



CULTURAL IMPACT ASSESSMENT
FOR
TE AHU A TURANGA; MANAWATŪ TARARUA HIGHWAY
PREPARED FOR
NEW ZEALAND TRANSPORT AGENCY

March 2020

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TE AHU A TURANGA; MANAWATŪ TARARUA HIGHWAY
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Statement of Use

This report has been prepared based upon the particular project scope for the purposes of informing the Transport Agency and local authorities of the cultural impacts to Rangitāne o Tamaki nui a Rua (RoTnaR) that arise as a result of the proposal and its specific activities. This report forms the technical basis from which to progress discussions and decision-making regarding how to avoid, remedy, mitigate, offset or compensate these effects. This report may be updated as an addendum should further changes to the project scope be introduced in the future, or new significant information be discovered that may introduce material differences to the assessment.

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Using this report, as the technical basis for dialogue with RoTnaR should ensure that our cultural values are embedded in the decision-making process and that the proposed development enhances how our cultural values are recognised and protected. The use of this CIA is restricted to:

- Sharing with Waka Kotahi NZ Transport Agency ("**Transport Agency**") and project teams to enable consideration of impacts pertaining to Te Ahu a Turanga; Manawatū Tararua Highway Project (the "**Project**");
- Appending to Resource Management Act (RMA) documentation to inform regulatory decision-making for the Project.

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PEPEHA

Ko Kurahaupō te Waka
Ko Ruahine te Maunga
Ko Manawatū te Awa
Ko Te Rangiwhaka-ewa te Tangata
Ko Rangitāne te Iwi

MANA WHENUA

Mana Whenua resides with the most permanent occupier of a specified area or region whose authority and occupation has been unbroken over time



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EXECUTIVE SUMMARY

Rangitāne o Tamaki nui a Rua Incorporated ("**RoTnaR**") have undertaken a Cultural Impact Assessment ("**CIA**") to determine the cultural effects of Te Ahu a Turanga; Manawatū Tararua Highway Project (the "**Project**") within the Project footprint and the surrounding cultural landscape setting within 1km (the "**Study Area**") and to provide recommendations as to how effects can be avoided, remedied or mitigated. The regional significance and need for a replacement to the closed Manawatū Gorge SH3 route is acknowledged and RoTnaR have supported and continue to support the principle of the development of the Project through the ongoing Resource Management Act processes.

This report relates to the resource consents that are needed from Horizons Regional Council ("**Horizons**") to allow for the construction and operation of the Project, being earthworks, vegetation clearance, works in rivers, streams and watercourse and all associated discharges.

RoTnaR have entered into a partnership arrangement with Waka Kotahi NZ Transport Agency ("**Transport Agency**") and the Alliance that has been established to develop the design and construct the Project ("**Alliance**"). Irrespective, while we support the Project, this must be balanced against equally significant cultural values and the impacts and effects arising through the construction and operational phases of the Project.

The cultural significance of this landscape risks being undermined by the physical presence of a new road and river bridge that will dominate the cultural viewshafts of the landscape. The introduction of physical infrastructure will alter the cultural and natural landscape, and introduce impacts associated with vehicle noise, light, and air discharges into the landscape.

In total, 25 significant adverse effects of the Project on the cultural values of RoTnaR and their relationship and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga, have been identified.

The 25 significant adverse impacts identified in this CIA are post-mitigation assessed, meaning they have not been reduced to less than significant (minor or less) by the remedy and mitigation identified by the Transport Agency to date. Consequently, further mitigation and/or offsetting is required, some of which will be provided outside of the consenting process. RoTnaR continue to grow a positive working relationship with the Transport Agency that will deliver material enhancements to te awa o Manawatū, Te Āpiti, and its surrounding environment that are value-add and Māori-outcome components of the Project.

RoTnaR have been involved in the Project since its inception, sit on the Project Alliance Governance Board and are a part of the wider Alliance team. This provides an avenue to help ensure a more meaningful relationship and confidence that the Project will deliver satisfactory cultural mitigation and offsetting in addition to broader social and economic benefits for the wider community.



INTRODUCTION

1.1 Project Background

RoTnaR have been commissioned by the Transport Agency to prepare a CIA for the proposed construction and operation of the Project, which involves 11.5km of new State highway between Ashhurst and Woodville. The proposed new section is required to replace the State Highway 3 route through the Manawatū Gorge that has been permanently closed due to geotechnical instability (the "**Gorge Route**"). The Project is known as Te Ahu a Turanga¹; Manawatū Tararua Highway. This CIA is focused on the construction and operational footprint of the Project corridor and the wider Study Area where setting and indirect impacts may occur.²

The Transport Agency seeks to create a new state highway connection between Ashhurst and Woodville following the closure of the Gorge Route. The use of existing alternatives has had significant social, economic and environmental impacts on nearby residents and the wider region and has led to a spike in crash events on alternative routes. The scale of impacts of the indefinite closure of the Gorge Route resulted in an urgent need to identify a safe, resilient and efficient new route and, as such, the Transport Agency undertook an extensive two-stage investigation process to identify a replacement route. This included analysis of a long list of 18 different route options, followed by a short list of four options (culminating in the confirmation of a preferred corridor in March 2018). Following further detailed design, the Project alignment has been amended to provide for a more northerly alignment, which largely avoids two areas of land that are subject to QEII Open Space Covenants.

The Project objectives are:

- To reconnect the currently closed Manawatū Gorge State Highway 3 with a more resilient connection.
- To reconnect the currently closed Manawatū Gorge State Highway 3 connection with a safer connection than the Saddle Road and Pahiatua Track.
- To reconnect the currently closed Manawatū Gorge State Highway 3 with a more efficient connection than the Saddle Road and Pahiatua Track.

The Project outcomes are:

- A safe, efficient, and resilient transport corridor. It is expected that the new road corridor will:
 - significantly reduce traffic-related deaths and serious injuries;
 - increase resilience of the corridor;
 - improve travel times by 12.1 minutes per trip for general traffic, and 13.8 minutes per trip for freight that currently use the Saddle Road (with associated reductions in vehicle operating costs).
- Enabled economic development and regional productivity. A new road corridor is expected to:
 - support regional economic activities and productivity including through reductions in operating costs and travel time;
 - avoid the cost of a delay to realising the benefits of the Gorge replacement, which is estimated to be \$22M per annum in additional direct travel costs.

¹ The Project name has special cultural significance and was gifted by tangata whenua.

² See methodology section.



The Transport Agency has already given notices of requirement for the designation of the Project to Palmerston North City Council, Manawatū District Council and Tararua District Council in November 2018. Following a hearing in March 2019 the Hearing Panel produced a recommendation report in May 2019. In June 2019 Transport Agency confirmed the requirements and accepted the Hearing Panel's recommendations in part. Some of the Transport Agency amended conditions include linking the timing of the recreational paths fund to the end of the construction sequence, as well as other relatively minor amendments. Two appeals have been lodged against the Transport Agency's decision to confirm the requirements and are currently before the Environment Court.

RoTnaR provided input into the NoR process, including providing a CIA at that stage. This CIA is scoped to inform the resource consents required from Horizons and detailed design. RoTnaR reserve the right and anticipate that there may be need for a more detailed CIA or addendum to this report responding to detailed design components, dependant on the formulation of consent conditions (informed by this CIA and the technical assessments) and the opportunity for RoTnaR to meaningfully participate in matters and decisions that affect their values and interests (potentially secured through MOU or other agreement with Transport Agency).

This CIA report has been prepared by RoTnaR which is the mandated entity representing the people of Rangitāne o Tamaki nui a Rua. RoTnaR is party to the 2016 Deed of Settlement ("**DoS**") with the Crown that settles the historical grievances of Rangitāne o Tamaki nui a Rua and Rangitane o Wairarapa. The purpose of the CIA is to provide the Transport Agency and relevant statutory agencies with documentation of RoTnaR's cultural values, interests, and associations with the Project area and its cultural and natural resources, and the potential impacts of the proposed Project activities on these. This CIA also provides recommendations as to how to avoid, remedy or mitigate any potential cultural effects that arise from the Project.

RoTnaR's engagement in statutory processes, including provision of technical advice for impact assessments, is guided by our tikanga (customs and protocols) and framed by Te Tiriti o Waitangi and our Trust charter. RoTnaR responsibilities are:

"to secure the advancement, independence and security of the Maori Iwi whether individually or collectively and in the following ways: Welfare, Health, Education, Employment, Recreation, Research, Arts and General Development."

In addition to our organisational objectives, the Cultural and Political Services unit of RoTnaR has the objective of:

"Preserve, protect and enhance the identity, integrity, future aspirations, and general wellbeing of Ngā Hapu o Rangitāne Iwi and Taurahere in Tamaki nui a Rua".

In the course of the Project, RoTnaR have been engaged in the following ways:

- Iwi Working Group as an Iwi Representative in the Project Alliance team
- Project planning which includes
 - the design process
 - ecological response planning
 - the consenting process
 - the development of the Alliance Charter
 - the CEDF (Cultural and Environmental Design Framework)
- Training and cultural inductions
- Regular monthly hui with Transport Agency
- Site visits
- Member of the Governance Group (Alliance Board)



1.2 Site Description

The Project is located in the Manawatū-Whanganui Region within the jurisdiction of the Horizons Regional Council, the Manawatū District Council, the Palmerston North City Council and the Tararua District Council. The Ruahine Range is to the north, and the Tararua Range is to the south. It is to the northeast of Palmerston North, and broadly follows the Manawatū River between the towns of Ashhurst and Woodville, connecting the western and eastern ends of the Manawatū Gorge (from State Highway 57 on the west to State Highway 3 on the east) (**Figure 1**).

The Project corridor crosses the Ruahine Ranges, from State Highway 57 on the west, past the western entry to the closed Gorge, north of the Manawatū Gorge and south of the existing Saddle Road, emerging to join State Highway 3 near Woodville. The new road will include roundabout connections with State Highway 57 east of Ashhurst and State Highway 3 west of Woodville, as well as a number of new bridge structures crossing the Manawatū River and unnamed streams and providing property access underpasses. The road will be a median separated carriageway that includes two lanes in each direction over the majority of the route (the second lane provides 'crawler lanes' over and between steeper grades).

This CIA will focus on Study Area. Within the Study Area the Ruahine and Tararua ranges meet at the Manawatū Gorge where the Manawatū Awa is a key feature, running broadly east-west. Parahaki Island sits within the Manawatū River, at the confluence with the Pohangina River, and where the Manawatū River bends towards the southwest and the open plains. Significant native (including old growth) forest exists within the Gorge immediately to the east and north.

The Project works will require large scale earthworks, land disturbance, vegetation clearance, works within the river bed, foundation construction, the construction of haul roads and other enabling works, the construction of new roads, associated roading infrastructure such as lighting and drainage, the construction of a new bridge, the construction of new shared accessways and rest area platforms, and the maintenance and operation of the new section of road.

Details of the Project's design and how it will be constructed are provided in the **Design and Construction Report (Volume II)**. Drawings providing details of the proposed road, earthworks, stormwater design and details of terrestrial ecology and streams is provided in the **Drawing Set (Volume III)**. Technical assessments of the effects of the Project are provided in **Volumes IV and V** and in particular include details of the Project's terrestrial and stream effects and water quality effects during construction and then operation.



Figure 1: Map showing Project regional context

1.3 Aims and Objectives

The aim of this CIA report is to document Rangitāne o Tamaki nui ā Rua cultural values, interests, and associations with the Project footprint; identify specific cultural sites and resources; assess the values of these sites and resources; identify the potential impacts that arise from Project activities and assess the significance of effect; and provide recommendations as to how to avoid, remedy or mitigate the potential effects to Rangitāne o Tamaki nui ā Rua.

This impact assessment will:

- provide a baseline of known environmental or natural features and resources that may hold cultural values;
- provide a statement of cultural association which RoTnaR have with the Project footprint and Study Area;
- identify any known and appropriate cultural sites and resources within the Project footprint or Study Area;
- describe the value or significance of such sites and resources;
- identify the potential for unrecorded cultural sites (i.e. buried Māori archaeology);
- identify the cultural constraints and risks associated with the Project footprint and the potential significance of effects; and
- provide recommendations for further assessment where necessary and/or measures to avoid, remedy or mitigate adverse effects upon RoTnaR.



METHODOLOGY

1.4 Statutory Process

Te Tiriti o Waitangi

The key guiding document in any consideration of planning or practice that may impact upon the cultural values or wellbeing of Mana Whenua is Te Tiriti o Waitangi. The principles of the Treaty are recognised and provided for in the sustainable management of ancestral lands, water, air, coastal sites, wāhi tapu and other taonga, and natural and physical resources. The Treaty is articulated in law through an evolving set of principles. These include:

- a. reciprocity;
- b. rangatiratanga;
- c. partnership;
- d. shared decision-making (participation);
- e. active protection;
- f. mutual benefit;
- g. right of development; and
- h. redress.

While Article 1 of the Treaty enables the Crown to govern and make laws, Article 2 provides for Māori rangatiratanga over their lands and taonga (things of value). Māori values, associations and interests with their taonga applies regardless of property titles or other constructs, and the Treaty requires that the Crown actively protect these associations and interests (including through but not limited to statutes).

Rangitāne Tū Mai Rā (Wairarapa Tamaki nui-ā-Rua) Trust Deed of Settlement

Rangitāne o Tamaki nui ā Rua have a DoS with the Crown which was signed on 6 August 2016. The DoS is the settlement of all historical Treaty of Waitangi claims of Rangitāne resulting from acts or omissions by the Crown prior to 21 September 1992, and is made up of a package that includes:

- an agreed historical account, Crown acknowledgments and apology;
- cultural redress; and
- financial and commercial redress.

A DoS precedes the passage of a Claims Settlement Act which provides the statutory mechanisms by which to give full effect to the redress and provisions set out in the DoS. However, even without the corresponding Claims Settlement Act being enacted, the DoS is binding on the Crown. Relevant to the Project, the DoS includes:

- an agreed Rangitāne o Tamaki nui ā Rua area of interest recognised by the Crown;
- a statutory acknowledgement over the Manawatū River and its tributaries; and
- a governance representative on the Manawatū River Advisory Board.

A statutory acknowledgement area provides for Rangitane Tū Mai Rā Trust and any member of Rangitāne o Tamaki nui-ā-Rua to cite the statutory acknowledgement as evidence of their association with the statutory area. Consent authorities must have regard to the statutory acknowledgement when deciding whether the Trust is an affected party in relation to a resource consent for an activity within, adjacent to, or directly affecting a statutory area. In addition, the Environment Court and Heritage New Zealand Pouhere Taonga must have regard to the statutory acknowledgement in certain circumstances; and consent authorities must record the statutory acknowledgement on relevant statutory plans and provide summaries of relevant resource consent applications to the Trust.



Heritage New Zealand Pouhere Taonga Act 2014

Statutory protection of Māori archaeology and wāhi tapu is provided for under the Heritage New Zealand Pouhere Taonga Act 2014 (**HNZPTA**), which is administered by Heritage New Zealand Pouhere Taonga (**HNZPT**), an autonomous Crown Entity. Under the HNZPTA all *in situ* materials, sites, and features older than 1900AD are considered archaeological sites whether previously recorded or not, and are afforded automatic protection from damage, modification, or destruction without first obtaining an Archaeological Authority from HNZPT. Moveable objects and artefacts that are not in situ but that are from an archaeological context, or are of Māori origin, are controlled under the Protected Objects Act 1975.

Section 45(2)(b) of the HNZPTA stipulates that works on sites of interest to Māori can only occur if the person nominated to undertake the activity under the authority (a) has the requisite competencies for recognising and respecting Māori values; and (b) has access to appropriate cultural support. Therefore, under the HNZPTA Mana Whenua are enabled to provide advice or assessment regarding the management or decision-making arising from impacts on their cultural sites, provided these meet the Act's criteria.

Resource Management Act 1991

The Resource Management Act 1991 (**RMA**) provides statutory recognition of the Treaty of Waitangi and the principles derived from the Treaty. It introduces the Māori resource management system via the recognition of kaitiakitanga and gives local authorities the power to delegate authority to iwi over relevant resource management decisions. The RMA contains over 30 sections, which require Councils to consider matters of importance to tangata whenua. Some of the most important of these are:

- Take into account principles of the Treaty of Waitangi and their application to the management of resources (Section 8).
- Recognise and provide for, as a matter of national importance, the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga (Section 6(e)).
- Have particular regard to the exercise of kaitiakitanga or the iwi's exercise of guardianship over resources (Section 7(a)).
- Require the Minister for the Environment to consider input from an iwi/hapū authority when preparing a national policy statement (Section 46).
- Enable local authorities to transfer their functions, powers or duties under the Act to iwi authorities (Section 33).
- Provide for the development of joint management agreements between councils and iwi/hapū authorities (Section 36B to 36E).
- Have regard to any relevant planning document recognised by an iwi/hapū authority (sections 35A(1)(b), 61(2A)(a), 66(2A)(a), 74(2A)).
- The obligation to consult with iwi/hapū over consents, policies and plans. (Combination of all the sections above and clause 3(1)(d) of Schedule 1).

An assessment of impacts on cultural values and interests (CIA) can assist both applicants and Councils in meeting statutory obligations in a number of ways, including:

- informing the preparation of an assessment of effects on the environment (**AEE**) in accordance with s88(2)(c) and Schedule 4 of the RMA;
- informing requests for further information under s92 of the RMA in order to assess the application;
- providing information to assist the Council in determining notification status under ss95 to 95F of the RMA;



- providing information to enable appropriate consideration of the relevant Part 2 matters when making a decision on an application for resource consent under s104 of the RMA, or when undertaking a plan change; and
- informing consideration of appropriate conditions of resource consent under s108 of the RMA.

Reserves Act 1977 and Conservation Act 1987

Section 4 of the Conservation Act, which is invoked by the Reserves Act, states that the Act must be interpreted and administered as to give effect to the principles of the Treaty of Waitangi.

Te Ture Whenua Māori Act 1993

Te Ture Whenua Māori Act is intended to assist in the retention of Māori land³ and to provide for the protection and use of the land by the owners, in accordance with certain principles. These principles reaffirm the Treaty of Waitangi relationship between the Māori people and the Crown and recognise that land is taonga tuku iho of special significance to Māori people. To that end, the principles "*promote the retention of ... land in the hands of its owners, their whanau, and their hapū, and to protect wāhi tapu*". Further, they "*facilitate the occupation, development, and utilisation of that land for the benefit of its owners, their whanau, and their hapū*".

Land Transport Management Act 2003

The Land Transport Management Act is the primary legislation under which the Transport Agency operates. The Act established the Transport Agency and states that the objective of the Transport Agency is to undertake its functions in a way that contributes to an effective, efficient, and safe land transport system in the public interest. The Act contains operating principles for the Transport Agency. These specify that in meeting its objective and undertaking its functions, the Transport Agency must exhibit a sense of social and environmental responsibility. The Act recognises Māori as a Treaty Partner of the Crown (and the Agency by extension). The supporting Transport Agency Public Engagement Guidelines explain that "*in a practical sense this means sharing decision making with Māori when identifying priorities for investment and when identifying the best choice of transport system for their communities, both regionally and nationally*".

1.5 Planning Policy Context

Te Kāuru Taiao Strategy – Te Kāuru Eastern Manawatū River Hapū Collective 2016

Te Kāuru Hapū Collective was founded in April 2010 as a hapū collective response to the identification of the Manawatū River as New Zealand's "River of shame". The report prompted Horizons Regional Council to form the Manawatū River Leaders Forum in February 2010. Te Kāuru Hapū Collective joined the forum in July 2010 as one of the signatories to the Manawatū River Leaders Accord. From the inception of Te Kāuru it was agreed by its hapū that the required administrative support services would be provided by Rangitāne o Tamaki nui a Rua Incorporated (RoTnaR). The purpose of the Te Kāuru Hapū Collective is to:

- Become co-governors and co-managers of the awa;
- Produce a management plan;
- Enhance tikanga tuku iho;

³ As a response to previous legislation that promoted the individualization of land titles and led to the alienation of land from Māori.



- Educate, promote and uphold the principles of kaitiakitanga through projects on the ground.

The formation of the collective has resulted in the development and adoption of the Te Kāuru Taiao Strategy. The purpose of this strategy is to:

1. Guide hapū of Te Kāuru (as well as the relevant RMA officers) in their decision making in all matters that have an impact on the air, water, the land (including rocks and minerals) and all life forms, including people, in the Eastern Manawatū River Catchment;
2. Provide for context on the basis for Te Kāuru Taiao Strategic Actions included in the Manawatū River Leaders Forum (MRLF) action planning and implementation process;
3. Provide an immediate record for local government to consider, respect and include in the environmental decision-making processes;
4. Be included and viewed in context with the Hapū and Iwi Taiao Management Plans that will be lodged with local government bodies.

The Taiao strategy is a living document. It will develop and evolve over time as information becomes available and hapū engage. The underlying framework is comprised of four strands which will be referenced throughout this report.

National Policy Statement for Freshwater Management 2014

The NPS for freshwater management provides national policy settings that relevant statutory agencies including local authorities must comply with. Policy AA1 provides for the recognition of Te Mana o Te Wai, being the connection between water and the broader environment. Policy D1 provides for the involvement of iwi/hapū in the management of fresh water and freshwater ecosystems; enabling iwi/hapū to identify cultural values and interests in fresh water and freshwater ecosystems; and reflects tangata whenua values and interests in the management of, and decision-making regarding, fresh water and freshwater ecosystems.

ICOMOS New Zealand Charter 2010

The International Council on Monuments and Sites (ICOMOS) is UNESCO's principal advisor in matters concerning the conservation and protection of historic monuments and sites and advises the World Heritage Committee on the administration of the World Heritage Convention (which includes provision of nationally significant heritage). The New Zealand National Committee (ICOMOS NZ) produced a New Zealand Charter in 2010 which has been adopted as a standard reference document by councils. The Charter sets out conservation purposes, principles, processes and practice. The scope covers tangible and intangible heritage, the settings of heritage, and cultural landscapes. Of particular relevance the Charter states that tangata whenua kaitiakitanga over their taonga extends beyond current legal ownership wherever such cultural heritage exists. The Charter also states that the conservation of Māori heritage requires incorporation of mātauranga and therefore is conditional on decisions made in association with tangata whenua and should proceed only in this context

Horizons Regional Council One Plan

At a Local Government level, the Horizons Regional Council One Plan provides for the protection and management of matters of importance to tangata whenua including the environment and cultural heritage. The RPS Issues of Significance to hapū and iwi (2.2) identifies degraded water quality, inappropriate land use and management, habitat and biodiversity loss, a need for research, and a need for monitoring and enforcement as the five key take for tangata whenua. The RPS objective for Māori resource management (2.3.2-1) is (a) to have regard to the mauri of natural and physical resources to enable hapū and iwi to provide for their social, economic and cultural wellbeing, and (b) kaitiakitanga must be given particular regard and the relationship of hapū and iwi with their ancestral lands, water,



sites, wāhi tapu and other taonga (including wāhi tūpuna) must be recognised and provided for through resource management processes. The RPS policies cover (2-1) enabling kaitiakitanga and increased involvement in resource management processes, (2-2) protecting identified Māori heritage places from inappropriate subdivision, use or development, (2-3) protecting the mauri of water including through suspension, restriction or voluntary rāhui, and (2-4) other issues to be managed in accordance with Table 2.1 of the Plan (itself a comprehensive list of methods by different take).

Specific further relevant sections of the RPS include: (5-4) the management of the beds of rivers and lakes, (6-1) indigenous biodiversity⁴, (6-2) scheduled landscapes⁵, and (6-3) historic heritage.⁶ It is noted that the Manawatū Gorge (including the river) is a scheduled outstanding natural landscape (item m) in the Regional Plan. The Manawatū River is also a scheduled surface water sub-zone.

The Regional Plan section includes further provisions of relevance. These include: (13-1(b)) requiring consents for vegetation clearance adjacent to waterbodies, vegetation clearance or land disturbance in erosion areas, and large scale land disturbance; (13-3) requiring consents for vegetation clearance, land disturbance, discharges, water take or use, and activities in the beds of rivers within rare, threatened or at risk habitats; (14-1) requiring consents for certain discharges to water and land; (15-1) requiring consents for certain discharges to air and (e) preventing any discharge to air (including resulting from roading works) that is likely to adversely affect sensitive areas including surface water bodies, wāhi tapu and sites of significance to hapū/iwi, and rare, threatened or at-risk habitats; (17-1) requiring consents for activities in, on, under or over the beds of rivers (including maintenance work).

District Councils

The three district councils with jurisdiction in the area have relevant objectives, policies, and rules both in terms of Māori resource management and general environmental controls. However, as the designation will (if confirmed by the Environment Court) be included in the district plan as if it were a rule, a summary of these provisions is not reproduced here. It is of note, however, that the Palmerston North City Council has listed Parahaki Island as a tangata whenua site of significance.

Transport Agency Bridging the Gap Urban Design Guide

This Transport Agency Guideline relates to the design of roading and infrastructure (in both rural and urban contexts). The document supports developing partnerships with Māori and incorporating cultural design. The Guide notes (at page 35) that "*Mātauranga Maori can inform urban design practice to allow Maori aspirations to be fulfilled while complementing and improving Transport Agency's urban design outcomes.*" The Guide goes on to state that "*the following steps will help to ensure the successful implementation of mātauranga Maori, including kaitiakitanga (stewardship), in the design of new and existing projects within New Zealand's state highway network:*

1. *Ensure outcomes informed by Mātauranga Maori are context specific and drawn from local sources of knowledge and interpretation. Early engagement with local mandated iwi representatives at the inception phase of the project is important.*

⁴ Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and maintain indigenous biological diversity, including enhancement where appropriate.

⁵ Adverse effects, including cumulative adverse effects, on the natural character of the coastal environment, wetlands, rivers and lakes and their margins, are:

(i) avoided in areas with outstanding natural character, and

(ii) avoided where they would significantly diminish the attributes and qualities of areas that have high natural character

⁶ Protect historic heritage from activities that would significantly reduce heritage qualities.



Rangitāne o Tamaki nui a Rua Inc.

2. *Formation of an Iwi working group/key stakeholders that can advise on the implementation of Mātauranga Maori based design solutions, such as environmental management, landscape design, artworks, construction methods, cultural heritage management (wahi tapu/wahi taonga).*
3. *Adequately assess Maori expectations pertaining to kaitiakitanga (stewardship) such as monitoring requirements, plant species selection, cultural harvest, mahinga kai, bio-diversity, ecological enhancements and protection of mauri (life force).*
4. *Ensure the group is well resourced to contribute and provide inputs into the design and implementation phases of the project.*
5. *Design responses should be tailored to addressing specific issues within specific areas. Local iwi, hapu or whanau will provide the guidance on how this can be achieved.'*

The Guide recognises the importance of Māori heritage places and the need to protect and incorporate these into the design. The Guide states that when designing a new highway the Transport Agency should seek to (at section 3.8, page 33):

- *identify cultural heritage values early on in the process.*
- *locate and design the road to avoid destroying, impacting or severing cultural heritage sites*
- *locate and design the road to minimise the visual impact on items of cultural heritage significance*
- *incorporate cultural heritage sites or structures as landmarks and provide suitable access*
- *locate rest areas to take advantage of cultural heritage sites or structures.*

1.6 Project Governance Structure

RoTnaR have the following positions:

- Governance Group seat
- Iwi Working group (2 representatives)
- One FTE Iwi Representative position
- One Kaitiaki (Junior Cadet) position

RoTnaR have a seat on the Governance Group Board (Interim Project Alliance Agreement, IPAA Board), where we are a part of the decision-making at that high level.

The Iwi Working Group's role is to provide a forum for iwi to discuss with each other and agree (or choose not to agree) with the Alliance matters of common interest including regarding the consent process, project design and construction, mitigation, cultural monitoring, oversight and induction. RoTnaR have two representatives on this Working Group.

RoTnaR have one FTE Iwi Representative, whose role is to deal with the day to day Alliance matters, which include the consent processes, project design and construction, mitigation, cultural and environmental monitoring and all other issues at the table.

RoTnaR also have one kaitiaki (junior cadet) position.]

1.7 Scoping and Consultation

The Study Area comprises a 1km radius from the approximate road centreline (as shown in the general arrangement drawings in Volume III and also considers the locations of proposed spoil sites, access tracks and construction yards/ laydown areas (which are generally within the 1km radius). The 1km radius Study Area is considered appropriate given the large scale of the Project and the Project footprint and the presence of Māori heritage places within the cultural landscape that are likely to experience setting or other impacts from the Project. Within this area all appropriate and known cultural sites, areas, landscapes and resources have been identified. RoTnaR however reserve the right to withhold certain information regarding wāhi tapu or sites that are culturally and spiritually sensitive.



This report includes all known elements of the natural and cultural environment within the Project footprint and Study Area considered to hold cultural value for RoTnaR. This information forms the baseline of the assessment. This includes native biodiversity and ecology, geological and topographic features, natural resources including water bodies, built heritage such as marae, socio-cultural features such as papakāinga, cultural landscapes, historic or cultural sites, Māori archaeological sites, pou whenua and significant cultural public art.

Mātauranga/cultural knowledge of the Project footprint and Study Area has been obtained, where appropriate, from kaumatua, kuia and other holders of knowledge within Rangitāne o Tamaki Nui ā Rua. Readily available published and unpublished written records, illustrations, maps, archaeological and geological records were also reviewed. Spatially referenced heritage asset data was reviewed from the New Zealand Archaeological Association (NZAA) recording scheme database (ArchSite). Other information, reports, and impact assessments available for the Project that have been provided by the Transport Agency have also been reviewed. The technical assessments prepared and lodged in support of the resource consent applications, including the Design Construction Report (**Volume II**) and the Drawing Set (**Volume III**) have also been reviewed. The opinions contained within this document may change and/or develop as new information is available.

This CIA involved a desktop study based on review of technical information, cultural knowledge of the area, and research, as well as site visits to assess and confirm site conditions.

Previous consultation with the Transport Agency resulted in the designation corridor at the western end being relocated in a more easterly direction to avoid the designation being located over Parahaki Island and to minimise the effect on this land parcel (which is owned and administered by the Te Āpiti Ahu Whenua Trust under Māori land title), with the bridge design to take into account changes in river flows that could potentially affect the property.

During the NoR hearings process RoTnaR advised the Hearing Panel that this road option was favoured. RoTnaR reiterated that this route would maintain connection to the various information kiosks, walkways, cycleways, camping grounds and areas of cultural significance in and around the Manawatū Gorge that had been established over recent years by groups such as the Manawatū Gorge Restoration Project 2006-2016 and the like.

1.8 Assessment approach

Following standard Environmental Impact Assessment (EIA) / Assessment of Environmental Effects (AEE) methodologies and planning terminology, but adapted for CIA purposes, this report will:

- a. **Identify** the cultural sites, areas and resources (defined as both tangible and intangible cultural heritage, natural resources of cultural interest, and socio-cultural features) within a Study Area encompassing the proposed Project footprint and a wider area that may be directly or indirectly impacted. The Study Area is defined as approximately 1km radius of the centreline of the Project corridor to correspond with a likely area of setting impacts (e.g. noise, visual), indirect impacts, and a logical catchment of the cultural landscape.
- b. Provide comment on the cultural **value** of the identified cultural sites, areas and resources. Māori cultural value is not derived from national or local policy but is defined and determined by tangata whenua and their particular world view and culture. Māori values are distinct from historic, archaeological or other value-systems, and are recognised by the courts and statute as their own legitimate knowledge-system with tangata whenua being the experts. Māori values are informed by whakapapa and guided by tikanga and kawa, with emphasis placed on the associative and living connection to places and resources which sustain cultural knowledge (mātauranga), practices, and spiritual and physical wellbeing. All cultural sites, areas and resources are of value and significance to RoTnaR, who hold a holistic view of the environment and the unique



relationship of RoTnaR, and the people it represents, to the whenua. It is inappropriate to apply a Western paradigm of value hierarchy or significance ranking when using a Te Ao Māori lens. For planning purposes, all cultural sites, areas and resources can be considered to hold high value, which is supported by RMA Part 2 matters noting the relationship of tangata whenua with their lands, waters, and taonga as nationally significant.

- c. Identify the potential **impacts** on cultural resources and elements. Only Mana Whenua can define the impact on their cultural values, but guidance is noted below. Cultural impacts can be neutral, negligible, minor, moderate, or major, and either adverse or beneficial. Impacts can also be temporary or permanent. Impacts can be:
- i. direct (i.e. physical impacts resulting from a development, impacts to the settings of cultural sites or the character of cultural landscapes, visual, noise, odour, or culturally inappropriate land use activities).
 - ii. indirect (i.e. traffic congestion, erosion due to vegetation loss, or other secondary impacts that occur over time or in a secondary location to the original activity).
 - iii. cumulative (i.e. impacts which are caused by the combined result of past, current and future activities, or in-combination impacts).
- d. Define the **significance of effect** resulting from combining the value of a cultural site, area or resource and the level of potential impact to that site, area or resource. Significance of effect is assessed pre-mitigation but can also be assessed again post-mitigation to ascertain the *residual effect* and effectiveness of any proposed mitigation. Significant effects (within a planning framework) are those with moderate or large effects (either adverse or beneficial). This method is outlined below in **Table 1**.

Table 1: Significance of effect

		LEVEL OF IMPACT				
		No Change	Negligible	Minor	Moderate	Major
CULTURAL VALUE	High	Neutral	Minor	Moderate	Large	Large
	Medium	N/A	N/A	N/A	N/A	N/A
	Low	N/A	N/A	N/A	N/A	N/A

1.9 Assumptions and limitations

RoTnaR are the experts of their own culture and tikanga. This expertise and the equal weighting of Mātauranga Māori evidence is accepted in the courts and by statute. Through a necessity to work within a Western planning framework we utilise planning language where possible to aid in mutual understanding, however there is difficulty in the translation and application of some core cultural concepts to such a framework. This is particularly an issue when segmenting or demarcating value spatially, when ascribing a type of significance hierarchy, and when limiting value to tangible elements (e.g. archaeology), whereas Māori hold a holistic perspective that operates differently to typical western paradigms. Where there is doubt or confusion over a term or point of discussion, readers should contact RoTnaR directly for clarification.



Due to the sensitive nature of certain cultural knowledge, areas and sites (e.g. burial grounds), RoTnaR reserve the right to not identify the exact spatial extents or provide full information of such areas to retain and protect this knowledge within RoTnaR and whānau. RoTnaR also reserve the right to disclose information to other parties at RoTnaR's discretion. In other situations, while a general area may be known to be of cultural significance the exact spatial extent or location of the Project footprint may have been lost over successive generations. Where possible and appropriate, sites are described and defined to enable discussion of the impacts while acknowledging these limitations.

The environmental and archaeological data relied upon for elements of this report are derived from secondary sources and it is assumed the data and opinions within these and other secondary sources is reasonably accurate.

The ArchSite database is a record of known archaeological and historic sites. It is not an exhaustive record of all surviving historic or cultural sites and resources and does not preclude the existence of further sites/features which are unknown at present. The database also utilises a site location point co-ordinate system rather than detailing site extents or cultural landscapes.

ENVIRONMENTAL BASELINE

1.10 Topography and Geology

The Project corridor is situated on the southern section of the Ruahine range and the eastern and western ends of the Manawatū Gorge which separates the Ruahine and Tararua ranges. The Project corridor traverses from the west a short section on the edge of the Manawatū Plain (an old seabed) then crosses the Manawatū River near the confluence with the Pohangina River before rising up the steep hill slopes to a flattish area along the ridge crest. The corridor then descends through steep hill country on the eastern side and onto the alluvial plain south of Woodville. The Project area has a complex geology and is a seismically active area due to the presence of a number of active and inactive fault lines. Greywacke is the predominant underlying geology along the Manawatū Gorge, with older sandstone/siltstone near the plateau or saddle. Dense gravels underlie much of the western end of the Gorge, with more recent alluvial gravels along the rivers including Parahaki Island. The Study Area interconnects with nine streams/natural waterways (intermittent and permanent) (**Figure 2**). The alluvial gravels of the river terraces were fertile gardening grounds thanks to periodic flooding and areas of wetlands, while remaining free draining in other areas.

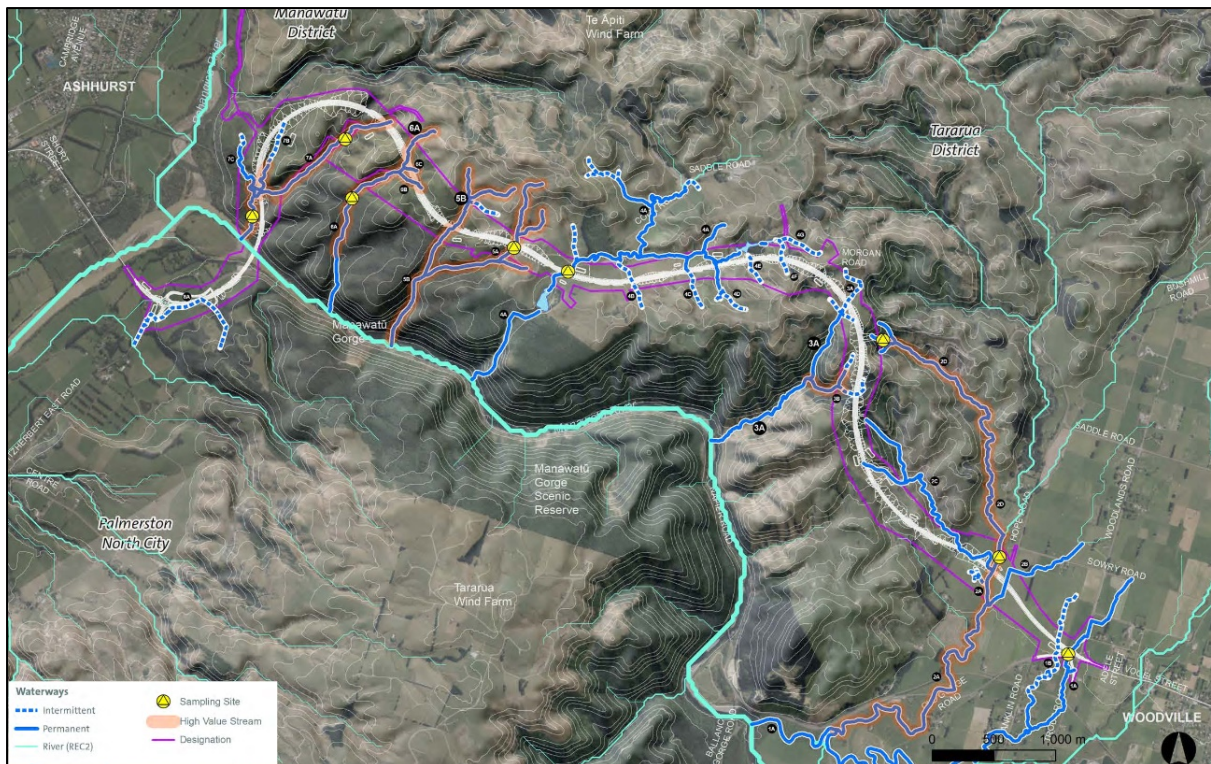


Figure 2: Waterways in the Study Area (source: Transport Agency)

1.11 Natural Resources and Ecology

Achieving sustainable management requires a number of assumptions. It is generally assumed that future generations of the Manawatū Gorge Rangitāne area will require the same sorts of things we enjoy such as clean waterways, fresh air and quiet neighbourhoods. It is about passing on the stock of such natural and physical resources to the next generation in a similar condition to the current state and in sufficient quantities to meet future needs. We also need to set benchmarks or bottom lines to safeguard the life-supporting capacity of our air, land and water. The assumption is that a certain level of impact and effect on the environment can be tolerated. The requirement to avoid, remedy or mitigate adverse effects on the environment provides an opportunity to prevent those effects, or if this cannot be achieved, minimise effects to an acceptable and practical level.

The indigenous vegetation in the Project area has been historically extensively cleared and compromised, with the land converted by European settlers into agricultural and urban land uses. The exception is the Manawatū Gorge Scenic Reserve. Approximately 38ha of indigenous terrestrial ecosystems are within the Project corridor. This includes: old-growth alluvial forests, old-growth hill country forests, secondary broadleaved forests with old-growth signatures, old-growth treelands, advanced secondary broadleaved forests, raupo dominated seepage wetlands, secondary broadleaved forests and scrublands, kānuka forests, indigenous-dominated seepage wetlands, and manuka, kānuka and divaricating shrublands (**Figure 3**).

Indigenous animal species identified or likely to be present include barking gecko, glossy brown skink, ornate skink, common stick insect, tree weta, falcon, pipit, black-billed gull, Australasian bittern, Caspian tern, banded dotterel, red-billed gull, whitehead, spotless crane, rifleman, pied oystercatcher, marsh crane, dabchick, kaka, pied shag, coot, black shag, little black shag, and black-fronted dotterel. The Freshwater Ecology Assessment (**Technical Assessment H**) indicates that the following species are present in the waterways crossed by the Project: shortfin and longfin eels/tuna, torrentfish, dwarf galaxias, upland, common, redfin and unknown bully, brown mudfish, koura, perch, common smelt, unidentified salmonid and brown trout.

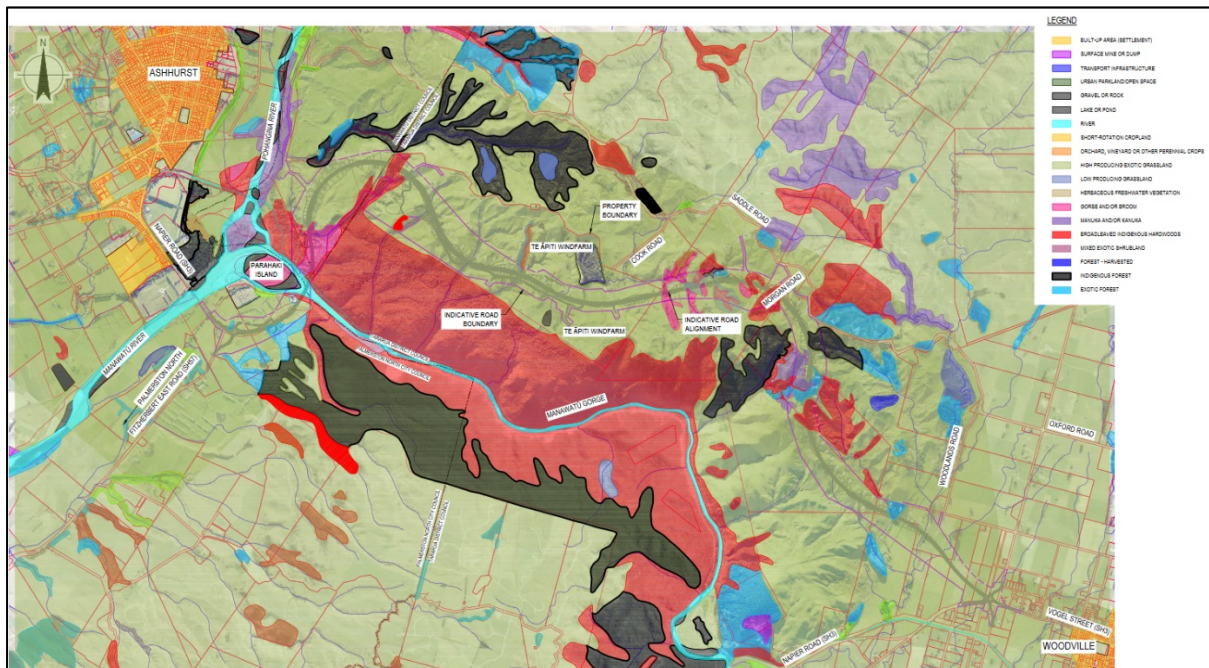


Figure 3: Landcover and vegetation in the Study Area: red (indigenous broadleaved), purple (manuka/kānuka) and dark green (indigenous forest) (source: Transport Agency)

CULTURAL BASELINE

1.12 Whakapapa

Only a brief summary of whakapapa is offered here. It is not the place of a technical CIA report, or any other planning instrument, to provide in-depth detail regarding matters of whakapapa, values or history. These reside within whanau and hapū and are best shared through a karu ki te karu relationship based on mutual respect and understanding, rather than through the narrow lens of a project. What is offered is what is considered need-to-know for the purposes of informing the Transport Agency of our cultural values, interests, issues and methods within the Study Area.

Rangitāne o Tamaki Nui ā Rua Incorporated is the legal and mandated entity representing the Iwi members of Rangitāne o Tamaki Nui ā Rua. The rohe (tribal territory or area of interest) of Rangitāne o Tamaki Nui ā Rua has a similar demarcation to the modern day Tararua District (**Figure 4**).



Figure 4: Area of Interest of Rangitāne o Tamaki Nui ā Rua

Rangitāne claim interests throughout this area by virtue of whakapapa, take tupuna (inherited rights) and ahi kā roa (long occupation). Rangitāne tikanga does not recognise that “affiliations over time” provide any basis for confirming the customary interests of Rangitāne. Rangitāne acknowledge that Rangitāne individuals have whakapapa connections to many non-Rangitāne tūpuna throughout Aotearoa, but that these connections do not give those individuals their customary rights and interests as Rangitāne in the area of interest described above. Rangitāne claim that their rights within their area of interest are derived from their Rangitāne whakapapa.

Hapū with customary interests within the Study Area include the Rangitāne hapū of Ngāti Mutuahi and Ngāti Te Koro. The name Ngāti Mutuahi commemorates a significant event in contrast to the usual practise of naming hapū after particular ancestors. Ngāti Te Koro is one of the hapū whose interests include land in and to the east of the Manawatū Gorge. Ngāti Te Koro trace their descent from the tupuna Te Koro-o-ngā-whenua, the son of Te Ruatōtara. The latter is the eponymous ancestor of the Ngāti Ruatōtara hapū of Rangitāne who are also members of the Te Kāuru Hapū Collective.



Rangitāne, the eponymous ancestor of Rangitāne o Tamaki Nui ā Rua was the grandson of Whatonga, (captain of the Kurahaupo waka) who was the grandson of early navigator and explorer, Toi Te Huatahi (also known as Toi Kairākau).⁷ Rangitāne's mother was Waipuna a direct descendant of the great navigator Kupe whose people are often referred to as Te Aitanga a Kupe. His paternal grandmother was Reretua (wife of Whātonga) who was a grandchild of Tamakuku. Tamakuku was a son of Nukutoea; a male sibling of Kupe.⁸

Following a disagreement with his first wife, Whatonga travelled south to Cape Palliser and Wellington Harbour then on to the Marlborough sounds before returning to Te Ika a Maui (the North Island). Arriving at the mouth of the Manawatū River he followed its course north-eastwards to Te Ahu a Turanga (the Manawatū Gorge), where the River bisects the Tararua and Ruahine Ranges. Emerging from the Gorge on the eastern side of the Ranges Whatonga beheld a vast forest which he named Te Tāpere Nui o Whatonga⁹ (the great district belonging to Whatonga). This area would later become known by early settlers as the Seventy Mile Bush.

The Manawatū Gorge is recognised as one of the main routes connecting the east and west and is named Te Āpiti, meaning the narrow passage that is situated between two mountain ranges, Te Hononga Maunga. The rapids of the Manawatū Awa are called Te Au-Rere-a-Te Tonga ('the rushing current of the south'). Rangitāne tradition tells of the spirit Okatia possessing a giant tōtara tree on the Puketoi Ranges. This oral tradition reflects the geological contradictions of the Manawatū Gorge. Okatia endowed the tree with power of motion, whereupon it wormed its way across the land and gouged a channel that divided the Tararua and Ruahine Ranges.

Te Waha o Te Kurī is the traditional name for the entrance of the Manawatū Gorge at the Woodville (eastern) end. The origin of the name traces back to Tara, son of Pouheni, who inherited three ancestral dogs. These dogs were wayward and Tara could not keep up with them. Two swam out to sea while the third dog, Mahurangi, fled southward through Heretaunga with Tara in pursuit. After a lengthy pursuit through the forest Tara was able to locate Mahurangi near the entrance of the Manawatū Gorge. He named the location Te Waha o Te Kurī in commemoration of the event.¹⁰

Other traditions address the bed of the River, one concerning the taniwha named Whāngaimokopuna whose original home was at the mouth of the River. Unlike most taniwha, Whāngaimokopuna was a pet. His owners, the people of Motuiti fed him on the choicest portions of eel caught in the area and apparently spoiled him. One day while the elders were away the children who had been left in charge of the pet saw no reason for coddling the taniwha, so they fed him on the heads of the eels, keeping the best portions for themselves. Whāngaimokopuna was naturally upset and seized one of the boys and swallowed him. When the elders returned the boy was absent however while they were searching for him their pet vomited up his remains. It was now the parents turn to be upset and Whāngaimokopuna fled from their anger. The taniwha went inland until the sound of the sea was inaudible and travelled inland through the Gorge and upstream eventually to the source of the Mangapuaka stream in the Whangai Range which was subsequently named after him.¹¹

⁷ Peter McBurney (2014), Cultural Values Assessment for Woodville Sewage Treatment Plant and Pahiatua Sewage Treatment Plant.

⁸ Manahi Paewai (2016), korero from Deed of Settlement signing.

⁹ McEwen, J.M, Rangitāne: A Tribal History, Auckland, Reed Books, 1986, p.21.

¹⁰ Correspondence Te Matenga Kurukore to Maaka Whangataua (1872). Courtesy Brad Haami.

¹¹ Unpublished. Parsons, P (2015). The Manawatu Gorge: A Cultural Values Assessment. Unpublished report for DOC



The Manawatū Gorge has always played a strategic role in the history of the region as a key transport route, and continues to. When the awa ran low waka would be hauled along a walking track through the Gorge. Tangata whenua have always lived along the awa, traditionally in a seasonal cycle of resource gathering and use, utilising the swamps and wooded forest for kai and textiles, the river terraces for gardening and kainga, as well as for ceremonies and nehu. Both the Manawatū and Pohangina Awa are considered living entities with their own mana, wairua and mauri which sustains and provides for flora and fauna, tangata whenua, and manuhiri. Pā were strategically located to oversee the entrances to Te Āpiti, including near what is now the Ashhurst Domain and the Raukawa pā near Ashhurst which was used when gathering hinau berries. Kainga in the area included Raparuhe, Te Ponga, Te Wharau and Parahaki. Parahaki Island, at the mouth of Te Āpiti/Manawatū Gorge and the confluence of the two rivers, held a seasonal kāinga, mahinga kai, and urupa that serviced many of the surrounding kainga clustered around Otangaki and the lower Pohangina valley. One whare is recorded as having been erected on stilts, due to the seasonal floodwaters that would wash over the site.

When the land was Crown-granted in 1870 the block estimated to contain 21,000 acres took the name Te Ahu a Turanga. Tribal historian Hohepa Paewai was the first witness to give evidence at the hearing. *“I belong to the tribe of Rangitāne. I live at Tawakeroa in the district of Tamaki. I know the block of land called Te Ahu a Turanga delineated from the Plan. I have lived and cultivated on the land and have houses on it. I claim through my ancestor. The chief claimant to this land in the old times was Poutoa a grandson of Rangitāne. I am the only surviving chief claimant to this land. There is no dispute among ourselves about it”*. Hohepa then named seventy-two co-claimants with himself from the upper and lower Manawatū who had interests in the block.

Other witnesses appeared briefly and identified the ancestors Rangiwaka-ewa, Whata, etc. The judgement read *“that Rangitāne have substantiated their claim to the land called Te Ahu a Turanga and that opposing claimants Aperahama Ruatahi, Te Ropiha Tako and Wi Matua have no claim to the land.”*

Seven Crown-grantees were awarded title to Te Ahu a Turanga as trustees for those identified as having interests in the block which meant the grantees were free to sell it to the Crown.

Statement of Association for the Manawatu River and Tributaries Statutory Acknowledgement Area

Set out below is a direct reproduction of the Statement of Association included in the DoS. A map showing the statutory acknowledgement area is provided in **Figure 5**:

“The Manawatū River has its origins on the western side of the Ruahine Range. Its primary source is north of modern day Dannevirke. The catchment also includes the rivers south of the gorge which stretch all the way back to Pukaha / Mount Bruce. They include Bruce Stream, Mākākahi, Mangatainoka, Tiraumea and Mangahao rivers. All of these waters converge and enter Te Āpiti (the Manawatū Gorge) and flow on through the Manawatū plains and out to sea at Foxton Beach. For Rangitāne o Tamaki nui-ā-Rua, the Manawatū River is an ancestral waterway, which many hapū refer to as the awa in their pepeha. When the Tamaki nui-ā-Rua was covered in forest, the river served as a highway for Rangitāne. It was an important means of travel and communication, and linked the Rangitāne settlements in forest clearings. Rangitāne had many settlements along the River, which provided fresh water and plentiful kai.

The original ancestor linked with the Manawatū River was Tamakuku, who dug out the bed of the river, and exercised mana on both sides of the river for its full length. Rangitāne’s grandfather, Whātonga, journeyed up the Manawatū River whilst on a trip away from Heretaunga. Whātonga’s second wife, Reretua, was the grand-daughter of Tamakuku. The links between Rangitāne and Tamakuku were further cemented when Hinetakutai, the daughter of Rangitāne, married Te Rahekeua, a descendant of Tamakuku. All of Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua therefore share descent from Tamakuku, and the link to the Manawatū River.



According to Rangitāne the southern part of the river was formed by the efforts of a giant tōtara tree which grew on the Puketoi Range. The tree became possessed with a spirit called Okatia, which desired to get to the sea. When it descended the Puketoi Range, it headed west and thus encountered the formidable Tararua/Ruahine Range. The constant pounding of the giant tree, assisted by the force of the waters of the Manawatū fractured the range, separating the Ruahine and Tararua Ranges and forming the Manawatū Gorge. Rangitāne use the term Te Āpiti when referring to the cleft that Okatia created in the gorge. Where the river flows through the gorge it is referred to as 'Te Au-rere-a-te-tonga' meaning the flowing current of the south. Other names used by Rangitāne when referring to the Manawatū Gorge area are Te Ahu a Turanga-i-mua and Te waha o te kurī.

The Manawatū River was named by the tupuna Haunui a Nanaia. He travelled along the west coast of the lower North Island, pursuing his wife. When he came to the Manawatū river mouth, he stood aghast as he contemplated the crossing, hence Manawa-breath and tū- to stand still. Some say that his breath stood still as he was actually crossing the river, not only because of the width and depth of the river, but because of the intense cold; it made his breath stand still hence Manawatū.

Rangitāne know of many taniwha and kaitiaki along the course of the river. One of these is Peketahi, the kaitiaki in the bend of the river near the Kaitoki Bridge east of Dannevirke. Peketahi appears in the form of crayfish with a missing limb, an eel or a log. In times of flood Peketahi is often seen as a floating log as he keeps watch on the kāinga."

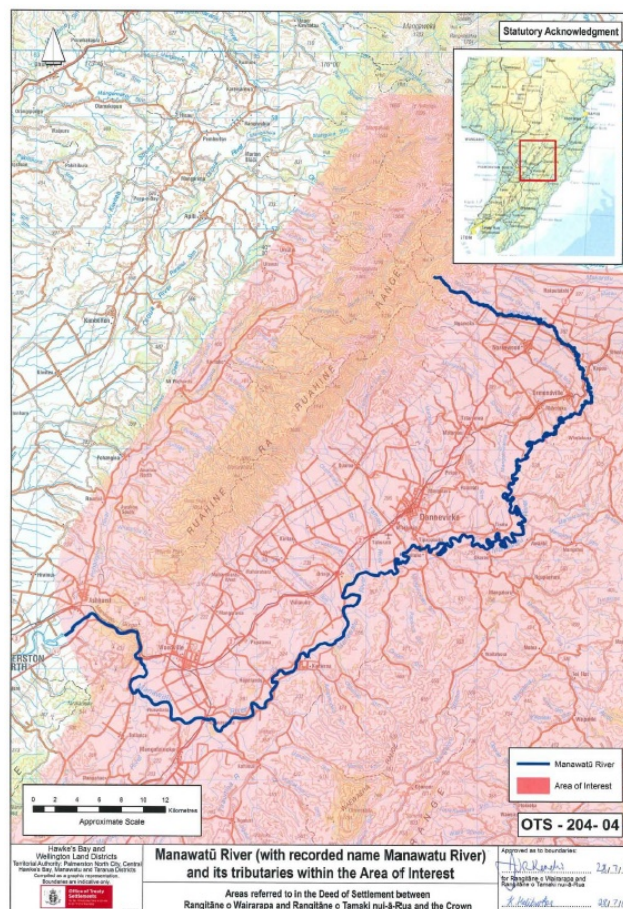


Figure 5: RoTnaR Manawatū River Statutory Acknowledgement Area

Cultural landscape

The Project cannot be examined in isolation of the wider cultural landscape (also known as the ancestral landscape). This wider context is required to better understand the cultural values associated with the lands and resources occupied by and surrounding the Project. Cultural landscapes are the sum of the physical resources and geography, archaeological features, wāhi tapu, place names, histories, places and sites that are interconnected and imbue a spatially defined area with context and meaning for a particular cultural group or groups. Cultural landscapes are what give meaning to and allow interpretation of otherwise spatially discrete sites and resources. They are also integral to the Iwi identity and sense of wellbeing. The Rangitāne o Tamaki Nui ā Rua relationship with their cultural heritage and to their ancestral lands and resources is an integral part of their wellbeing and responsibilities. Cultural heritage sits within and across cultural landscapes and includes history, culture, traditions, tikanga, place names, artefacts, archaeological features, wāhi tapu, natural resources with cultural value, and historic places. It is notable that cultural heritage encompasses both tangible (e.g. physical) and intangible (e.g. spiritual) values. These features help tie the iwi to the whenua and create a web of cultural reference points within the rohe (tribal area).

The key features of the Te Āpiti cultural landscape are the Manawatū Awa, the Pohangina Awa, the Manawatū Gorge slopes and ridgelines that are the Tararua and Ruahine ranges, Parahaki Island, the nearby historic kainga (Otangaki, Te Wharau and Raukawa), the highland streams, the river gravel deposits, the traditional portage ara/route (identified by various markers), Tapu Rock, Te Waha o Te Kuri, the indigenous vegetation and wetlands, and the indigenous animals present in the catchment (**Figure 6**). These features are not just historic relics, but living culture, imbued with values associated with the ability for the environment to provide for customary practices. It is a kaitiaki responsibility to maintain and protect wāhi tapu, just as it is to ensure that the environment is healthy enough to provide the species necessary for mahinga kai.

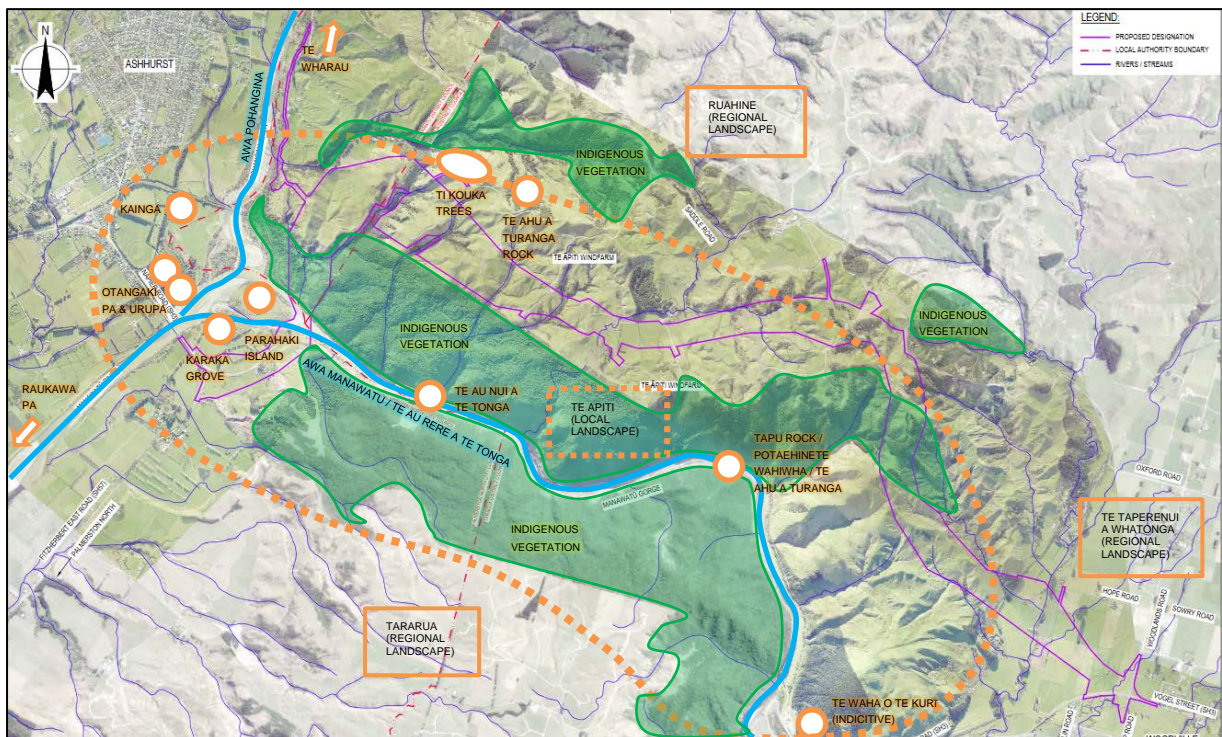


Figure 6: Map depicting some of the cultural sites, areas and resources within the Study Area (indicative only).



1.13 Cultural Values

Over time the Māori world developed its own distinct values system (cultural values) that is integral to its societal structure, the regulation of behaviours, and the continuity of culture. These values and ‘ways of being’ differ in many ways from European culture. Some examples of places, practices and objects that are valued include;

- Marae – place
- Tangihanga – gatherings
- Tribal and whānau whakapapa – knowledge
- Harakeke – commodity
- Elders – person

Whatever we culturally value, has become surrounded in “best practice” – our equivalent for this term is ‘tikanga’. The greater the value of a particular place, area, custom or person, the greater the tikanga (protocol, process and procedure) that is applied to preserve the value of that item, custom or person. Any non-compliance or disrespect of tikanga therefore assigned to preserve the value of a particular item could cause offence or even attract consequences. Some key RoTnaR values include:

- Mātauranga Māori – is the intimate understanding of all of this, that is, its origins, its purpose, implementation and management.
- Mauri – a hidden principle that protects the vitality and the continued fruitfulness of natural and physical resources including land, water, forests and all life that dwells within these environs including people.
- Tapu and Noa – essentially a system of social restriction and latitude.
- Kaitiakitanga – acknowledges the well-known principle that Māori regarded themselves as guardians of their territories and resources rather than owners.
- Tino Rangatiratanga – The sovereign responsibility to protect and guard your people, your territories and your resources.
- Mana – means that you must have an intimate knowledge of Mauri, Tapu/Noa, Kaitiakitanga, Tino Rangatiratanga. Ultimately you have power.

The values stated in the Te Kāuru Taiao Strategy are intended to inform local government and other agencies in their environmental decision-making, ensuring due consideration and inclusion of Te Kāuru Hapū Collective Kaitiakitanga. These values and cultural indicators could be broadly applied and adapted to the project and wider cultural landscape.

Table 2: Values and cultural indicators from Te Kāuru Taiao Strategy

Kaupapa	Indicators	Kaupapa	Status	Importance
Hauora/Wairoa	Te Whare Wwhā	Connecting the river wellbeing to and of the people	Disconnected	High
	Mahinga kai	Nourishment/Survival	Compromised	High
	Healthy Recreational Engagement	Wellbeing/ Health	Compromised	Medium
Hapū	Involved in care of the land and the water	Effective consultation and engagement	Very little interest	Medium



Kaupapa	Indicators	Kaupapa	Status	Importance
Mātauranga Māori	Intergenerational knowledge conservation and development.	Maintain cultural values through education, involvement, acceptance	Very little interest	Medium
Mauri	People rely on a river for survival	Water is drinkable, swimmable and monitored regularly.	Compromised	Medium
	River treated as a taonga and alive	Quality improvement, life and river is protected and maintained – culturally, environmentally and scientifically.	Neglected	High
Tikanga/kawa	The tikanga/kawa of hapū is respected	Hapū cultural practices acknowledged and supported.	Neglected	High

1.14 The Pre and Post Contact Tribal Economy

Pre-contact Māori society had a very clearly defined property rights structure in place. This was a system of resource user rights as opposed to western private property ownership rights. Resource rights were conferred to users via four means:

- Ahikāroa – long term occupation and use;
- Tāketuku—rights through gift and exchange
- Take raupatu—the conquering of new territory and in turn gaining access to the resources of that territory.
- Take tupuna – rights through ancestral birth right
- Take taunaha – rights through discovery
- Whakamoe—marriage was another method by which rights to resources could be conferred, with children inheriting the rights of both parents.

Land itself was not owned as such, but the different resource areas on the land, were owned by individuals, families and sub-tribes through a complex array of rights, dependent upon genealogical linkages, status, and occupation. According to Firth these boundaries were not rigid. For many hapū, boundaries overlapped and rights to gather or hunt in an area might change according to changes that went along with seasons, or according to rights associated with lines of descent” (Reid and Rout, 2015, p119). In effect the pre-contact economy was characterised by a complex array of resource user rights administered through a hierarchical quasi-feudal social structure. It is also important to highlight the important role of utu (reciprocal obligations) and mana (authority/respect) in terms of providing intrinsic cultural values that ultimately shaped behaviour, cultural norms. Adherence to these values also provided the incentives necessary for economic growth to occur. This is a departure from more romanticised accounts of communalism, which fail to explain how tribal economies were able to rapidly adapt and exploit new opportunities following European contact. The economies of scale vastly increasing as demand increased exponentially and intertribal competition for European trade grew. Petrie (2007 as cited in Reid & Rout, 2015) explains:

“The arrival of Europeans merely signalled a new opportunity and Māori seized this instantly, setting the tone for the next decades of burgeoning inter-cultural economic exchange. For Māori present at the time of contact the very first exchanges they sought were economic because



these sorts of pragmatic transactions are an inherent aspect of any vital culture. Māori commerce at contact alone disproves the reactionary traditionalist position, culture and economy were then complimentary components of Māori everyday reality (p118)”

This highlights the adaptability of Māori society and a willingness to adopt new technologies. There was a great incentive to welcome early settlers and to form viable trading relationships in order to grasp and realise new opportunities. However some of these new technologies also brought significant threats that would result in significant imbalances of power and result in the displacement of entire tribes. This is summarised by Mildon (2002);

“Firearms brought not only rapid and violent changes of influence and power and killings in unprecedented numbers but also great upheavals and movements as weaker Iwi sought to escape to safer parts.....Iwi more strongly armed with guns campaigned virtually at will, aggressively ranging over great distances into territory where they held neither legitimate claim or grievance....Rangitāne and their neighbouring relatives did not receive the “benefits” of this early contact with the Europeans. Although likely to be numerically superior to any unwelcome visitors that may arrive, lacking better traditional heavy weapons or without firearms of which technology or method of supply they were utterly unacquainted, they were in an exposed position (p14-15)”.

Prior to European arrival the presence and ebb and flow in authority over land occurred consistently between disputing hapū and a beaten or displaced people yielded their mana for only as long as the occupying force could hold onto their land by strength of arms. By 1840 there had been many shifts in authority over great areas of formerly long-held ancestral lands. These changes were only obtained and upheld with certainty by the unnatural advantage of non-customary weapons introduced initially to only small sections of the Māori population and which had upset the natural balance of power.¹² While this is by no means a comprehensive analysis it does highlight some of the positive and negative effects of early trade upon Māori society and the resulting impacts to traditional patterns of occupation.

1.15 Māori Archaeology

The Project corridor contains a very low number of recorded archaeological and cultural sites which is unlikely to reflect the actual density or distribution of archaeological evidence or cultural sites within the area (**Figure 7**). Within the Study Area five archaeological sites of Māori origin are recorded: T24/28 is a pā within the Ashhurst Domain; T24/30 records burials within the Ashhurst Domain (also known as Otangaki and scheduled in the district plan); T24/29 are gardening soils on a river terrace on the western side of the Pohangina River; T24/31 is a large grove of karaka trees along the Manawatū River terrace and slope above the river to the south of Parahaki Island; and T24/32 the Parahaki kāinga and urupa.

The nature of archaeology means that the total resource of an area is not known until it is either fully investigated by exploratory means prior to works, or uncovered during project earthworks. However, assessment should be made as to the likelihood of unrecorded archaeological resources within the project footprint, the likely value of such resources, and the possible impacts that might occur should archaeological materials in fact be present. This is a part of archaeological effects assessment best

¹² R.Mildon,(2002) The People and the Land; p82

practice. Within the Study Area there is a moderate likelihood of encountering unrecorded archaeology and cultural sites within the river terrace deposits and river banks, and a low likelihood of encountering such materials on the slopes and higher terrain of the Ruahine Range.¹³ However, such encounters should never be discounted irrespective of locations. Potential unrecorded Māori archaeology would likely be associated with seasonal occupation such as midden or features and soils associated with gardening. It is noted that the walking track and lookout sites are recorded in tradition running along the ridgeline pass, though they may not have an archaeological signature.

It should finally be noted that absence of archaeology does not necessarily equate to absence of cultural activity and cultural value.

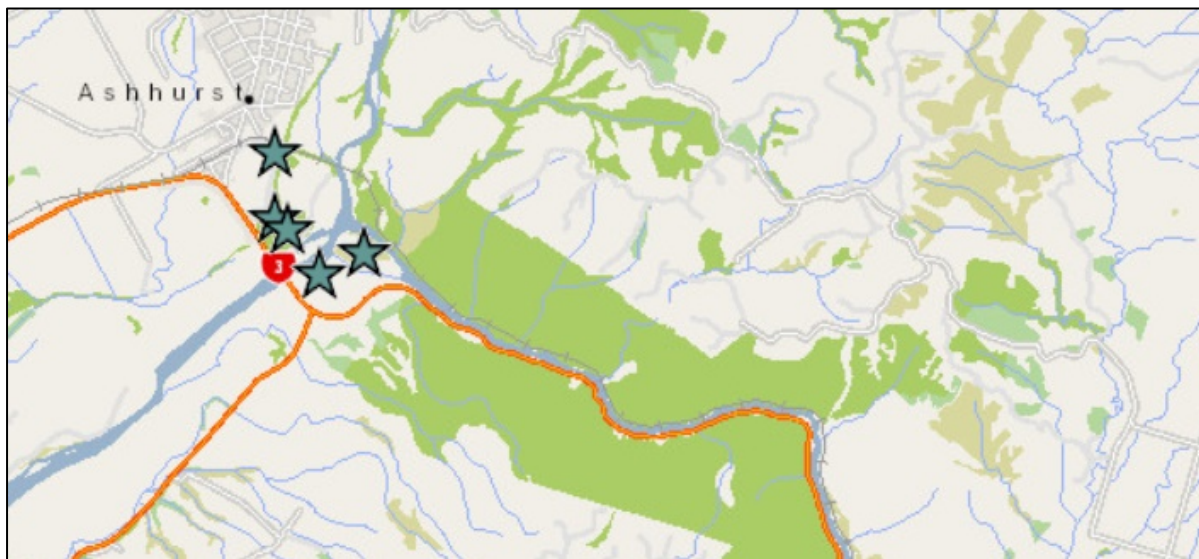


Figure 7: Map showing Māori archaeological records in the area (from NZAA ArchSite database)

1.16 Cultural Sites and Resources

For Rangitāne o Tamaki nui ā Rua, the entire Te Āpiti/Manawatū Gorge area is a cultural landscape, embedded with identity, meaning, and significance. The character and integrity of the whole is made up of its constituent parts, such as the Manawatū Awa, Pohangina Awa, the Manawatū Gorge slopes that are the Tararua and Ruahine ranges, Parahaki Island, the nearby historic kainga (Otangaki and Te Wharau), the river gravel deposits, the traditional portage ara/route, the indigenous vegetation and wetlands, and the indigenous animals present in the catchment. The land on which the Project is proposed is significant due to its place within this landscape, as well as the proximity/interaction with the Manawatū Awa, Parahaki Island, and significant habitat. Below is an annotated list of specific sites, areas and resources of cultural significance in the Study Area which RoTnaR consider appropriate to disclose (**Table 3**).

¹³ This is supported by the Clough and Associates Ltd. 2018 archaeological report findings.



Table 3: Summary of cultural sites, areas and resources within the Study Area

Name	Description	Cultural Activity	Cultural Values	Cultural Value
Te Āpiti/Manawatū Gorge Cultural Landscape	The landscape encompassing the Manawatū River running along the narrow pass between the Tararua and Ruahine ranges, the north-south ridgelines, and the confluence between the Manawatū and Pohangina Awa with Parahaki Island. The landscape is ancestral and gives context and meaning to the cultural sites (tohu whenua) and resources within. The cultural landscape differs from but includes the Outstanding Natural Landscape (ONL).	Mahinga Kai, Māra Kai, Rawa Taio, Wāhi Tapu, Wāhi Tohu, Wāhi Tupuna, Wāhi Taonga, Tōanga Waka	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Manawatū Awa	The river is a living entity with its own mauri, wairua and mana. It sustains flora, fauna, and human spiritual and physical wellbeing within the area. Te-Au-rere a-te-tonga (the river flows south) was the name given to the river as it flowed through the narrows and rapids of the gorge. Te-Au-nui-a-te-tonga (the great south current) was a specific reference to the waterfall in the gorge which proved such an obstacle to early travellers trying to make their way to the interior. ¹⁴	Mahinga Kai, Rawa Taio, Wāhi Tapu, Wāhi Tohu, Tōanga Waka, Wai Māori	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Pohangina Awa	The river is a living entity with its own mauri, wairua and mana. It sustains flora, fauna, and human spiritual and physical wellbeing within the area.	Mahinga Kai, Rawa Taio, Wāhi Tapu, Wāhi Tohu, Tōanga Waka, Wai Māori	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Parahaki Island	The Island is of high cultural importance to whanau, hapū and iwi and as Māori freehold land, as the location of an historic kāinga, gardens, mahinga kai processing site, and burials. Te Kāuru Taiao Strategy identifies this as a site of significance in Table 5 and 6 and seeks the re-establishment of māra kai and cultural events as a key Action.	Mahinga Kai, Māra Kai, Rawa Taio, Wāhi Tapu, Wāhi Tohu, Wāhi Tupuna, Wāhi Taonga, Kāinga	Hauora/Wairoa, Hapū, Mātauranga Māori, Tikanga/Kawa	High
Manawatū Ara	A traditional walking route along the gorge and route when the river levels were low and waka had to be portaged on foot. Some traditions name the pass Te Ahu a Turanga (also a name associated with both Tapu Rock and the early colonial land block title) that ran along the Ruahine side of the gorge. The track was linked to a watching post on the summit of the range.	Tōanga Waka, Ara	Mātauranga Māori	High
The line of Tī Kouka along the Manawatū Ara	The Tī Kouka trees (2 in particular) that line a path heading east along the modified northern alignment are significant of the traditional walking route along the summit range heading to the Te Ahu a Turanga Peak.	Ara, Wāhi Tapu,	Mātauranga Māori, Mauri	High

¹⁴ P.Parsons (2015), The Manawatū Gorge: A Cultural Values Assessment, p.18

Name	Description	Cultural Activity	Cultural Values	Cultural Value
Te Ahu a Turanga Peak	Often referred to as the 'Te Ahu a Turanga Rock' they are one in the same. It is defining of where Turanga I Mua and his party met their end. They heaped up their bodies after they were killed which later in time turned to rock and the position of the rock has now been referred to as the peak. It is located at the highest point on the western side of the Manawatū Gorge Te Āpiti area of the Ruahine Range.	Wāhi Tapu, Wāhi Tohu	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Swamp Maire/northern embankment	Sensitive cultural area within the project footprint and adjacent the northern embankment of the Manawatū awa. This location comprises existing swamp maire trees and other native vegetation.	Rawa Taio, Wāhi Tapu, Wāhi Tohu	Mātauranga Māori, Tikanga/Kawa	High
Taniwha	A number of kaitiaki occupy areas of the Awa Manawatū, including within the Study Area.	Wāhi Tapu, Wāhi Tohu	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Te Waha o Te Kurī	Located at the Woodville entrance to the Manawatū gorge this is where Tara found his ancestral dog Mahurangi after a lengthy pursuit. It is also associated with the tupuna Te Koro o ngā whenua, one of four children of Te Ruatotorā, who lived at and protected the Te Waha o Te Kurī exit of the forest of Te Taperenui a Whatonga in the 18 th century, and likely held a pa.	Wāhi Tupuna, Wāhi Pakanga, Pā, Kāinga, Rohenga/Māka	Mātauranga Māori, Tikanga/Kawa	High
The Tapu Rock	It is located in the upper gorge 2-3km below the upper bridge. It has a reddish tinge which is said to intensify and act as an omen to people. Rangitāne of the upper river call it Potaetewhaiwa or Hinepotae. ¹⁵	Wāhi Tapu, Wāhi Tohu	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Karaka Grove	A sacred karaka grove at the western end of the gorge associated with nearby kāinga. Karaka played important roles in customs and berries were harvested seasonally.	Mahinga Kai, Kāinga	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Otangaki historic kāinga and pā	Historic kāinga and pā site the function of which was to observe and control access to the interior. The name Otangaki means to "clear away the weeds".	Pā, Kāinga, Rohenga/Māka, Wāhi Tapu, Wāhi Tupuna	Mātauranga Māori, Tikanga/Kawa	High
Raukawa historic kāinga and pā	Historic pā on the southside of the river near the entrance of the gorge (reported to have eroded into the river near Raukawa Road termination) and guarded the upper Manawatū against attacking forces coming through the gorge.	Pā, Kāinga, Rohenga/Māka, Wāhi Tapu, Wāhi Tupuna	Mātauranga Māori, Tikanga/Kawa	High
River gravel deposits/terraces	River terraces are ideal locations for gardening and were used for this purpose along the Manawatū and Pohangina rivers.	Rawa Taio, Māra Kai,	Hapū, Mātauranga Māori	High
Streams	A number of permanent and intermittent natural waterways cross the Project footprint. These provide habitat and are part of the mauri of the Ruahine ranges and the Study Area.	Wai Māori, Mahinga Kai	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High
Potential archaeological sites	Unrecorded archaeology is likely to be midden or associated with gardening on the river terraces. The likelihood is moderate on riverbanks and low on steeper slopes.	Wāhi Taonga, Wāhi Tupuna	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	High

¹⁵ Ibid.

Name	Description	Cultural Activity	Cultural Values	Cultural Value
Old-growth alluvial forests	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Old-growth hill country forests	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Old-growth treelands	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Advanced secondary broadleaved forests	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Raupo dominated seepage wetlands	Native species of wetland vegetation hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources including for food, textiles, and customary practices. Te Kāuru Taiao Strategy identifies wetland enhancement as a key Action.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Secondary broadleaved forests and scrublands	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Kānuka forests	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Indigenous-dominated seepage wetlands	Native species of wetland vegetation hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources including for food, textiles, and customary practices.	Rawa Taio, Mahinga Kai, Wāhi Tohu	Mātauranga Māori, Mauri	High
Manuka, kānuka and divaricating shrublands.	Native species of forest cover hold whakapapa to the area, enhance the mauri of the area, provide habitat, and are significant cultural resources.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Barking gecko	Native lizards hold whakapapa to the area, are cultural indicators or tohu, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Glossy brown skink	Native lizards hold whakapapa to the area, are cultural indicators or tohu, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Ornate skink	Native lizards hold whakapapa to the area, are cultural indicators or tohu, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Common stick insect	Native insects hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Tree weta	Native insects hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Karearea/Falcon	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Pipit	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Black-billed gull	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High

Name	Description	Cultural Activity	Cultural Values	Cultural Value
Australasian bittern	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Caspian tern	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Banded dotterel	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Red-billed gull	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Whitehead	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Spotless crane	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Rifleman	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Pied oystercatcher	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Marsh crake	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Dabchick	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Kaka	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Pied shag	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Coot	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Black shag	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Little black shag	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Black-fronted dotterel	Native birds are significant spiritual tohu, hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Pekapeka/Long-tailed bats	The only native mammal in the area, bats hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Longfin eels/tuna	Longfin eels hold whakapapa to the area, are cultural indicators, contribute to the local ecology, and are a cultural resource for kai.	Rawa Taio, Wāhi Tohu, Mahinga Kai	Hapū, Mātauranga Māori, Mauri	High
Inanga	Inanga hold whakapapa to the area, are cultural indicators, contribute to the local ecology, and are a cultural resource for kai.	Rawa Taio, Wāhi Tohu, Mahinga Kai	Hapū, Mātauranga Māori, Mauri	High
Lamprey	Native fish hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu	Mātauranga Māori, Mauri	High
Kokopu	Native fish hold whakapapa to the area, are cultural indicators, and contribute to the local ecology.	Rawa Taio, Wāhi Tohu, Mahinga Kai	Hapū, Mātauranga Māori, Mauri	High
Kākahi (freshwater mussel).	Kākahi hold whakapapa to the area, are cultural indicators, and contribute to the local ecology, and are a cultural resource for kai.	Rawa Taio, Wāhi Tohu, Mahinga Kai	Hapū, Mātauranga Māori, Mauri	High

IMPACT ASSESSMENT

1.17 Potential Direct Impacts

Direct impacts are likely to occur from construction activities: bulk earthworks, staging areas, vehicle movements, operation of heavy machinery and cranes, works within the riverbed and riverbanks, modification to natural waterways, vegetation clearance, potential discharges, and associated noise and light; and from operational activities: new bridge structures, culverting waterways, viewing platforms, road maintenance, and traffic with the associated noise, vehicle emissions, and light pollution. These activities have potential to physically impact cultural sites and resources, as well as directly impact upon spiritual values associated with certain locations or resources, and significantly alter the setting and viewshafts of the cultural landscape. For example, there was considerable concern expressed about the bridge design severing or restricting the connection between Parahaki Island and the Manawatū Gorge (**Figure 8**). After much discussion the design of the bridge has been pared down to a single pier in the awa to reduce the risk of disconnection and minimise negative impacts on the awa



Figure 8: View east at mouth of Manawatū Gorge over Parahaki Island with proposed new bridge indicated by red dotted line (adapted from Transport Agency)

1.18 Potential Indirect Impacts

There is a risk of indirect impacts to occur during construction activities (inappropriate access to Parahaki Island or photographs of wāhi tapu by workers, difficulties accessing the island and awa due to construction traffic movements, and erosion resulting from vegetation clearance); and from operational activities (potential hydrological changes and potential increased instances of bird-strike).



1.19 Potential Cumulative Impacts

Cumulative impacts are likely to occur from construction activities (habitat removal at multiple locations will have an in-combination contemporaneous effect on native fauna, removal of established 'old' habitat across the Project in sequences of work will have a combined effect on native flora and fauna over time while young habitat is still establishing, the likely cumulative loss of Māori archaeology from the cultural landscape); and operational activities (new bridge structures and roads will contribute to the cumulative loss of integrity of the natural and cultural landscape, although the opportunity for cultural input into the design may help to mitigate this effect).

1.20 Summary of Effects

Specific potential impacts identified as relating to the proposed project are included in **Table 4** below:



Table 4: Summary of potential cultural impacts

Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
1. Te Āpiti/Manawatū Gorge Cultural Landscape	The construction impacts will include staging areas, vehicle, crane, and heavy machinery movements and noise, and the destruction of native vegetation. Operational impacts will include the new road along the ridgelines, a new bridge, and traffic movements with resulting noise, light pollution, and vehicle emissions/discharges. This will have both temporary and permanent impacts to the setting, and experience of the landscape.	Temporary Major Direct, Permanent Major Direct and Cumulative	Temporary and Permanent Large Adverse	Bridge Option – 1 pier in river (Our preferred position was no pier in river) Cultural design of bridge, cultural design of thresholds, cultural design of platforms and shared path, vegetation replacement and offsetting.	Temporary and Permanent Moderate Impact, Large Adverse Effect	The road, bridge and loss of old growth vegetation has been mitigated to less than the allowed limit in the NOR conditions. The bridge effects are lessened by agreed upon option of 1 pier in the river and cultural design but are still significant. Replacement of old growth forest by saplings is not a 'like for like' offset however, the Ecological Management Plan includes a detailed description of measures to avoid and minimise adverse effects. The detailed vegetation management plan and offsetting calculations may ensure long-term success of habitat relocation..
2. Manawatū Awa	Construction impacts include works within the riverbed and riverbanks, removal of vegetation adjoining the river, and risk of sediment and discharge. Operational impacts include changes to the setting, possible changes to the hydrology of the river and indirect impacts to Parahaki Island.	Temporary Moderate Direct, Permanent Moderate Direct and Indirect	Temporary and Permanent Large Adverse	Bridge Option – 1 pier in river, vegetation replacement and offsetting.	Temporary Moderate Impact, Large Adverse Effect, Permanent Negligible-Minor Impact, Minor-Moderate Effect.	Offsetting required as effects unlikely to reduce to minor or less. Condition proposed to include Te Awa o Manawatu Cultural Monitoring Tool developed and implemented.
3. Pohangina Awa	Possible operational impacts from changes to river hydrology.	Permanent Negligible Indirect	Permanent Minor Adverse	Nil	Permanent Negligible Impact, Minor Adverse Effect	Refer Technical Assessment F: Hydrological Assessment
4. Parahaki Island	Construction impacts include staging areas, vehicle, crane, and heavy machinery movements, lighting, and noise. Operational impacts will include a new bridge, and traffic movements with resulting noise, light pollution and	Temporary Moderate Direct, Permanent Major Direct and Indirect	Temporary Large Adverse, Permanent Large Adverse	Bridge Option – 1 pier in river, , cultural design of bridge.	Temporary Moderate Impact, Large Adverse Effect, Permanent Moderate Impact, Large Adverse Effect *Bridge Option wi pier in the	Cultural design and mitigation with regard to the bridge - 1 pier in the river, will reduce permanent impacts from major to moderate, but they will still remain significant.



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
	vehicle emissions/discharges. This will have both temporary and permanent impacts to the setting.				water will increase adverse effects.	
5. Manawatū Ara	Operational impacts includes severance of traditional route across the Mountain ranges by new road corridor	Permanent Negligible Direct	Permanent Minor Adverse	Recommend referencing in shared walkway.	Permanent Negligible Impact, Minor Adverse Effect	Inclusion of the Ara in the Cultural design somewhere and inclusion into the shared walkway
6. The line of Tī Kouka along the Manawatū Ara	Operational impacts include the disturbance of a line of Tī Kouka trees which are culturally significant.	Permanent Negligible Direct	Permanent Large Adverse	Opportunity to relocate the two Tī Kouka trees to be investigated.	Permanent Impact, Moderate Adverse Effect	Condition proposed requiring investigation of options and then if practicable to relocate the two Tī Kouka trees. This includes specialist advice on the ability for translocation. This work to be undertaken in consultation with Rangitane.
7. Te Ahu a Turanga Peak	Operational impacts will come close to this culturally sensitive location	Temporary Major Direct, Permanent Major Direct and Cumulative	Temporary and Permanent Large Adverse	Avoidance and recommend referencing in shared walkway	Permanet Negligible Impact, Minor Adverse Effect	Mechanism to be included to retain confidential cultural information that will be shared at Rangitane's discretion. Inclusion in the Cultural design and inclusion into the shared walkway
8. Swamp Maire/ northern embankment	Construction impacts will result in removal of vegetation within the construction footprint and potential of accidental drainage. Culturally sensitive location that would be impacted by piers/ piles, bridge abutments and associated excavations.	Temporary Major Direct, Permanent Major Direct and Cumulative	Temporary and Permanent Large Adverse	The Northern Alignment road design leaves the swamp maire untouched (by extending the Eco Bridge). ADP and engineering design details for bridge abutments and treatment of area surrounding the swamp maire and northern embankment area.	Temporary and Permanent Moderate Impact, Large Adverse Effect	Sensitive area requiring further archaeological investigation (i.e geomagnetic survey). Offsetting may be required if effects are not reduced to minor or less.



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
9. Taniwha	Construction impacts include works within the riverbed and riverbanks, removal of vegetation adjoining the river, and risk of sediment and discharge.	Temporary Negligible Direct, Permanent Negligible Direct and Indirect	Temporary and Permanent Minor Adverse	Bridge Option with no Piers in River, vegetation replacement and offsetting.	Temporary and Permanent Negligible Impact, Minor Adverse Effect. *Bridge Option with piers in the river will increase adverse effects.	N/A – covered by Awa mitigation and offsetting above.
10. Te Waha o Te Kuī	No construction or operational impacts anticipated.	No change.	Neutral	Nil	Neutral	N/A
11. The Tapu Rock	No construction or operational impacts anticipated.	No change.	Neutral	Nil	Neutral	N/A
12. Karaka Grove	No construction or operational impacts anticipated.	No change.	Neutral	Nil	Neutral	N/A
13. Otangaki historic kāinga	No construction or operational impacts anticipated.	No change.	Neutral	Nil	Neutral	N/A
14. Raukawa historic kāinga	No construction or operational impacts anticipated.	No change.	Neutral	Nil	Neutral	N/A
15. River gravel deposits/terraces	Operational impacts from structures in the riverbed and riverbanks.	Permanent Negligible-Minor Direct	Minor-Moderate Adverse	Bridge Option with no piers in the river	Permanent Negligible Impact, Minor Adverse Effect	N/A

Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
16.Streams	Construction impacts involve earthworks around or infilling of streams and diversion or piping of streams. Operational impacts from stormwater discharges.	Permanent Moderate Direct and Cumulative.	Temporary and Permanent Large Adverse	Stormwater treatment design, planting.	Temporary and Permanent Minor Impact, Moderate Adverse Effect	Provide cultural design input to stormwater treatment including the incorporation of tikanaga and mātauranga, and use bridge rather than culvert methodology, to reduce effects further.
17.Potential unknown archaeological sites	Any materials within construction footprint (including staging) would be destroyed.	Permanent Major Direct and Cumulative	Large Adverse	ADP	Permanent Major Impact, Large Adverse Effect	ADP does not mitigate or lessen cultural harm, it is just a form of how to deal with and accidental discovery. If further sites are discovered then the associated effects and mitigation or offsetting will need to be considered
18.Old-growth alluvial forests	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
19.Old-growth hill country forests	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
20.Old-growth treelands 21.Swamp Maire	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
						offsetting calculation and ensuring long-term success of habitat relocation.
22. Advanced secondary broadleaved forests	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
23. Raupo dominated seepage wetlands	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
24. Secondary broadleaved forests and scrublands	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
25. Kānuka forests	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
						offsetting calculation and ensuring long-term success of habitat relocation.
26. Indigenous-dominated seepage wetlands	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
27. Mānuka, kānuka and divaricating shrublands.	Construction impacts will result in removal of vegetation within the construction footprint.	Permanent Major Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent Negligible-Minor Impact, Minor to Moderate Effect	It is difficult for biodiversity offsetting to be calculated as trading old growth established habitat for saplings is not equivalence. Therefore the mitigation could fall within acceptable levels or require further offsetting, depending on the detailed vegetation management plan and offsetting calculation and ensuring long-term success of habitat relocation.
28. Barking gecko	Construction impacts have potential to kill individuals through works or displace populations through habitat loss, noise and vibration.	Permanent and Temporary Moderate Direct and Cumulative	Large Adverse	Lizard Management Plan, Vegetation replanting and offsetting	Permanent and Temporary Negligible-Minor Impact, Minor to Moderate Effect	Individual deaths cannot be mitigated by a management plan, although the number of deaths may. Relocating Lizards to unestablished new habitat will lessen impacts, but depends on the detailed offsetting calculation and ensuring long-term success of habitat relocation.
29. Glossy brown skink	Construction impacts have potential to kill individuals through works or displace populations through habitat loss, noise and vibration.	Permanent and Temporary Moderate Direct and Cumulative	Large Adverse	Lizard Management Plan, Vegetation replanting and offsetting	Permanent and Temporary Negligible-Minor Impact, Minor to Moderate Effect	Individual deaths cannot be mitigated by a management plan, although the number of deaths may. Relocating Lizards to unestablished new habitat will lessen impacts, but depends on the detailed offsetting calculation and ensuring long-term success of habitat relocation.

Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
30. Ornate skink	Construction impacts have potential to kill individuals through works or displace populations through habitat loss, noise and vibration.	Permanent and Temporary Moderate Direct and Cumulative	Large Adverse	Lizard Management Plan, Vegetation replanting and offsetting	Permanent and Temporary Negligible-Minor Impact, Minor to Moderate Effect	Individual deaths cannot be mitigated by a management plan, although the number of deaths may. Relocating Lizards to unestablished new habitat will lessen impacts, but depends on the detailed offsetting calculation and ensuring long-term success of habitat relocation.
31. Common stick insect	Construction impacts have potential to kill individuals through works or displace populations through habitat loss, noise and vibration.	Permanent and Temporary Moderate Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent and Temporary Negligible-Minor Impact, Minor to Moderate Effect	An entomological management plan should be prepared. Relocating insects to unestablished new habitat will lessen impacts, but depends on the detailed offsetting calculation and ensuring long-term success of habitat relocation.
32. Tree weta	Construction impacts have potential to kill individuals through works or displace populations through habitat loss, noise and vibration.	Permanent and Temporary Moderate Direct and Cumulative	Large Adverse	Vegetation replanting and offsetting	Permanent and Temporary Negligible-Minor Impact, Minor to Moderate Effect	An entomological management plan should be prepared. Relocating insects to unestablished new habitat will lessen impacts, but depends on the detailed offsetting calculation and ensuring long-term success of habitat relocation.
33. Karearea/ Falcon	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
34. Pipit	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
35. Black-billed gull	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
36. Australasian bittern	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
37. Caspian tern	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
38. Banded dotterel	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
39. Red-billed gull	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
40. Whitehead	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
41. Spotless crane	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
42. Rifleman	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
43. Pied oystercatcher	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
44. Marsh crane	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
45. Dabchick	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
46. Kaka	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
47. Pied shag	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
48. Coot	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
49. Black shag	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
50. Little black shag	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
51. Black-fronted dotterel	Construction impacts include disturbance from noise. Operational impacts could increase bird-strike by vehicles.	Permanent and Temporary Negligible Direct and Cumulative	Minor Adverse	Avifauna management plan	Permanent and Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Avifauna and vegetation management plan including monitoring.
52. Pekapeka/ Long-tailed bats	Construction impacts include disturbance from noise and individual deaths from tree felling if containing roosts.	Temporary Negligible Direct and Cumulative	Minor Adverse	Bat management plan	Temporary Negligible Impact, Minor Effect.	N/A subject to detailed Bat and vegetation management plan including monitoring.



Name	Summary of impact	Level of Impact	Significance of effect	Proposed mitigation	Residual effect	Additional action wanted (mitigation, offsetting or compensation)
53. Longfin eels/tuna	Construction impacts from works within the riverbed and wetlands, and possible sediment and other discharges to water.	Temporary Minor to Moderate Direct and Indirect	Moderate to Large Adverse	Nil	Temporary Minor to Moderate Impact, Moderate to Large Adverse	Ecological Management Plan recognises this species as "at risk"
54. Inanga	Construction impacts from works within the riverbed, and possible sediment and other discharges to water.	Temporary Negligible to Minor Direct and Indirect	Minor to Moderate Adverse	Nil	Temporary Negligible to Minor Impact, Minor to Moderate Adverse	Freshwater ecology management plan should be prepared and monitored.
55. Lamprey	Construction impacts from works within the riverbed, and possible sediment and other discharges to water.	Temporary Negligible to Minor Direct and Indirect	Minor to Moderate Adverse	Nil	Temporary Negligible to Minor Impact, Minor to Moderate Adverse	Freshwater ecology management plan should be prepared and monitored.
56. Kokopu	Construction impacts from works within the riverbed, and possible sediment and other discharges to water.	Temporary Negligible to Minor Direct and Indirect	Minor to Moderate Adverse	Nil	Temporary Negligible to Minor Impact, Minor to Moderate Adverse	Freshwater ecology management plan should be prepared and monitored.
57. Kākahi (freshwater mussel)	Construction impacts from works within the riverbed, and possible sediment and other discharges to water.	Temporary Negligible to Minor Direct and Indirect	Minor to Moderate Adverse	Nil	Temporary Negligible to Minor Impact, Minor to Moderate Adverse	Freshwater ecology management plan should be prepared and monitored.



WHAKAKAPI

The Project to replace the closed Gorge Route is a project of regional to national importance. The social, safety and economic rationale for a new route alignment roughly along the proposed designation corridor is agreed in principle by RoTnaR. However RoTnaR maintains significant concerns regarding the detailed design and construction stages of the Project, which are matters to be addressed by these resource consents, detailed design, implementation and monitoring. RoTnaR have a constructive but developing working relationship with the Transport Agency and will require a continued high level of engagement and participation in these next phases of the Project.

RoTnaR has reviewed material provided through the NOR process and the proposed application for regional resource consents. The following observations arising out of this are:

1. Vegetation clearance of rare, threatened, or at-risk habitat, particularly near rivers, is likely to be non-complying.
2. The March 2019 (updated) Cultural and Environmental Design Framework (CEDF), which is required by the proposed conditions on the designation, notes (2.4.1) that the Project will 'protect' cultural values through bridge design. Given the bridge itself will cause a significant permanent adverse effect to RoTnaR, the choice of wording here is misleading. To alleviate this issue we look forward to updating the CEDF in collaboration with the wider team. These discussions will include broader offsetting measures within this location and wider catchment area as cultural effects cannot be mitigated through design responses alone. The CEDF as it currently reads is also limiting in that it identifies Parahaki Island as the 'only Mātauranga Māori' opportunity. This fails to demonstrate the need for matauranga Maori to flow through the Project in its entirety, as a matter of tikanga and partnership, from procurement to design to construction to monitoring and operation.
3. The CEDF in its updating and evolving form (2.4.1 March 2019) notes that the Project will 'protect' cultural values. Proposed viewpoints of the Gorge allow for positive interpretation and celebration of cultural narratives and their viewing from a distance.

In total, 25 significant adverse effects to the cultural values of RoTnaR's relationship and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, have been identified.

The 25 significant adverse impacts identified in this CIA are post-mitigation assessed, meaning they have not been reduced to less than significant (minor or less) by the remedy and mitigation identified by the Transport Agency to date. Subsequently, further mitigation and offsetting is required. RoTnaR wishes to continue to develop a positive working relationship with the Transport Agency that will deliver material enhancements to the Awa Manawatū, Te Āpiti, and its surrounding environment that are value-add and Māori-outcome components of the Project.

The specific recommendations that RoTnaR wish to see implemented are detailed in the next section. RoTnaR recognise, however, that not all of these recommendations are suitable for addressing in the resource consenting process, and may be better addressed directly between RoTnaR and the Transport Agency (for instance through project agreements or MoU).

RECOMMENDATIONS

Table 5: Recommendations and outcome alignment

No.	Recommendation	Treaty Value alignment	Te Kāuru Strategy alignment	Legislative alignment	Policy alignment
1	RoTnaR reserve its position (default conditional opposition) on any upcoming resource consents related to the Project, pending the adoption of these recommendations by the Transport Agency or otherwise securing by agreement net positive cultural outcomes for RoTnaR.	Reciprocity, partnership, shared decision-making, active protection, mutual benefit	Hapū	RMA s6E, 7A, 8 LTMA S96(1)(a)	NPSFW D1 One Plan 2.3.2-1
2	RoTnaR's preferred position is no piers in the river. However, we support the 1 Pier Bridge design that has collectively been agreed upon.	Shared decision-making, active protection	Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA S96(1)(a)	NPSFW D1 One Plan 2.3.2-1
3	RoTnaR understand that the Northern Alignment avoids 0.05ha of nationally significant swamp maire and old growth forest, but reserves its position in respect of the bridge and roadway design and resulting treatment of the northern embankment and swamp maire area subject to the receipt of engineering design details and further discussions regarding the potential requirement for further archaeological investigation.	Shared decision-making, active protection	Hapū, Mātauranga Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA S96(1)(a)	NPSFW D1 One Plan 2.3.2-1
4	RoTnaR support investigation into the possibility of translocation for the two Ti Kouka on the northern alignment.	Shared decision-making, active protection, mutual benefit	Mātauranga Māori, Māori, Wāhi Tapu	RMA s6E, 7A, 8 HNZPT s45(2)(b)	One Plan 2.3-2.1 ICOMOS Transport Agency Design Guidance step 2 and 5, 3.8
5	RoTnaR continue to be provided opportunity to participate and share in decision-making (at the cost of the Transport Agency) regarding the cultural design and interpretation of key built design elements such as shared paths, viewing platforms, gateways, bridges, barriers, and landscape planting, with particular regard to the cultural values mapped on figure 8 of this report.	Partnership, shared decision-making, active protection, mutual benefit	Hapū, Mātauranga Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA S96(1)(a)	One Plan 2.3.2-1 ICOMOS Transport Agency Design Guidance step 2 and 5, section 3.8



No.	Recommendation	Treaty Value alignment	Te Kāuru Strategy alignment	Legislative alignment	Policy alignment
6	RoTnaR continue to be provided opportunity to participate and share in decision-making (at the cost of the Transport Agency), including the formulation of cultural indicators, regarding the various environmental/ecological management plans , the construction management plan, and the environment and cultural design framework.	Partnership, shared decision-making, active protection, mutual benefit	Hapū, Mātauranga Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA S96(1)(a)	One Plan 2.3.2-1 ICOMOS Transport Agency Design Guidance step 2 and 5, section 3.8
7	That the Transport Agency provide offset mitigation to RoTnaR for significant cultural impacts in the form of a Te Āpiti Restoration Fund for the purposes of protecting and enhancing the cultural and environmental values of the Manawatū Gorge and its environs. The offset fund could be administered by a Te Āpiti Restoration Trust with representation from RoTnaR and the Transport Agency. This will be reviewed once we understand the ecological response package.	Reciprocity, partnership, shared decision-making, active protection, mutual benefit	Hauora/Wairoa, Hapū, Mātauranga Māori, Mauri, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA S96(1)(a)	One Plan 2.3.2-1 Transport Agency Design Guidance step 3
8	That RoTnaR be provided opportunity to review and inform, and ideally participate in, procurement for the construction and operation of the Project.	Reciprocity, partnership, mutual benefit	Hapū	RMA s6E, 7A, 8 LTMA s96(1)(a)	Transport Agency Design Guidance step 2 and 5, section 3.8
9	That RoTnaR be provided opportunity (at the cost of the Transport Agency) to develop cultural indicators for relevant management plans and frameworks (see recommendation 4 above) and are provided resourcing to undertake kaitiaki cultural monitoring during the construction phase.	Shared decision-making, active protection	Mātauranga Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA s96(1)(a) HNZPT s45(2)(b)	NPSFW D1 One Plan 2.3.2-1 Transport Agency Transport Agency Design Guidance step 3 ICOMOS
10	That RoTnaR be provided the opportunity to develop and implement Te Awa o Manawatu Cultural Monitoring Tool and Framework	Active protection, mutual benefit	Matauranga Maori		



No.	Recommendation	Treaty Value alignment	Te Kāuru Strategy alignment	Legislative alignment	Policy alignment
11	That RoTnaR continue to be provided opportunity to workshop or otherwise input to the formulation of relevant upcoming resource consent and archaeological authority conditions.	Partnership, shared decision-making, active protection	Mātauranga Māori, Tikanga/Kawa	RMA s6E, 7A, 8 LTMA s96(1)(a) HNZPT s45(2)(b)	NPSFW D1 One Plan 2.3.2-1 Transport Agency Design Guidance step 3 NPSFW D1 ICOMOS



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