construction undertaken by other parties, fires, traffic accidents or unusually dusty conditions generally;
 - f. Measures taken to respond to the complaint or confirmation of no action if deemed appropriate; and
 - g. The response provided to the complainant.
13. The Requiring Authority will acknowledge receipt of a complaint related to Project Works within 24 hours and shall respond in full to such complaint as soon as practicable and no later than 10 Days after the complaint was received, except where urgency is indicated, in which case the Requiring Authority shall use its best endeavours to respond within 2 hours.
14. The Requiring Authority shall provide a copy of the Complaints Record to the Manager on a monthly basis, unless otherwise agreed with the Manager.

Mana Whenua

Cultural Indicators Report

15. At least 12 months prior to the Requiring Authority's nominated start date for detailed design of the Project, the Requiring Authority shall invite Mana Whenua to prepare a Cultural Indicators Report for the Project, or to nominate a person or organisation to prepare a Cultural Indicators Report on their behalf. To assist with preparation of any Cultural Indicators Report, the Requiring Authority shall provide access to Crown owned land within the Project Area for Mana Whenua to undertake surveys. The purpose of any Cultural Indicators Report is to assist with the protection and management of Ngā Taonga Tuku Iho (treasures handed down by our ancestors) during Construction Works.
16. Any Cultural Indicators Report should be completed and provided to the Requiring Authority at least 6 months prior to the Requiring Authority's nominated start date for detailed design of the Project and should:
- a) Describe Mana Whenua's customary rights through occupation to resources within the Designation.
 - b) Identify and map cultural sites, landscapes and values that have the potential to be affected by Project Works;
 - c) Set out Mana Whenua's desired outcomes and recommended methods for management of potential effects on cultural values;
 - d) Identify cultural indicators of cultural stream health as relevant to the Project Works;
 - e) Set out recommended methods to measure the effects on identified cultural indicators during Project Works;
 - f) Identify opportunities for restoration and enhancement of Mauri and mahinga kai within the Designation; and

- g) Identify cultural criteria that should be acknowledged in the development of the SECMP, the ULDF, the ULDMPs, the HHMP.

Conditions 17 and 18 are intentionally left blank

Cultural Artworks Plan

19. At least 18 months prior to start of Construction Works, the Requiring Authority shall invite Mana Whenua to prepare a cultural artworks plan to identify possible artworks or features to reflect sites and values of significance to Mana Whenua. Condition 19 will cease to apply if Mana Whenua have been invited to prepare a cultural artwork plan and have not provided it within six months prior to start of Construction Works.

Cultural Engagement Plan

19A. At least 1 month prior to the Requiring Authority's nominated start date for detailed design of the Project, if it has received any Cultural Indicators Report in accordance with Conditions 15-16, the Requiring Authority shall prepare a Cultural Engagement Plan. The purpose of the Cultural Engagement Plan is to identify:

- a. The measures and methods to implement the recommendations within the Cultural Indicators Report(s) where the Requiring Authority considers it is practicable to do so.
- b. Written reasons where the Requiring Authority considers any recommendations in the Cultural Indicators Report(s) cannot be practicably implemented, for example due to the operational, technical, financial, health and safety or engineering needs of the Project.
- c. The roles and responsibilities of Mana Whenua during the Project Works
- d. The roles and responsibilities of the Iwi Advisor, which shall include but not be limited to:
 - i. Engaging with the Requiring Authority on the preparation of the SECMP, the ULDF, the ULDMPs, the HHMP;
 - ii. Onsite monitoring of Project Works involving top soil removal up to 1.5m below ground level (as defined in the AUP(OP));
- e. Requirements for formal dedication or cultural interpretation prior to the start of Construction Works in areas identified as having significance to Mana Whenua.
- f. A written record of the engagement undertaken in accordance with Condition 19B.

19B. In preparing the Cultural Engagement Plan the Requiring Authority shall engage with Mana Whenua who have prepared a Cultural Indicators Report over a period of not less than 3 months prior to the Requiring Authority's nominated start date for detailed design of the Project to better understand any Cultural Indicators Report and to discuss the recommendations in it.

19C. The Requiring Authority shall implement the Cultural Engagement Plan throughout the Project Works.

Iwi Advisor

19D. At least 12 months prior to commencement of Construction Works, the Requiring

Authority shall invite Hōkai Nuku to appoint an Iwi Advisor or other nominated kaitiaki (Iwi Advisor) to undertake the roles and responsibilities set out, or to be set out in the Cultural Engagement Plan.

- 19E. Conditions 19A-19C will cease to apply if Mana Whenua have been invited to prepare a Cultural Indicators Report in accordance with Condition 15 and have not provided that report within six months of the Requiring Authority's nominated start date for detailed design of the Project.

Conditions 20 – 23 are intentionally left blank

Network Utilities

24. The Requiring Authority shall ensure that Project Works do not adversely impact on the ongoing safe and efficient operation of Network Utility Operations. The scope, timing and methodology for utility protection and / or relocation works shall be developed in consultation with the relevant Network Utility Operator to ensure ongoing safe and efficient operation for the required works.
- 24A. The Requiring Authority shall consult with Network Utility Operators during the detailed design phase to identify opportunities to enable, or not preclude, the development of new network utility facilities including access to power and ducting within the Project, where practicable to do so. The consultation undertaken, opportunities considered, and whether or not they have been incorporated into the detailed design, shall be summarised in the Outline Plan or Plans prepared for the Project.
- 25A. The Project must be designed and undertaken to comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- 25B. The Requiring Authority shall design and undertake earthworks to ensure that the vertical clearance provided between the HEN-MPE-A transmission line conductors and the finished road level shall be a minimum of 10 metres for State Highway 1 (including approach roundabouts and on/off ramps), and 8 metres for Vipond Road.
- 25C. The Requiring Authority shall ensure that all trees and vegetation planted for the Project Works comply with the Electricity (Hazards from Trees) Regulations 2003; and cannot fall within 4m of any transmission line conductors.
- 25D. The Requiring Authority shall ensure that any new landscaping planted for the Project Works within 12m of the centre line of the HEN-MPE-A transmission line conductors is limited to species that will grow to a maximum of 2m in height at full maturity.

Transpower – Construction

- 25E. Construction or Enabling Works north of Wellsford must not commence within fifty (50) metres of the centreline of the HEN-MPE-A assets until the Electricity Infrastructure Construction Management Plan (EICMP) required by Condition 25F

has been completed and either:

- a. the construction and operation of the Project has been designed to comply with Conditions 24 and 25A to 25D; or
- b. the HEN-MPE-A assets have been relocated or altered to ensure compliance with Conditions 24 and 25A to 25D and enable the construction and operation of the Project.

25F. The Requiring Authority shall prepare an EICMP prior to start of Project Works within fifty (50) metres of the centreline of the HEN-MPE-A assets. The EICMP shall be prepared by a Suitably Qualified and Experienced Person in consultation with Transpower NZ Ltd. The purpose of the EICMP is to ensure Project Works are carried out safely and to manage any potential adverse effects of the works on Transpower's assets, including confirming that all works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of that code.

25G. The EICMP shall:

- a. Include a record of consultation undertaken with Transpower New Zealand;
- b. Provide procedures, methods and measures to be implemented during Project Works to:
 - i) Manage effects of dust and other material potentially resulting from Project Works and able to cause damage, beyond normal wear and tear, to the HEN-MPE-A assets;
 - ii) Ensure that no activity is undertaken during construction that would result in ground vibrations, ground instability and/or ground settlement likely to cause damage to HEN-MPE-A assets;
 - iii) Meet applicable standards and Codes of Practice applying to the construction of Project Works that interface with the HEN-MPE-A assets;
 - iv) Ensure that, during construction and operation, changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations of any HEN-MPE-A support structures; and
 - v) Mitigate Earth Potential Rise, where use of conductive material for road infrastructure (e.g., metallic barriers, lighting) is within 25m of the outer foundations of any HEN-MPE-A support structures;
- c. Confirm that all Project Works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001). For certainty, this shall include specific measures and methods relating to:
 - i. Excavation or disturbance of the land around any transmission support structures (Section 2);
 - ii. Building to conductor clearances (Section 3);
 - iii. Depositing of material under or near overhead conductors (Section 4.3);
 - iv. Mobile plant to conductor clearances and warning notices for mobile plant (Section 5); and
 - v. People to conductor clearances (Section 9).

Advice Note: Along with the RMA processes, there are other additional processes and

approvals applying to any work or activity that affect network utilities. The Requiring Authority may require additional approvals from Network Utility Operators prior to any works commencing in proximity to network utilities.

Construction Noise and Vibration

Noise Criteria

26. Unless provided for in Conditions 28 and 29, construction noise from Project Works shall comply with the following criteria in accordance with NZS 6803:

a. Residential receivers:

	Time	dB LAeq(15min)	dB LAmax
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and Public Holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

b. Industrial and commercial receivers:

Time	dB LAeq(15min)
0730-1800	70
1800-0730	75

26A. Air blast noise shall comply with a limit of 120 dB L_{Zpeak} at 1m from the most exposed façade of any occupied buildings.

Measurement and assessment of air blast noise shall be undertaken in accordance with AS 2187-2:2006 Explosives – Storage and use - Part 2: Use of explosives, (as it relates to air blast).

Vibration Criteria

27. Unless otherwise provided for in Conditions 28, 29 or 30, vibration from Project Works shall comply with the following criteria:

Receiver	Location	Detail	Category A	Category B
Occupied PPFs*	Insidethe building	Night-time 2000h - 0630h	0.3mm/s PPV	1mm/s PPV
		Daytime 0630h - 2000h	1mm/s PPV	5mm/s PPV
		Blasting– vibration	5mm/s PPV	10mm/s PPV
Other occupied buildings	Insidethe building	Daytime 0630h - 2000h	2mm/s PPV	5mm/s PPV
All other buildings	Building Foundation	Vibration - transient [including blasting]	5mm/s PPV	BS 5228-2 Table B.2
		Vibration - continuous		BS 5228-2 50% of Table B.2 values

Notes:

Measurements of construction vibration shall be undertaken in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures.

* For vibration, Protected Premises and Facilities (PPFs) are dwellings, educational facilities, boarding houses, homes for the elderly and retirement villages, marae, hospitals that contain in-house patient facilities and buildings used as temporary accommodation (eg motels and hotels).

Construction Noise and Vibration Management Plan

28. The Requiring Authority shall prepare a Construction Noise and Vibration Management Plan (CNVMP), prior to start of Project Works, to provide a framework for the development, identification, and implementation of the Best Practicable Option for the management and mitigation of all construction noise and vibration effects. The CNVMP shall set out how compliance with the construction noise and vibration criteria in Conditions 26 to 27A will be achieved, to the extent practicable. The CNVMP shall be prepared in accordance with NZS 6803, Annex E2, and the NZ Transport Agency’s State highway construction and maintenance noise and vibration guide (version 1.1, 2019), and shall address the process required to review and

update the CNVMP. The CNVMP shall also include methods to minimise significant intermittent noise and vibration event effects on farm animals by:

- notifying farm operators in advance of a blasting programme or other significant noise and vibration event in the vicinity of farm animals; and
- minimising the use of horns and sirens in the vicinity of farm animals.

The term 'noise' in NZS 6803, Annex 2 shall be interpreted as 'noise and vibration'.

The CNVMP shall be prepared by a Suitably Qualified and Experienced Person and implemented for the duration of the Project Works.

29. If during Project Works noise or vibration levels from Project Works are predicted or measured to exceed the noise criteria in Condition 26 or the Category A vibration criteria in Condition 27, then a Suitably Qualified and Experienced Person shall be engaged to identify specific Best Practicable Option measures to manage the effects of the specific construction activity. The measures shall be added as a Schedule to the CNVMP and implemented by the Requiring Authority for the duration of the relevant works.

Where practicable, the Schedules shall be provided to the Manager for information within five Days before the specific construction activity is undertaken.

30. If prior to or during Project Works vibration levels from Project Works are predicted or measured to exceed the Category B criteria in Condition 27, then the relevant works shall not commence or proceed until a Suitably Qualified and Experienced Person has undertaken a building condition survey (provided the owner and/or occupier has agreed to such survey), and identified specific Best Practicable Option measures to manage the effects of vibration.

The measures shall be added as a Schedule to the CNVMP and implemented by the Requiring Authority for the duration of the relevant works. The Schedule shall, as a minimum, contain the information set out in Condition 29 and the findings of the building pre-condition survey.

Where practicable, the Schedules shall be provided to the Manager for information within five Days before the specific construction activity is undertaken.

Vibration monitoring shall be undertaken and continue throughout the works covered by the Schedule. Following completion of the activity, a building condition survey shall be undertaken to determine if any damage has occurred as a result of construction vibration, and any such damage shall be repaired by the Requiring Authority.

- 30A. The Requiring Authority shall not locate any site office or construction yards that are to be established and used for longer than 12 months, within 200 metres of any PPFs.

Construction Traffic

General construction traffic management

31. Kraack Road shall not be used as a haulage route for Heavy Vehicles between State Highway 1 and Saunders Road.
32. Construction Works shall be managed to enable pedestrian access along Te Araroa Walkway where feasible and practicable to do so and where the health and safety of users can be maintained.
33. Any damage to a local road at a construction site access point, which is verified by a Suitably Qualified and Experienced Person as being directly attributable to Heavy Vehicles entering or exiting the construction site at that location, shall be repaired within two weeks or within an alternative timeframe to be agreed with Auckland Transport. All repairs shall be undertaken in accordance with the Auckland Transport's Transport Design Manual, or any subsequent version.

Construction Traffic Management Plan

34. The Requiring Authority shall manage construction traffic and construction parking to:
 - a. Protect public safety including the safe passage of pedestrians, equestrians and cyclists;
 - b. Minimise delays to road users, particularly during peak traffic periods;
 - c. Minimise interruption to property access;
 - d. Inform the public about any potential impacts on the road network;
 - e. Enable 24 hour emergency access to lifeline utilities; and
 - f. Enable access to Watercare's Wastewater Treatment Plant (Lot 3 DP64870), Water Treatment Facility (362 Wayby Valley Road) and planned water treatment facility (487 Wayby Valley Road) at reasonable times.
35. The Requiring Authority shall prepare a Construction Traffic Management Plan (CTMP) prior to the start of Construction Works for the Project to identify how Condition 34 will be met. The CTMP shall be prepared by a Suitably Qualified and Experienced Person and shall include the following:
 - a. Methods that will be undertaken to communicate traffic management measures to affected road users (residents/public/stakeholders/emergency services);
 - b. Identification of traffic management activities and sequencing proposed for the Project, including a staff travel plan, site access routes and site access points for Heavy Vehicles;
 - c. Methods for managing traffic effects, including through Temporary Traffic Management activities (TTM); including:
 - i. Methods to provide for safe and efficient access of construction vehicles to and from construction sites, including consideration of capacity for queuing vehicles, restrictions on turning movements and sight distances;
 - ii. Methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
 - iii. Methods to minimise the effects of TTM activities on traffic;

- iv. Methods to maintain local access during Project Works, where practicable, in particular during the realignment of or connection to local roads;
 - v. Methods to maintain access, turnaround locations and set down areas for bus routes (including school buses) where practicable;
 - vi. Methods for temporary road closures, with road closures to be carried out at times of lowest traffic, at night if practicable;
 - vii. Methods to identify how impacts on the road network from construction related light vehicle movements will be managed during peak traffic periods; and
 - viii. Methods to identify how impacts from construction related Heavy Vehicle movements on traffic flow and level of service of the road network will be managed;
 - ix. Methods to manage noise from Heavy Vehicles including effective noise suppression devices for engine brakes and planning routes, speeds and times; and
- d. Auditing, monitoring and reporting requirements relating to TTM activities in accordance with the requirements of NZ Transport Agency Code of Practice for Temporary Traffic Management (COPTTM).
36. The Suitably Qualified and Experienced Person shall prepare the CTMP based on traffic volumes and movements and the transport network that is in place immediately prior to the start of Construction Works and shall take into account any other transport works that are planned to occur during the Construction Works.
37. In preparing the CTMP, the Requiring Authority shall consult with Auckland Transport, and the owner of the commercial plantation forest (Mahurangi Forest) located west of SH1 with respect to access and traffic management activities which directly interface with forestry operations. If the Requiring Authority has not received any written comment from Auckland Transport or the owner of the Mahurangi Forest within 20 days of providing the CTMP to them, the Requiring Authority may consider the relevant party has no comments.

Site Specific Traffic Management Plans

38. The Requiring Authority shall prepare a Site Specific Traffic Management Plan (SSTMP) or Plans where any Construction Works vary the normal traffic conditions of any public road. The SSTMP shall be prepared prior to using that road and prior to start of the relevant Construction Works. The purpose of the SSTMP(s) is to identify specific construction methods to comply with the CTMP and to address the particular circumstances, local traffic and community travel demands within the area covered by the SSTMP.
39. The SSTMP(s) shall be prepared by a Suitably Qualified and Experienced Person and shall comply with the version of COPTTM which applies at the time the relevant SSTMP is prepared. Where it is not possible to adhere to this Code, the Requiring Authority shall apply COPTTM's prescribed Engineering Exception Decision (EED) process.
40. In preparing the SSTMP, the Requiring Authority shall consult with Auckland Transport where the Construction Works interfaces with the local road network.

If the Requiring Authority has not received any comment from Auckland Transport within 20 Days of providing the SSTMP to them, the Requiring Authority may consider Auckland Transport has no comments and proceed to lodge the SSTMP in accordance with Table 1.

Enabling Works Construction Traffic Management Plan

41. Where Enabling Works are to be undertaken, the Requiring Authority shall prepare an activity specific Enabling Works Construction Traffic Management Plan (EWCTMP) prior to the start of the relevant Enabling Works. The EWCTMP shall be prepared by a Suitably Qualified and Experienced Person and shall provide a similar scope of information as for a CTMP but shall be commensurate with the scale and effects of the proposed Enabling Works.
42. In preparing the EWCTMP, the Requiring Authority shall consult with Auckland Transport where the Project construction activity interfaces with the local road network. If the Requiring Authority has not received any comment from Auckland Transport within 20 Days of providing the EWCTMP to them, it may proceed to lodge the EWCTMP in accordance with Table 1.

Urban and Landscape Design

Urban and Landscape Design Framework

43. The Requiring Authority shall prepare an Urban and Landscape Design Framework (ULDF) prior to the start of Construction Works. The purpose of the ULDF is to:
 - a. Set the framework for integration of the permanent Project Works into the surrounding landscape and topography, and built environment, having regard to the local landscape and character and contexts along the Project route;
 - b. inform development of the Urban and Landscape Design Management Plan(s) (ULDMP(s)); and
 - c. support the achievement of the Ecological Outcomes in Condition 54C of the resource consents, by combining landscape planting, restoration planting and habitat rehabilitation where practicable.
44. The ULDF shall be prepared by a Suitably Qualified and Experienced Person having regard to the:
 - a. Planning Version ULDF (2019) (submitted with the Notice of Requirement);
 - b. NZ Transport Agency Bridging the Gap NZTA Urban Design Guidelines (2013), or any subsequent version;
 - c. NZ Transport Agency Landscape Guidelines (final draft dated 2014), or any subsequent version, and the NZ Transport Agency P39 Standard Specification for Highway Landscape Treatments (2013), or any subsequent version;
 - d. the ULDF for Ara Tūhono Puhoi to Warkworth section of SH1;
 - e. Landscape mitigation planting and screen planting shown on Maps 1 – 6;
 - f. Te Aranga Principles, Auckland Design Manual (2013), or any subsequent version;
 - g. Cultural Engagement Plan; and
 - h. the Ecological Outcomes required by Condition 54C of the Resource Consent.

45. The ULDF shall:
- a. Confirm the overall key design principles and sector outcomes for the Project, as set out in the descriptions of those principles and outcomes in the Planning Version of the ULDF (2019);
 - b. Identify individual urban and landscape design sectors within the Project area;
 - c. Identify highly sensitive locations, which may include properties in close proximity to the Designation, requiring particular urban and landscape design treatment; and
 - d. Identify opportunities to integrate landscape planting under a ULDMP with restoration planting and habitat rehabilitation or other planting required for the Project.
46. The Requiring Authority shall prepare the ULDF in engagement with Mana Whenua and in consultation with:
- a. Auckland Council;
 - b. Rodney Local Board;
 - c. Auckland Transport for areas within and adjoining local roads; and
 - d. HNZPT for areas next to identified heritage sites.
47. The ULDF shall include a summary of the consultation undertaken and shall document how input from the parties listed in Condition 46 has or has not been incorporated in the ULDF or supporting information. If the Requiring Authority has not received any comment from such parties within 20 Days of providing the ULDF to them, the Requiring Authority may consider the relevant party has no comment.

Urban and Landscape Design Management Plan(s)

48. The Requiring Authority shall prepare an Urban and Landscape Design Management Plan (ULDMP) for each individual urban and landscape design sector within the Project area, in engagement with Mana Whenua, prior to the start of Construction Works within each sector. The purpose of the ULDMP(s) is to identify, how for the relevant sector:
- a. the key design principles and sector outcomes identified in the ULDF will be met by the permanent Project Works;
 - b. the landscape and visual requirements (Conditions 49 to 50) have been incorporated; and
 - c. landscape planting is to be integrated with restoration planting and habitat rehabilitation or other planting required for the Project.
49. The ULDMP(s) shall be prepared by a Suitably Qualified and Experienced Person and shall include the following details for the sector to which the plan applies:
- a. A plan describing and illustrating the overall landscape and urban design concept and rationale.
 - b. Detailed design drawings of the landscape and urban design features, including the following:
 - i. Road design including elements such as earthworks contouring including cut and fill batters to integrate with adjacent landform, benching (to be

- avoided if practicable), treatment of rock cuts, and spoil disposal sites; median width and treatment; borrow pits/areas; roadside width and treatment.
- ii. Appropriate surface treatment of cut slopes such as grassing, revegetation or leaving an exposed rock face.
 - iii. Roadside elements including elements such as lighting, sign gantries and signage, guard rails, fences, central and median barriers etc.
 - iv. Urban design and landscape treatment of:
 - a. all major structures, including viaducts, bridges and associated infrastructure, retaining walls, ancillary buildings;
 - b. any Structural Mitigation required by Condition 90;
 - c. roadside furniture, such as lighting, sign gantries and signage, guard rails, fences and median barriers; and
 - d. hardscape material, (e.g. rock rip rap, sealed shoulders, kerbs, roundabouts) and interchanges.
 - v. Land use re-instatement.
 - vi. Landscape treatment/rehabilitation of construction yards and haul roads following completion of construction.
 - vii. The integration of landscape planting with restoration planting and habitat rehabilitation or other planting required for the Project (including by resource consent conditions) where applicable, as further specified by Condition 50.
 - viii. Landscape design input to the form of stormwater ponds and swales to assist with landscape integration.
 - ix. Pedestrian and cycle facilities including paths along local roads where these facilities are directly affected by Project Works.
 - x. Features (such as interpretive signage) for identifying and interpreting cultural heritage, built heritage, archaeology, geological heritage and ecology.
 - xi. Noise barriers, and structures, walking and cycling facilities (including bridges, underpasses and associated retaining walls) which are identified in the ULDF as being in highly sensitive locations.
 - xii. The design of the tunnel portals, which shall be integrated with the adjacent landform through the use of sloping portal structures and revegetation works. Any ancillary structures associated with the tunnels shall be located and designed so they are recessive in form and colour.
 - xiii. Context-sensitive landscape design and planting at Interchanges to create a local gateway, wayfinding and promote a sense of place that reflects the destination accessed via the interchange.
 - xiv. New planting or other measures where practicable to provide visual screening of the permanent Project Works from dwellings with direct line of sight to the Project, in particular from the following properties:
 - (i) 111 Kaipara Flats Road
 - (ii) 211 Kaipara Flats Road
 - (iii) 214 Kaipara Flats Road
 - (iv) 215 Kaipara Flats Road
 - (v) 542 SH1
 - (vi) 250 Silver Hill Road

- (vii) 263 Silver Hill Road
 - (viii) 199 Shepherd Road
 - xv. Design and landscape features to acknowledge cultural values relating to landscape design identified through the Cultural Engagement Plan.
 - xvi. Design and landscape features to acknowledge the recommendations of the Cultural Artworks Plan (if prepared), where feasible and practicable to do so.
 - c. Environmental design measures to support crime prevention (CPTED or superseding industry standard) principles.
- 49A. Prior to the completion of the relevant ULDMP, the Requiring Authority shall provide drafts of the detailed design drawings required by Condition 49(b)(xiv) to the current landowner(s) of the properties identified in that condition and invite their feedback on the new planting or other screening measures proposed for their property. The Requiring Authority shall consider any feedback received when preparing the relevant ULDMP. If the Requiring Authority has not received any feedback within 20 days of the detailed design drawings being provided, the Requiring Authority may assume that no feedback is to be provided.
- The final ULDMP shall be submitted with a report describing how any feedback has been considered when preparing the relevant ULDMP and how any input from the landowner(s) of the properties has or has not been incorporated in the ULDMP.
- 49B. Within 10 days of the relevant ULDMP being confirmed, the Requiring Authority shall provide a copy of any final ULDMP that addresses visual screening for the properties listed in Condition 49(b)(xiv) to the current landowner(s) of those properties including:
- a) information as to how the landscape mitigation and screen planting in Maps 1 - 6 and their feedback has been given regard to and (if relevant) why visual screening was not practicable, and
 - b) A copy of the report describing how the feedback has or has not been incorporated in the ULDMP.
- 49C. In addition to the requirements of Condition 49(b)(xiv), prior to the commencement of Construction Works the Requiring Authority shall provide and plant a 15m wide planting area along the western boundary of the blue hatched area shown on the map at Attachment A for the purpose of providing visual screening of the permanent Project Works for the property at 39 Phillips Road (Lot 1 DP 103533). The Requiring Authority shall not undertake any Project Works (except for the planting and related activities) within the blue hatched area shown on the map at Attachment A.
- 49D. The Requiring Authority shall procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the planting required by Condition 49C is protected on an ongoing basis prior to any transfer of ownership/tenure from the Crown.
50. The ULDMP(s) shall include the following planting and vegetation management details:
- a) Planting design details, including:
 - i. Identification of vegetation to be retained.
 - ii. Proposed planting suitable to site conditions including plant species

- (including consideration of native bird food sources), mixes (canopy succession species), spacing/densities and sizes (at the time of planting), and layout and planting methods including trials. All proposed planting shall be native species, except for visual screen planting which may include exotic species. A minimum 1% of planting shall be of Threatened Species.
- iii. Details of the sourcing of native plants including genetic sourcing of native plants from the Rodney Ecological District.
 - iv. Retention of existing shelter belts and indigenous trees within the Designation, where practicable, to screen direct line of sight of the permanent Project Works from adjacent properties.
- b) A planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of the Project.
- c) Detailed specifications relating to the following:
- i. Weed control and clearance;
 - ii. Pest animal management;
 - iii. Ground preparation (top soiling and decompaction);
 - iv. Mulching; and
 - v. Plant sourcing and planting, including hydroseeding and grassing.
- d) The relevant requirements of the NZ Transport Agency P39 Standard Specification for Highway Landscape Treatments (2013), or any subsequent version, and performance standards including a five-year maintenance plan/schedule that requires any unsuccessful planting to be replaced within that five-year period unless canopy closure is achieved as determined by a Suitably Qualified and Experienced Person.

Landscape and visual requirements – construction activities

51. Construction yards shall be located at least 200 m from any dwelling which has a view of the construction yard.
52. Temporary haul roads and access roads shall be rehabilitated as soon as reasonably practicable following completion of construction.

Compliance with the Electricity (Hazards from Trees) Regulations 2003

53. Areas of landscape planting (trees and vegetation) shall be designed to enable compliance with the Electricity (Hazards from Trees) Regulations 2003. Any new landscaping within 12m of the centre line of the HEN-MPE-A transmission line conductors shall be limited to species that grow to a maximum of 2m in height at full maturity.

Conditions 54-77 are intentionally left blank

Historic Heritage and Archaeology

78. The Requiring Authority shall design and implement the Project Works to achieve the following Heritage Outcomes:
- a. Avoid adverse effects on historic heritage sites and places as far as practicable;

- b. Where avoidance of adverse effects is not practicable, minimise adverse effects on historic heritage sites and places as far as practicable;
- c. Where avoidance of adverse effects is not practicable, investigate and record all historic heritage sites and places (pre and post 1900) within the Designation; and
- d. Positive historic heritage outcomes

Historic Heritage Management Plan

79. The Requiring Authority shall prepare a Historic Heritage Management Plan (HHMP) prior to the start of Project Works, in engagement with Mana Whenua and in consultation with HNZPT and Auckland Council. The purpose of the HHMP is to identify indirect and direct adverse effects on historic heritage sites and appropriate methods to avoid, remedy and mitigate them. The HHMP shall set out the methods to achieve the Heritage Outcomes. The HHMP shall be provided to the Manager (in consultation with the Manager: Heritage Unit) for certification.

79A. The HHMP shall be prepared with up to date information. This additional information shall be provided to council prior to the lodgement of the HHMP to streamline the certification process. This includes:

- a. Any archaeological assessments, heritage impact assessments, granted authorities, final archaeological reports and updated site record forms (CHI and NZAA ArchSite) prepared/submitted since time of the granting of any designation;
- b. Cultural Indicators Report; and
- c. Additional areas of survey and investigation undertaken as part of the Project.

79B. Further assessment of built heritage shall include (but not be limited to):

- a. 156 Kaipara Flats Road, Dome Valley
- b. 35 Borrows Road, Waiteitei
- c. 30 Robertson Road, Wayby Valley
- d. 159 Whangaripo Valley Road, Wellsford
- e. 199 Rustybrook Road, Wayby Valley
- f. 200 Rustybrook Road, Wayby Valley

79C. If Phillips Cottage (156 Kaipara Flats Road, Dome Valley) cannot be avoided at the detailed design stage, then:

- a. in the first instance the cottage structure must be relocated within its local area of significance.
- b. if this can be demonstrated not to be practicable then the structure must be relocated within the wider area of significance, including offering the place to the Warkworth Museum.
- c. if all relocation options can be shown to have been exhausted, only then should the building be demolished and recorded to Level II per HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (November 2018) or any subsequent version.

- d. Auckland Council shall be advised in writing at least 10 Days prior to the cottage's relocation or demolition, with accompanying records demonstrating compliance with (a)-(c) above and Condition 81(h).
80. The HHMP shall be consistent with the conditions of any Archaeological Authority granted by HNZPT for the Project.
81. The HHMP shall be prepared by a Suitably Qualified and Experienced Person and shall identify and include:
- a. Any adverse direct and indirect effects on historic heritage sites and measures to appropriately avoid, remedy or mitigate any such effects;
 - b. Methods and areas for the identification and assessment of potential historic heritage sites and values within the Designation to inform detailed design;
 - c. Known historic heritage sites and places and areas of historic heritage potential within the Designation;
 - d. Any pre-1900 archaeological sites or areas of archaeological potential for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
 - e. Any historic heritage sites within the Designation to be avoided, relocated, documented and recorded;
 - f. Roles, responsibilities and contact details of Project personnel, Mana Whenua representatives, and relevant agencies involved with historic heritage and archaeological matters including surveys, documentation and recording, monitoring of Project Works, Accidental Discovery Protocols, and monitoring of conditions;
 - g. Specific areas to be investigated, monitored and recorded to the extent these are directly affected by Project Works;
 - h. The proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the preferred methodology, in accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (November 2018), or any subsequent version and the International Council on Monuments and Sites (ICOMOS) New Zealand Charter 2010 or any subsequent versions;
 - i. Proposed methodology for documentation of historic heritage exposed during construction and the recording of these sites in the Auckland Council Cultural Heritage Inventory (www.chi.net/Home.aspx).
 - j. Methods to acknowledge cultural values identified through the Cultural Engagement Plan where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;
 - k. Methods for protecting or minimising adverse effects on historic heritage and archaeological sites within the Designation during Project Works as far as practicable in line with the ICOMOS NZ Charter and including construction methods that minimise vibration (for example fencing around historic heritage and archaeological sites to protect them from damage during construction);

- l. Training requirements for contractors and subcontractors on historic heritage sites within the Designation, legal requirements relating to accidental discoveries, and implementing the Accidental Discovery Protocol. The training shall be undertaken under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under the Cultural Engagement Plan and shall include a pre-construction briefing to contractors;
- m. How Conditions 81(a)-(j) address the following sites:
 - i. Woodthorpe House (CHI 22114, R09/2064);
 - ii. Dome Valley teacher's residence (CHI 22119, R09/2226);
 - iii. Dome Valley school site (CHI 22118, R09/2225);
 - iv. Phillips' Cottage (CHI 19027, R09/2063);
 - v. Whitson's House and Stockyard (CHI 22117, R09/2224); and
 - vi. World War II military camps (various) in the Warkworth area.
- n. Construction and post-construction reporting requirements; and
- o. Measures to mitigate adverse effects on historic heritage that achieve positive heritage outcomes. Measures may include, but not be limited to: increased public awareness and amenity of historic heritage sites and places, interpretation, repatriation and donation of historic heritage material to suitable repositories and publication of heritage stories.

Accidental discovery during construction

- 82. Prior to the start of Project Works, the Requiring Authority shall prepare an accidental discovery protocol for any accidental historic heritage discoveries which occur during Project Works.
- 83. The accidental discovery protocol shall be consistent with the NZ Transport Agency Minimum Standard P45 Accidental Archaeological Discovery Specification, or any subsequent version and the Auckland Unitary Plan Accidental Discovery Rule (E11 Land disturbance Regional – E11.6.1).
- 84. The accidental discovery protocol shall be prepared in engagement with Mana Whenua and consultation with Auckland Council and HNZPT and modified as necessary to reflect the site-specific Project detail. The Requiring Authority shall undertake engagement and consultation for a period of not less than 30 Days.
- 85. The Accidental Discovery Protocol shall be implemented throughout the Project Works.
- 85A. Electronic copies of all historic heritage reports relating to historic heritage investigations (evaluation, excavation and monitoring etc.), including interim reports, shall be submitted to the Manager (in consultation with the Manager: Heritage Unit) within 12 months of being produced.
- 85B. The Suitably Qualified and Experienced Person shall record and log any heritage discovery and on-going compliance with the conditions of this Designation. This log shall be provided to the Manager (in consultation with the Manager: Heritage Unit) quarterly.

85C. In the event that any unrecorded historic heritage sites are exposed as a result of the work, these shall be recorded and documented by a Suitably Qualified and Experienced Person for inclusion within the Auckland Council Cultural Heritage Inventory (CHI). The information and documentation shall be forwarded to the Team Manager: Heritage Unit (heritageconsents@aucklandcouncil.govt.nz) or other address nominated by the Manager within twelve months of the works being completed on site.

Air quality

86. There shall be no noxious, dangerous, objectionable or offensive dust, fumes or odour to the extent that it causes an adverse effect at or beyond the Designation boundary.
87. The Requiring Authority shall prepare a Construction Air Quality Management Plan (CAQMP) to outline the measures to be adopted to meet Condition 86. The CAQMP shall be prepared by a Suitably Qualified and Experienced Person and shall include:
- a. A description of the works, and periods of time when emissions of odour, dust or fumes might arise from Construction Works;
 - b. Identification of HSRs that may be adversely affected by emissions of odour, dust or fumes from Construction Works;
 - c. Methods for mitigating dust that may arise from:
 - i. exposed surfaces, vehicle movements and truck loads, potentially including watering for dust suppression, wind fencing, metalling of yards and access roads, minimising open earthwork areas, re-vegetation, controlling vehicle speeds, covering or dampening loads and limiting drop heights, and limiting earthworks during high winds.
 - ii. dust trackout from construction site exits onto sealed roads, potentially including the use of vacuum sweeping, water sprays or wheel washes for trucks;
 - iii. construction traffic on unsealed roads, including consideration of sealing the sections of any road that is 50m of a HSR;
 - iv. earthworks and rock crushing, potentially including minimum setbacks from HSRs where necessary, emissions control equipment (e.g. enclosure and/or water sprays at transfer points), and monitoring of weather conditions and visual inspections; and
 - d. Methods for maintaining and operating construction equipment and vehicles to manage visual emissions of smoke from exhaust tailpipes;
 - e. Methods for undertaking and reporting on the results of daily inspections of Construction Works that might give rise to odour, dust or fumes;
 - f. Methods for monitoring and reporting on the state of air quality during Construction Works, including wind speed, wind direction, air temperature and rainfall;
 - fa. Methods for limiting the effects of dust on the Kourawhero Wetland Complex;
 - g. Methods to remediate adverse dust deposits from Construction Works on HSRs, potentially including cleaning exterior surfaces of houses or driveways and/or cleaning of water tanks and replenishment of water supplies;
 - h. Site specific methods for managing potential dust effects on HSRs within 50 metres of dust generating activities;

- i. Procedures for maintaining contact with stakeholders and notifying of proposed construction activities, with reference to the SECMP, including complaints procedures;
 - j. Methods to review and update the CAQMP to add further measures such as ambient air boundary dust measuring and associated trigger levels, where improvements to practices are necessary to achieve Condition 86;
 - k. Construction operator training procedures;
 - l. Consideration of portable Total Suspended Particle measurement devices and associated levels; and
 - m. Contact details of the site supervisor or Project manager and the Project Liaison Person (telephone number and email or other contact address).
88. When preparing the CAQMP the Suitably Qualified and Experienced Person shall have regard to the guidance contained in the Good Practice Guide for Assessing and Managing Dust, Ministry for Environment, 2016, or any subsequent version and the NZ Transport Agency Guide to assessing air quality impacts from state highway projects (version 2.3, October 2019), or any subsequent version.
- 88A. At intervals of no less than three (3) months during the period of Construction Works, the Requiring Authority shall offer by mail or email to the landowners and occupiers (if different) of any occupied dwellings:
- i. Located on the following properties:
 - a) 111 Kaipara Flats Road;
 - b) 211 Kaipara Flats Road
 - c) 214 Kaipara Flats Road;
 - d) 215 Kaipara Flats Road;
 - e) 39 Phillips Road;
 - f) 253 Worthington Road;
 - g) 259 Worthington Road;
 - h) 263 Worthington Road;
 - i) 542 SH1;
 - j) 250 Silver Hill Road;
- or
- ii. Within 200 metres of the Designation boundary on any other property.
- to:
- iii. Fill any potable water tanks on the property, up to a maximum of 30,000 litres per property every three (3) months; and
 - iv. Conduct exterior house and window soft washing, (every three (3) months), with non-toxic washing liquid to remove visible dust arising from the Construction Works.

- 88B. Where a property owner/occupier has accepted the offer of potable water under Condition 88A(iii), the Requiring Authority shall offer to temporarily disconnect from roof collection the relevant potable water tanks on the property (and divert the rainwater flow to a tank overflow system or a suitable alternative drainage path), and internally clean any such tank before delivering the first load of potable water. At the end of Construction Works within 500m of the relevant property, the Requiring Authority shall reconnect the water tank to roof collection.
- 88C. The Requiring Authority shall offer by mail or email to the persons referred to in Condition 88A(i) and (ii) to conduct a soft wash with a non-toxic washing liquid of any surface used to collect potable water on the properties referred to in Condition 88A(i) and (ii), at the conclusion of Construction Works within 500m of the relevant property.
- 88D. If the Requiring Authority has not received a response from a landowner or occupier identified in Condition 88A(i) or (ii) within 20 Days of making an offer under Condition 88A or Condition 88C, that landowner or occupier will be deemed to have rejected the offer. The Requiring Authority shall undertake the activities under Conditions 88A, 88B or 88C within 30 Days of obtaining agreement, subject to access being provided.
- 88E. The Requiring Authority shall keep a record of all offers made under Conditions 88A, 88B or 88C, any response from the property owner/occupier, and a note as to whether the offer was taken up.

Physical connection between 109 Kaipara Flats Road (ROT 764798) and 141 Carran Road (ROT 758198) (*Augier condition*)

- 88F. Unless one of the circumstances in condition 88G applies, the Requiring Authority will, provide a physical connection between the Northern Civil Land and the Southern Civil Land (either via the Existing Underpass or an alternative physical connection). The design of any new physical connection shall be determined by a Suitably Qualified and Experienced Person:
- i. on the basis of a farming use of the same or similar nature as at 9 November 2023 (generally including grazing animals) and considering the land area that will be available for farming of the Northern Civil Land and the Southern Civil Land; and
 - ii. having regard to consultation with the Civil Landholding Owners or their appointed representatives as to the proposed physical connection (such consultation to be undertaken over a period of no less than 40 working days by the Requiring Authority during the detailed design phase of the Project). The Requiring Authority shall summarise in the Outline Plan(s) prepared for the Project all consultation undertaken under this condition, the physical connection options considered, and whether the Civil Landholding Owners' feedback has been incorporated into the final detailed design and if not, the reasons for that.

The completed physical connection shall be made available to the Civil

Landholding Owners when the Project becomes operational unless the Requiring Authority determines it is able to provide the completed connection earlier.

88G. The Requiring Authority is not required to provide the physical connection in 88F if at any time up to the date the Project becomes operational:

- i. The Northern Civil Land and/or the Southern Civil Land are not owned by the Civil Landholding Owners; or
- ii. The Northern Civil Land and/or the Southern Civil Land will not be owned by the Civil Landholding Owners once the Project becomes operational; or
- iii. The Civil Landholding Owners have or intend to cease farming activity on the Northern Civil Land or the Southern Civil Land (as evidenced by written notice from the Civil Landholding Owners to the Requiring Authority); or
- iv. The Requiring Authority determines not to provide a physical connection between the Northern Civil Land and the Southern Civil Land and the Public Works Act 1981 process has been commenced or concluded by the Crown and the loss of the connection will be or has been taken into consideration as potential injurious affection; or
- v. The Requiring Authority has made reasonable attempts over a 40 working day period to consult with the Civil Landholding Owners under condition 88F(ii), and has been unable to receive feedback on the preferred connection; or
- vi. The Southern Civil Land has an Urban Zoning.

88H. Where the Requiring Authority considers during detailed design that condition 88G applies, it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

88I. Where the Requiring Authority has committed to provide a physical connection under condition 88F, but subsequently one of the criteria in 88G applies before the connection has been completed and made available for use by the Civil Landholding Owners, the Requiring Authority may elect to no longer provide the physical connection and it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

MAINTENANCE AND OPERATIONAL CONDITIONS

Operational Noise

Noise Criteria Categories

89. The Requiring Authority shall design and construct the Project to ensure that the operational State highway achieves the predicted Noise Criteria Categories identified in Table 2 at each of the identified PPFs adopting the Best Practicable Option. Compliance with the Noise Criteria Categories shall be based on a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the Project.

Table 2: Identified PPFs

Address	Noise Criteria Category	Predicted noise level (dBL_{Aeq(24h)})	New or Altered Category (as per NZS 6806)
83 Valerie Close	A	57	New
74 Wyllie Road	A	52	New
12 Wyllie Road	A	57	New
2 Wyllie Road	A	57	New
2 - 2 Wyllie Road	A	57	New
371 Woodcocks Road	B	60	New
372 Woodcocks Road	B	62	New
79 J Viv Davie Martin Drive	A	57	New
79 B Viv Davie Martin Drive	A	57	New
79 K Viv Davie Martin Drive	A	57	New
78 B Viv Davie Martin Drive	A	57	New
79 A Viv Davie Martin Drive	A	57	New
78 B Viv Davie Martin Drive	A	57	New
78 A Viv Davie Martin Drive	A	57	New
78 Viv Davie Martin Drive	A	57	New
115 Kaipara Flats Road	A	52	New
115 - 2 Kaipara Flats Road	A	52	New
130 Kaipara Flats Road	A	56	New
131 Kaipara Flats Road	A	55	New
211 Kaipara Flats Road	A	53	New
214 Kaipara Flats Road	A	51	New
215 Kaipara Flats Road	A	56	New
91 SH1, Warkworth	A	57	Altered
27 SH-1, Warkworth	A	61	Altered
63 SH-1, Warkworth	A	57	Altered
42 SH-1, Warkworth	A	41 (69 from SH1)	Altered
39 Phillips Road	A	51	New
105 SH1, Warkworth	A	57	Altered
102 SH-1, Warkworth	A	60	Altered
104 SH1, Warkworth	A	39 (65 from SH1)	Altered
6 Kaipara Flats Road	A	59	Altered
161 Kraack Road	A	49	New
145 Kraack Road	A	39	New
127 Kraack Road	A	48	New
696a SH-1, Dome Forest	A	64	Altered
696b SH-1, Dome Forest	A	64	Altered
1232A SH-1, Wayby Valley (first floor)	A	54 (55 from SH1)	Altered
1232A SH-1, Wayby Valley (ground floor)	A	54	Altered
25 Wayby Station Road	A	64	Altered
49(a) Wayby Station Road	A	64	Altered

Address	Noise Criteria Category	Predicted noise level(dBL _{Aeq(24h)})	New or Altered Category (as per NZS 6806)
44 Wayby Station Road	A	58	Altered
177 Rustybrook Road	A	53	New
351 Wayby Valley Road	A	53	New
64 Whangaripo Valley Road	A	51	New
96 Whangaripo Valley Road	A	53	New
40 Borrows Road	A	56	New
47 Borrows Road	A	53	New
213 Whangaripo Valley Road	A	53	New
263 Worthington Road	A	47	New
250 Silver Hill Road	A	50	New
263 Silver Hill Road	A	49	New
273 Silver Hill Road	A	48	New
332 Silver Hill Road	A	53	New
344 Silver Hill Road	A	51	New
469 SH-1, Te Hana	A	52	Altered
490 SH-1, Wellsford	B	65	Altered
10 Charis Lane	A	51	Altered
13 Charis Lane	A	54	Altered
8 Charis Lane	A	54	Altered
7 Charis Lane	A	53	Altered
9 Charis Lane	A	55	Altered
6 Charis Lane	A	52	Altered
542 SH-1, Topuni	A	55	Altered
557 SH-1, Wellsford	A	55	Altered
139 Vipond Road	A	56	Altered
129 Vipond Road	A	51	Altered
575 SH-1, Topuni	B	58	New
28 Waimanu Road	A	54	Altered
641 SH-1, Wellsford	A	59	Altered
705 SH-1, Wellsford	C	70	Altered
704 SH-1, Wellsford	C	68	Altered
17 Maeneene Road	A	61	Altered
45 Maeneene Road	A	59	Altered
33 Maeneene Road	A	58	Altered
18 Maeneene Road	A	56	Altered
35 Vipond Road	B	60	New
17 Vipond Road	A	55	New
259 Worthington Road	A	50	New

Implementation of noise mitigation

90. The Requiring Authority shall implement all Structural Mitigation or other noise mitigation identified in the Noise Mitigation Plan (Condition 99) prior to the Project becoming operational, except for the road surfaces identified in Condition 91.

91. The Requiring Authority shall use Porous Asphalt, or another road surface with equivalent or better low-noise generating characteristics, from where the Project connects with the Ara Tūhono Puhoi to Warkworth section of SH1 to the southern portal of the tunnels, and from Dibble Road (a forestry road) to the northern tie-in with the existing SH1 north of Maeneene Road. Such a surface shall be implemented within 12 months following the Project being officially opened to general public traffic.

Building-Modification Mitigation

92. Prior to the start of Construction Works, a Suitably Qualified and Experienced Person shall identify:
- a. Category B PPFs where the predicted sound level increases by more than 3dB as a result of road-traffic noise from the operational Project calculated:
 - i. for PPFs identified as Altered Category in Table 2 and assessed against the Altered Road criteria from the NZS 6806 “do-nothing” level for Altered Roads to the level with all detailed design Structural Mitigation, and
 - ii. for PPFs identified as New Category in Table 2 and assessed against the New Road criteria from the estimated future noise level in the design year without the project to the level with all detailed design Structural Mitigation; and
 - b. Category C PPFs, following implementation of all detailed design Structural Mitigation.
93. The Requiring Authority shall apply the Building Modification Conditions 94 to 98 for any PPF that is identified under Condition 92.
94. If the owner(s) of the PPF agree to entry within 12 months of the date of the request for entry, the Requiring Authority shall engage a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.
95. If the Requiring Authority cannot meet the requirements of Condition 90 because:
- a. The building owner(s) agreed to entry, but entry was not attainable by the Requiring Authority (e.g., entry denied by a tenant); or
 - b. The building owner(s) did not agree to entry within 12 months of the date of the request for entry (including where the owner did not respond within that period); or
 - c. The building owner(s) cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

The Requiring Authority will be deemed to have complied with those conditions and the Requiring Authority shall not be required to implement Building-Modification Mitigation to that building.

96. Within six months of an assessment of a PPF being undertaken in accordance with Condition 92, the Requiring Authority shall give the owner(s) of each PPF written notice advising:
- a. If Building-Modification Mitigation is required to achieve 40 dB LAeq(24h)

- inside Habitable Spaces when windows are open 100mm for ventilation; and
 - b. The options available for Building-Modification Mitigation, if required; and
 - c. That the owner has three months to decide whether to accept Building-Modification Mitigation and to advise which option for Building-Modification Mitigation the owner(s) prefers (if more than one option is available).
97. The Requiring Authority shall implement the Building-Modification Mitigation agreed in accordance with Condition 96, in a reasonable timeframe agreed with the owner.
98. If the Requiring Authority cannot meet the requirements of Conditions 94 and 95 because:
- a. An alternative agreement for mitigation was reached with the building owner(s); or
 - b. The building owner(s) did not accept the offer to implement Building-Modification Mitigation within three months of the date of the written notice being sent (including where the owner did not respond within that period); or
 - c. The building owner(s) cannot, after reasonable enquiry, be found prior to completion of construction of the Project;

then the Requiring Authority will be deemed to have complied with those conditions.

Noise Mitigation Plan

99. Prior to the Project becoming operational, the Requiring Authority shall prepare a Noise Mitigation Plan (NMP) in accordance with the NZ Transport Agency P40 Noise Specification 2014, or any subsequent version and provide it to the Manager for information. The NMP shall be prepared by a Suitably Qualified and Experienced Person and shall include methods and design details that encourage road users to accelerate and brake gradually at the roundabout at the existing SH1/Mangawhai Road intersection to minimise noise at the dwelling at 542 SH1 Topuni.
100. Within 6 months of the low noise road surface being installed under Condition 91, the Requiring Authority shall prepare, a post-construction review report in accordance with the NZ Transport Agency P40 Noise Specification 2014, or any subsequent version, and provide the post-construction review report to the Manager for information.

Maintenance and protection of landscape, mitigation and offset planting and works

101. The Requiring Authority shall maintain all landscape planting (and replace unsuccessful planting) undertaken as part of the Project for a period of 5 years following opening of the Project in accordance with NZTA P39 Standard Specification for Highway Landscape Treatments 2013, or any subsequent version, to ensure its successful establishment.

Lighting

102. Lighting of the new State highway will be limited to safety and operational requirements (e.g., interchanges) and shall comply with AS/NZS 1158:2005: Lighting for roads and public spaces and any subsequent version.

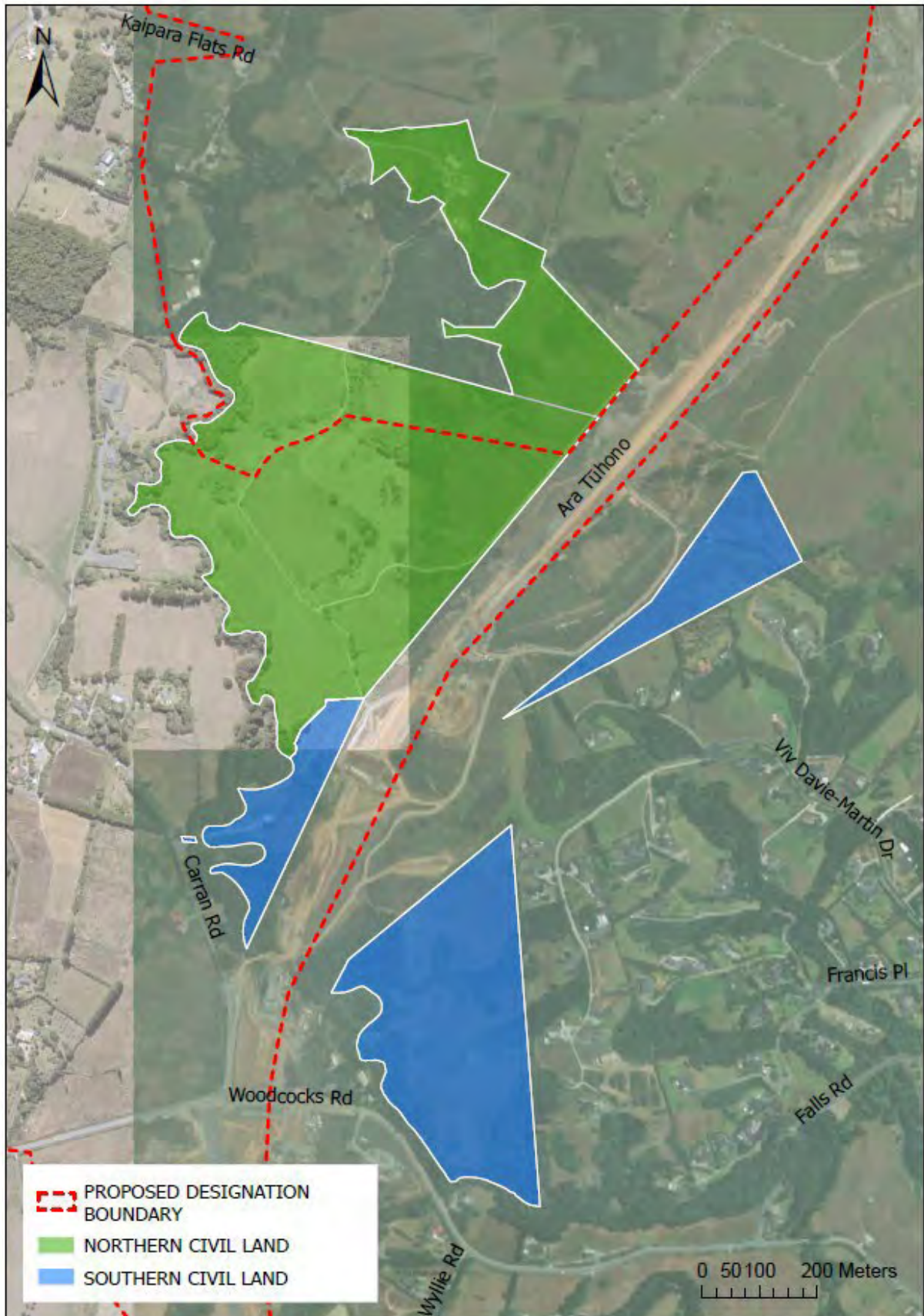
Attachment A



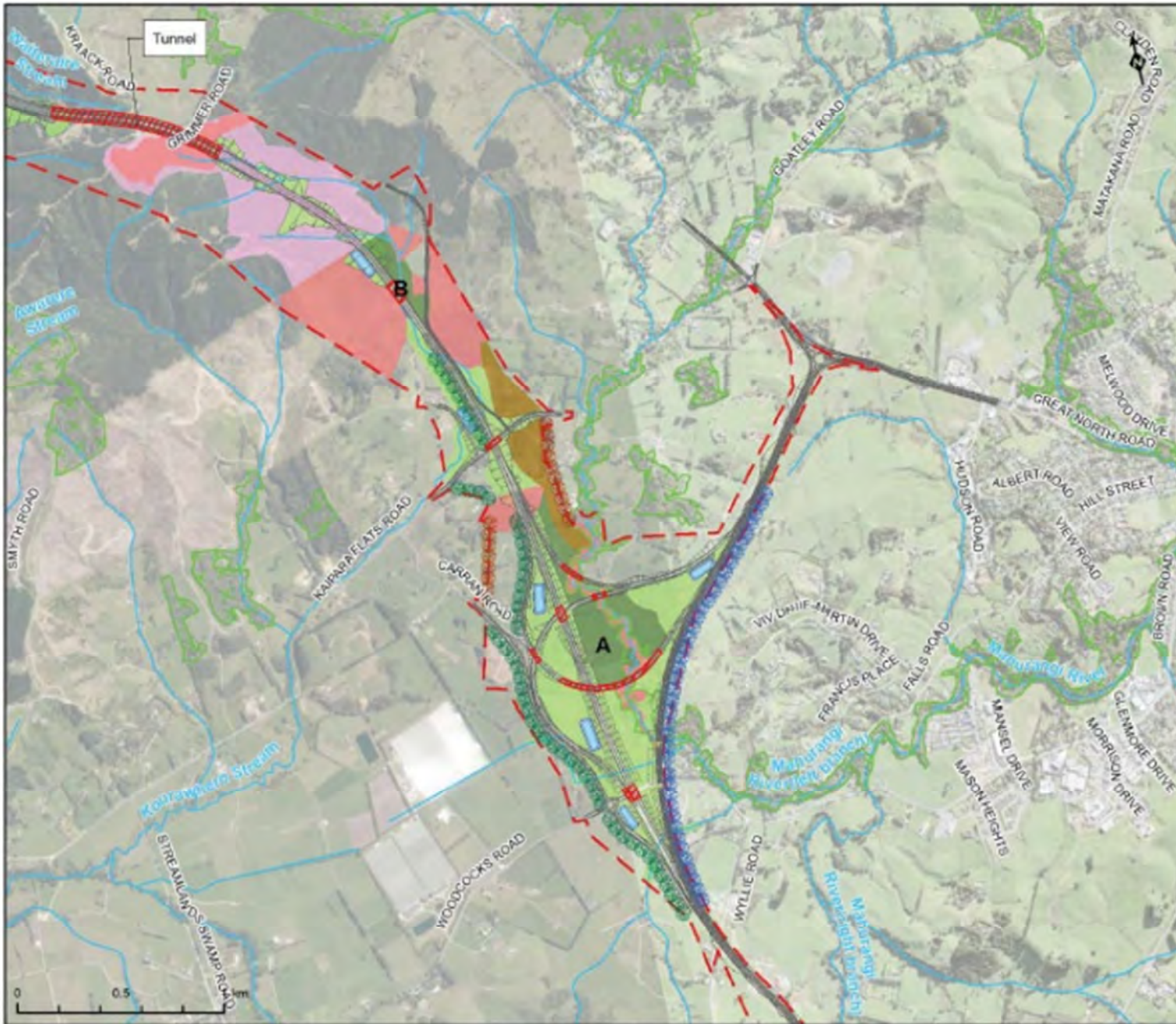
Attachment B – Plan showing existing underpass



Attachment C – Illustrating the Northern and Southern Civil Land

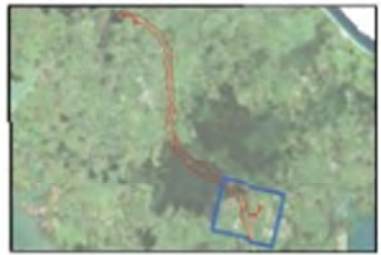


Conditions maps



- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- P2W screen planting
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Fauna habitat and flyway mitigation
- Mitigation for fragmentation
- Significant ecological area - Terrestrial

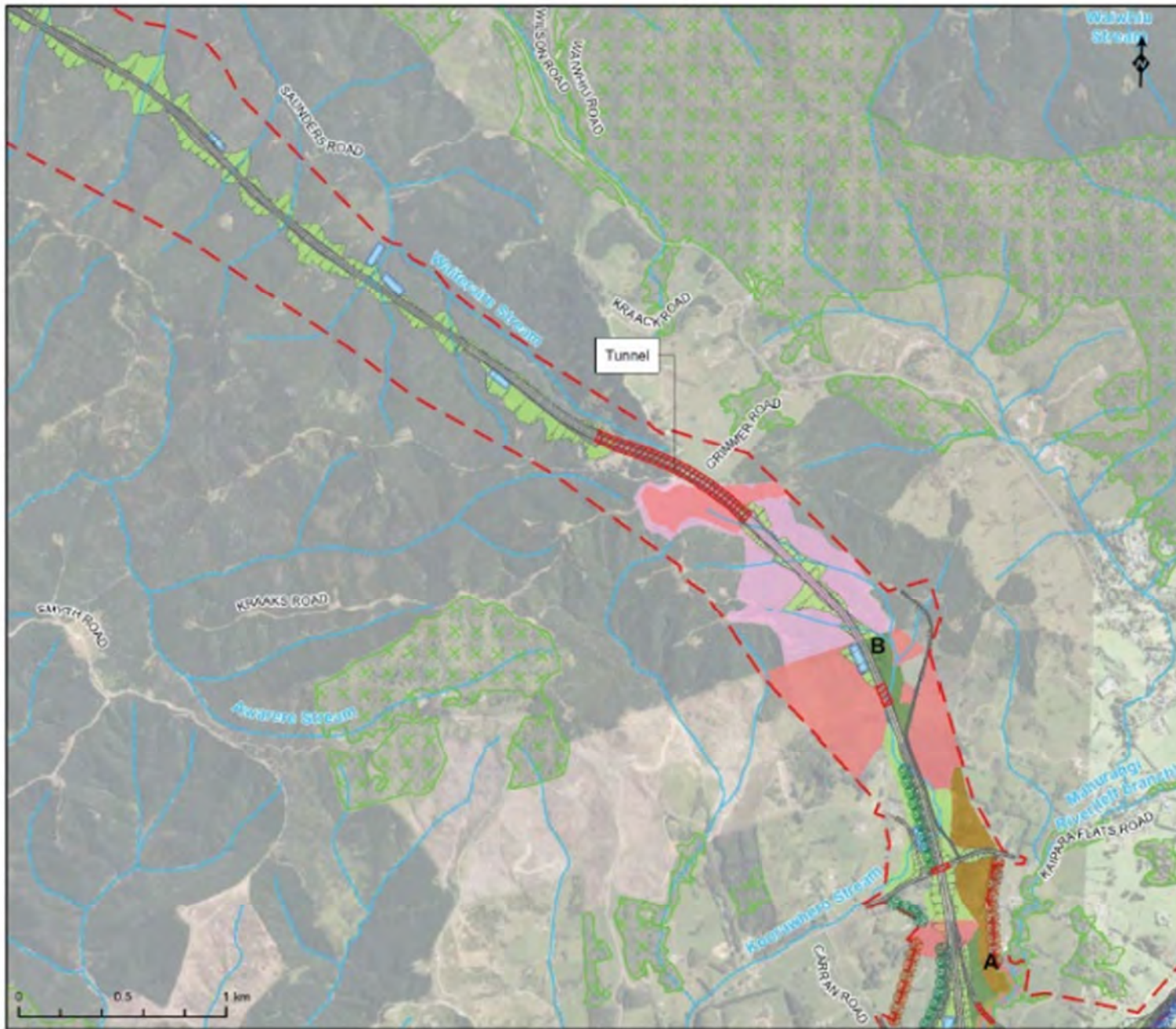
Conditions - Map 1



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- P2W screen planting
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Fauna habitat and flyway mitigation
- Mitigation for fragmentation
- Significant ecological area -Terrestrial

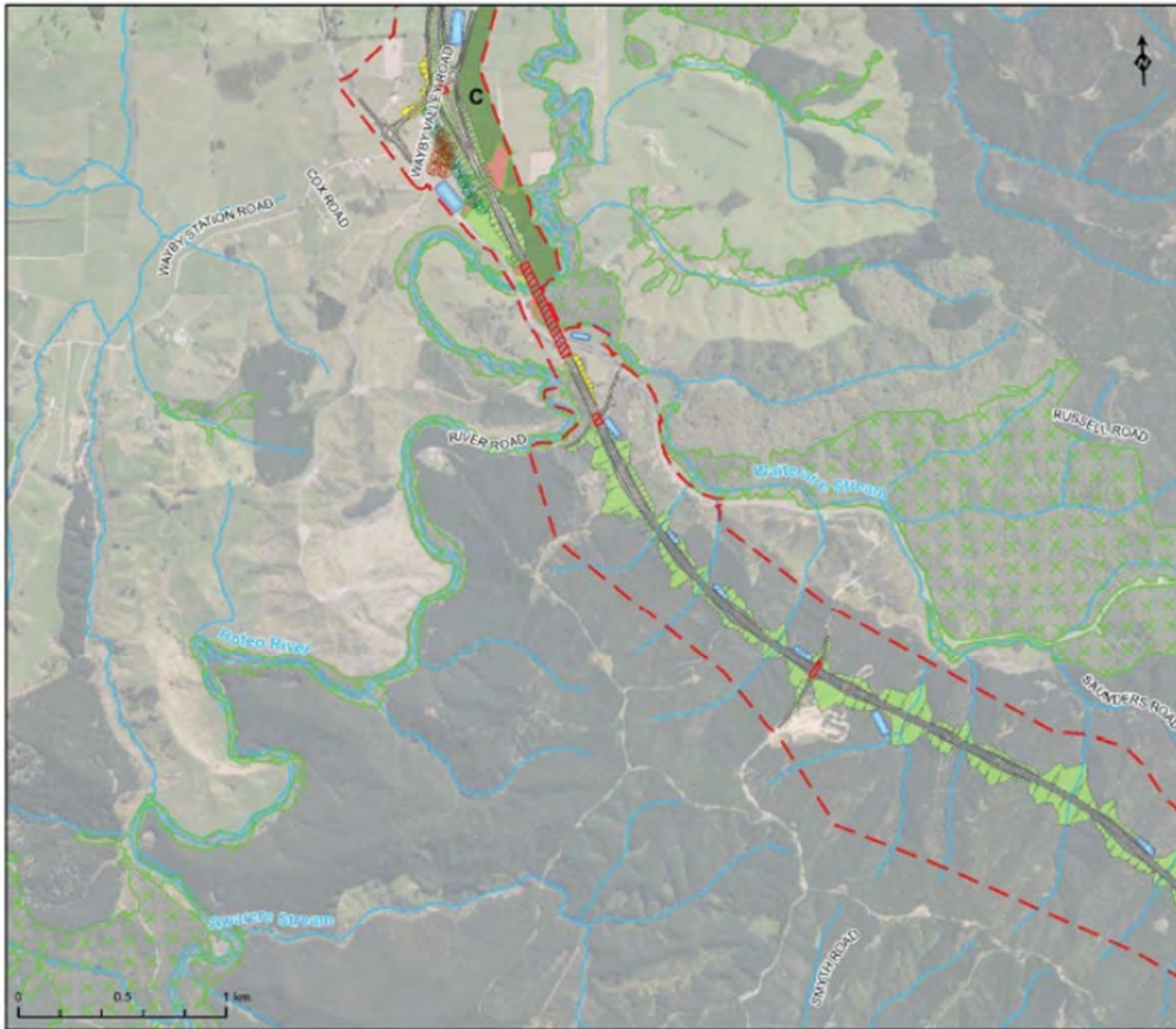
Conditions - Map 2



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Grass batter slopes
- Significant ecological area -Terrestrial

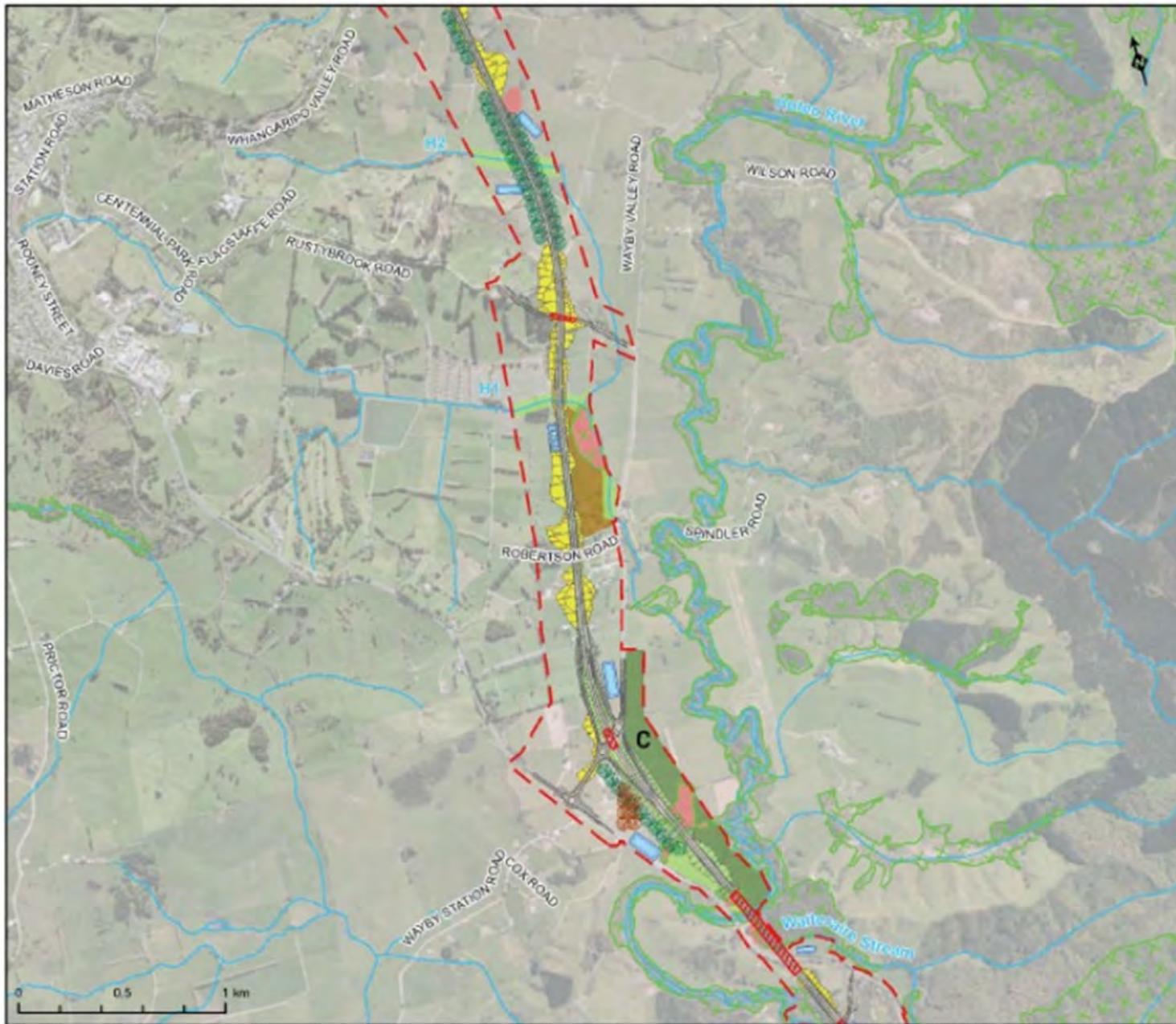
Conditions - Map 3



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Mitigation for fragmentation
- Grass batter slopes
- Significant ecological area - Terrestrial

Conditions - Map 4



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- 🌳 Screen planting
- 🌳 Existing shelter belt
- 🌊 Stormwater treatment wetlands - indicative locations
- 🌊 Watercourse
- 🌿 Landscape Mitigation Planting
- 🌿 Indigenous vegetation
- 🌿 Ecology vegetation mitigation
- 🟡 Grass batter slopes
- 🌿 Significant ecological area -Terrestrial

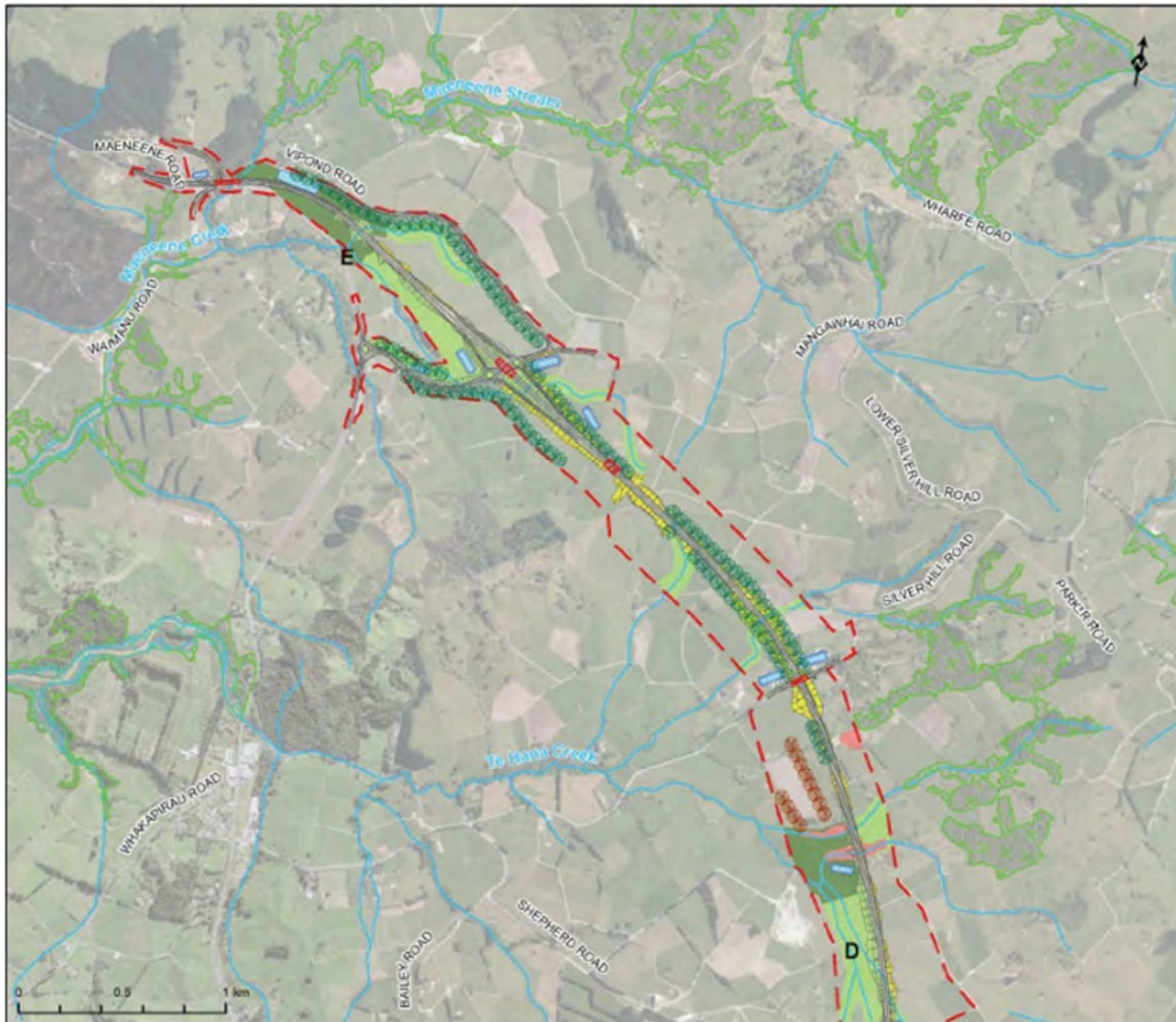
Conditions - Map 5



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Grass batter slopes
- Significant ecological area - Terrestrial
- Significant ecological area - Marine 2

Conditions - Map 6



WARKWORTH TO WELLSFORD

MITIGATION SITES



Attachment B: Conditions

6779 Ara Tūhono – Warkworth to Wellsford

Designation Number	6779
Requiring Authority	New Zealand Transport Agency
Location	Between Warkworth and Te Hana
Lapse Date	The Designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.

Purpose

Construction, operation and maintenance of a new state highway and associated activities between Warkworth and north of Te Hana

Conditions

DEFINITIONS

The table below defines the acronyms and terms used in the conditions. Defined terms are capitalised throughout the conditions.

Acronym / Term	Definition / Meaning
Auckland Transport	The Chief Executive of Auckland Transport or authorised delegate
AUP(OP)	Auckland Unitary Plan Operative in Part
Best Practicable Option or BPO	Best Practicable Option as defined in section 2 of the Resource Management Act 1991.
Building-Modification Mitigation	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
CAQMP	Construction Air Quality Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CIR	Cultural Indicators Report
Civil Landholding Owners	the owners specified in the Northern Civil Land and the Southern Civil Land definitions or the children of Joan Colleen Civil, Ian Donald Shepherd Civil and Denise Lyn Civil.
Construction Works	Activities undertaken to construct the Project excluding Enabling Works
COPTTM	NZ Transport Agency Code of Practice for Temporary Traffic Management, or any subsequent version
CTMP	Construction Traffic Management Plan
Day(s)	Has the same meaning as “working day” under section 2 of the RMA

Acronym / Term	Definition / Meaning
Designation	The designation included in the AUP(OP)
EICMP	Electricity Infrastructure Construction Management Plan
Enabling Works	Preliminary construction activities as follows: <ul style="list-style-type: none"> • geotechnical investigations (including trial embankments) • formation of access for geotechnical investigations • establishment of site yards, site offices, site entrances and site access points and fencing • constructing and sealing site access roads • demolition or removal of buildings and structures • relocation of services • establishment of mitigation measures (such as erosion and sediment control measures, temporary noise walls, earth bunds and screen planting)
EWCTMP	Enabling Works Construction Traffic Management Plan
Existing Underpass	the existing underpass between the Northern Civil Land and the Southern Civil Land as illustrated on the drawing at Attachment B
Habitable Space	As defined in New Zealand Standard NZS 6806:2010: Acoustics – Road-traffic noise – New and altered roads
HHMP	Historic Heritage Management Plan
Heavy Vehicle	A motor vehicle having a gross laden weight exceeding 3500 kg
HEN-MPE-A	Transpower's Henderson to Maungatapere A (HEN-MPE-A) 110kV high voltage transmission line assets, which include: <ul style="list-style-type: none"> • the existing HEN-MPE-A transmission line Spans 199-204 and support structures/Towers 200-203; and • any proposed new or relocated high voltage transmission line assets (spans and/or support structures) required as a result of the Project Works.
Highly Sensitive Receiver (HSR)	Residential dwellings within: <ul style="list-style-type: none"> • 200m of the Designation boundary; • 50m of sealed access roads used for Project Works up to 500 m outside of the Designation boundary; and • 100m of unsealed access roads used for Project Works outside of the Designation boundary.
HNZPT	Heritage New Zealand Pouhere Taonga

Acronym / Term	Definition / Meaning
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Hōkai Nuku	The iwi collective being comprised of the representatives for Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Ngāti Whātua o Kaipara and Ngāti Whātua.
Iwi Advisor	The advisor (or other nominated kaitiaki) appointed by Hōkai Nuku in accordance with Condition 19D.
Manager	The Team Manager – Compliance Monitoring, of Auckland Council, or authorised delegate
Mana Whenua	Māori who can demonstrate customary rights through occupation to resources within the Project area, and who have responsibilities as kaitiaki over their tribal lands, waterways and other taonga
Mitigation Sites	The mitigation planting sites identified on Maps 1 to 6 included with the Designation
Network Utility Operation(s)/Operator(s)	As defined in section 166 of the RMA, for the avoidance of doubt this includes the North Albertland Community Water Supply Association
NMP	Noise Mitigation Plan
Noise Criteria Categories	The groups of preference for sound levels established in accordance with New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> when determining the BPO for noise mitigation (Categories A, B and C)
Northern Civil Land	the land or parts thereof located at 109 Kaipara Flats Road (ROT 764798) legally described as CT 764798 and owned by Denise Lyn Civil, Ian Donald Shepherd Civil and Michael Charles Tisdall, as illustrated in green on the drawing at Attachment C.
NZS 6803	New Zealand Standard 6803:1999: <i>Acoustics – Construction Noise</i> , or any subsequent version
NZS 6806	New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i> , or any subsequent version
PPF	Protected Premises and Facilities as defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Project	The construction, maintenance and operation of the Ara Tūhono Warkworth to Wellsford Project, which extends from Warkworth to north of Te Hana

Project Liaison Person	The person or persons appointed for the duration of the construction phase of the Project to be the main and readily accessible point of contact for persons affected by the construction work
Project Works	All activities undertaken to construct the Project (Construction Works and Enabling Works) and including ecological and landscape mitigation activities, but excluding operation of the highway
Resource Consent	Those consents granted to the Requiring Authority by Auckland Council to undertake the Project
RMA	Resource Management Act 1991
SECMP	Stakeholder Engagement and Communications Management Plan
SH1	State Highway 1
Southern Civil Land	the land or parts thereof at 141 Carran Road (ROT 758198) legally described as CT 758198 and owned by Joan Colleen Civil and Ian Donald Shepherd Civil as to a ½ share as Executors and Joan Colleen Civil as to a ½ share, as illustrated in blue on the drawing at Attachment B
SSTMP	Site Specific Traffic Management Plan
Stage(s)	A specific works area or new land disturbing activity associated with construction of the Project as nominated by the Requiring Authority
Structural Mitigation	As defined in New Zealand Standard NZS 6806:2010: <i>Acoustics – Road-traffic noise – New and altered roads</i>
Suitably Qualified and Experienced Person	A person (or persons) who can provide sufficient evidence to demonstrate their suitability and competence
Threatened Species	Species listed as per the Department of Conservation's <i>New Zealand Threat Classification System</i> (NZTCS)
TTM	Temporary Traffic Management
ULDF	Urban and Landscape Design Framework
ULDMP	Urban and Landscape Design Management Plan
Urban Zoning	an urban zoning identified in an operative planning map within the Auckland Unitary Plan or any replacement statutory planning document from time to time and excludes a future urban zoning or deferred development zoning.

GENERAL

1. As soon as practicable following completion of construction of the Project, the Requiring Authority shall give notice to Auckland Council in accordance with section 182 of the RMA for removal of those parts of the Designation that are not required for the long-term operation, maintenance and mitigation of effects of the State highway.

Lapse

- The Designation shall lapse if not given effect to within 15 years from the date on which it is included in the District Plan under section 175 of the RMA.

Construction conditions

- Conditions 4 to 88E relate to construction of the Project and only apply to construction activities. Once construction of the Project is complete these conditions will no longer apply and can be removed, except for conditions that specify an obligation which continues after construction.

Management and outline plan process

- The Requiring Authority shall prepare, submit to Auckland Council, and implement the Designation management plans in accordance with Table 1 and the specific management plan conditions.
- The Requiring Authority may prepare management plans in parts or in Stages to address specific activities or to reflect the staged implementation of the Project Works.
- The Requiring Authority shall not commence Project Works within the area to which a management plan applies until the Outline Plan of Works has been considered in accordance with s176A of the RMA or the required management plan(s) has been certified or otherwise provided to the Council for information.

Table 1: Management Plan Table

Management Plan	Decision Pathway	When to submit	Response time from Manager	Duration for implementation
Stakeholder Engagement and Communications	To Manager for information	At least 6 months prior to the start of the Requiring Authority's nominated date for detailed design	N/A	Duration of Project Works
Construction Noise and Vibration	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Noise Mitigation	Outline Plan of Works	Prior to the Project becoming operational	N/A	Throughout the operation of the State Highway
Construction Traffic	Outline Plan of Works	Prior to start of Construction Works	Within statutory timeframes	Duration of Construction Works

Enabling Works Traffic	To Road Controlling Authority for approval via COPTTM process	Prior to start of relevant Enabling Works	N/A	Duration of Enabling Works
Site Specific Traffic	To Road Controlling Authority for approval via COPTTM process	Prior to using the relevant public road	N/A	Duration of use of public road for construction activities.
Enabling Works Traffic	To Manager for Information (approval via COPTTM process)	Prior to start of relevant Enabling Works	N/A	Duration of Enabling Works
Urban and Landscape Design Framework	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Urban and Landscape Design Management Plan/s	Outline Plan of Works	Prior to start of Construction Works in relevant sector	Within statutory timeframes	Duration of Project Works
Historic Heritage	Outline Plan of Works	Prior to start of Project Works	Within statutory timeframes	Duration of Project Works
Construction Air Quality	Outline Plan of Works	Prior to start of Construction Works	Within statutory timeframes	Duration of Construction Works
Cultural Engagement	To the Manager for information	Prior to the start of Project Works	N/A	Throughout the Project Works
Electricity Infrastructure Construction	To the Manager for information	Prior to the start of Project Works	N/A	Throughout the Project Works

CONSTRUCTION CONDITIONS

Stakeholder Engagement and Communications

Project Liaison Person

- The Requiring Authority shall appoint a Project Liaison Person for the duration of Project Works to be the main and readily accessible point of contact for persons interested in, or affected by, Project Works. The Project Liaison Person's contact details shall be readily available via the internet (e.g., via the Project website) and the Project Liaison Person shall be contactable at all times during Project Works.

Stakeholder Engagement and Communications Management Plan

8. The Requiring Authority shall prepare a Stakeholder Engagement and Communications Management Plan (SECMP) at least 6 months prior to the start of the Requiring Authority's nominated date for detailed design. The purpose of the SECMP is to set out how the Requiring Authority will communicate with the public and stakeholders for the duration of Project Works.
9. The SECMP shall set out the framework for how the Requiring Authority will:
 - a. Engage with stakeholders such as directly affected landowners and immediately adjoining landowners, educational facilities, iwi and hapū groups, community groups, local businesses and representative groups, residents' organisations, other interested groups and individuals, Auckland Council, Auckland Transport and adjacent local authorities, the Rodney Local Board, and Network Utility Operators about the Project Works;
 - b. Inform the communities of Warkworth, Wellsford and Te Hana of construction progress, including proposed hours of work;
 - c. Engage with the communities to foster good relationships and to provide opportunities for learning about the Project;
 - d. Provide information on key Project milestones;
 - e. Provide advance notice of the upcoming works programme, including intended hours of works and activities, to residents and businesses in proximity to the Project Works; and
 - f. Make each management plan listed in Table 1 publicly available online once it is finalised (and if it is amended or updated), and for the duration of the Project Works.
10. The Requiring Authority shall prepare the SECMP in consultation with:
 - a. Auckland Council, with respect to coordination of communications with the public and stakeholders; and
 - b. Auckland Transport, with respect to communications relating to Project Works or activities that interface with the local road network; and
 - c. shall engage with Mana Whenua, with respect to provisions that relate specifically to communications with iwi and hapū groups.
- 10A. At all times prior to and during Project Works, the Requiring Authority shall maintain a Project website with current information about the Project, including details of its current state of progress towards commencement, likely commencement timeframe and anticipated milestones in that regard. The website shall also include contact details (email and/or phone number) for any person seeking further information about the Project.

Complaints Management Process

11. The Requiring Authority shall keep and maintain a complaints record (*Complaints Record*), to record any complaints received in relation to Project Works for the duration of the Project Works.
12. The Complaints Record shall include:

- a. The name and address (if known) of the complainant;
 - b. Details of the complaint;
 - c. The date and time of the complaint, and the location, date and time of the alleged event giving rise to the complaint;
 - d. The weather conditions at the time of the complaint (as far as reasonably practicable), including wind direction and approximate wind speed if the complaint relates to air quality or noise and where weather conditions are relevant to the nature of the complaint;
 - e. Any other activities in the area, unrelated to the Project that may have contributed to the complaint, such as construction undertaken by other parties, fires, traffic accidents or unusually dusty conditions generally;
 - f. Measures taken to respond to the complaint or confirmation of no action if deemed appropriate; and
 - g. The response provided to the complainant.
13. The Requiring Authority will acknowledge receipt of a complaint related to Project Works within 24 hours and shall respond in full to such complaint as soon as practicable and no later than 10 Days after the complaint was received, except where urgency is indicated, in which case the Requiring Authority shall use its best endeavours to respond within 2 hours.
 14. The Requiring Authority shall provide a copy of the Complaints Record to the Manager on a monthly basis, unless otherwise agreed with the Manager.

Mana Whenua

Cultural Indicators Report

15. At least 12 months prior to the Requiring Authority's nominated start date for detailed design of the Project, the Requiring Authority shall invite Mana Whenua to prepare a Cultural Indicators Report for the Project, or to nominate a person or organisation to prepare a Cultural Indicators Report on their behalf. To assist with preparation of any Cultural Indicators Report, the Requiring Authority shall provide access to Crown owned land within the Project Area for Mana Whenua to undertake surveys. The purpose of any Cultural Indicators Report is to assist with the protection and management of Ngā Taonga Tuku Iho (treasures handed down by our ancestors) during Construction Works.
16. Any Cultural Indicators Report should be completed and provided to the Requiring Authority at least 6 months prior to the Requiring Authority's nominated start date for detailed design of the Project and should:
 - a) Describe Mana Whenua's customary rights through occupation to resources within the Designation.
 - b) Identify and map cultural sites, landscapes and values that have the potential to be affected by Project Works;
 - c) Set out Mana Whenua's desired outcomes and recommended methods for management of potential effects on cultural values;
 - d) Identify cultural indicators of cultural stream health as relevant to the Project Works;
 - e) Set out recommended methods to measure the effects on identified cultural

- indicators during Project Works;
- f) Identify opportunities for restoration and enhancement of Mauri and mahinga kai within the Designation; and
 - g) Identify cultural criteria that should be acknowledged in the development of the SECMP, the ULDF, the ULDMPs, the HHMP.

Conditions 17 and 18 are intentionally left blank

Cultural Artworks Plan

19. At least 18 months prior to start of Construction Works, the Requiring Authority shall invite Mana Whenua to prepare a cultural artworks plan to identify possible artworks or features to reflect sites and values of significance to Mana Whenua. Condition 19 will cease to apply if Mana Whenua have been invited to prepare a cultural artwork plan and have not provided it within six months prior to start of Construction Works.

Cultural Engagement Plan

- 19A. At least 1 month prior to the Requiring Authority's nominated start date for detailed design of the Project, if it has received any Cultural Indicators Report in accordance with Conditions 15-16, the Requiring Authority shall prepare a Cultural Engagement Plan. The purpose of the Cultural Engagement Plan is to identify:
- a. The measures and methods to implement the recommendations within the Cultural Indicators Report(s) where the Requiring Authority considers it is practicable to do so.
 - b. Written reasons where the Requiring Authority considers any recommendations in the Cultural Indicators Report(s) cannot be practicably implemented, for example due to the operational, technical, financial, health and safety or engineering needs of the Project.
 - c. The roles and responsibilities of Mana Whenua during the Project Works
 - d. The roles and responsibilities of the Iwi Advisor, which shall include but not be limited to:
 - i. Engaging with the Requiring Authority on the preparation of the SECMP, the ULDF, the ULDMPs, the HHMP;
 - ii. Onsite monitoring of Project Works involving top soil removal up to 1.5m below ground level (as defined in the AUP(OP));
 - e. Requirements for formal dedication or cultural interpretation prior to the start of Construction Works in areas identified as having significance to Mana Whenua.
 - f. A written record of the engagement undertaken in accordance with Condition 19B.
- 19B. In preparing the Cultural Engagement Plan the Requiring Authority shall engage with Mana Whenua who have prepared a Cultural Indicators Report over a period of not less than 3 months prior to the Requiring Authority's nominated start date for detailed design of the Project to better understand any Cultural Indicators Report and to discuss the recommendations in it.
- 19C. The Requiring Authority shall implement the Cultural Engagement Plan throughout the Project Works.

Iwi Advisor

- 19D. At least 12 months prior to commencement of Construction Works, the Requiring Authority shall invite Hōkai Nuku to appoint an Iwi Advisor or other nominated kaitiaki (Iwi Advisor) to

undertake the roles and responsibilities set out, or to be set out in the Cultural Engagement Plan.

- 19E. Conditions 19A-19C will cease to apply if Mana Whenua have been invited to prepare a Cultural Indicators Report in accordance with Condition 15 and have not provided that report within six months of the Requiring Authority's nominated start date for detailed design of the Project.

Conditions 20 – 23 are intentionally left blank

Network Utilities

24. The Requiring Authority shall ensure that Project Works do not adversely impact on the ongoing safe and efficient operation of Network Utility Operations. The scope, timing and methodology for utility protection and / or relocation works shall be developed in consultation with the relevant Network Utility Operator to ensure ongoing safe and efficient operation for the required works.
- 24A. The Requiring Authority shall consult with Network Utility Operators during the detailed design phase to identify opportunities to enable, or not preclude, the development of new network utility facilities including access to power and ducting within the Project, where practicable to do so. The consultation undertaken, opportunities considered, and whether or not they have been incorporated into the detailed design, shall be summarised in the Outline Plan or Plans prepared for the Project.
- 25A. The Project must be designed and undertaken to comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- 25B. The Requiring Authority shall design and undertake earthworks to ensure that the vertical clearance provided between the HEN-MPE-A transmission line conductors and the finished road level shall be a minimum of 10 metres for State Highway 1 (including approach roundabouts and on/off ramps), and 8 metres for Vipond Road.
- 25C. The Requiring Authority shall ensure that all trees and vegetation planted for the Project Works comply with the Electricity (Hazards from Trees) Regulations 2003; and cannot fall within 4m of any transmission line conductors.
- 25D. The Requiring Authority shall ensure that any new landscaping planted for the Project Works within 12m of the centre line of the HEN-MPE-A transmission line conductors is limited to species that will grow to a maximum of 2m in height at full maturity.

Transpower – Construction

- 25E. Construction or Enabling Works north of Wellsford must not commence within fifty (50) metres of the centreline of the HEN-MPE-A assets until the Electricity Infrastructure Construction Management Plan (EICMP) required by Condition 25F

has been completed and either:

- a. the construction and operation of the Project has been designed to comply with Conditions 24 and 25A to 25D; or
- b. the HEN-MPE-A assets have been relocated or altered to ensure compliance with Conditions 24 and 25A to 25D and enable the construction and operation of the Project.

25F. The Requiring Authority shall prepare an EICMP prior to start of Project Works within fifty (50) metres of the centreline of the HEN-MPE-A assets. The EICMP shall be prepared by a Suitably Qualified and Experienced Person in consultation with Transpower NZ Ltd. The purpose of the EICMP is to ensure Project Works are carried out safely and to manage any potential adverse effects of the works on Transpower's assets, including confirming that all works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of that code.

25G. The EICMP shall:

- a. Include a record of consultation undertaken with Transpower New Zealand;
- b. Provide procedures, methods and measures to be implemented during Project Works to:
 - i) Manage effects of dust and other material potentially resulting from Project Works and able to cause damage, beyond normal wear and tear, to the HEN-MPE-A assets;
 - ii) Ensure that no activity is undertaken during construction that would result in ground vibrations, ground instability and/or ground settlement likely to cause damage to HEN-MPE-A assets;
 - iii) Meet applicable standards and Codes of Practice applying to the construction of Project Works that interface with the HEN-MPE-A assets;
 - iv) Ensure that, during construction and operation, changes to the drainage patterns and runoff characteristics do not result in adverse effects from stormwater on the foundations of any HEN-MPE-A support structures; and
 - v) Mitigate Earth Potential Rise, where use of conductive material for road infrastructure (e.g., metallic barriers, lighting) is within 25m of the outer foundations of any HEN-MPE-A support structures;
- c. Confirm that all Project Works will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001). For certainty, this shall include specific measures and methods relating to:
 - i. Excavation or disturbance of the land around any transmission support structures (Section 2);
 - ii. Building to conductor clearances (Section 3);
 - iii. Depositing of material under or near overhead conductors (Section 4.3);
 - iv. Mobile plant to conductor clearances and warning notices for mobile plant (Section 5); and
 - v. People to conductor clearances (Section 9).

Advice Note: *Along with the RMA processes, there are other additional processes and*

approvals applying to any work or activity that affect network utilities. The Requiring Authority may require additional approvals from Network Utility Operators prior to any works commencing in proximity to network utilities.

Construction Noise and Vibration

Noise Criteria

26. Unless provided for in Conditions 28 and 29, construction noise from Project Works shall comply with the following criteria in accordance with NZS 6803:

a. Residential receivers:

	Time	dBLAeq(15min)	dB LAmax
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and Public Holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

b. Industrial and commercial receivers:

Time	dBLAeq(15min)
0730-1800	70
1800-0730	75

26A. Air blast noise shall comply with a limit of 120 dB L_{Zpeak} at 1m from the most exposed façade of any occupied buildings.

Measurement and assessment of air blast noise shall be undertaken in accordance with AS 2187-2:2006 Explosives – Storage and use - Part 2: Use of explosives, (as it relates to air blast).

Vibration Criteria

27. Unless otherwise provided for in Conditions 28, 29 or 30, vibration from Project Works shall comply with the following criteria:

Receiver	Location	Detail	Category A	Category B
Occupied PPFs*	Inside the building	Night-time 2000h-0630h	0.3mm/sPPV	1mm/sPPV
		Daytime 0630h-2000h	1mm/sPPV	5mm/sPPV
		Blasting – vibration	5mm/sPPV	10mm/sPPV
Other occupied buildings	Inside the building	Daytime 0630h-2000h	2mm/sPPV	5mm/sPPV
All other buildings	Building Foundation	Vibration-transient [including blasting]	5mm/sPPV	BS 5228-2 Table B.2
		Vibration - continuous		BS 5228-2 50% of Table B.2 values

Notes:

Measurements of construction vibration shall be undertaken in accordance with ISO 4866:2010 Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures.

* For vibration, Protected Premises and Facilities (PPFs) are dwellings, educational facilities, boarding houses, homes for the elderly and retirement villages, marae, hospitals that contain in-house patient facilities and buildings used as temporary accommodation (eg motels and hotels).

Construction Noise and Vibration Management Plan

28. The Requiring Authority shall prepare a Construction Noise and Vibration Management Plan (CNVMP), prior to start of Project Works, to provide a framework for the development, identification, and implementation of the Best Practicable Option for the management and mitigation of all construction noise and vibration effects. The CNVMP shall set out how compliance with the construction noise and vibration criteria in Conditions 26 to 27A will be achieved, to the extent practicable. The CNVMP shall be prepared in accordance with NZS 6803, Annex E2, and the NZ Transport Agency's State highway construction and maintenance noise and vibration guide (version 1.1, 2019), and shall address the process required to review and

update the CNVMP. The CNVMP shall also include methods to minimise significant intermittent noise and vibration event effects on farm animals by:

- notifying farm operators in advance of a blasting programme or other significant noise and vibration event in the vicinity of farm animals; and
- minimising the use of horns and sirens in the vicinity of farm animals.

The term 'noise' in NZS 6803, Annex 2 shall be interpreted as 'noise and vibration'.

The CNVMP shall be prepared by a Suitably Qualified and Experienced Person and implemented for the duration of the Project Works.

29. If during Project Works noise or vibration levels from Project Works are predicted or measured to exceed the noise criteria in Condition 26 or the Category A vibration criteria in Condition 27, then a Suitably Qualified and Experienced Person shall be engaged to identify specific Best Practicable Option measures to manage the effects of the specific construction activity. The measures shall be added as a Schedule to the CNVMP and implemented by the Requiring Authority for the duration of the relevant works.

Where practicable, the Schedules shall be provided to the Manager for information within five Days before the specific construction activity is undertaken.

30. If prior to or during Project Works vibration levels from Project Works are predicted or measured to exceed the Category B criteria in Condition 27, then the relevant works shall not commence or proceed until a Suitably Qualified and Experienced Person has undertaken a building condition survey (provided the owner and/or occupier has agreed to such survey), and identified specific Best Practicable Option measures to manage the effects of vibration.

The measures shall be added as a Schedule to the CNVMP and implemented by the Requiring Authority for the duration of the relevant works. The Schedule shall, as a minimum, contain the information set out in Condition 29 and the findings of the building pre-condition survey.

Where practicable, the Schedules shall be provided to the Manager for information within five Days before the specific construction activity is undertaken.

Vibration monitoring shall be undertaken and continue throughout the works covered by the Schedule. Following completion of the activity, a building condition survey shall be undertaken to determine if any damage has occurred as a result of construction vibration, and any such damage shall be repaired by the Requiring Authority.

- 30A. The Requiring Authority shall not locate any site office or construction yards that are to be established and used for longer than 12 months, within 200 metres of any PPFs.

Construction Traffic

General construction traffic management

31. Kraack Road shall not be used as a haulage route for Heavy Vehicles between State Highway 1 and Saunders Road.
32. Construction Works shall be managed to enable pedestrian access along Te Araroa Walkway where feasible and practicable to do so and where the health and safety of users can be maintained.
33. Any damage to a local road at a construction site access point, which is verified by a Suitably Qualified and Experienced Person as being directly attributable to Heavy Vehicles entering or exiting the construction site at that location, shall be repaired within two weeks or within an alternative timeframe to be agreed with Auckland Transport. All repairs shall be undertaken in accordance with the Auckland Transport's Transport Design Manual, or any subsequent version.

Construction Traffic Management Plan

34. The Requiring Authority shall manage construction traffic and construction parking to:
 - a. Protect public safety including the safe passage of pedestrians, equestrians and cyclists;
 - b. Minimise delays to road users, particularly during peak traffic periods;
 - c. Minimise interruption to property access;
 - d. Inform the public about any potential impacts on the road network;
 - e. Enable 24 hour emergency access to lifeline utilities; and
 - f. Enable access to Watercare's Wastewater Treatment Plant (Lot 3 DP64870), Water Treatment Facility (362 Wayby Valley Road) and planned water treatment facility (487 Wayby Valley Road) at reasonable times.
35. The Requiring Authority shall prepare a Construction Traffic Management Plan (CTMP) prior to the start of Construction Works for the Project to identify how Condition 34 will be met. The CTMP shall be prepared by a Suitably Qualified and Experienced Person and shall include the following:
 - a. Methods that will be undertaken to communicate traffic management measures to affected road users (residents/public/stakeholders/emergency services);
 - b. Identification of traffic management activities and sequencing proposed for the Project, including a staff travel plan, site access routes and site access points for Heavy Vehicles;
 - c. Methods for managing traffic effects, including through Temporary Traffic Management activities (TTM); including:
 - i. Methods to provide for safe and efficient access of construction vehicles to and from construction sites, including consideration of capacity for queuing vehicles, restrictions on turning movements and sight distances;
 - ii. Methods to maintain vehicle access to property and/or private roads where practicable, or to provide alternative access arrangements when it will not be;
 - iii. Methods to minimise the effects of TTM activities on traffic;

- iv. Methods to maintain local access during Project Works, where practicable, in particular during the realignment of or connection to local roads;
 - v. Methods to maintain access, turnaround locations and set down areas for bus routes (including school buses) where practicable;
 - vi. Methods for temporary road closures, with road closures to be carried out at times of lowest traffic, at night if practicable;
 - vii. Methods to identify how impacts on the road network from construction related light vehicle movements will be managed during peak traffic periods; and
 - viii. Methods to identify how impacts from construction related Heavy Vehicle movements on traffic flow and level of service of the road network will be managed;
 - ix. Methods to manage noise from Heavy Vehicles including effective noise suppression devices for engine brakes and planning routes, speeds and times; and
- d. Auditing, monitoring and reporting requirements relating to TTM activities in accordance with the requirements of NZ Transport Agency Code of Practice for Temporary Traffic Management (COPTTM).
36. The Suitably Qualified and Experienced Person shall prepare the CTMP based on traffic volumes and movements and the transport network that is in place immediately prior to the start of Construction Works and shall take into account any other transport works that are planned to occur during the Construction Works.
37. In preparing the CTMP, the Requiring Authority shall consult with Auckland Transport, and the owner of the commercial plantation forest (Mahurangi Forest) located west of SH1 with respect to access and traffic management activities which directly interface with forestry operations. If the Requiring Authority has not received any written comment from Auckland Transport or the owner of the Mahurangi Forest within 20 days of providing the CTMP to them, the Requiring Authority may consider the relevant party has no comments.

Site Specific Traffic Management Plans

38. The Requiring Authority shall prepare a Site Specific Traffic Management Plan (SSTMP) or Plans where any Construction Works vary the normal traffic conditions of any public road. The SSTMP shall be prepared prior to using that road and prior to start of the relevant Construction Works. The purpose of the SSTMP(s) is to identify specific construction methods to comply with the CTMP and to address the particular circumstances, local traffic and community travel demands within the area covered by the SSTMP.
39. The SSTMP(s) shall be prepared by a Suitably Qualified and Experienced Person and shall comply with the version of COPTTM which applies at the time the relevant SSTMP is prepared. Where it is not possible to adhere to this Code, the Requiring Authority shall apply COPTTM's prescribed Engineering Exception Decision (EED) process.
40. In preparing the SSTMP, the Requiring Authority shall consult with Auckland Transport where the Construction Works interfaces with the local road network.

If the Requiring Authority has not received any comment from Auckland Transport within 20 Days of providing the SSTMP to them, the Requiring Authority may consider Auckland Transport has no comments and proceed to lodge the SSTMP in accordance with Table 1.

Enabling Works Construction Traffic Management Plan

41. Where Enabling Works are to be undertaken, the Requiring Authority shall prepare an activity specific Enabling Works Construction Traffic Management Plan (EWCTMP) prior to the start of the relevant Enabling Works. The EWCTMP shall be prepared by a Suitably Qualified and Experienced Person and shall provide a similar scope of information as for a CTMP but shall be commensurate with the scale and effects of the proposed Enabling Works.
42. In preparing the EWCTMP, the Requiring Authority shall consult with Auckland Transport where the Project construction activity interfaces with the local road network. If the Requiring Authority has not received any comment from Auckland Transport within 20 Days of providing the EWCTMP to them, it may proceed to lodge the EWCTMP in accordance with Table 1.

Urban and Landscape Design

Urban and Landscape Design Framework

43. The Requiring Authority shall prepare an Urban and Landscape Design Framework (ULDF) prior to the start of Construction Works. The purpose of the ULDF is to:
 - a. Set the framework for integration of the permanent Project Works into the surrounding landscape and topography, and built environment, having regard to the local landscape and character and contexts along the Project route;
 - b. inform development of the Urban and Landscape Design Management Plan(s) (ULDMP(s)); and
 - c. support the achievement of the Ecological Outcomes in Condition 54C of the resource consents, by combining landscape planting, restoration planting and habitat rehabilitation where practicable.
44. The ULDF shall be prepared by a Suitably Qualified and Experienced Person having regard to the:
 - a. Planning Version ULDF (2019) (submitted with the Notice of Requirement);
 - b. NZ Transport Agency Bridging the Gap NZTA Urban Design Guidelines (2013), or any subsequent version;
 - c. NZ Transport Agency Landscape Guidelines (final draft dated 2014), or any subsequent version, and the NZ Transport Agency P39 Standard Specification for Highway Landscape Treatments (2013), or any subsequent version;
 - d. the ULDF for Ara Tūhono Puhoi to Warkworth section of SH1;
 - e. Landscape mitigation planting and screen planting shown on Maps 1 – 6;
 - f. Te Aranga Principles, Auckland Design Manual (2013), or any subsequent version;
 - g. Cultural Engagement Plan; and
 - h. the Ecological Outcomes required by Condition 54C of the Resource Consent.

45. The ULDF shall:
 - a. Confirm the overall key design principles and sector outcomes for the Project, as set out in the descriptions of those principles and outcomes in the Planning Version of the ULDF (2019);
 - b. Identify individual urban and landscape design sectors within the Project area;
 - c. Identify highly sensitive locations, which may include properties in close proximity to the Designation, requiring particular urban and landscape design treatment; and
 - d. Identify opportunities to integrate landscape planting under a ULDMP with restoration planting and habitat rehabilitation or other planting required for the Project.

46. The Requiring Authority shall prepare the ULDF in engagement with Mana Whenua and in consultation with:
 - a. Auckland Council;
 - b. Rodney Local Board;
 - c. Auckland Transport for areas within and adjoining local roads; and
 - d. HNZPT for areas next to identified heritage sites.

47. The ULDF shall include a summary of the consultation undertaken and shall document how input from the parties listed in Condition 46 has or has not been incorporated in the ULDF or supporting information. If the Requiring Authority has not received any comment from such parties within 20 Days of providing the ULDF to them, the Requiring Authority may consider the relevant party has no comment.

Urban and Landscape Design Management Plan(s)

48. The Requiring Authority shall prepare an Urban and Landscape Design Management Plan (ULDMP) for each individual urban and landscape design sector within the Project area, in engagement with Mana Whenua, prior to the start of Construction Works within each sector. The purpose of the ULDMP(s) is to identify, how for the relevant sector:
 - a. the key design principles and sector outcomes identified in the ULDF will be met by the permanent Project Works;
 - b. the landscape and visual requirements (Conditions 49 to 50) have been incorporated; and
 - c. landscape planting is to be integrated with restoration planting and habitat rehabilitation or other planting required for the Project.

49. The ULDMP(s) shall be prepared by a Suitably Qualified and Experienced Person and shall include the following details for the sector to which the plan applies:
 - a. A plan describing and illustrating the overall landscape and urban design concept and rationale.
 - b. Detailed design drawings of the landscape and urban design features, including the following:
 - i. Road design including elements such as earthworks contouring including cut and fill batters to integrate with adjacent landform, benching (to be

- avoided if practicable), treatment of rock cuts, and spoil disposal sites; median width and treatment; borrow pits/areas; roadside width and treatment.
- ii. Appropriate surface treatment of cut slopes such as grassing, revegetation or leaving an exposed rock face.
 - iii. Roadside elements including elements such as lighting, sign gantries and signage, guard rails, fences, central and median barriers etc.
 - iv. Urban design and landscape treatment of:
 - a. all major structures, including viaducts, bridges and associated infrastructure, retaining walls, ancillary buildings;
 - b. any Structural Mitigation required by Condition 90;
 - c. roadside furniture, such as lighting, sign gantries and signage, guard rails, fences and median barriers; and
 - d. hardscape material, (e.g. rock rip rap, sealed shoulders, kerbs, roundabouts) and interchanges.
 - v. Land use re-instatement.
 - vi. Landscape treatment/rehabilitation of construction yards and haul roads following completion of construction.
 - vii. The integration of landscape planting with restoration planting and habitat rehabilitation or other planting required for the Project (including by resource consent conditions) where applicable, as further specified by Condition 50.
 - viii. Landscape design input to the form of stormwater ponds and swales to assist with landscape integration.
 - ix. Pedestrian and cycle facilities including paths along local roads where these facilities are directly affected by Project Works.
 - x. Features (such as interpretive signage) for identifying and interpreting cultural heritage, built heritage, archaeology, geological heritage and ecology.
 - xi. Noise barriers, and structures, walking and cycling facilities (including bridges, underpasses and associated retaining walls) which are identified in the ULDF as being in highly sensitive locations.
 - xii. The design of the tunnel portals, which shall be integrated with the adjacent landform through the use of sloping portal structures and revegetation works. Any ancillary structures associated with the tunnels shall be located and designed so they are recessive in form and colour.
 - xiii. Context-sensitive landscape design and planting at Interchanges to create a local gateway, wayfinding and promote a sense of place that reflects the destination accessed via the interchange.
 - xiv. New planting or other measures where practicable to provide visual screening of the permanent Project Works from dwellings with direct line of sight to the Project, in particular from the following properties:
 - (i) 111 Kaipara Flats Road
 - (ii) 211 Kaipara Flats Road
 - (iii) 214 Kaipara Flats Road
 - (iv) 215 Kaipara Flats Road
 - (v) 542 SH1
 - (vi) 250 Silver Hill Road

- (vii) 263 Silver Hill Road
 - (viii) 199 Shepherd Road
 - xv. Design and landscape features to acknowledge cultural values relating to landscape design identified through the Cultural Engagement Plan.
 - xvi. Design and landscape features to acknowledge the recommendations of the Cultural Artworks Plan (if prepared), where feasible and practicable to do so.
 - c. Environmental design measures to support crime prevention (CPTED or superseding industry standard) principles.
- 49A. Prior to the completion of the relevant ULDMP, the Requiring Authority shall provide drafts of the detailed design drawings required by Condition 49(b)(xiv) to the current landowner(s) of the properties identified in that condition and invite their feedback on the new planting or other screening measures proposed for their property. The Requiring Authority shall consider any feedback received when preparing the relevant ULDMP. If the Requiring Authority has not received any feedback within 20 days of the detailed design drawings being provided, the Requiring Authority may assume that no feedback is to be provided.
- The final ULDMP shall be submitted with a report describing how any feedback has been considered when preparing the relevant ULDMP and how any input from the landowner(s) of the properties has or has not been incorporated in the ULDMP.
- 49B. Within 10 days of the relevant ULDMP being confirmed, the Requiring Authority shall provide a copy of any final ULDMP that addresses visual screening for the properties listed in Condition 49(b)(xiv) to the current landowner(s) of those properties including:
- a) information as to how the landscape mitigation and screen planting in Maps 1 -6 and their feedback has been given regard to and (if relevant) why visual screening was not practicable, and
 - b) A copy of the report describing how the feedback has or has not been incorporated in the ULDMP.
- 49C. In addition to the requirements of Condition 49(b)(xiv), prior to the commencement of Construction Works the Requiring Authority shall provide and plant a 15m wide planting area along the western boundary of the blue hatched area shown on the map at Attachment A for the purpose of providing visual screening of the permanent Project Works for the property at 39 Phillips Road (Lot 1 DP 103533). The Requiring Authority shall not undertake any Project Works (except for the planting and related activities) within the blue hatched area shown on the map at Attachment A.
- 49D. The Requiring Authority shall procure from the Crown the entering into of appropriate covenants and/or encumbrances (or similar legal mechanisms) to ensure that the planting required by Condition 49C is protected on an ongoing basis prior to any transfer of ownership/tenure from the Crown.
50. The ULDMP(s) shall include the following planting and vegetation management details:
- a) Planting design details, including:
 - i. Identification of vegetation to be retained.
 - ii. Proposed planting suitable to site conditions including plant species (including consideration of native bird food sources), mixes (canopy succession species), spacing/densities and sizes (at the time of planting), and layout and planting methods including trials. All proposed planting shall be native species, except for visual screen planting which may include exotic species. A minimum 1% of planting shall be of Threatened Species.
 - iii. Details of the sourcing of native plants including genetic sourcing of native plants from the Rodney Ecological District.
 - iv. Retention of existing shelter belts and indigenous trees within the Designation, where practicable, to screen direct line of sight of the permanent Project Works from adjacent properties.

- b) A planting programme including the staging of planting in relation to the construction programme which shall, as far as practicable, include provision for planting within each planting season following completion of works in each Stage of the Project.
- c) Detailed specifications relating to the following:
 - i. Weed control and clearance;
 - ii. Pest animal management;
 - iii. Ground preparation (top soiling and decompaction);
 - iv. Mulching; and
 - v. Plant sourcing and planting, including hydroseeding and grassing.
- d) The relevant requirements of the NZ Transport Agency P39 Standard Specification for Highway Landscape Treatments (2013), or any subsequent version, and performance standards including a five-year maintenance plan/schedule that requires any unsuccessful planting to be replaced within that five-year period unless canopy closure is achieved as determined by a Suitably Qualified and Experienced Person.

Landscape and visual requirements – construction activities

- 51. Construction yards shall be located at least 200 m from any dwelling which has a view of the construction yard.
- 52. Temporary haul roads and access roads shall be rehabilitated as soon as reasonably practicable following completion of construction.

Compliance with the Electricity (Hazards from Trees) Regulations 2003

- 53. Areas of landscape planting (trees and vegetation) shall be designed to enable compliance with the Electricity (Hazards from Trees) Regulations 2003. Any new landscaping within 12m of the centre line of the HEN-MPE-A transmission line conductors shall be limited to species that grow to a maximum of 2m in height at full maturity.

Conditions 54-77 are intentionally left blank

Historic Heritage and Archaeology

- 78. The Requiring Authority shall design and implement the Project Works to achieve the following Heritage Outcomes:
 - a. Avoid adverse effects on historic heritage sites and places as far as practicable;
 - b. Where avoidance of adverse effects is not practicable, minimise adverse effects on historic heritage sites and places as far as practicable;
 - c. Where avoidance of adverse effects is not practicable, investigate and record all historic heritage sites and places (pre and post 1900) within the Designation; and
 - d. Positive historic heritage outcomes

Historic Heritage Management Plan

- 79. The Requiring Authority shall prepare a Historic Heritage Management Plan (HHMP) prior to the start of Project Works, in engagement with Mana Whenua and in consultation with HNZPT and Auckland Council. The purpose of the HHMP is to identify indirect and direct adverse effects on historic heritage sites and appropriate methods to avoid, remedy and mitigate them. The HHMP shall set out the methods to achieve the Heritage Outcomes. The HHMP shall be provided to the Manager (in consultation with the Manager: Heritage Unit) for certification.

79A. The HHMP shall be prepared with up to date information. This additional information shall be provided to

council prior to the lodgement of the HHMP to streamline the certification process. This includes:

- a. Any archaeological assessments, heritage impact assessments, granted authorities, final archaeological reports and updated site record forms (CHI and NZAA ArchSite) prepared/submitted since time of the granting of any designation;
- b. Cultural Indicators Report; and
- c. Additional areas of survey and investigation undertaken as part of the Project.

79B. Further assessment of built heritage shall include (but not be limited to):

- a. 156 Kaipara Flats Road, Dome Valley
- b. 35 Borrows Road, Waiteitei
- c. 30 Robertson Road, Wayby Valley
- d. 159 Whangaripo Valley Road, Wellsford
- e. 199 Rustybrook Road, Wayby Valley
- f. 200 Rustybrook Road, Wayby Valley

79C. If Phillips Cottage (156 Kaipara Flats Road, Dome Valley) cannot be avoided at the detailed design stage, then:

- a. in the first instance the cottage structure must be relocated within its local area of significance.
- b. if this can be demonstrated not to be practicable then the structure must be relocated within the wider area of significance, including offering the place to the Warkworth Museum.
- c. if all relocation options can be shown to have been exhausted, only then should the building be demolished and recorded to Level II per HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (November 2018) or any subsequent version.
- d. Auckland Council shall be advised in writing at least 10 Days prior to the cottage's relocation or demolition, with accompanying records demonstrating compliance with (a)-(c) above and Condition 81(h).

80. The HHMP shall be consistent with the conditions of any Archaeological Authority granted by HNZPT for the Project.

81. The HHMP shall be prepared by a Suitably Qualified and Experienced Person and shall identify and include:

- a. Any adverse direct and indirect effects on historic heritage sites and measures to appropriately avoid, remedy or mitigate any such effects;
- b. Methods and areas for the identification and assessment of potential historic heritage sites and values within the Designation to inform detailed design;
- c. Known historic heritage sites and places and areas of historic heritage potential within the Designation;
- d. Any pre-1900 archaeological sites or areas of archaeological potential for which an Archaeological Authority under the HNZPTA will be sought or has been granted;
- e. Any historic heritage sites within the Designation to be avoided, relocated, documented and recorded;
- f. Roles, responsibilities and contact details of Project personnel, Mana Whenua representatives, and relevant agencies involved with historic heritage and archaeological matters including surveys, documentation and recording, monitoring of Project Works, Accidental Discovery Protocols, and monitoring of conditions;
- g. Specific areas to be investigated, monitored and recorded to the extent these are directly affected by Project Works;
- h. The proposed methodology for investigating and recording post-1900 heritage sites (including buildings) that need to be demolished or relocated, including details of their condition, measures to mitigate any adverse effects and timeframe for implementing the preferred methodology, in

- accordance with the HNZPT guideline AGS 1A: Investigation and Recording of Buildings and Standing Structures (November 2018), or any subsequent version and the International Council on Monuments and Sites (ICOMOS) New Zealand Charter 2010 or any subsequent versions;
- i. Proposed methodology for documentation of historic heritage exposed during construction and the recording of these sites in the Auckland Council Cultural Heritage Inventory (www.chi.net/Home.aspx).
 - j. Methods to acknowledge cultural values identified through the Cultural Engagement Plan where archaeological sites also involve Ngā Taonga Tuku Iho (treasures handed down by our ancestors) and where feasible and practicable to do so;
 - k. Methods for protecting or minimising adverse effects on historic heritage and archaeological sites within the Designation during Project Works as far as practicable in line with the ICOMOS NZ Charter and including construction methods that minimise vibration (for example fencing around historic heritage and archaeological sites to protect them from damage during construction);
 - l. Training requirements for contractors and subcontractors on historic heritage sites within the Designation, legal requirements relating to accidental discoveries, and implementing the Accidental Discovery Protocol. The training shall be undertaken under the guidance of a Suitably Qualified and Experienced Person and Mana Whenua representatives (to the extent the training relates to cultural values identified under the Cultural Engagement Plan and shall include a pre-construction briefing to contractors;
 - m. How Conditions 81(a)-(j) address the following sites:
 - i. Woodthorpe House (CHI 22114, R09/2064);
 - ii. Dome Valley teacher's residence (CHI 22119, R09/2226);
 - iii. Dome Valley school site (CHI 22118, R09/2225);
 - iv. Phillips' Cottage (CHI 19027, R09/2063);
 - v. Whitson's House and Stockyard (CHI 22117, R09/2224); and
 - vi. World War II military camps (various) in the Warkworth area.
 - n. Construction and post-construction reporting requirements; and
 - o. Measures to mitigate adverse effects on historic heritage that achieve positive heritage outcomes. Measures may include, but not be limited to: increased public awareness and amenity of historic heritage sites and places, interpretation, repatriation and donation of historic heritage material to suitable repositories and publication of heritage stories.

Accidental discovery during construction

82. Prior to the start of Project Works, the Requiring Authority shall prepare an accidental discovery protocol for any accidental historic heritage discoveries which occur during Project Works.
83. The accidental discovery protocol shall be consistent with the NZ Transport Agency Minimum Standard P45 Accidental Archaeological Discovery Specification, or any subsequent version and the Auckland Unitary Plan Accidental Discovery Rule (E11 Land disturbance Regional – E11.6.1).
84. The accidental discovery protocol shall be prepared in engagement with Mana Whenua and consultation with Auckland Council and HNZPT and modified as necessary to reflect the site-specific Project detail. The Requiring Authority shall undertake engagement and consultation for a period of not less than 30 Days.
85. The Accidental Discovery Protocol shall be implemented throughout the Project Works.
- 85A. Electronic copies of all historic heritage reports relating to historic heritage investigations (evaluation, excavation and monitoring etc.), including interim reports, shall be submitted to the Manager (in consultation with the Manager: Heritage Unit) within 12 months of being produced.
- 85B. The Suitably Qualified and Experienced Person shall record and log any heritage discovery and on-going compliance with the conditions of this Designation. This log shall be provided to the Manager (in

consultation with the Manager: Heritage Unit) quarterly.

- 85C. In the event that any unrecorded historic heritage sites are exposed as a result of the work, these shall be recorded and documented by a Suitably Qualified and Experienced Person for inclusion within the Auckland Council Cultural Heritage Inventory (CHI). The information and documentation shall be forwarded to the Team Manager: Heritage Unit (heritageconsents@aucklandcouncil.govt.nz) or other address nominated by the Manager within twelve months of the works being completed on site.

Air quality

86. There shall be no noxious, dangerous, objectionable or offensive dust, fumes or odour to the extent that it causes an adverse effect at or beyond the Designation boundary.
87. The Requiring Authority shall prepare a Construction Air Quality Management Plan (CAQMP) to outline the measures to be adopted to meet Condition 86. The CAQMP shall be prepared by a Suitably Qualified and Experienced Person and shall include:
- a. A description of the works, and periods of time when emissions of odour, dust or fumes might arise from Construction Works;
 - b. Identification of HSRs that may be adversely affected by emissions of odour, dust or fumes from Construction Works;
 - c. Methods for mitigating dust that may arise from:
 - i. exposed surfaces, vehicle movements and truck loads, potentially including watering for dust suppression, wind fencing, metalling of yards and access roads, minimising open earthwork areas, re-vegetation, controlling vehicle speeds, covering or dampening loads and limiting drop heights, and limiting earthworks during high winds.
 - ii. dust trackout from construction site exits onto sealed roads, potentially including the use of vacuum sweeping, water sprays or wheel washes for trucks;
 - iii. construction traffic on unsealed roads, including consideration of sealing the sections of any road that is 50m of a HSR;
 - iv. earthworks and rock crushing, potentially including minimum setbacks from HSRs where necessary, emissions control equipment (e.g. enclosure and/or water sprays at transfer points), and monitoring of weather conditions and visual inspections; and
 - d. Methods for maintaining and operating construction equipment and vehicles to manage visual emissions of smoke from exhaust tailpipes;
 - e. Methods for undertaking and reporting on the results of daily inspections of Construction Works that might give rise to odour, dust or fumes;
 - f. Methods for monitoring and reporting on the state of air quality during Construction Works, including wind speed, wind direction, air temperature and rainfall;
 - fa. Methods for limiting the effects of dust on the Kourawhero Wetland Complex;
 - g. Methods to remediate adverse dust deposits from Construction Works on HSRs, potentially including cleaning exterior surfaces of houses or driveways and/or cleaning of water tanks and replenishment of water supplies;
 - h. Site specific methods for managing potential dust effects on HSRs within 50 metres of dust generating activities;

- i. Procedures for maintaining contact with stakeholders and notifying of proposed construction activities, with reference to the SECMP, including complaints procedures;
 - j. Methods to review and update the CAQMP to add further measures such as ambient air boundary dust measuring and associated trigger levels, where improvements to practices are necessary to achieve Condition 86;
 - k. Construction operator training procedures;
 - l. Consideration of portable Total Suspended Particle measurement devices and associated levels; and
 - m. Contact details of the site supervisor or Project manager and the Project Liaison Person (telephone number and email or other contact address).
88. When preparing the CAQMP the Suitably Qualified and Experienced Person shall have regard to the guidance contained in the Good Practice Guide for Assessing and Managing Dust, Ministry for Environment, 2016, or any subsequent version and the NZ Transport Agency Guide to assessing air quality impacts from state highway projects (version 2.3, October 2019), or any subsequent version.
- 88A. At intervals of no less than three (3) months during the period of Construction Works, the Requiring Authority shall offer by mail or email to the landowners and occupiers (if different) of any occupied dwellings:
- i. Located on the following properties:
 - a) 111 Kaipara Flats Road;
 - b) 211 Kaipara Flats Road
 - c) 214 Kaipara Flats Road;
 - d) 215 Kaipara Flats Road;
 - e) 39 Phillips Road;
 - f) 253 Worthington Road;
 - g) 259 Worthington Road;
 - h) 263 Worthington Road; i) 542 SH1;
 - j) 250 Silver Hill Road;
- or
- ii. Within 200 metres of the Designation boundary on any other property. to:
 - iii. Fill any potable water tanks on the property, up to a maximum of 30,000 litres per property every three (3) months; and
 - iv. Conduct exterior house and window soft washing, (every three (3) months), with non-toxic washing liquid to remove visible dust arising from the Construction Works.

88B. Where a property owner/occupier has accepted the offer of potable water under Condition 88A(iii), the Requiring Authority shall offer to temporarily disconnect from roof collection the relevant potable water tanks on the property (and divert the rainwater flow to a tank overflow system or a suitable alternative drainage path), and internally clean any such tank before delivering the first load of potable water. At the end of Construction Works within 500m of the relevant property, the Requiring Authority shall reconnect the water tank to roof collection.

88C. The Requiring Authority shall offer by mail or email to the persons referred to in Condition 88A(i) and (ii) to conduct a soft wash with a non-toxic washing liquid of any surface used to collect potable water on the properties referred to in Condition 88A(i) and (ii), at the conclusion of Construction Works within 500m of the relevant property.

88D. If the Requiring Authority has not received a response from a landowner or occupier identified in Condition 88A(i) or (ii) within 20 Days of making an offer under Condition 88A or Condition 88C, that landowner or occupier will be deemed to have rejected the offer. The Requiring Authority shall undertake the activities under Conditions 88A, 88B or 88C within 30 Days of obtaining agreement, subject to access being provided.

88E. The Requiring Authority shall keep a record of all offers made under Conditions 88A, 88B or 88C, any response from the property owner/occupier, and a note as to whether the offer was taken up.

Physical connection between 109 Kaipara Flats Road (ROT 764798) and 141 Carran Road (ROT 758198) (*Augier condition*)

88F. Unless one of the circumstances in condition 88G applies, the Requiring Authority will, provide a physical connection between the Northern Civil Land and the Southern Civil Land (either via the Existing Underpass or an alternative physical connection). The design of any new physical connection shall be determined by a Suitably Qualified and Experienced Person:

- i. on the basis of a farming use of the same or similar nature as at the 9 November 2023 (generally including grazing animals) and considering the land area that will be available for farming of the Northern Civil Land and the Southern Civil Land; and
- ii. having regard to consultation with the Civil Landholding Owners or their appointed representatives as to the proposed physical connection (such consultation to be undertaken over a period of no less than 40 working days by the Requiring Authority during the detailed design phase of the Project). The Requiring Authority shall summarise in the Outline Plan(s) prepared for the Project all consultation undertaken under this condition, the physical connection options considered, and whether the Civil Landholding Owners' feedback has been incorporated into the final detailed design and if not, the reasons for that.

The completed physical connection shall be made available to the Civil Landholding Owners when the Project becomes operational unless the Requiring Authority determines it is able to provide the completed connection earlier.

88G. The Requiring Authority is not required to provide the physical connection in 88F if at

any time up to the date the Project becomes operational:

- i. The Northern Civil Land and/or the Southern Civil Land are not owned by the Civil Landholding Owners; or
- ii. The Northern Civil Land and/or the Southern Civil Land will not be owned by the Civil Landholding Owners once the Project becomes operational; or
- iii. The Civil Landholding Owners have or intend to cease farming activity on the Northern Civil Land or the Southern Civil Land (as evidenced by written notice from the Civil Landholding Owners to the Requiring Authority); or
- iv. The Requiring Authority determines not to provide a physical connection between the Northern Civil Land and the Southern Civil Land and the Public Works Act 1981 process has been commenced or concluded by the Crown and the loss of the connection will be or has been taken into consideration as potential injurious affection; or
- v. The Requiring Authority has made reasonable attempts over a 40 working day period to consult with the Civil Landholding Owners under condition 88F(ii), and has been unable to receive feedback on the preferred connection; or
- vi. The Southern Civil Land has an Urban Zoning.

88H. Where the Requiring Authority considers during detailed design that condition 88G applies, it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

88I. Where the Requiring Authority has committed to provide a physical connection under condition 88F, but subsequently one of the criteria in 88G applies before the connection has been completed and made available for use by the Civil Landholding Owners, the Requiring Authority may elect to no longer provide the physical connection and it will notify the Civil Landholding Owners in writing of that position and the evidence to support it.

MAINTENANCE AND OPERATIONAL CONDITIONS

Operational Noise

Noise Criteria Categories

89. The Requiring Authority shall design and construct the Project to ensure that the operational State highway achieves the predicted Noise Criteria Categories identified in Table 2 at each of the identified PPFs adopting the Best Practicable Option. Compliance with the Noise Criteria Categories shall be based on a traffic forecast for a high growth scenario in a design year at least 10 years after the programmed opening of the Project.

Table 2: Identified PPFs

Address	Noise Criteria Category	Predicted noise level (dBLAeq(24h))	New or Altered Category (as per NZS 6806)
83 Valerie Close	A	57	New
74 Wyllie Road	A	52	New
12 Wyllie Road	A	57	New
2 Wyllie Road	A	57	New
2 - 2 Wyllie Road	A	57	New
371 Woodcocks Road	B	60	New
372 Woodcocks Road	B	62	New
79 J Viv Davie Martin Drive	A	57	New
79 B Viv Davie Martin Drive	A	57	New
79 K Viv Davie Martin Drive	A	57	New
78 B Viv Davie Martin Drive	A	57	New
79 A Viv Davie Martin Drive	A	57	New
78 B Viv Davie Martin Drive	A	57	New
78 A Viv Davie Martin Drive	A	57	New
78 Viv Davie Martin Drive	A	57	New
115 Kaipara Flats Road	A	52	New
115 - 2 Kaipara Flats Road	A	52	New
130 Kaipara Flats Road	A	56	New
131 Kaipara Flats Road	A	55	New
211 Kaipara Flats Road	A	53	New
214 Kaipara Flats Road	A	51	New
215 Kaipara Flats Road	A	56	New
91 SH1, Warkworth	A	57	Altered
27 SH-1, Warkworth	A	61	Altered
63 SH-1, Warkworth	A	57	Altered
42 SH-1, Warkworth	A	41 (69 from SH1)	Altered
39 Phillips Road	A	51	New
105 SH1, Warkworth	A	57	Altered
102 SH-1, Warkworth	A	60	Altered
104 SH1, Warkworth	A	39 (65 from SH1)	Altered
6 Kaipara Flats Road	A	59	Altered
161 Kraack Road	A	49	New
145 Kraack Road	A	39	New
127 Kraack Road	A	48	New
696a SH-1, Dome Forest	A	64	Altered
696b SH-1, Dome Forest	A	64	Altered
1232A SH-1, Wayby Valley (first floor)	A	54 (55 from SH1)	Altered
1232A SH-1, Wayby Valley (ground floor)	A	54	Altered

Address	Noise Criteria Category	Predicted noise level (dBLAeq(24h))	New or Altered Category (as per NZS 6806)
25 Wayby Station Road	A	64	Altered
49(a) Wayby Station Road	A	64	Altered
44 Wayby Station Road	A	58	Altered
177 Rustybrook Road	A	53	New
351 Wayby Valley Road	A	53	New
64 Whangaripo Valley Road	A	51	New
96 Whangaripo Valley Road	A	53	New
40 Borrowows Road	A	56	New
47 Borrowows Road	A	53	New
213 Whangaripo Valley Road	A	53	New
263 Worthington Road	A	47	New
250 Silver Hill Road	A	50	New
263 Silver Hill Road	A	49	New
273 Silver Hill Road	A	48	New
332 Silver Hill Road	A	53	New
344 Silver Hill Road	A	51	New
469 SH-1, Te Hana	A	52	Altered
490 SH-1, Wellsford	B	65	Altered
10 Charis Lane	A	51	Altered
13 Charis Lane	A	54	Altered
8 Charis Lane	A	54	Altered
7 Charis Lane	A	53	Altered
9 Charis Lane	A	55	Altered
6 Charis Lane	A	52	Altered
542 SH-1, Topuni	A	55	Altered
557 SH-1, Wellsford	A	55	Altered
139 Vipond Road	A	56	Altered
129 Vipond Road	A	51	Altered
575 SH-1, Topuni	B	58	New
28 Waimanu Road	A	54	Altered
641 SH-1, Wellsford	A	59	Altered
705 SH-1, Wellsford	C	70	Altered
704 SH-1, Wellsford	C	68	Altered
17 Maeneene Road	A	61	Altered
45 Maeneene Road	A	59	Altered
33 Maeneene Road	A	58	Altered
18 Maeneene Road	A	56	Altered
35 Vipond Road	B	60	New
17 Vipond Road	A	55	New
259 Worthington Road	A	50	New

Implementation of noise mitigation

90. The Requiring Authority shall implement all Structural Mitigation or other noise mitigation identified in the Noise Mitigation Plan (Condition 99) prior to the Project becoming operational, except for the road surfaces identified in Condition 91.
91. The Requiring Authority shall use Porous Asphalt, or another road surface with equivalent or better low-noise generating characteristics, from where the Project connects with the Ara Tūhono Puhoi to Warkworth section of SH1 to the southern portal of the tunnels, and from Dibble Road (a forestry road) to the northern tie-in with the existing SH1 north of Maeneene Road. Such a surface shall be implemented within 12 months following the Project being officially opened to general public traffic.

Building-Modification Mitigation

92. Prior to the start of Construction Works, a Suitably Qualified and Experienced Person shall identify:
 - a. Category B PPFs where the predicted sound level increases by more than 3dB as a result of road-traffic noise from the operational Project calculated:
 - i. for PPFs identified as Altered Category in Table 2 and assessed against the Altered Road criteria from the NZS 6806 “do-nothing” level for Altered Roads to the level with all detailed design Structural Mitigation, and
 - ii. for PPFs identified as New Category in Table 2 and assessed against the New Road criteria from the estimated future noise level in the design year without the project to the level with all detailed design Structural Mitigation; and
 - b. Category C PPFs, following implementation of all detailed design Structural Mitigation.
93. The Requiring Authority shall apply the Building Modification Conditions 94 to 98 for any PPF that is identified under Condition 92.
94. If the owner(s) of the PPF agree to entry within 12 months of the date of the request for entry, the Requiring Authority shall engage a Suitably Qualified and Experienced Person to visit the building and assess the noise reduction performance of the existing building envelope.
95. If the Requiring Authority cannot meet the requirements of Condition 90 because:
 - a. The building owner(s) agreed to entry, but entry was not attainable by the Requiring Authority (e.g., entry denied by a tenant); or
 - b. The building owner(s) did not agree to entry within 12 months of the date of the request for entry (including where the owner did not respond within that period); or
 - c. The building owner(s) cannot, after reasonable enquiry, be found prior to completion of construction of the Project.

The Requiring Authority will be deemed to have complied with those conditions and the Requiring Authority shall not be required to implement Building- Modification Mitigation to that building.

96. Within six months of an assessment of a PPF being undertaken in accordance with Condition 92, the Requiring Authority shall give the owner(s) of each PPF written notice advising:

- a. If Building-Modification Mitigation is required to achieve 40 dB LAeq(24h) inside Habitable Spaces when windows are open 100mm for ventilation; and
 - b. The options available for Building-Modification Mitigation, if required; and
 - c. That the owner has three months to decide whether to accept Building- Modification Mitigation and to advise which option for Building-Modification Mitigation the owner(s) prefers (if more than one option is available).
97. The Requiring Authority shall implement the Building-Modification Mitigation agreed in accordance with Condition 96, in a reasonable timeframe agreed with the owner.
98. If the Requiring Authority cannot meet the requirements of Conditions 94 and 95 because:
- a. An alternative agreement for mitigation was reached with the building owner(s); or
 - b. The building owner(s) did not accept the offer to implement Building- Modification Mitigation within three months of the date of the written notice being sent (including where the owner did not respond within that period); or
 - c. The building owner(s) cannot, after reasonable enquiry, be found prior to completion of construction of the Project;

then the Requiring Authority will be deemed to have complied with those conditions.

Noise Mitigation Plan

99. Prior to the Project becoming operational, the Requiring Authority shall prepare a Noise Mitigation Plan (NMP) in accordance with the NZ Transport Agency P40 Noise Specification 2014, or any subsequent version and provide it to the Manager for information. The NMP shall be prepared by a Suitably Qualified and Experienced Person and shall include methods and design details that encourage road users to accelerate and brake gradually at the roundabout at the existing SH1/Mangawhai Road intersection to minimise noise at the dwelling at 542 SH1 Topuni.
100. Within 6 months of the low noise road surface being installed under Condition 91, the Requiring Authority shall prepare, a post-construction review report in accordance with the NZ Transport Agency P40 Noise Specification 2014, or any subsequent version, and provide the post-construction review report to the Manager for information.

Maintenance and protection of landscape, mitigation and offset planting and works

101. The Requiring Authority shall maintain all landscape planting (and replace unsuccessful planting) undertaken as part of the Project for a period of 5 years following opening of the Project in accordance with NZTA P39 Standard Specification for Highway Landscape Treatments 2013, or any subsequent version, to ensure its successful establishment.

Lighting

102. Lighting of the new State highway will be limited to safety and operational requirements (e.g., interchanges) and shall comply with AS/NZS 1158:2005: Lighting for roads and public spaces and any subsequent version.

Attachments

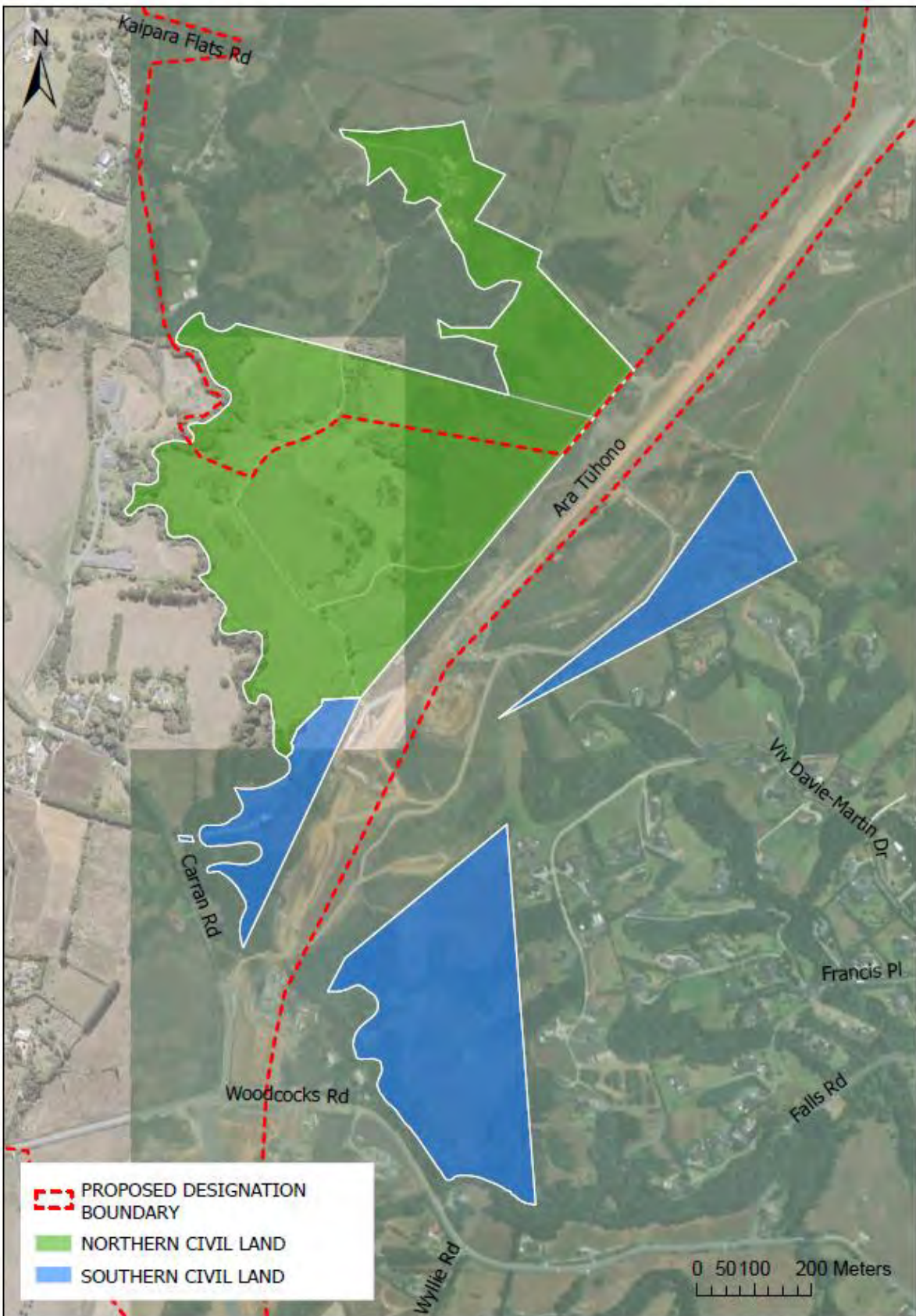
Attachment A



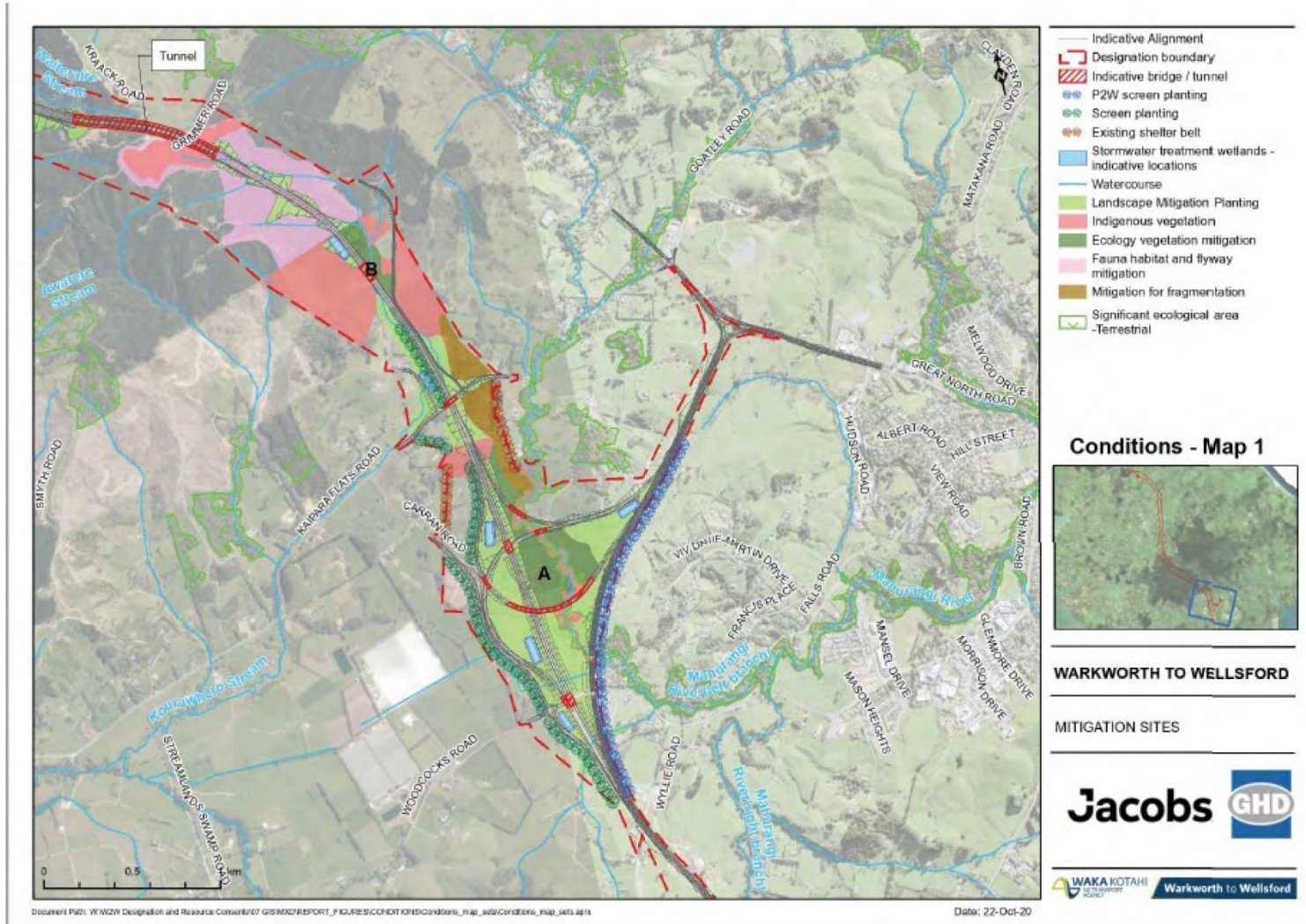
Attachment B – Plan showing existing underpass

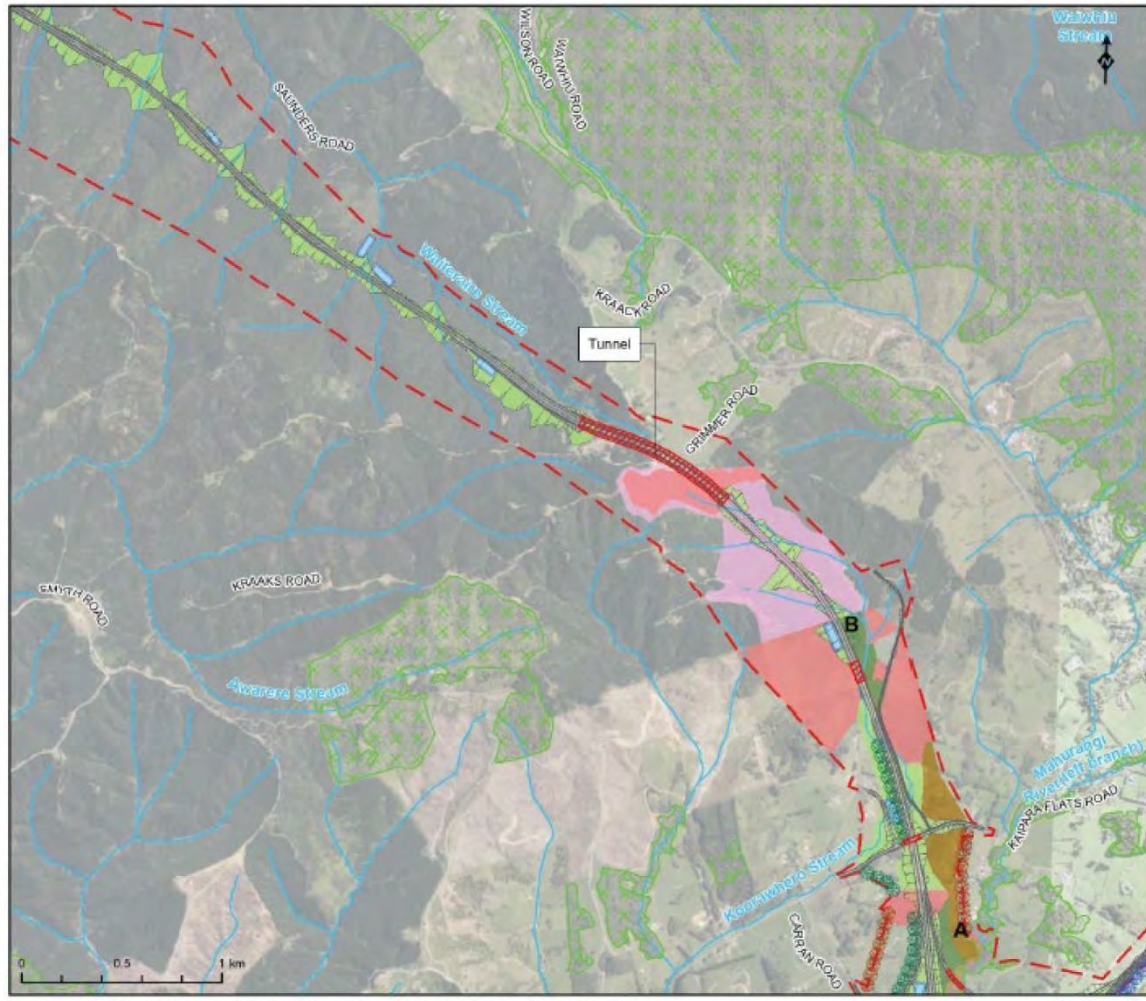


Attachment C – Illustrating the Northern and Southern Civil Land



Maps 1-6





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Date: 22-Oct-20

- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- ⊙ P2W screen planting
- ⊙ Screen planting
- ⊙ Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Fauna habitat and flyway mitigation
- Mitigation for fragmentation
- Significant ecological area - Terrestrial

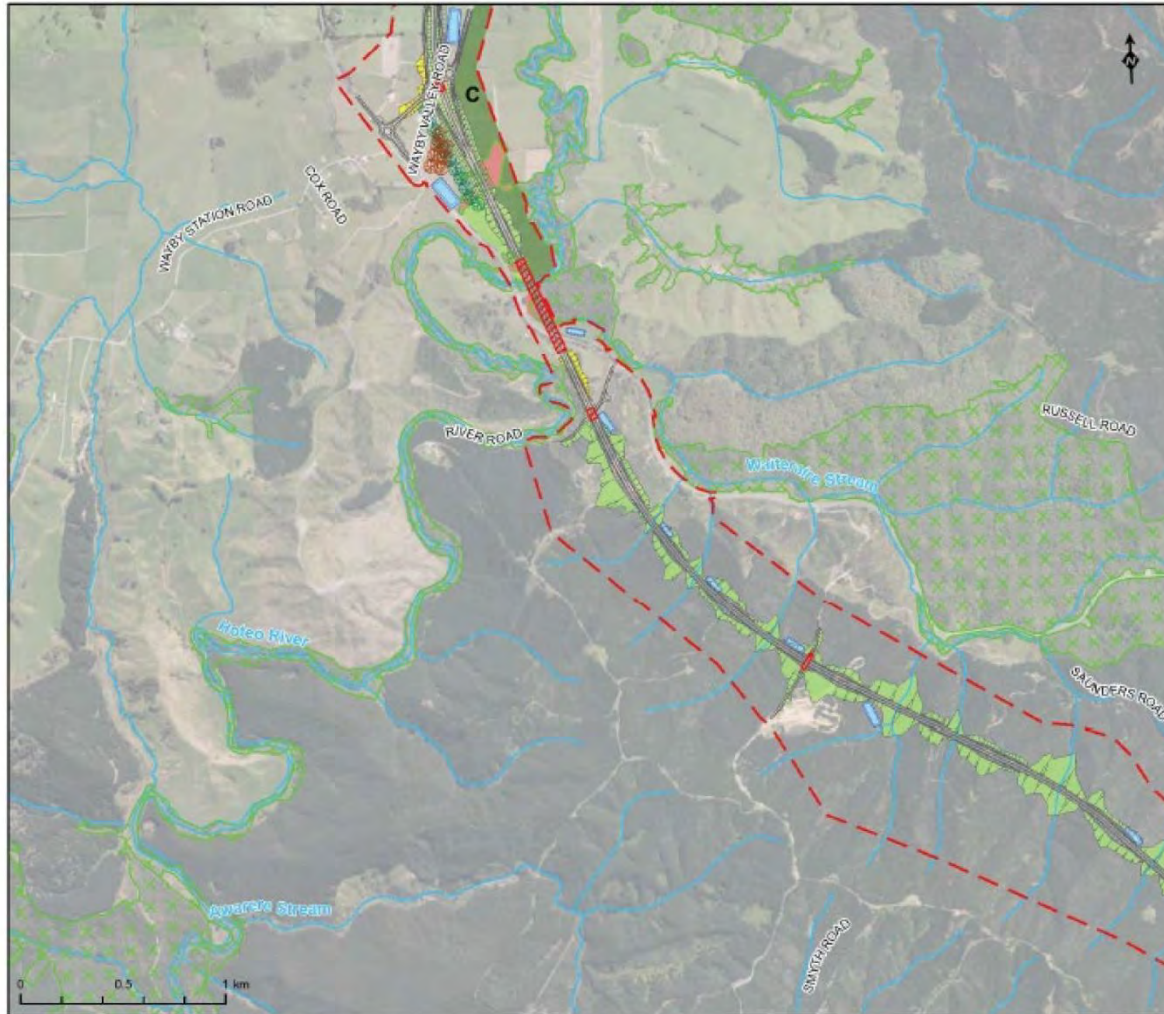
Conditions - Map 2



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- - - Designation boundary
- ▨ Indicative bridge / tunnel
- ⊗ Screen planting
- ⊗ Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Grass batter slopes
- ⊗ Significant ecological area -Terrestrial

Conditions - Map 3



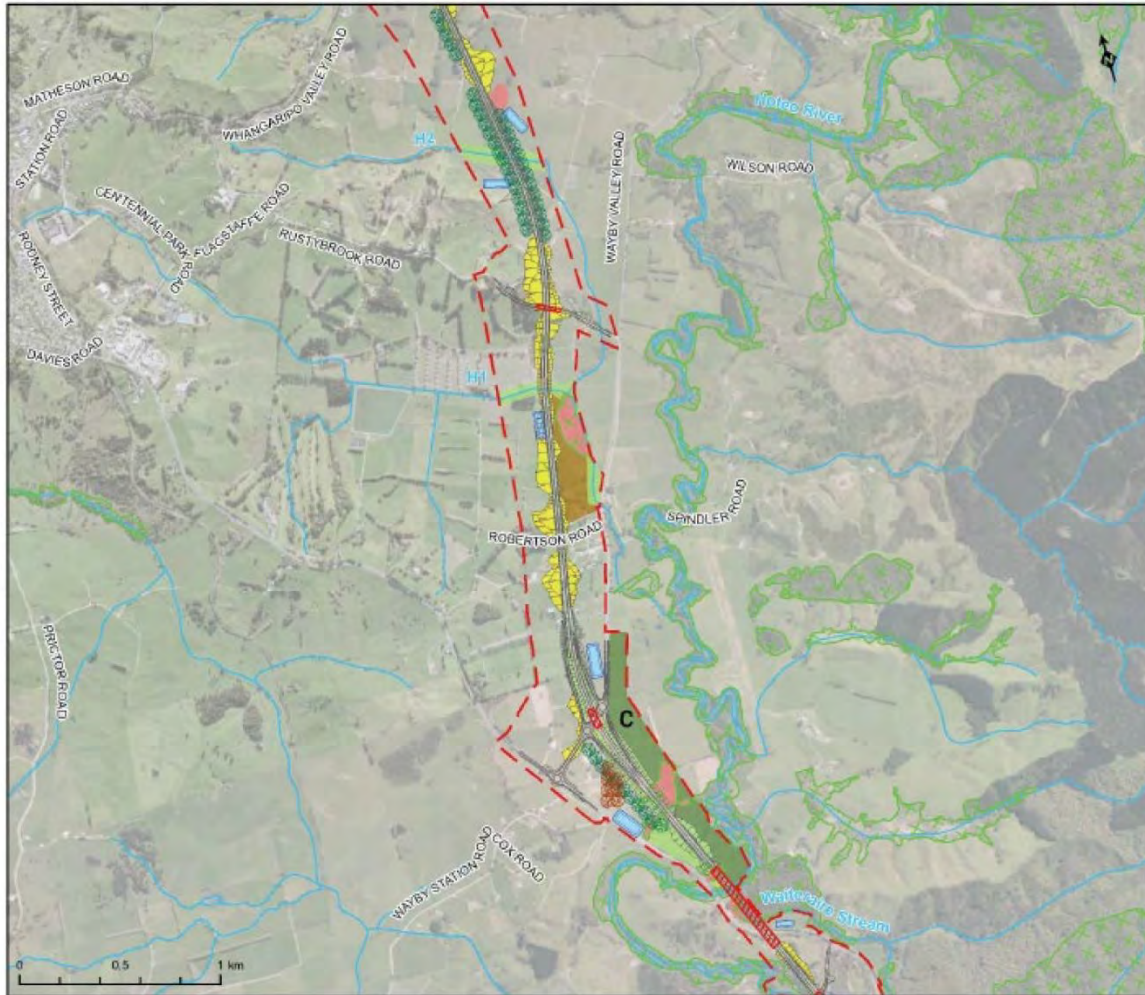
WARKWORTH TO WELLSFORD

MITIGATION SITES



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Date: 22-Oct-20



- Indicative Alignment
- - - Designation boundary
- ▨ Indicative bridge / tunnel
- ⊗ Screen planting
- ⊙ Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Mitigation for fragmentation
- Grass batter slopes
- Significant ecological area -Terrestrial

Conditions - Map 4



WARKWORTH TO WELLSFORD

MITIGATION SITES



WAKA KOTAHU
Māori Language Commission
Warkworth to Wellsford

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Date: 22-Oct-20



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Date: 22-Oct-20

- Indicative Alignment
- ▭ Designation boundary
- ▨ Indicative bridge / tunnel
- 🌳 Screen planting
- 🏠 Existing shelter belt
- 🌊 Stormwater treatment wetlands - indicative locations
- Watercourse
- 🌿 Landscape Mitigation Planting
- 🌳 Indigenous vegetation
- 🌿 Ecology vegetation mitigation
- 🟡 Grass batter slopes
- 🌿 Significant ecological area - Terrestrial

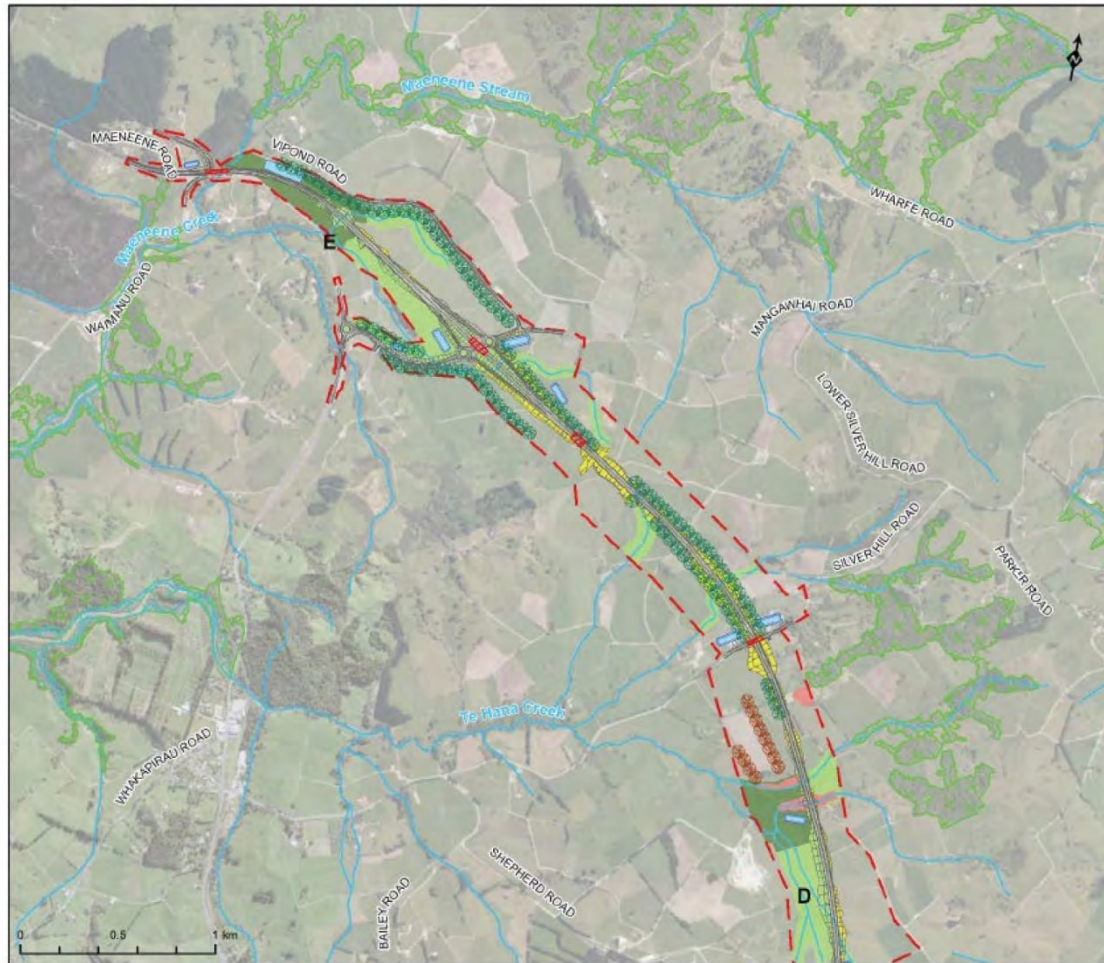
Conditions - Map 5



WARKWORTH TO WELLSFORD

MITIGATION SITES





- Indicative Alignment
- ▬ Designation boundary
- ▨ Indicative bridge / tunnel
- Screen planting
- Existing shelter belt
- Stormwater treatment wetlands - indicative locations
- Watercourse
- Landscape Mitigation Planting
- Indigenous vegetation
- Ecology vegetation mitigation
- Grass batter slopes
- Significant ecological area - Terrestrial
- Significant ecological area - Marine 2

Conditions - Map 6



WARKWORTH TO WELLSFORD

MITIGATION SITES

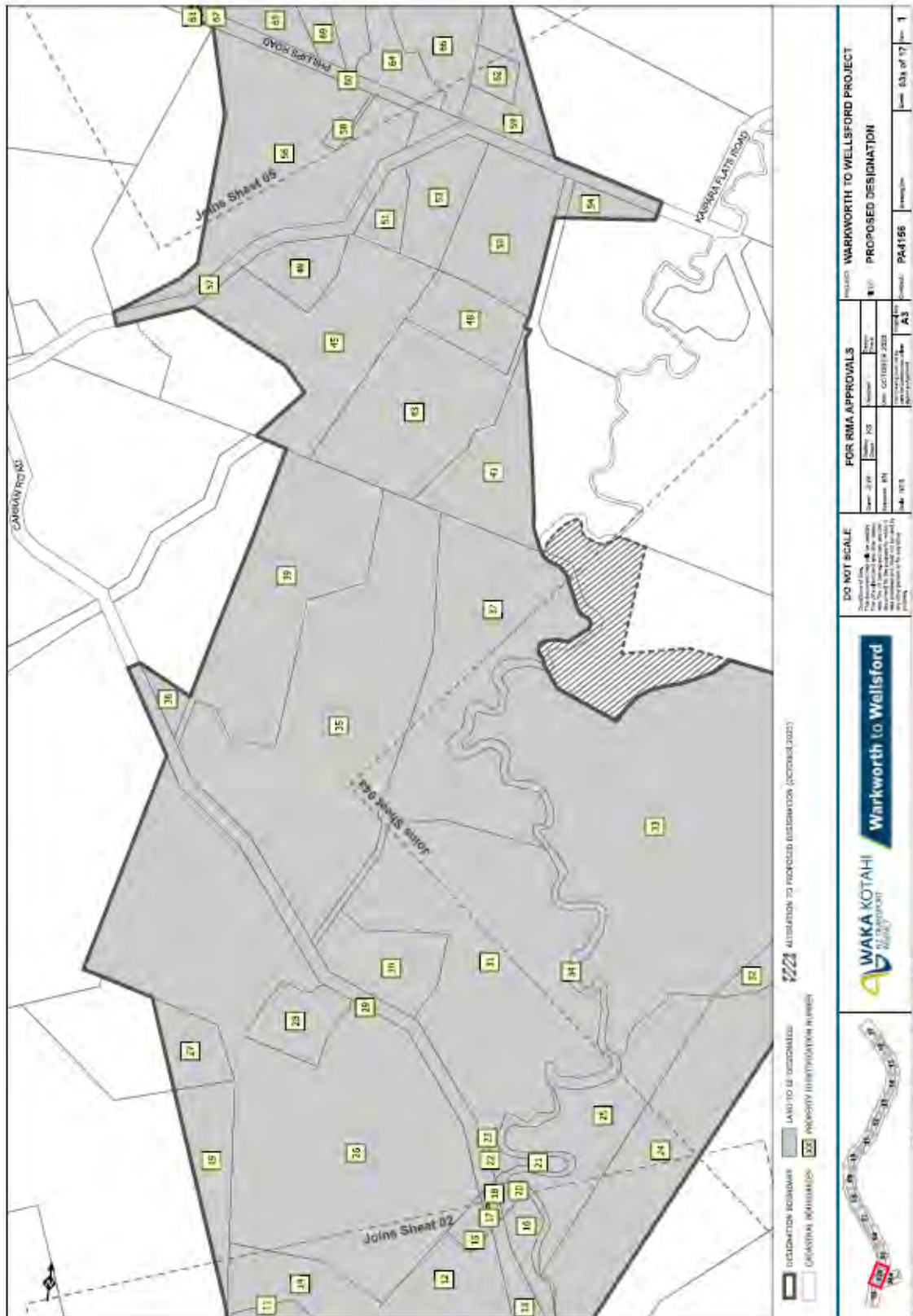


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Date: 22-Oct-20

**Attachment C: Amended designation boundary
(in accordance with the Environment Court
Consent Order)**

ANNEXURE 3 – PLANS SHOWING CHANGES IN DESIGNATION BOUNDARY



ATTENTION TO PROPOSED DESIGNATION (PROPOSED 2025)

- DESIGNATION BOUNDARY
- LAND TO BE DESIGNATED
- EXISTING BOUNDARIES
- PROPERTY IDENTIFICATION NUMBER



WAKA KOTAHU
 Warkworth to Wellsford

DO NOT SCALE		FOR RMA APPROVALS		PROJECT WARKWORTH TO WELLSFORD PROJECT	
Author: JLS	Scale: 1:50	Issue: 01/10/2022	Project: PA4156	Page: 03 of 17	Rev: 1
Checked by: JLS	Drawn: JLS	Issue: 01/10/2022	Project: PA4156	Page: 03 of 17	Rev: 1
Approved by: JLS	Drawn: JLS	Issue: 01/10/2022	Project: PA4156	Page: 03 of 17	Rev: 1

