Remediation of Former Tokanui Hospital Site

Assessment of Environmental Effects

Toitū Te Whenua Land Information New Zealand

Prepared by:
SLR Consulting New Zealand

SLR Project No.: 880.V11547.00001
Client Reference No.: 11547

20 November 2024

Revision: Issued v1.0

Revision Record

Prepared for:	Toitū Te Whenua Land Information New Zealand
Prepared by:	Emily Buckingham Principal Consultant – Planning
Checked by:	Mark Ashby Technical Director – Planning
Authorised by:	Christina Walker Hamilton, Tauranga and Gisborne Planning Manager
SLR Project No.:	880.V11547.00001
SLR Ref No.:	AEE - Remediation Application
Revision:	Date:
Draft v0.1	15 November 2024
Issued v1.0	20 November 2024

Basis of Report

This report has been prepared by SLR Consulting New Zealand (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Toitū Te Whenua Land Information New Zealand (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR and LINZ.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Table of Contents

Tables in Text

Figures in Text

Appendices

Abbreviations

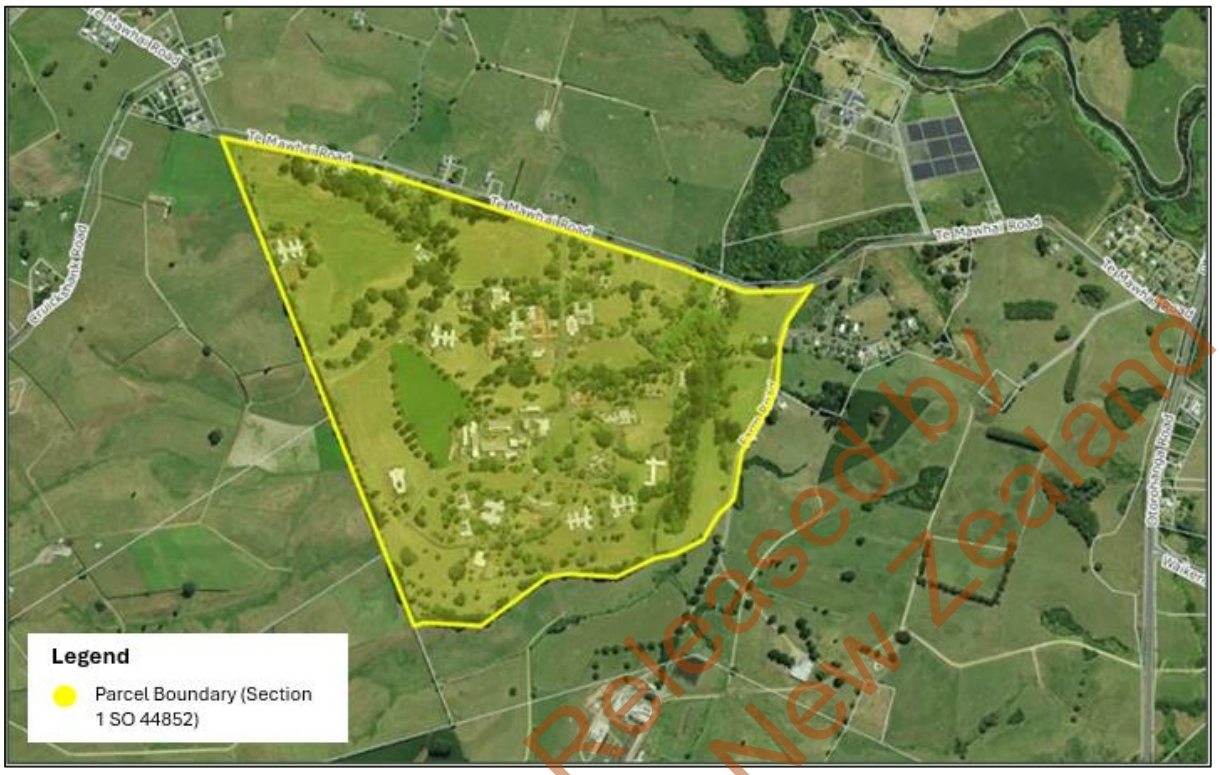
Abbreviation	Meaning
ACM	Asbestos Containing Material
AEE	Assessment of Environmental Effects
AEP	Annual Exceedance Probability
bgl	Below ground level
BMP	Bat Management Plan
CoC	Certificate of Compliance
CIA	Cultural Impact Assessment
CLMG	Contaminated Land Management Guidelines
CTMP	Chemical Treatment Management Plan
DDRMP	Draft Demolition, Deconstruction and Remediation Management Plan
DSI	Detailed Site Investigation
EcIA	Ecological Impact Assessment
ESCP	Erosion and Sediment Control Plan
FMP	Fish Management Plan
HAIL	Hazardous Activities and Industries List
HNZPT	Heritage New Zealand Pouhere Taonga
LINZ	Toitū Te Whenua Land Information New Zealand
NES-CS	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
NES-F	National Environmental Standards for Freshwater
NPS-FM	National Policy Statement for Freshwater Management
NPS-IB	National Policy Statement for Indigenous Biodiversity
ITA	Integrated Transportation Assessment
PMP	Planting and Maintenance Plan
PSI	Preliminary Site Investigation
RAP	Remedial Action Plan

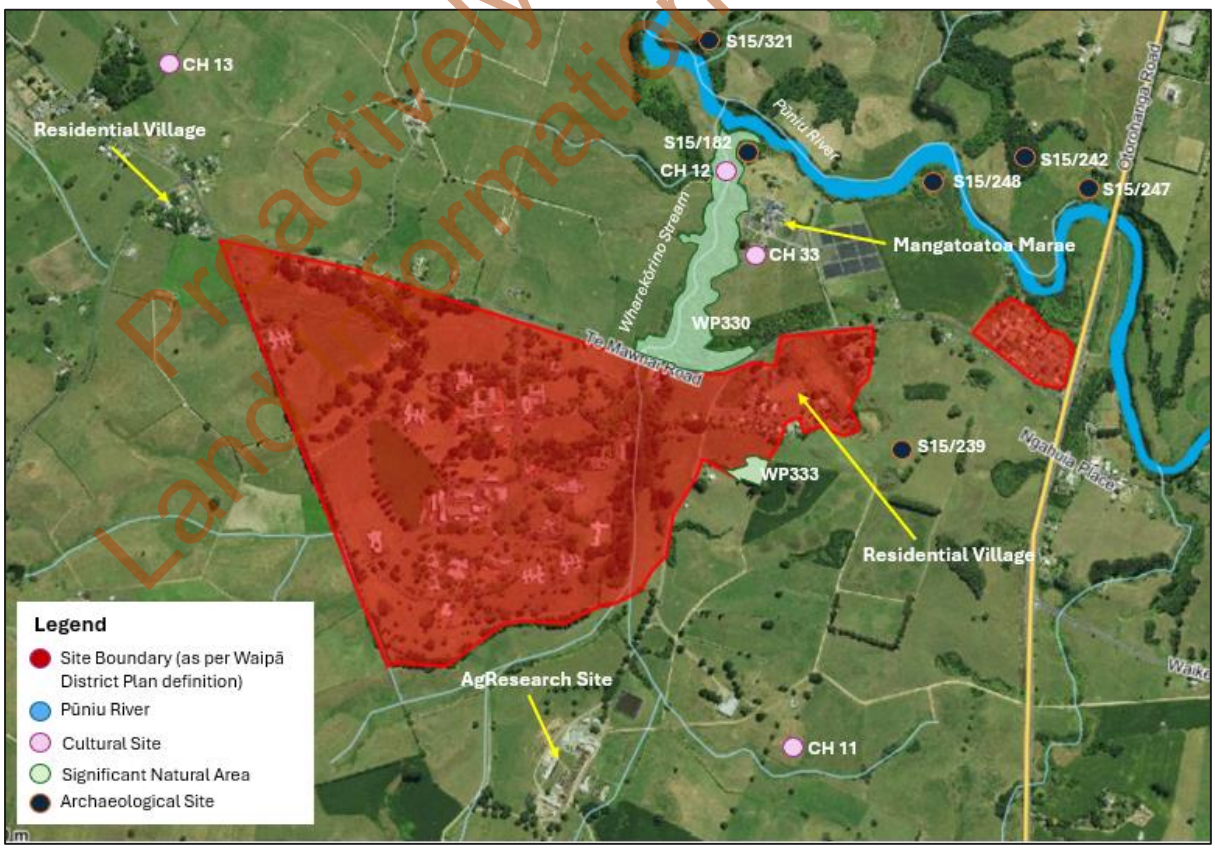
Abbreviation	Meaning
RMA	Resource Management Act 1991
ROR	Remedial Options Report
SNA	Significant Natural Area
SSRA	Site Specific Risk Assessment
TAR	Tokanui Action Roopu
TNN	Te Nehenehenui Trust
WDC	Waipā District Council
WDP	Waipā District Plan
WRC	Waikato Regional Council
WRP	Waikato Regional Plan
WRPS	Waikato Regional Policy Statement
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant

Application details

Consent authorities:	Waipā District Council Waikato Regional Council
Applicant:	Toitū Te Whenua Land Information New Zealand
Address for service:	SLR Consulting New Zealand Level 2, 214 Collingwood Street Hamilton 3204 Attention: Emily Buckingham emily.buckingham@slrconsulting.com
Address for fees:	Toitū Te Whenua Land Information New Zealand Private Bag 4721 Christchurch 8140 Attn: Bryan Daly bdaly@linz.govt.nz
Site:	Former Tokanui Hospital, 149 Te Mawhai Road, Tokanui
Legal description:	Section 1 SO 44852
Site area:	79.0174 ha
Plans and National Environmental Standards:	Waipā District Plan Waikato Regional Plan National Environmental Standards – Freshwater National Environmental Standard – Contaminants in Soil
District Plan Zone:	Rural Zone
District Plan Overlays or controls:	High Class Soil
Regional Plan Zone:	Waipā Catchment Management Zone
Brief description of the proposed activity:	Contaminated soil remediation and the removal of horizontal infrastructure and building foundations, in accordance with the Ngāti Maniapoto Deed of Settlement
Resource consents required:	Waipā District Council: - Earthworks, including in proximity to waterbodies and cultural sites - Construction noise exceedance - Traffic generation - Contaminated soil disturbance and change of use Waikato Regional Council: - Temporary surface and groundwater take, damming, diversion and discharges including in proximity to natural inland wetlands and streams - Soil disturbance including in proximity to natural inland wetlands and streams - Cleanfill discharge
Status of the proposed activity:	Discretionary (Waipā District Council) Non-complying (Waikato Regional Council)

Figure 1: Locality plans of the site





Executive Summary

Toitū Te Whenua Land Information New Zealand (LINZ) seeks resource consents to remove underground infrastructure and remediate the 79 hectare former Tokanui Psychiatric Hospital site at 149 Te Mawhai Road, Tokanui.

The former Tokanui Psychiatric Hospital is a deferred selection property in the Ngāti Maniapoto Deed of Settlement and forms part of the Maniapoto Settlement Claims Act 2022, which gives effect to the Deed. LINZ is the Government agency responsible for delivering this project as part of the Crown's requirements under the Deed. Once the works are completed, the site will be offered to the Ngāti Maniapoto Post Settlement Governance Entity, Te Nehenehenui Trust, for purchase. The project is unique, as no other property included in a Treaty settlement has required demolition and remediation on this scale, or included a commitment to undertake remediation in a Deed of Settlement.

Two resource consent applications are being made to Waipā District Council and Waikato Regional Council:

- The first application is for the substantial remediation works across the main hospital site (west of the Wharekōrino Stream) to return the site to vacant land that is suitable for rural and rural residential activities, referred to as the **Remediation Application**;
- The second application is for a discrete package of works to the closed landfill on the eastern portion of the site, referred to as the **Landfill Upgrade Application**. LINZ's preferred option for the disposal of contaminated soil from the main hospital site is to utilise this existing landfill and undertake enhancement works to the landfill at the same time. However, LINZ also has the option of disposing of the contaminated soil at an approved facility offsite, therefore the Remediation Application does not rely on the Landfill Upgrade Application.

This Assessment of Environmental Effects (AEE) report (including appended reports and documentation) supports the **Remediation Application**.

Remediation Application

The key elements of the Remediation Application are summarised as follows and in Table 1:

- Partial removal of horizontal infrastructure across the site, including underground services up to 800mm below ground level and manholes to a depth of 1,000mm below ground level (bgl), and roads/paved areas (including coal tar roading materials);
- Remediation of ~3,250m³ of contaminated soil, predominantly located around buildings with asbestos containing materials and lead-based paint, plus removal of a provisional ~3,150m³ of inferred contaminated soil and a contingency of ~1,400m³ to provide for any accidental discovery. Following soil remediation, the majority of the site will meet the site specific rural residential standards;
- Removal of the foundations of 84 buildings/structures (note: the demolition of the above ground buildings is part of the wider project, but has been confirmed as permitted through a Certificate of Compliance, and does not form part of this application);
- Works near streams and wetlands, including removal of a culvert ('Culvert 2') underneath a road embankment crossing the Wharekōrino Stream, relining of the existing stormwater trunk pipeline, removal of pipes and cables crossing 'Wetland 2', and removal of redundant wastewater treatment plant infrastructure within and near 'Wetland 1';

- Reinstatement of the site following earthworks, so that it is free of any debris and stabilised by grassing.

The proposal has a Discretionary activity status under the Waipā District Plan (WDP), Restricted Discretionary activity status under the National Environmental Standard for Contaminants in Soil (NES-CS), Discretionary activity status under the Waikato Regional Plan (WRP) and Non-Complying activity status under the National Environmental Standards for Freshwater (NES-F).

Extensive iwi consultation has been undertaken over a number of years and a Cultural Impact Assessment (CIA) has been prepared by mana whenua. However, there are a number of interested iwi parties, and no formal endorsement relating to the Landfill Upgrade Application has been provided. Given the importance of the site to iwi and hapū, LINZ requests that both applications are limited notified to iwi and hapū to ensure that they have the opportunity to identify any additional cultural effects and mitigation measures that have not already been recorded.

The proposal's effects are otherwise assessed to be minor and acceptable, with substantial positive effects. The proposal has been assessed as being consistent with Part 2 of the RMA and relevant statutory and non-statutory documents.

Table 1: Key Figures – Remediation Application

Key Element	Sub Category	Estimated Total Volume	Estimated Total Area / Length	Indicative Timeframe
Partial removal of horizontal infrastructure	Roading materials	~13,750m³	5.37km / 34,900m²	11-13 months
	Underground heating	~2,400m³	2.9km	
	Water		Services to 800mm depth bgl and manholes to 1000mm depth bgl	
	Stormwater			
	Wastewater			
	Power			
	Telecoms			
Remediation of contaminated land	Low and moderate level contaminated soil	~3,250m³	1.6 ha	4.5-6 months
	Inferred contaminated soil	~3,150m³		
	Contingency	~1,400m³		
Removal of building foundations		~9,000m³	N/A	4.5-6 months
Culvert removal		~6,800m³	3,000m²	3 months
Overall Earthworks	Excavation	~38,500m³	13 ha	18-24 months (staged)
	Fill	~31,200m³		

1.0 Information requirements

This resource consent application has been prepared in accordance with the requirements of Schedule 4 of the Resource Management Act 1991 (the Act or the RMA) and the specific information requirements for this proposal contained in Section 21.2 of the Waipā District Plan (WDP) and Section 8 of the Waikato Regional Plan (WRP). The application is made on behalf of Toitū Te Whenua Land Information New Zealand (LINZ) for the remediation of the former Tokanui Psychiatric Hospital site (the Site).

The relevant Waipā District Council and Waikato Regional Council application forms are included in **Appendix A**.

2.0 Background

2.1 Site history

The Site is part of 1,194ha of Māori land (the Pokuru 1B block) taken under the Public Works Act in 1910 for the construction of the Tokanui Hospital. This was by far the largest public works taking in the Ngāti Maniapoto rohe and was strongly opposed by Ngāti Maniapoto. The Crown has acknowledged that acquisition of the land was a Treaty breach.

Ngāti Maniapoto are an iwi based in Te Rohe Pōtae (the King Country), in and around Te Kūiti, Ōtorohanga and Te Awamutu. The Waitangi Tribunal's *Te Mana Whatu Ahuru Report on Te Rohe Pōtae Claims* describes the cultural significance of the Tokanui site to Maniapoto and the hurt the Crown's compulsory acquisition of the Site caused. This included the loss of their tūrangawaewae, the destruction of waahi tapu including ancestral burial sites, and the loss of resources and opportunities for economic development.

Section 5 of the Cultural Impact Assessment (CIA) (**Appendix B**) provides a historical overview of the long-established connection Tangata Whenua have had in the Waipa – Pūniu area. In brief, Tainui iwi first settled in the Waipa area in the early 14th century. In the early history of Pokuru, Ngāti Kahupungapunga occupied much of the valley of the Waikato. Ngāti Kahupungapunga occupation remained undisturbed in this region for perhaps 300 years. The CIA then traces the ancestry from the tūpuna Whaita, his son the tūpuna Ngutu, and the hapū Ngutu and Ngāti Paia whose descendants occupied the area up to the time when the land was taken under the Public Works Act. Reference should be had to the CIA for the full historical overview.

The Tokanui Hospital opened in 1912 and closed in 1998. The Site was then transferred into the Treaty Settlements Landbank in 1999 (managed by the Ministry of Justice at the time) to potentially be used as redress to settle historical claims. The site was transferred to LINZ in 2016 with the remainder of Treaty Settlements Landbank property portfolio and is currently managed by LINZ.

In 2017, the Crown and Maniapoto Māori Trust Board signed the Te Hautahi Agreement in Principle to Settle Historic Claims which included Tokanui as a potential staged Deferred Selection Property. At that time the Crown acknowledged Maniapoto's aspiration to purchase the Tokanui property in a remediated state.

2.2 Maniapoto Deed of Settlement

The Site is now listed as a Deferred Selection Property in the Ngāti Maniapoto Deed of Settlement (the Deed). The Deed was signed by the Maniapoto Māori Trust Board and the

Minister of Treaty of Waitangi Negotiations and became effective on 11 November 2021.[1] The Property Redress Schedule of the Deed requires the Crown to demolish buildings and infrastructure and remediate soil contamination to agreed standards before offering the Site to Te Nehenehenui Trust (TNN), being the Maniapoto Post Settlement Governance Entity, for purchase. The Maniapoto Settlement Claims Act 2022, which gives effect to the settlement, came into force on 28 September 2022.

The specific terms in the Property Redress Schedule (Part 9: Tokanui Hospital Deferred Selection Process) that the Crown is obliged to meet include (but are not limited to):

- apply for all necessary resource consents for the demolition and remediation works on the Site and existing and/or new disposal sites within two years of the settlement date (by 24 November 2024) and complete the demolition and remediation works within seven years of consent being granted;
- demolish all vertical (e.g. above ground) building structures;
- remove horizontal infrastructure to a determined extent;
- remediate the soil in accordance with remediation standards, being a minimum of 85% of total land area to rural residential standards, and a contiguous area not exceeding 15% of total land area to a managed remediation standard (if applicable); and
- leave the land free of building debris and stabilise it by grassing.

The Tokanui situation is unique as no other property included in a Treaty settlement has required demolition and remediation on this scale, or included a commitment to undertake remediation in a deed of settlement. LINZ is the Government agency responsible for delivering this project on the Crown's behalf.

The Deed also acknowledges the presence of existing closed landfills (defined as existing disposal sites in the Deed) on the Site, and states that the Crown is to maintain valid land use resource consents and liability for those disposal sites at all times and in perpetuity. Under clause 9.1.12 of the Deed, existing disposal sites means two existing sites (as described in the existing disposal consents[2]) historically used to dispose of waste when the hospital was operational, shown in Area 1 of the attachments (see Figure 2). The Crown has no commitment under the Deed to carry out remedial works on the existing disposal sites, except as might be required to comply with resource consents.

The Deed granted the Crown discretion to decide two matters, with consideration of TNN's views, being:

- the extent of horizontal infrastructure, including roading and underground services, to be removed; and
- whether demolition waste, including hazardous building materials, will be transported off-site for disposal or contained within a new engineered landfill to be constructed on-site.

Decisions on these matters were made by the three relevant Ministers at the end of September 2023 (see section 2.3 following), which has informed the scope of work for this application. The decisions aligned with the preferred option of TNN and mana whenua.

[1] https://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/maniapoto/

[2] Existing disposal consents means the land use resource consents numbered 102269.01.01, 102270.01.01 and 102271.01.01 (clause 9.1.12).

In accordance with the requirements of the Deed, LINZ is now applying for the necessary resource consents to remediate the contaminated soil identified at the Site and to remove the agreed extent of horizontal infrastructure. It is noted that the Deed divides the Site into four deferred selection properties areas (also see Figure 2), allowing for staged transfer of the Site to TNN as demolition and remediation works are completed; however the consent applications are being made for the entire Site.

Once demolition and remediation are completed by LINZ, subject to the contractor's programme, the available Tokanui Hospital deferred selection property area(s) will be offered to TNN for purchase following the process set out in the Deed.

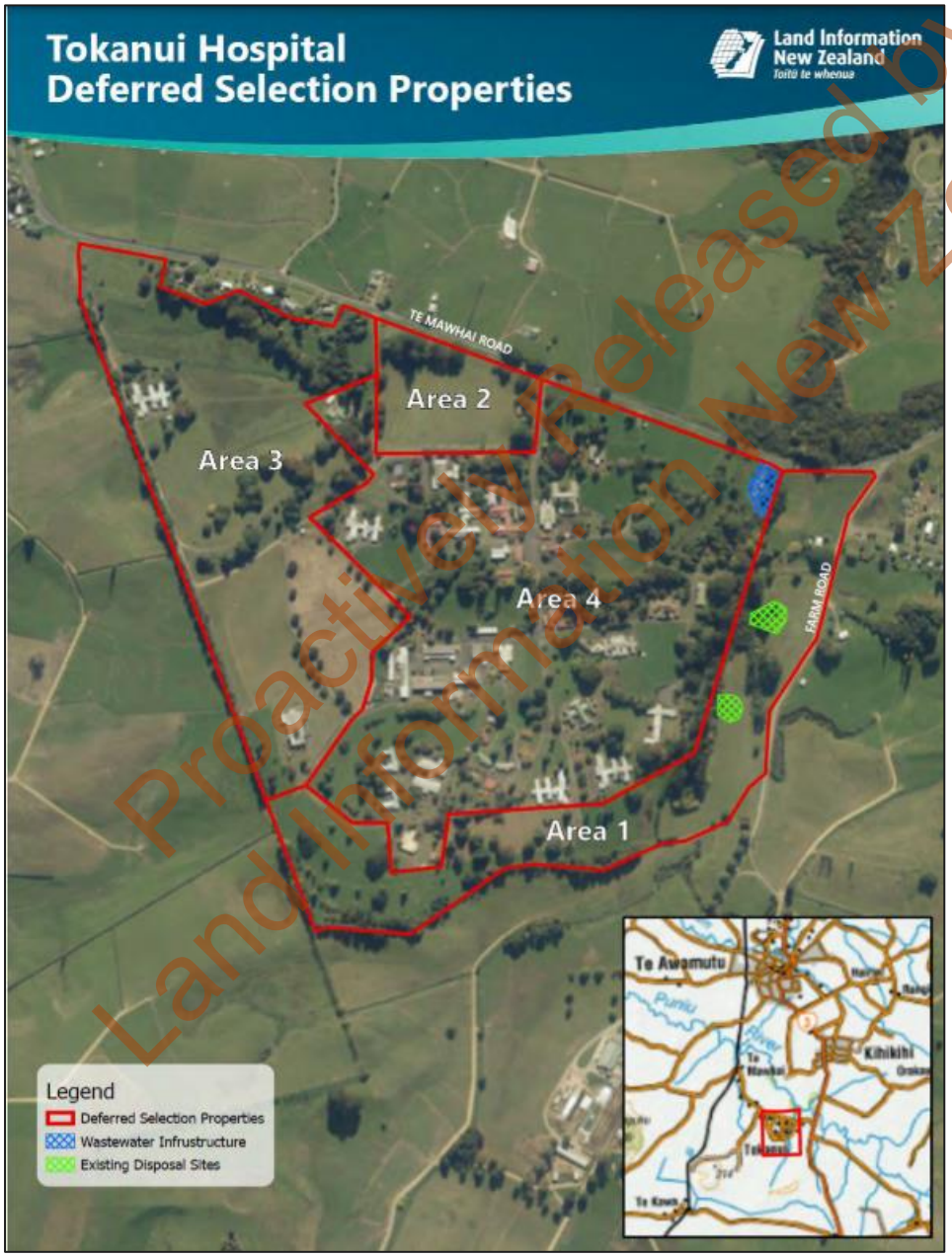


Figure 2: Deferred selection properties and existing disposal sites map from the Deed

2.3 Ministerial decisions

As previously noted, Ministerial decisions were required on the extent of infrastructure to be removed and disposal options for non-recyclable demolition waste. The options considered ranged from the removal of all horizontal infrastructure to retaining any horizontal infrastructure 600mm below ground level. Onsite and offsite disposal were both considered.

The key considerations to inform these decisions were also previously agreed with joint Ministers and included strategic alignment, Iwi-Crown relationship, social and environmental impact, and value for money. As part of the assessment, LINZ engaged with TNN and mana whenua, adjusted and re-evaluated the options being considered based on their request. On balance of the two shortlisted options, LINZ then recommended iwi's preferred option to the joint Ministers.

At the end of September 2023, the joint Ministers (Finance, Treaty of Waitangi Negotiations and Land Information) accepted LINZ's recommendation to proceed with 'Option 1C' for the extent of horizontal infrastructure to be removed and the disposal of non-recyclable demolition materials.[3] In summary, this option entails retaining some horizontal infrastructure, including non-hazardous infrastructure below 800mm, removing manholes to 1000mm and removing other horizontal infrastructure above 800mm, and the transportation of all non-recyclable demolition materials to an existing Class 1 and/or Class 2 landfill off-site.

Detailed information regarding the Ministerial decision and engagement are provided in the Iwi Engagement Report (**Appendix D**).

2.4 Consultation

2.4.1 Consultation with mana whenua

It is in all parties' interests that the Site is remediated to a condition that is acceptable for TNN to purchase. LINZ has undertaken extensive consultation, and continues to engage with, TNN and mana whenua in relation to the project via in person hui, online meetings and email communications. A record of iwi consultation undertaken in relation to this project's milestones is included in **Appendix D**. The consultation includes four larger scale public hui since 2023, however it is also noted that discussions with LINZ around inclusion of the Site within the Deed go back at least to 2016/17, and there was iwi engagement throughout initial feasibility studies over 2018/19 as well as during the Deed negotiations in 2020/21.

LINZ also obtained a CIA, which was delivered over the course of 2021 by TAR Block Ltd. The Tokanui Action Rōpū (TAR) was formed in August 2019. TAR's purpose was to act as a strategic and advisory body for the claimants and landowners of WAI 440. As described in the CIA, TAR is a subset of hapū with traditional and customary authority over the former hospital site, comprised of Ngāti Paia, Ngāti Ngutu, Ngāti Huiao and Ngāti Paretekawa. The CIA is included as **Appendix B** and has also been used to help inform decision making throughout the project.

It is noted that the CIA prepared by TAR states that Tangata Whenua (being represented by TAR) have not yet reached a settlement with the Crown for their Treaty claims, and many Tangata Whenua who belong to the hapū of Ngāti Paia, Ngāti Ngutu, Ngāti Paretekawa and others, do not unanimously support the Maniapoto Deed of Settlement. They do not believe

[3] Decision can be accessed at https://www.linz.govt.nz/sites/default/files/release/BRF%2023-424%20Tokanui%20Hospital_%20Scope%20of%20Works.pdf

that their Treaty claims have been provided for in the Maniapoto Deed of Settlement. The CIA states that this is likely to remain an on-going issue, although Tangata Whenua believe that this should not hinder the planning and implementation of the demolition and remediation project. However, until a Deed of Settlement is approved with Tangata Whenua there is no statutory relationship between Tangata Whenua and the Crown nor are there any Statutory Acknowledgements that Tangata Whenua recognise.

LINZ also entered into a second contractual agreement with TAR Block Ltd to implement several of the recommendations from the CIA relevant to the project. As part of that engagement, in early February 2023, during the initial investigations used to inform this AEE and as part of a pilot trial for how site inductions and cultural monitoring could be run during the demolition and remediation works, the project team attended a cultural induction at the Mangatoatoa Marae. The purpose of the cultural induction was to improve participants' understanding from a Tangata Whenua perspective of the cultural importance and significance of the impacts and changes which will occur on the whenua as a result of the proposed demolition and remediation works. Participants were introduced to Tangata Whenua cultural frameworks and the relevance and use of these within the context of Kaitiakitanga responsibilities and the proposed demolition and remediation program.

Following the completion of the CIA and supplementary contractual agreement, it is understood that TAR Block Ltd may no longer represent views of all hapū with an interest in Pokuru 1B. LINZ have continued to host public hui to ensure they reach as wide an audience as possible to deliver updates on the project and seek feedback from mana whenua representatives. Any new person attending a hui has been added to LINZ's mailing list for future communications and hui invitations.

The purpose of the more recent consultation has been to share updates on key stages of the project and provide an opportunity to receive feedback from mana whenua on the delivery of the project – notably where there have been options to consider in regards to the management of contaminated soil and the closed landfill, but also to assist in directing works or ensuring impacts could be mitigated or minimised and to respond to concerns.

A range of verbal feedback has been received at hui and taken into account in project reports. However, no formal written feedback on the project as a whole has been requested from mana whenua since the Ministerial decisions were made with TNN and mana whenua input. In particular, while written feedback was invited, none was received with regards to the remediation options for low to moderate level contaminated soil, its potential disposal in the existing closed landfill, and associated enhancement works to the landfill (the Landfill Upgrade Application).

Appendix D contains a list of contacts who are recorded as having attended hui.

2.4.2 Pre-application meetings

A pre-application meeting was held with Waipā District Council (WDC) on 1 May 2024 to provide an overview of the Demolition and Remediation project as a whole, and to discuss the planned CoC application. Notes from this meeting are attached in **Appendix C**.

A pre-application meeting was also held with Waikato Regional Council (WRC) on 16 August 2024 to provide an overview of this proposal as well as the Landfill Upgrade Application. No minutes were provided as no specific feedback was being sought at this meeting.

Following the meetings, further correspondence occurred with both councils regarding rule interpretation and consent triggers, which has informed the final application.

2.4.3 Consultation with other stakeholders

2.4.3.1 Waipa District Council Assets

LINZ met with Waipā District Council (Bryan Hudson and Johan Rossouw) separately on 21 August 2024 and 16 October 2024 to discuss how the removal of Culvert 2 may affect flooding at Te Mawhai Road and the Wastewater Pumping Station (WWPS), and whether Culvert 1 under Te Mawhai Road needed to be upgraded as a result. WDC questioned whether any improvements to Culvert 1 would be effective and buildable, given the influence of downstream conditions on flood levels, and that Culvert 1 was thought to be very deep. WDC also suggested that a wider range of flood events be modelled to understand whether or not the proposal may lead to nuisance flooding effects for road users in more common rainfall events. Following the meetings, additional modelling was undertaken and results were forwarded to WDC, with the opinion that the best practicable option did not involve an upgrade of Culvert 1. No further feedback has been received.

2.4.4 Written approvals

Written approval has been sought from neighbour AgResearch in relation to the Landfill Upgrade Application. No written approvals have been obtained in relation to this application.

2.5 Consent history

2.5.1 Certificate of Compliance

A CoC application was lodged with Waipā District Council in May 2024 for the demolition of above ground buildings and structures at the Site, referred to as Phase 1. No regional consents were required for this activity.

The CoC was granted on 19 June 2024 (ref PG/0067/24, copy included in **Appendix E**). Demolition has not yet commenced. LINZ is in discussions around contractual engagement for the required karakia and whakawātea and procurement processes for appointment of demolition contractors, which needs to be resolved before demolition commences.

2.5.2 Regional consents

Table 2 lists the existing regional consents applicable to the Site.

Table 2: Existing regional consents

Resource consent	Status	Description	Commenced	Expiry
AUTH102269.01.01	Current	Discharge leachate into land in circumstances that may result in contaminants entering groundwater	17/04/2000	10/03/2035
AUTH102270.01.01	Current	Divert & discharge stormwater into the Wharekōrino Stream	17/04/2000	10/03/2035
AUTH102271.01.01	Current	Discharge contaminants to air	17/04/2000	10/03/2035
AUTH102272.01.01	Current	Undertake earthworks within 5 metres of the Wharekōrino Stream	17/04/2000	10/03/2035

Resource consent	Status	Description	Commenced	Expiry
AUTH971371.01.01	Current	Discharge stormwater to the Wharekōrino Stream	16/09/1997	1/09/2032

The first four consents relate to the existing disposal site, which is a capped and closed historic landfill on the Site, further described in section 3.1.4 of this report. Via these consents, the closed landfill is authorised to discharge leachate to land, discharge stormwater into the Wharekōrino Stream, undertake earthworks in proximity to Wharekōrino Stream, and discharge contaminants to air. The consents were publicly notified in 1999, granted in 2000 and expire in 2035.

Consent AUTH971371.01.01 also applies to the Site and authorises the Consent Holder (LINZ) to discharge up to 3.65m^3/s of stormwater to the Wharekōrino Stream in the vicinity of Tokanui Road, at or about map reference NZMS 260 S15:146-462. This consent is understood to authorise the discharge from the hospital grounds stormwater system. It was granted in 1997 and expires in 2032.

2.5.3 HNZPT authority

An Archaeological Authority from Heritage New Zealand Pouhere Taonga (HNZPT) was granted to undertake geotechnical and soil investigations in two areas of the Site. These were areas where the archaeological assessment found reasonable cause to suspect that previously unrecorded archaeological sites may be present.

The archaeological authority to modify or destroy archaeological sites was issued on 14 August 2023 (ref 2024/018 – see **Appendix F**). The soil investigations were completed in accordance with the project management plan including inductions and spot checks. LINZ undertook the works with cultural monitoring, as per the cultural monitoring protocol and the requirements of the HNZPT authority. No unrecorded sites were discovered. A completion report was provided to HNZPT as per the conditions of authority 2024/018.

A second archaeological authority will be sought from HNZPT to ensure appropriate archaeological management for the main works.

3.0 Site and surrounding environment

3.1 Site description

The Site is located at 149 Te Mawhai Rd, Tokanui, approximately 14 kilometres southeast of Te Awamutu, Waikato. It is known as Pokuru 1B Block, legally described as Section 1 SO 44852 and its Record of Title has been cancelled (previously RT SA56A/866, attached in **Appendix G**). Note that the two areas of land to the east of the Site, commonly referred to as the Tokanui Villages, legally described as Section 1 SO 59771 and Section 3 SO 44852 are under the same cancelled title as the Site, therefore included in the WDP definition of the 'site'. However, no works are proposed within the residential areas as part of this application as these properties are listed separately from the Tokanui Hospital in Section 4 of the Property Redress Schedule and are excluded from the project.

The Site is approximately 79 hectares in size and (prior to any demolition) contains 84 buildings/structures, a now decommissioned wastewater treatment plant (WWTP), a swimming pool, eight substations, substantial underground services, a closed landfill and substantial roading infrastructure. The Tokanui Hospital closed in 1998 following a move from residential to community-based mental health care. Consequently, minimal maintenance

works have been undertaken over the last 26 years. Full site plans are included in **Appendix H**.

Portions of the site without built structures are in rural farmland used for grazing. There is an existing License to Occupy over the grassed portions of the site, as shown in Figure 3, below.

Figure 3: Grazing areas

3.1.1 Existing buildings and structures

Prior to commencing demolition, the existing hospital buildings and structures cover approximately 45,000m² of the site. Many of the buildings are dilapidated and contain some hazardous materials, including friable asbestos and lead based paint. Former uses of the buildings include (but are not limited to) wards, dentist, pharmacy, workshops, a laundry, kitchen, fuel station and boiler house. The site plan in Figure 4 below shows the building locations prior to any demolition (buildings outlined in red demolished previously).

The WWTP was on the eastern side of Wharekōrino Stream, accessed directly off Te Mawhai Road rather than being connected to the remainder of the Site. The WWTP has recently been decommissioned and replaced with a wastewater pump station (WWPS). It has only partially been demolished.

There is an existing dwelling located on the eastern side of the Wharekōrino Stream accessed off Farm Road. There are also six existing dwellings located along the northern edge of the Site along Te Mawhai Road (183, 187, 193, 197, 203 and 207 Te Mawhai Road). These buildings are not part of the former hospital, are occupied, and are to remain.

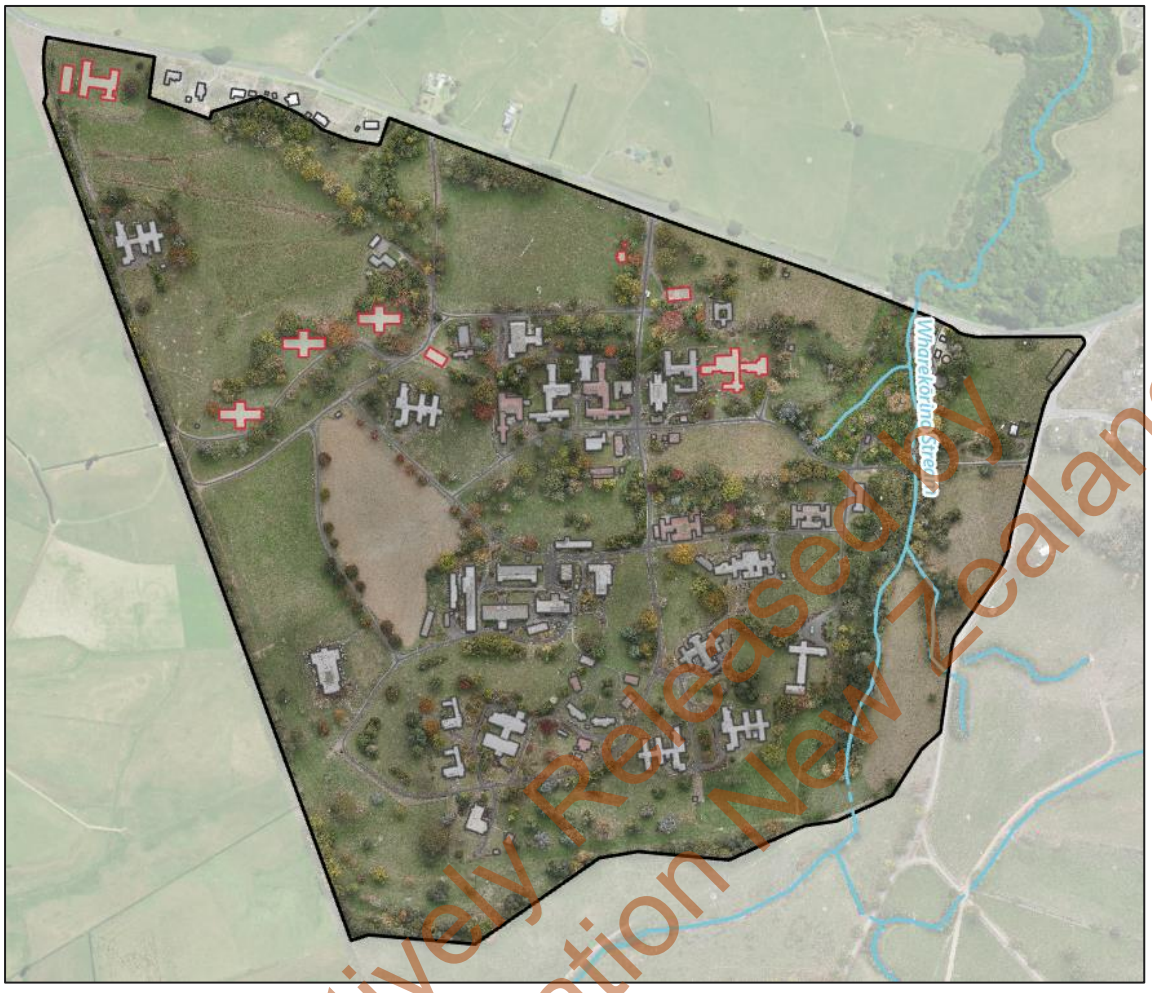


Figure 4: Site plan showing building locations

3.1.2 Horizontal infrastructure

The extent and condition of horizontal infrastructure[4] within the Site has been established as far as possible through comprehensive research and investigations. These involved a desktop review of available information, comprehensive site investigations including site walkovers, pavement test pits and deflection measurements, CCTV and underground services detection, hydro excavation and topographical survey. This information was compiled to produce horizontal infrastructure plans and assessments of asset quantities, condition and estimated residual lifetime. The investigations are set out in the Horizontal Infrastructure Assessment Report by Fraser Thomas Ltd (**Appendix I**), and the resulting plans of horizontal infrastructure location are included in **Appendix H** (ref 33205/2000-2800). Excerpts of the overview maps for wastewater, stormwater, water supply and road locations are also included in Figure 5 to Figure 8 below.

Investigations have also been undertaken to establish where coal tar is present in the roads and paving on the Site. These investigations are reported on in the Fraser Thomas Ltd Coal

[4] 'Horizontal infrastructure' has been defined in the Property Redress Schedule as:

"The roading and accessways, foundations and services that the Crown, with the consent of the relevant Ministers as required, decides must be retained on the relevant Tokanui Hospital deferred selection property, in accordance with paragraph 9.9 of the Deed".

Tar Investigation Report (**Appendix J**). They found that coal tar is present across the main roads, minor roads and other paved areas and in all roading layers. The majority of the coal tar, in terms of areal coverage, is in the surface pavement layers, with the areas with coal tar decreasing in the basecourse and further decreasing in the subbase. Furthermore, there are localised areas of the site where multiple 'top ups' of the basecourse and pavement have been done over the years, forming a 'pancake' roading structure. Plans of the areal distribution of coal tar have been prepared and are included within the above report.

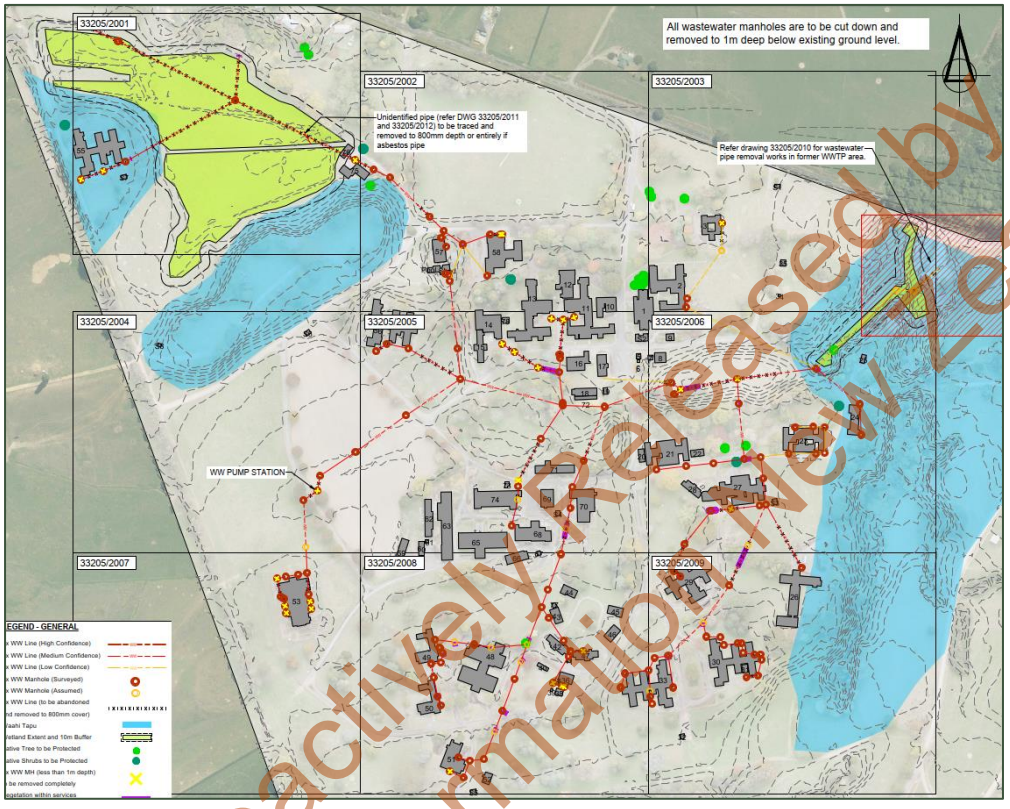


Figure 5: Overview of wastewater line locations (marked in red and orange)

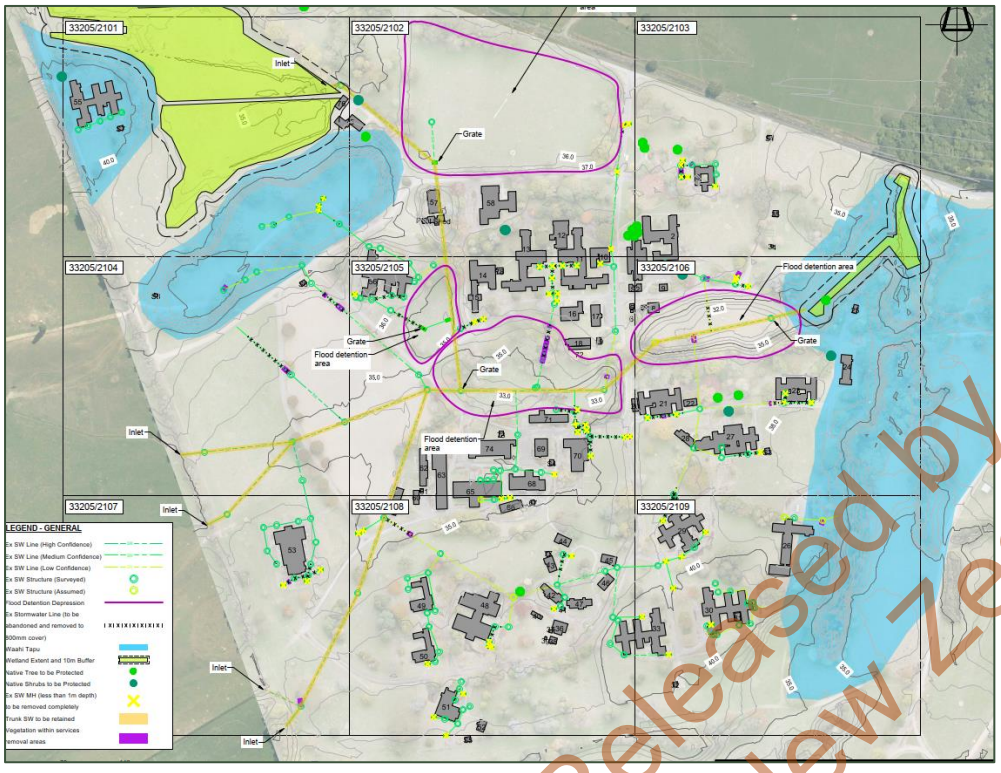


Figure 6: Overview of stormwater line locations (trunk in yellow, other in green)

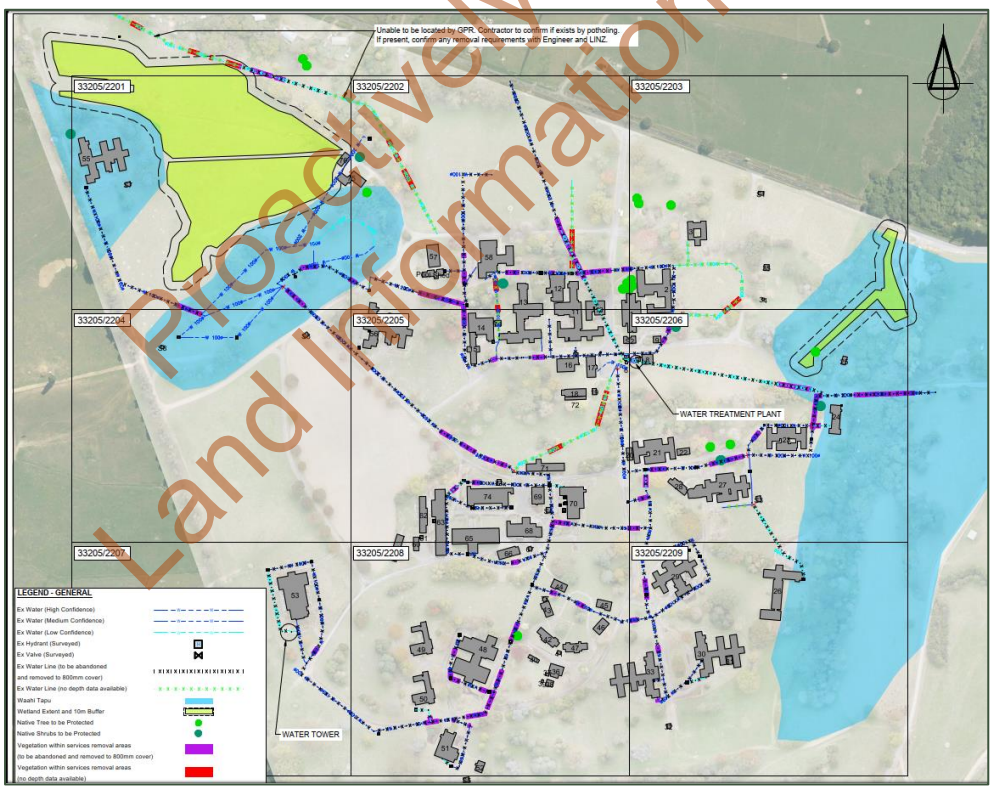


Figure 7: Overview plan of water line layout (marked in dark and light blue)

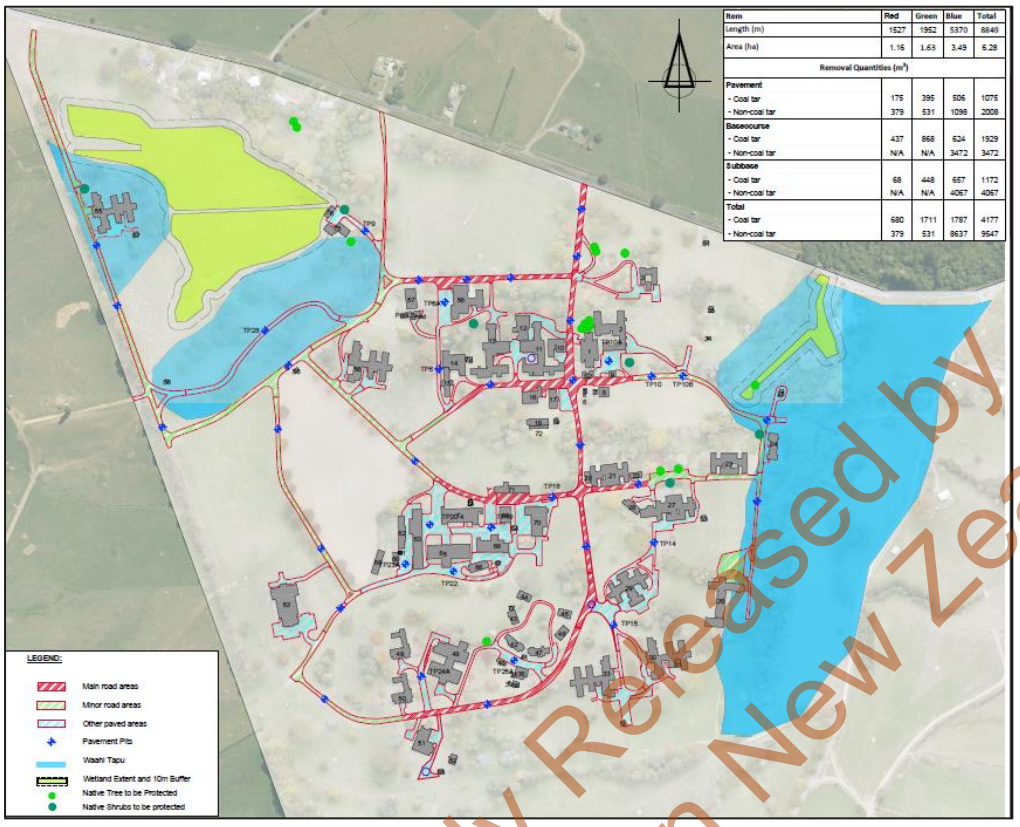


Figure 8: Overview of roads (main - red, minor - green and other paved areas - blue)

3.1.3 Soil Contamination

It was initially suspected that the Site could be significantly contaminated. Early feasibility studies and a Preliminary Site Investigation (PSI) (GHD Ltd, 2023) identified many locations across the site where Hazardous Activities and Industries List (HAIL) land uses might have taken place. These HAIL land uses included:

- A2: Chemical bulk storage
- A5: Dry cleaning plants including dry-cleaning premises or the bulk storage of dry-cleaning solvents
- A8: Livestock dip
- A10: Persistent pesticide bulk storage or use
- A14: Pharmaceutical manufacture including the blending, mixing or formulation of pharmaceuticals
- A17: Storage tanks
- B4: Substations
- E1: Buildings with asbestos products in a deteriorated condition
- F4: Motor vehicle workshops
- F7: Service stations
- G3: Landfilling
- G6: Waste or wastewater treatment
- I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.

Detailed Site Investigations (DSI) involving hundreds of soil samples from all parts of the Site and extensive asbestos and lead based paint building surveys of all buildings sought to find and delineate any resulting contamination. The investigations concluded that:

- The site is not generally contaminated, indeed it is much less contaminated than was initially assumed.
- The principal soil contamination issue is asbestos and lead from building materials. There are also minor hotspots of contamination.
- The closed landfill areas (defined as existing disposal sites in the Deed) east of the Wharekōrino Stream are greater in extent than had been realised.
- There are suspected additional filling areas in the southeast of the site identified from research and intrusive investigations. Fill materials generally appear to comprise construction debris in a silt or sand matrix; samples from these areas have identified elevated arsenic, copper, lead, zinc and asbestos.

Four petroleum storage systems and associated contaminated soils had already been removed. Several of the HAIL land uses could not be substantiated through site inspection or sampling. Other HAIL land uses did not appear to have resulted in contamination exceeding applicable standards.

An overview of the sample locations where elevated concentrations of contaminants were found is shown on Figure 9 below. Moderate level contamination (exceeding the site specific managed remedial standard) is estimated to be ~1,480m³ in volume. Low level contamination (exceeding the site specific rural residential soil remedial standard, but not the managed remedial standard) is estimated to be ~1,770m³ in volume. The total contaminated soil volume is ~3,250m³. Refer to section 4.3 for further details on the applicable remedial standards. There is also ~3,150m³ of soil inferred to be contaminated (e.g. building sub floors and soil around asbestos pipes).

During the investigations, eleven locations were identified where potential fill pockets may be present, potentially associated with historical demolition works or former site construction activities. These pockets appeared to be relatively minor.

The findings on the extent of soil contamination informed the Remedial Options Report (ROR), the Site Specific Risk Assessment (SSRA) and the Remedial Action Plan (RAP) that is to be implemented as part of this consent application, discussed later in this report.

The most recent and relevant contaminated land reporting is attached in full to this application in **Appendix K** and includes:

- Appendix K1 – PSI by GHD Ltd (2023)
- Appendix K2 – DSI by GHD Ltd (2024)
- Appendix K3 – Addendum DSI by Fraser Thomas Ltd and HAIL Environmental Ltd (2024)
- Appendix K4 – Site Specific Risk Assessment by HAIL Environmental Ltd (2024)
- Appendix K5 – Remedial Options Report by Fraser Thomas Ltd and HAIL Environmental Ltd (2024)
- Appendix K6 – Remedial Action Plan by Fraser Thomas Ltd (2024).

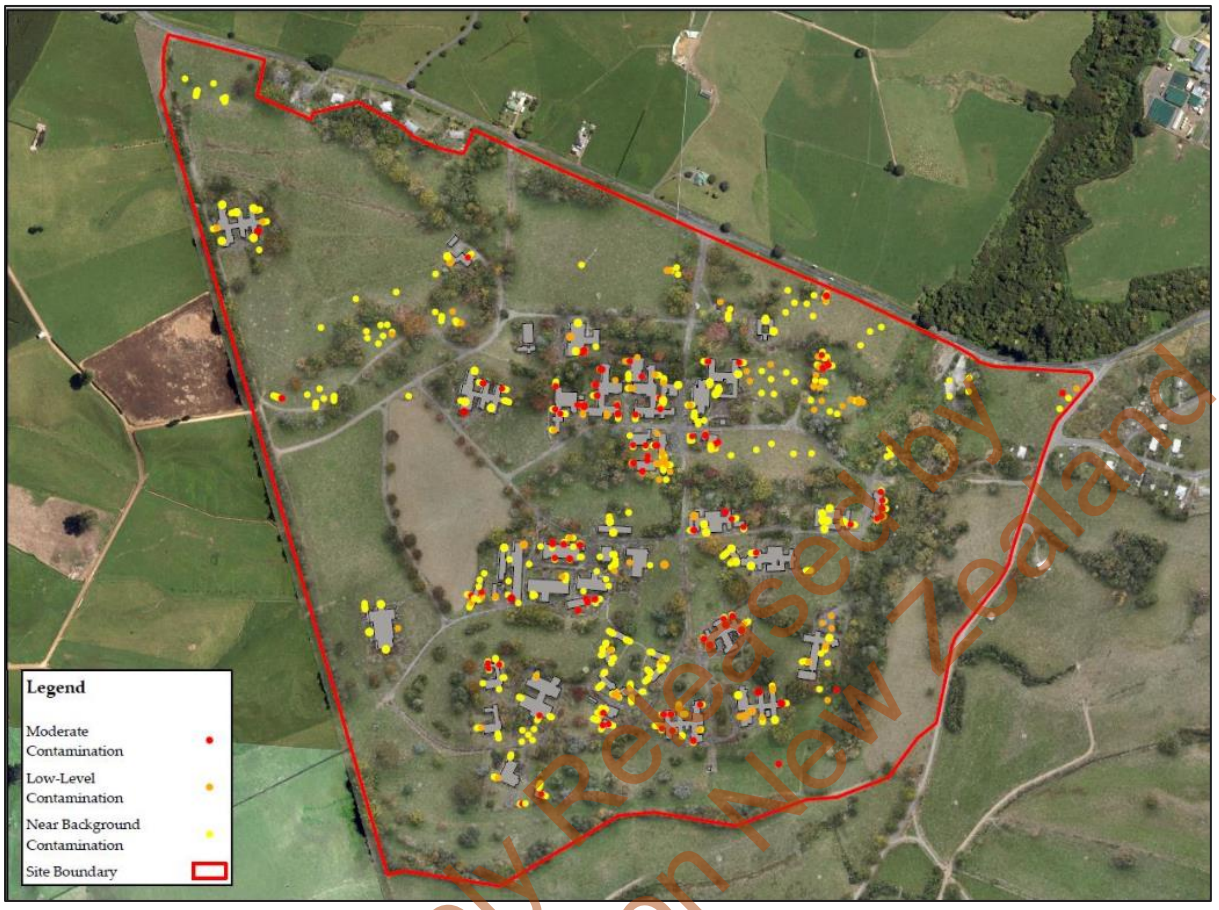


Figure 9: Overview of soil sample locations where elevated concentrations were found

3.1.4 Existing Disposal Sites

While the hospital was operational, landfilling of waste occurred on the eastern part of the Site, in close proximity to Wharekōrino Stream, which transects the property. Landfilling ceased with the closure of the hospital in 1998. Regional consents for the landfill capping and closure were granted in 2000 (as set out in section 2.5).

The landfill areas are summarised in Table 3 and shown on Figure 10. As discussed in Sections 2.2 and 2.5, the Crown is responsible for maintaining valid land use consents for the existing disposal sites at all times.

The Wharekōrino Stream is culverted where it passes through the southern part of landfill area (Area A), referred to as Culvert 3, and then runs in an open channel (natural stream) alongside the western extent of the landfill until passing through Culvert 2.

The above information is provided as part of a full description of the Site, however it is primarily relevant to the Landfill Upgrade Application, as no works are proposed to the landfill area within the scope of this Remediation Application. Refer to the Landfill Upgrade Application for further details of the intrusive investigations undertaken to determine the extent and type of fill for the various landfill areas.

Table 3: Existing Disposal Site areas and characteristics

Area	Area (m²)	Fill volume (m³)	Estimated date for end of filling	Fill description
A	7,990	12,960-16,310	1988	Construction & general waste, burnt material, inferred boiler ash, asbestos
B	2,790	3,420	1979	Construction/demolition waste, some burnt debris
C	1,180	1,350	1997	General & construction waste
D	2,440	3,870	1979	Construction waste, including wood, metal, concrete and bricks
E	660	0	1979	None
F	930	3,730	1979	Medical waste buried in multiple small offal pits
G	1,310	0	1979	Reworked Material
H	1,980	910	1979	Construction & general waste, burnt material, tree stumps/wood fragments

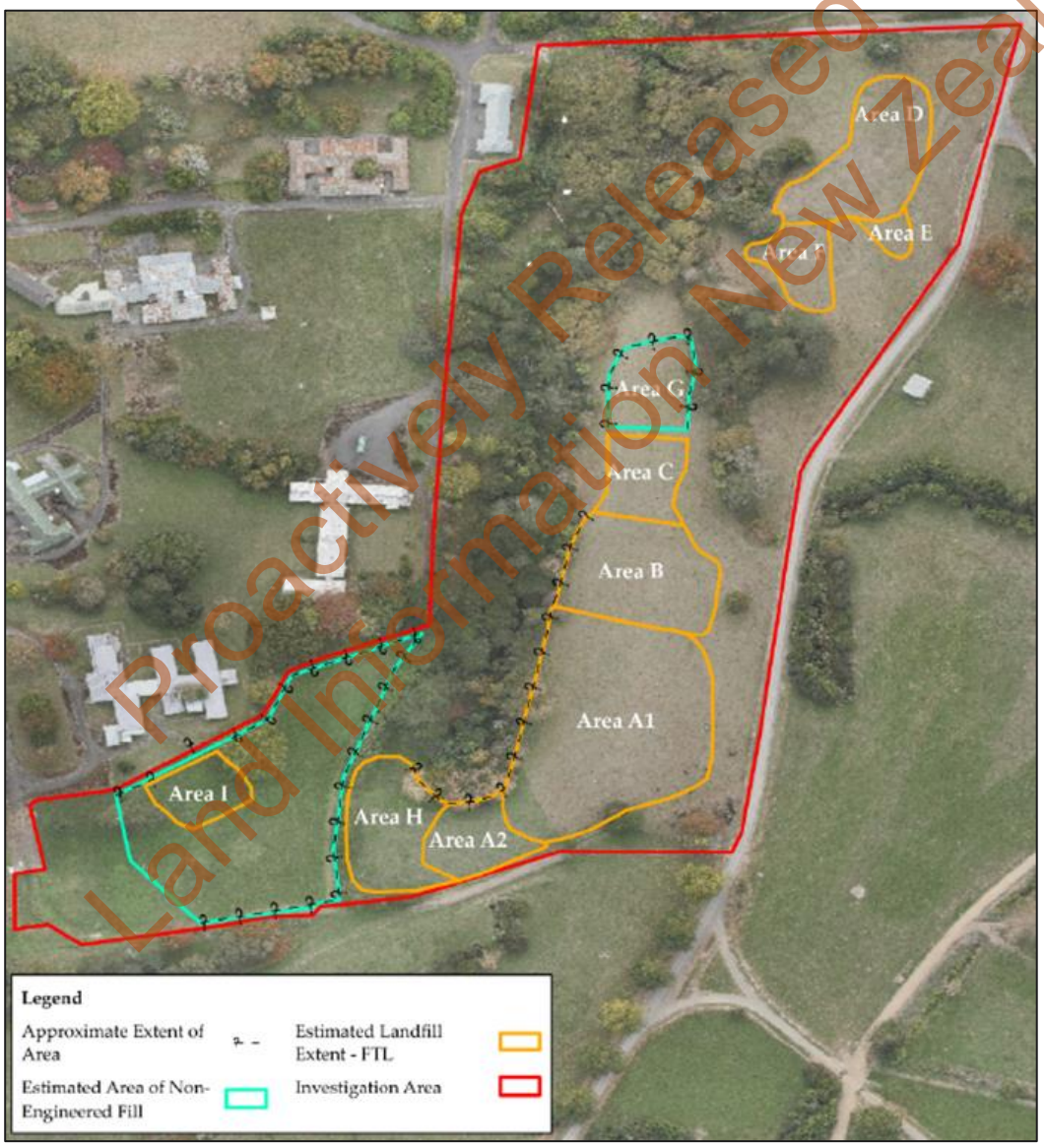


Figure 10: Areas potentially subject to historic landfilling

3.1.5 Cultural values and significance

The CIA prepared by TAR in 2021 is included in **Appendix B**. For ease of reference, a brief summary of the cultural significance of the Site expressed in the CIA is provided below. However, this should not be considered a complete summary, and reference should be had to the full CIA.

The Site is of high cultural significance to Tangata Whenua, being a subset of hapū with traditional and customary authority over the Site and surrounding geographical area. These hapū include Ngāti Ngutu, Ngāti Huiao, Ngāti Paia, and Ngāti Paretekawa. The ancestral lands of Tangata Whenua, their *taonga*, rivers, food sources, tikanga and more were lost through whenua raupatu (compulsory Crown acquisition) which displaced tangata whenua. Tangata Whenua views on this project are positioned in relation to whenua raupatu because they are inextricably linked to their whakapapa and the history of their land.

While the hospital was in operation, some whanau benefited from employment and access to social services however, these benefits were short lived and minimal compared to the overall detrimental effects on Tangata Whenua.

Before the whenua raupatu and the hospital opened, the waterways on the site had provided resources to sustain life including kai, *rongoā* (medicine), building materials and drinking water. The whenua surrounding the hospital had an abundance of trees for building *whare* (houses) and fertile soil for plants, harakeke for weaving, and *maara kai* (gardens) were abundant. Wetlands covered much of the area before being drained and filled to make way for buildings, agriculture and horticulture. The indigenous biodiversity within these wetlands included harakeke, pūkeko and other bird species, and eels. All of these natural resources provided sustenance and materials for Tangata Whenua to support their physical and spiritual wellbeing, the produce also provided an income through trade. Another important feature the ecosystem offered was protection from flooding as wetlands provided a natural storage and filtering system.

There are many stories and events relating to the landscape and the associated tūpuna. The CIA describes that “significance to waahi tapu are reflected in names of mountain, streams, rivers and places where food was gathered, stories of *taniwha, patupaiarehe, pakanga whenua, pūrakāu kōrero*, and much more.”[5] “Stories that associate events with places are important because these are the landscapes which identify Tangata Whenua. They may not be tangible landscapes, but they are associated with whakapapa which is intangible.”[6] Other significant landscapes are associated with urupā (burial grounds) and pakanga whenua because people are interred there. There is an unidentified urupā within the hospital grounds.

In a separate ‘Waahi Tapu Investigation and Cultural Induction Summary’ report provided by TAR in June 2023 (also appended in **Appendix B**), waahi tapu and sites of cultural significance to Tangata Whenua were identified for the purpose of managing intrusive soil investigations. The identified areas have been incorporated on the works plans. The report also explains that due to the very sensitive nature of identifying names, places and locations of cultural significance, and that whānau could or would not share precisely where certain waahi tapu were located on the map, not all areas will be identified.

3.1.6 Heritage and archaeological values

There are no buildings with heritage status on the Site. No archaeological sites are currently recorded within the boundaries of the Site. However, it is located in proximity to (~700m) the

[5] CIA Section 6.2.10

[6] Ibid

southern bank of the Pūniu River, which was central to the pre-European Māori settlement of the area, adjacent to major battles during the Waikato War, and would become the southern boundary of Te Rohe Pōtae, all of which suggests previously unrecorded archaeological material may be present. Further, based on discussions with mana whenua and site characteristics, there is reasonable cause to suspect that there may have been undefended settlements / kāinga and urupā within parts of the hospital grounds.

An Archaeological Assessment for asset removal has been undertaken (see **Appendix F**) which has identified three areas on the Site where archaeological monitoring is recommended during the works (see Figure 11):

1. A hill extending into the northwest corner of the project area which would previously have been an elevated dry area of habitable ground with well-draining soils.
2. A hill extending through the western extent of the Site, a headland that may be the site of a settlement or pā called Mokoroa.
3. A low lying area incorporating the current and former alignments of the Tarutahi and Wharekōrino waterways along the eastern edge of the Site. This includes a north-facing highpoint where the former morgue stands at the confluence of the Wharekōrino and Tarutahi waterways.

It is noted that the waahi tapu and sites of cultural significance to Tangata Whenua referred to in section 3.1.5 above differ from the archaeological monitoring areas.

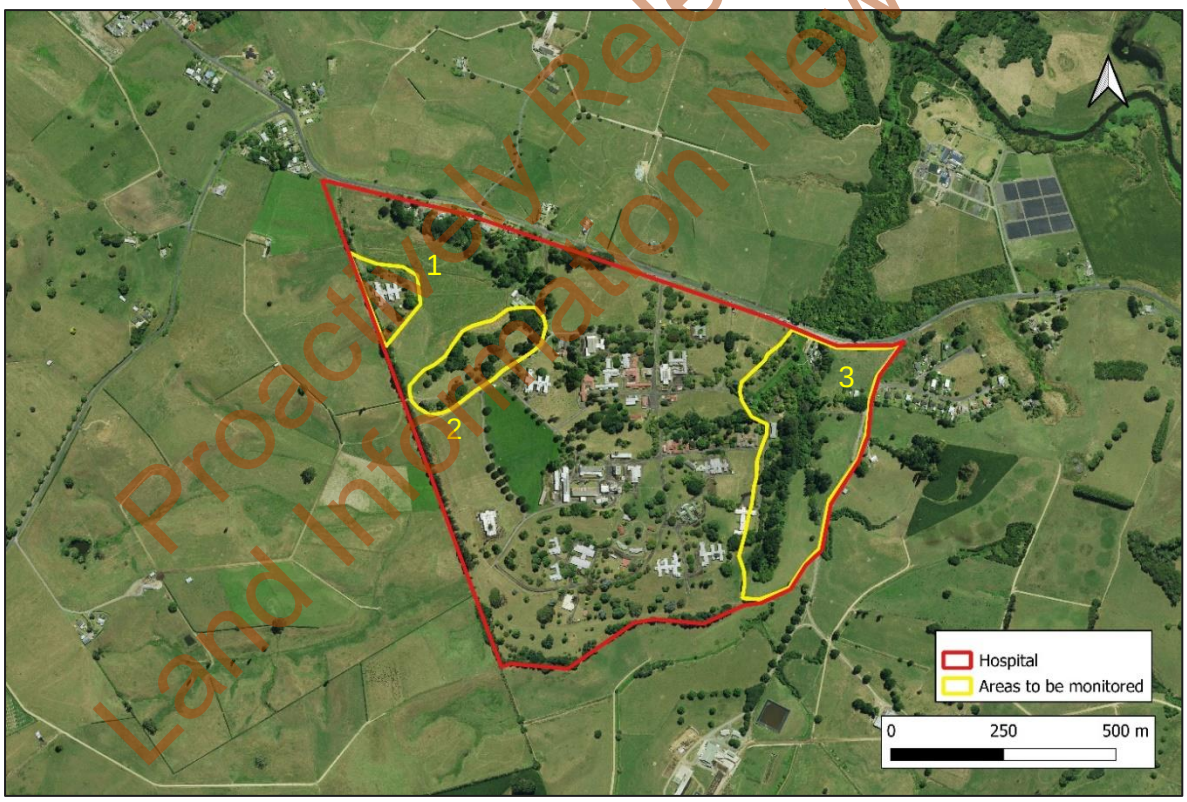


Figure 11: Identified points on the Site requiring archaeological authority to disturb

3.1.7 Terrestrial ecology

An Ecological Impact Assessment (EcIA) has been undertaken (see **Appendix L**) which identifies the existing terrestrial ecological features and values on the Site; those features are summarised in the following paragraphs.

Terrestrial vegetation types within the site are predominately exotic, with a number of pest plant species observed. Native trees sporadically present across the site include totara, rimu, miro and kauri. The overall ecological value of terrestrial vegetation on site is assessed as Low to Negligible.

Avifauna identified on site included a number of native and exotic species, all typical of highly modified environments. No “At-Risk” of “Threatened” avifauna species were observed, and it is unlikely that any are present on site. Native avifauna may utilise the large trees on site for nesting. Ecological value of avifauna is assessed as Low.

No herpetofauna species were observed on site. As a result of the high modification of the site and likely high numbers of mammalian pest species in and surrounding the site it is unlikely native skinks are present or they are at undetectable numbers. No native gecko or frog species are likely to be present as the site does not provide appropriate habitat to support them. Ecological value of herpetofauna onsite is assessed as Negligible.

Long-tailed bats have been recorded on site. Long-tailed bats are classified as “Threatened – Nationally Critical”. The many large exotic trees on Site and linear habitats provide potential long-tailed bat habitats for roosting, commuting and foraging. Although rare, long-tailed bats have also been found to occupy a human structure such as the abandoned buildings on site. Ecological value of long-tailed bats is assessed as Very High.

3.1.8 Hydrology

Two main catchments have been delineated on the site (see Figure 12). The southern catchment (440ha) drains to the Wharekōrino Stream, which flows through it in a south to north direction. The western catchment (166ha) drains through the Site’s detention storage areas and enters the Wharekōrino Stream near Te Mawhai Road.

The Wharekōrino Stream flows into the Pūniu River which then flows into the Waipā River. The Site is within the Waipā Catchment Management Zone under the Waikato Regional Plan.

Four culverts have been identified on site (see Figure 13). Three of the culverts intersect the Wharekōrino Stream: Culvert 3 is at the most upstream extent on site beneath a farm crossing; Culvert 1 is located at the northernmost extent of the stream within the site, beneath Te Mawhai Road; and Culvert 2 is within the site, beneath a bund created for a previous access road to Tokanui Hospital. Culvert 4 is fully operational while Culverts 1 and 2 could not be sited and are likely “drowned” (i.e. fully submerged) due to the flat nature of the stream through this area. Culvert 3 is considered to be fully operational as water was observed flowing through it, although the culvert is also largely submerged.

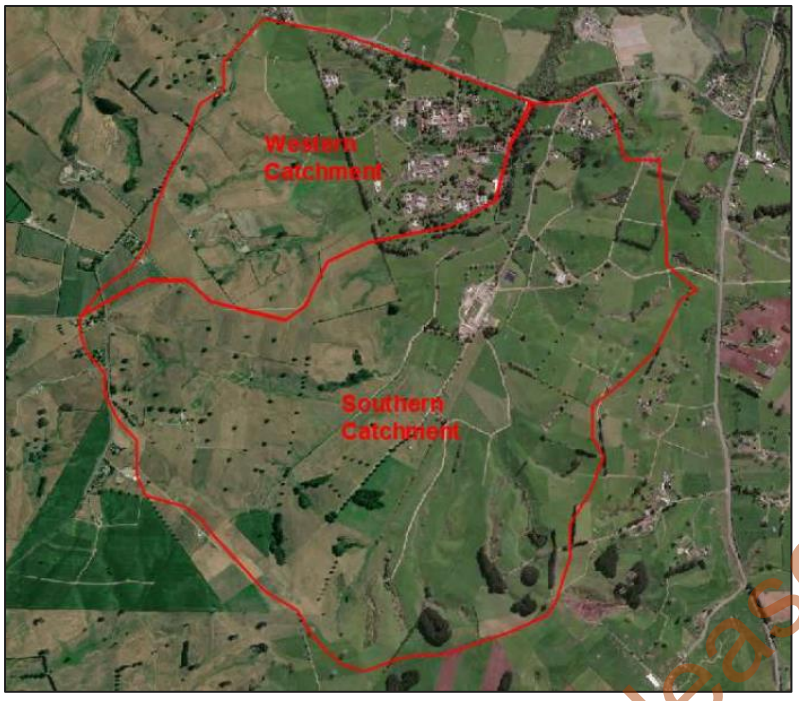


Figure 12: Catchments

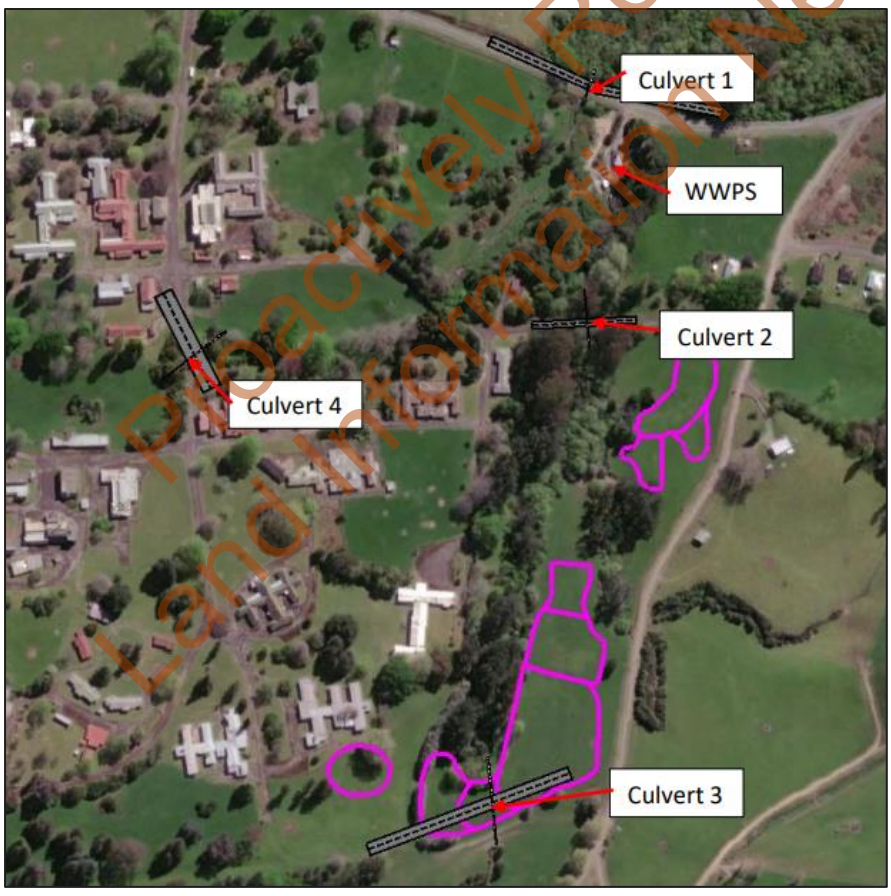


Figure 13: Culvert locations

The Site is shown as being partially affected by the Regional Scale Flood Hazard layer on the Waikato Regional Hazards Portal, which means that WRC holds information to suggest that part of the site will be affected by regionwide flooding (see Figure 14). The information indicates that during a 100 year flood the Waipā River will likely cause backflow up the Pūniu River, including up the Wharekōrino Stream.

The WDP maps do not identify any flood hazard areas on the Site. However, directly downstream (to the north of Te Mawhai Road), the floodplain of the Wharekōrino Stream and Pūniu River is mapped. Site-specific flood modelling has been undertaken for this project, identifying that flooding risk is concentrated around the stream (**Appendix M**).

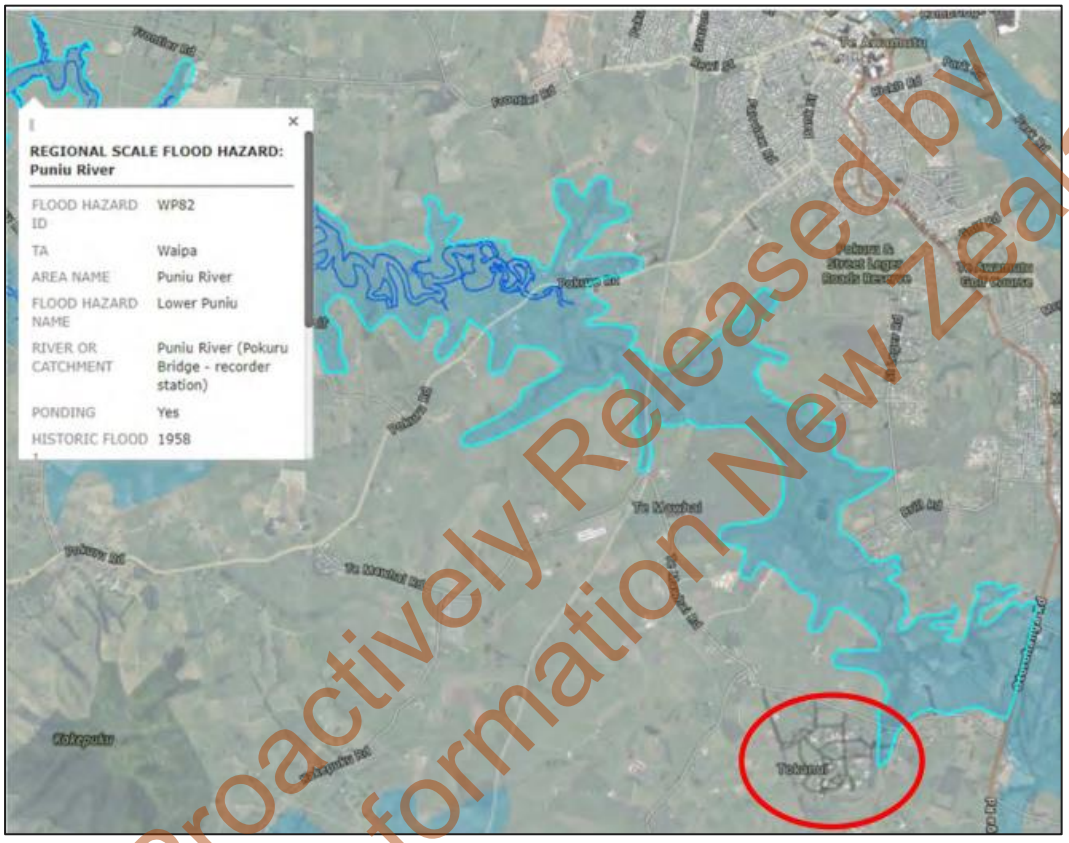


Figure 14: Regional Scale Flood Hazard – Pūniu River in Waikato Regional Hazards Portal (site circled in red)

3.1.9 Freshwater ecology

The EcIA (**Appendix L**) also identifies the existing freshwater features and values on the Site, which are summarised below.

Riparian vegetation around the Wharekōrino Stream is predominantly exotic but is continuous and dense. The abundance of macrophytes, deep pools, and over hanging *Tradescantia* provides a large amount of habitat for freshwater fish. In addition, some woody debris and root mats also provide habitat diversity for macroinvertebrates. The overall ecological value of the stream reach on the Site is assessed as High.

A fish survey was undertaken and identified shortfin eel (Not Threatened) and longfin eel (At-Risk – Declining) and elvers within the stream. Banded kokopu and giant kokopu may be present within the reach but were not captured. It is likely that Culvert 2 beneath the former

site access road is a fish passage barrier. The pest species Gambusia was observed downstream of the culvert. The ecological value of fish species present is assessed as High.

Approximately 721m of artificial watercourse is present within pasture in the northwest extent of the Site. Riparian vegetation is predominantly exotic grass and there is a lack of suitable instream habitat for native fish species. Artificial watercourses have been assessed as having Negligible ecological value.

Two natural inland wetlands (as defined under the National Policy Statement for Freshwater Management (NPS-FM)) have also been identified on Site (see Figure 15). Wetland 1 is a riverine wetland encompassing the northern extent of the Wharekōrino Stream in the Site and its floodplains. Vegetation present is predominantly exotic. Native freshwater fish, including At-Risk species, likely reside within the wetland. The wetland provides important habitat in a region lacking wetland habitat and provides connection to stream habitat upstream. Its ecological value is assessed as Moderate. Wetland 2, within the northwest extent of the Site, is a modified natural wetland with drainage channels created to allow for grazing of the area. The area is dominated by creeping bent, and is wet underfoot. Its ecological value is assessed as Negligible.

Wetland 1 and the Wharekōrino Stream meet criteria for indigenous biodiversity significance under the WRPS.

The stream reaches within the Site do not have a particular water management class under the Waikato Regional Plan.

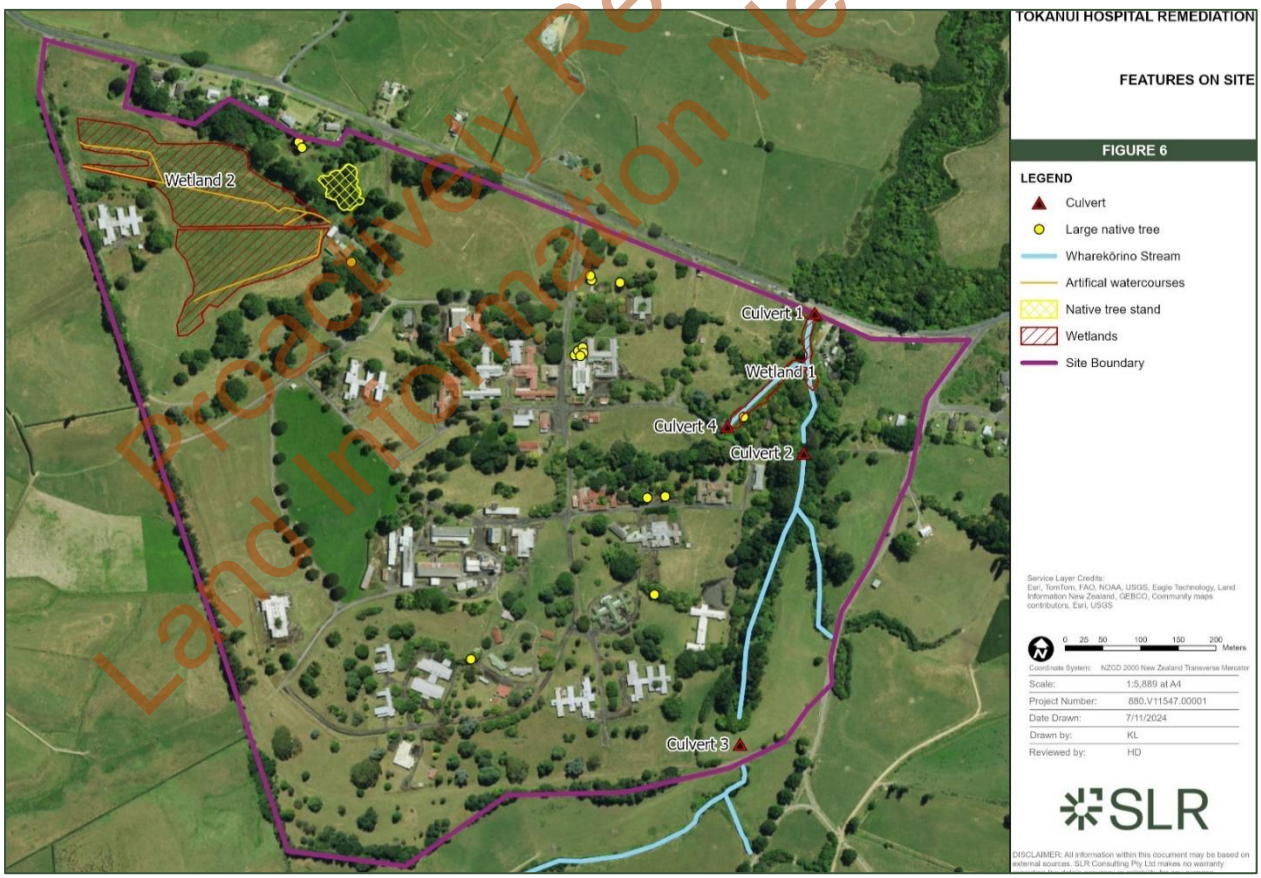


Figure 15: Locations of freshwater bodies

3.1.10 Soils

The majority of the Site rests on volcanic soils with moderate drainage, with some patches of yellow-brown loams. The Site is Land Use Capability Class 2 land as per the NZ Land Resource Inventory maps (see Figure 16).

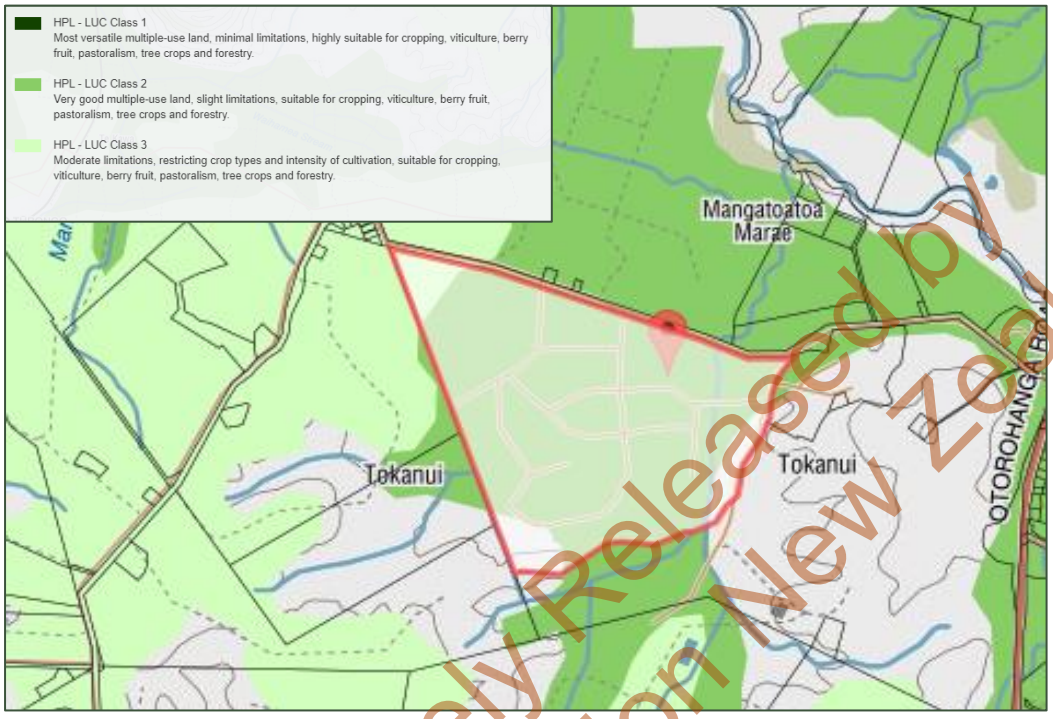


Figure 16: HPL soil classification map (Source: NZLRI)

3.1.11 Transport / Access

Primary access to the Site is via the main access gate on Te Mawhai Road (locked and monitored by security) which forms the northern boundary of the Site and is a local road. Farm Road, a private road, comes off Te Mawhai Road and runs along the eastern boundary of the Site. It provides some access to the eastern side of the Site as well as the neighbouring AgResearch site and residential village.

Te Mawhai Road is classified as a local road and has typical traffic volumes of 585 vehicles per day. It is a two-way, two-laned road with a marked centreline. The posted speed limit is 70km/h for the western half of the site frontage increasing to 100km/h across the eastern half of the site frontage. The Integrated Transport Assessment (ITA) in **Appendix N** contains a full description of the transport environment.

3.1.12 District Plan Zoning, Overlays, Controls

The site is within the Rural zone and within the High-Class Soil overlay of the WDP (see Figure 17 and Figure 18).

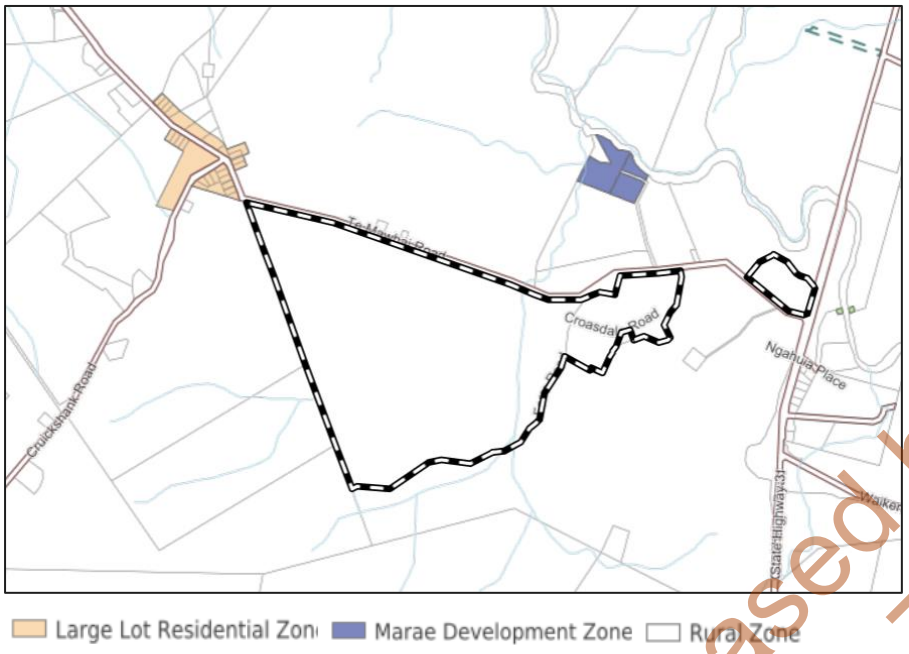


Figure 17: Zoning map from Waipā District Plan

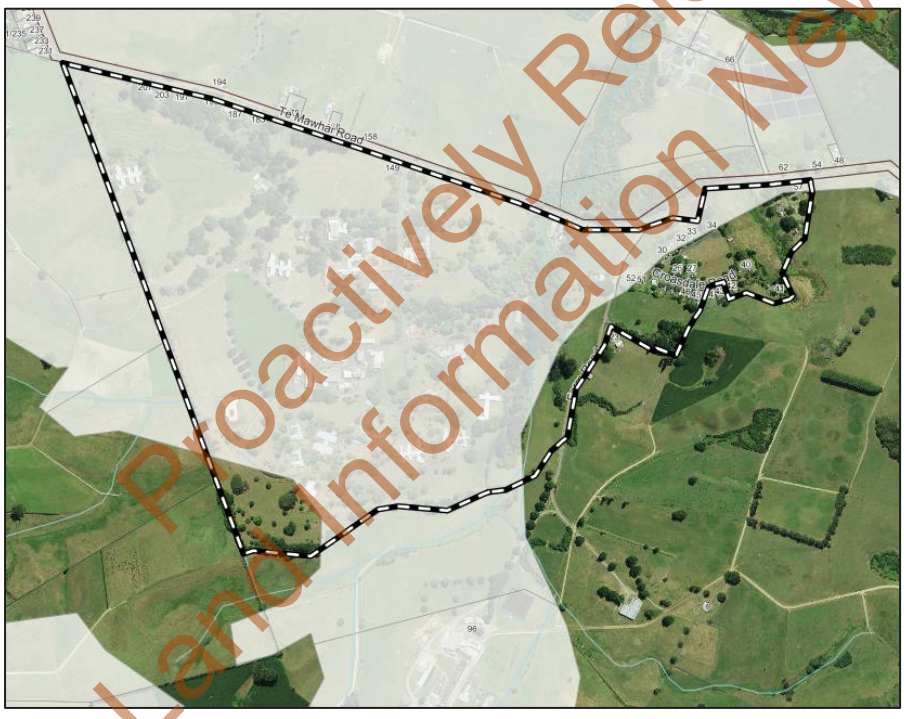


Figure 18: High Class Soil overlay from Waipā District Plan

There are no other WDP designations, overlays, controls or notations that are relevant to this proposal.

3.1.13 Regional Plan Zoning, Overlays

The Site is within the Waipā Catchment Management Zone as used by WRC to manage the region's catchments. There are no regional plan overlays applicable to the Site and the stream reaches through the Site have no water management classification.

3.2 Surrounding environment

The surrounding environment (see Figure 19) is primarily rural in character, with some residential activities also present. Directly to the north, west and south are large lots in pasture. This includes AgResearch's 'Tokanui Dairy Research Farm' to the south and east. Tokanui hospital cemetery (Section 3A Block X Puniu SD) and a Māori burial reserve (Tokanui 1C Block) are also located on smaller sites carved off from the Dairy Research Farm.

The eastern boundary of the Site partially adjoins a residential village of tenanted houses (managed by LINZ), and a second residential village (also managed by LINZ) is located approximately 700m east of the Site at the corner of Te Mawhai and Ōtorohanga Roads, both of which are within the same (cancelled) Record of Title as the Site, and zoned Rural. To the west of the Site at the intersection of Cruickshank Road and Te Mawhai Road is another small village with smaller residential allotments (in individual ownerships) zoned Large Lot Residential, being the closest residential zoned area to the site. There are also two smaller rural-residential sites on the northern side of Te Mawhai Road within the Rural zone.

The private Farm Road comes off Te Mawhai Road and runs along the eastern boundary of the Site. It provides access to Croasdale and Symonds Roads serving the eastern village. There is also an easement over the road securing right-of-way for the AgResearch site, the cemetery and Māori burial reserve, and the right to convey electricity and telecommunications for AgResearch.

Around 500m north-east of the site, located next to the convergence of the Pūniu River and Wharekōrino Stream is Mangatoatoa Marae and Paa accessed via a gravel road from Te Mawhai Road. This site is zoned Marae Development Zone under the WDP.

There are several cultural and archaeological sites and significant natural areas located near the Site, which are listed by the WDP, including:

a) Cultural sites approximately 400m to the north-northeast of the Site: CH12 (Urupā) and CH33 (Mangatoatoa Pā).
b) Archaeological sites along Pūniu River north of the Site: S15/182, 321, 248, 242 and 247 (Pā/Urupā).
c) Archaeological site S15/239 (Pā/Urupā) approximately 500m to the east of the site (the Māori burial reserve within the AgResearch site).
d) Cultural site CH11 (Urupā) approximately 500m to the south-east of the site (the hospital cemetery site within the AgResearch site).
e) Significant natural area WP333 – Forest patch 250m east of Wharekōrino Stream Tokanui Township (local significance, unprotected).
f) Significant natural area WP330 – Te Mawhai Road willow wetland, to the north of the Site along the Wharekōrino Stream.
g) Cultural site CH13 (Urupā) located approximately 500m north-west of the Site, off Te Mawhai Road.

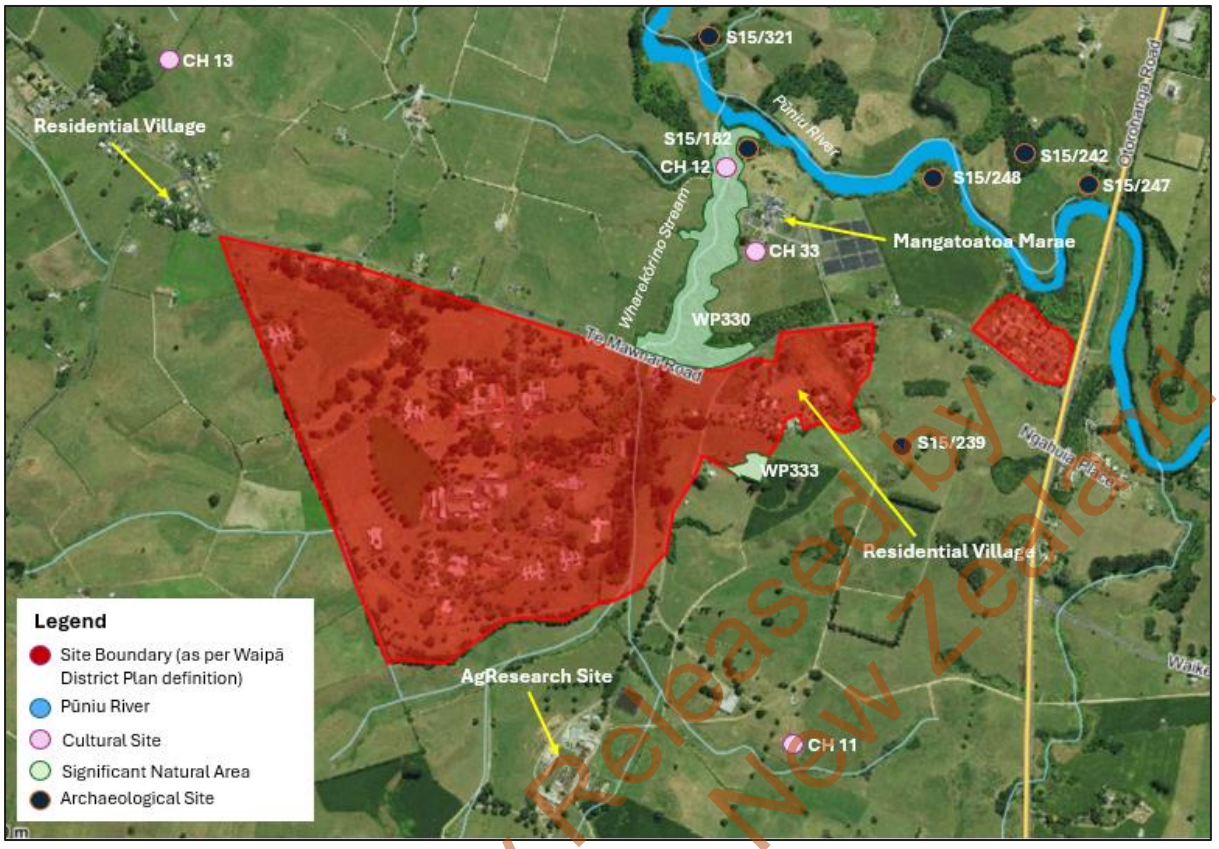


Figure 19: Features in the surrounding environment

Downstream of the Site, Pūniu River Care have a resource consent AUTH144702.01.01 valid until October 2037 to take water from the Wharekōrino Stream for irrigation of a 3ha plant nursery during September-March inclusive, based on a daily maximum take of 100m^3 and total annual take of not more than 10,000m^3.

Table 4 below, taken from the Acoustic Assessment (**Appendix O**), shows the approximate distances between the closest occupied dwellings and the underground services to be removed. The closest dwellings are to the north and north-west of the works area and are within the subject Site.

Table 4: Closest residential receivers

Receiver	Address	Approximate distance to nearest below ground structure/element to be removed or area of remediation	Comments
R1	183 Te Mawhai Road	55 m	Single storey dwelling – located on the subject site
R2	187 Te Mawhai Road	45 m	Single storey dwelling – located on the subject site
R3	193 Te Mawhai Road	55 m	Single storey dwelling – located on the subject site

Receiver	Address	Approximate distance to nearest below ground structure/element to be removed or area of remediation	Comments
R4	197 Te Mawhai Road	45 m	Single storey dwelling – located on the subject site
R5	203 Te Mawhai Road	25 m	Single storey dwelling – located on the subject site
R6	207 Te Mawhai Road	25 m	Single storey dwelling – located on the subject site
R7	158 Te Mawhai Road	70 m	Single storey dwelling
R8	168 Te Mawhai Road	70 m	Single storey dwelling
R9	178 Te Mawhai Road	120 m	Single storey dwelling
R10	231 Te Mawhai Road	>200 m	Single storey dwelling
R11	233 Te Mawhai Road	>200 m	Single storey dwelling

Kihikihi is the closest town, located approximately 3km away via Te Mawhai Road east and then north along Ōtorohanga Road (SH3).

4.0 Proposal

4.1 Summary

The proposal is to remove underground infrastructure and remediate the Site in accordance with the requirements in the Deed (set out in Section 2.2) so that it can be offered to TNN. This application is for the below ground works (above ground demolition having been applied for separately, as described in section 2.5 above). The below ground works comprise the following components:

- Partial removal of horizontal infrastructure
- Remediation of contaminated land
- Removal of building foundations
- Culvert removal, upgrade and pipe repair works.

The specific works involved are described below, followed by a description of construction methodology and management measures applicable to the project as a whole, and separate descriptions of the specific works proposed within, or within 10m of, wetlands.

4.2 Partial removal of horizontal infrastructure

The extent of the existing 'horizontal infrastructure' and where coal tar is present in roads and paving was derived through the investigations summarised in section 3.1.2. In line with the joint Ministers' decision of September 2023, the majority of existing horizontal infrastructure on the site will be removed, including roading, paving, 3 waters reticulation, underground heating, power and telecommunications.

Table 5 below provides an overview of the existing extent of each category of infrastructure asset, and the extent proposed to be retained or removed.

Table 5: Infrastructure assets to be retained and removed, by asset category

Asset category	Existing extent	Extent of retention	Extent of removal
Roading and paving	8.8km of roading (6.3ha in area) comprising main roads, minor roads, other paved areas around buildings	3.5km (2.8ha) to be repurposed as farm track (paving removed, basecourse retained)	5.4km (3.49ha) to be removed, being 56% of existing roading/paving, and up to 4,200m³ of coal tar. To be replaced with approx. 13,750m³ soil backfill
Underground heating	2.9km of concrete ducting, pipework and fittings, plus 37 access chambers (1.75m x 1.25m)	Nil	Removed in entirety. 880m³ minimum soil backfill
Water	8.9km of water piping, 41 hydrants, 25 valves	Any pipes deeper than 800mm bgl, and existing farm water supply	Any pipes to a depth of 800mm bgl and all asbestos pipes regardless of depth
Stormwater	1.8km trunk pipeline, 4.5km of minor stormwater piping, 145 manholes, 56 catchpits	Trunk pipeline to be re-lined and retained. Any pipes deeper than 800mm bgl and manholes deeper than 1,000mm bgl.	Any other pipes to a depth of 800mm bgl and any manholes to a depth of 1,000mm bgl
Wastewater	4.9km of wastewater piping, 152 manholes	Any pipes deeper than 800mm bgl and manholes deeper than 1,000mm bgl, and wastewater pump station.	Any pipes to a depth of 800mm bgl and any manholes to a depth of 1000mm bgl Remaining redundant WWTP infrastructure, grit chamber, inlet pipe and footbridge, trickling filter and stone media, UV treatment system, flow meter and outlet pipe, wastewater pipes and manholes, stormwater pipe
Power	7.3km of power cables (light poles, power poles)	Any cables deeper than 800mm bgl	Any cables to a depth of 800mm bgl. Concrete cable protection will also be removed where found
Telecoms	4.6km of telecommunications cables	Any cables deeper than 800mm bgl	Any cables to a depth of 800mm bgl

Asset category	Existing extent	Extent of retention	Extent of removal
Retaining walls	Small terraced retaining wall below road	To be entirely retained	Nil.

Non-hazardous demolition materials will be recycled where possible, for example crushed roading materials to be repurposed for farm tracks. The total volume of waste materials from the horizontal infrastructure removal to be disposed of offsite at an approved facility is estimated at up to 13,750m³ of roading materials and 2,400m³ from infrastructure services.

Further information on construction methodology is included in section 4.6 below.

4.2.1 In ground services removal

In ground reticulated infrastructure is to be removed to 800mm depth below ground level (bgl), except for manholes, which will be removed to 1,000mm bgl. This approach will provide more than sufficient soil depth for future agricultural use of the Site. Any deeper in-ground infrastructure will be defunct but retained in-situ. Trunk stormwater pipelines crossing the Site that convey runoff from upstream catchments will also be retained and remain in use.

Figure 20 below gives an overview of the extent of works required to remove the in ground infrastructure. Detailed plans are included in **Appendix H** (ref 33205/2000-2500). The plans also show where the infrastructure intersects with identified wetlands, culturally significant areas, areas requiring archaeological authority to disturb, and existing trees and vegetation.

The width of the trenching for service removal will vary depending on the width and depth of the pipe/line and local topography, but will generally be between 300mm and 750mm. The trenches where infrastructure has been removed will be backfilled to previous ground levels. Stabilisation of all disturbed areas will be undertaken by grassing.

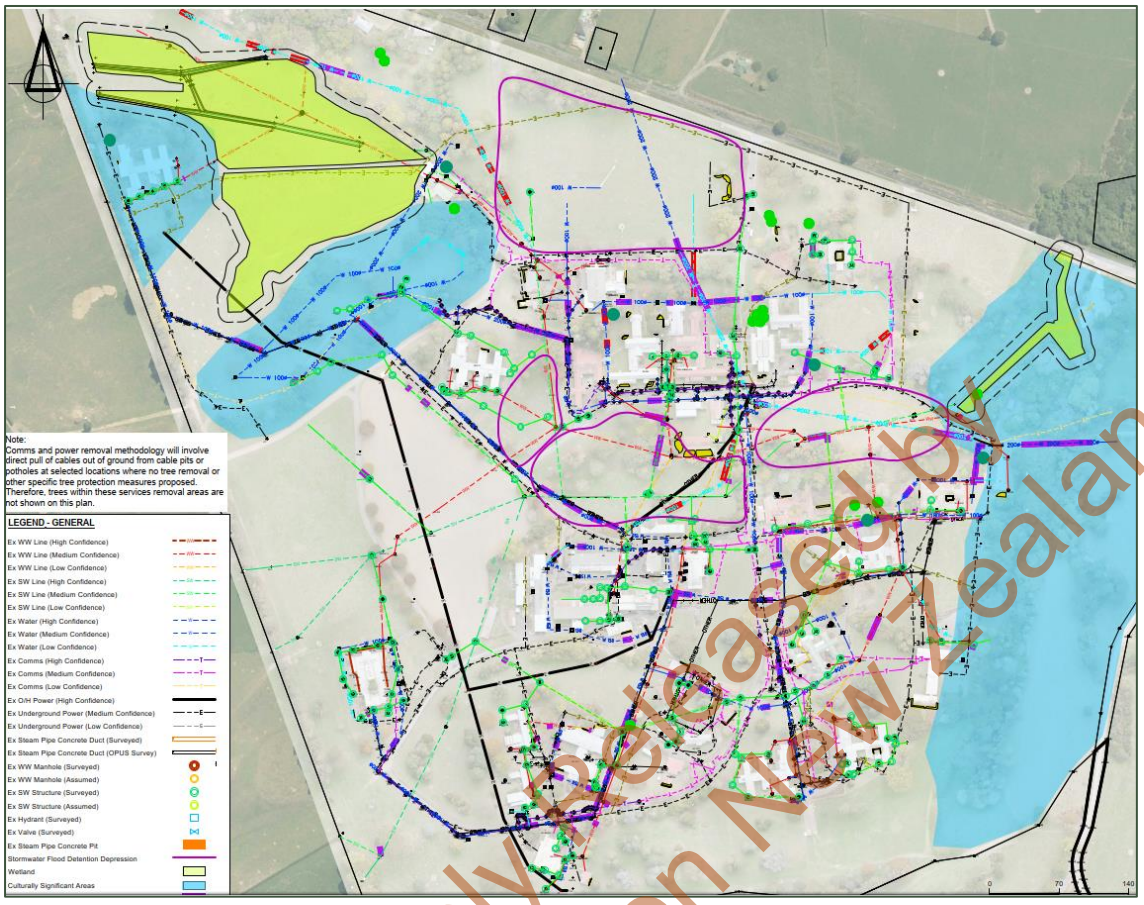
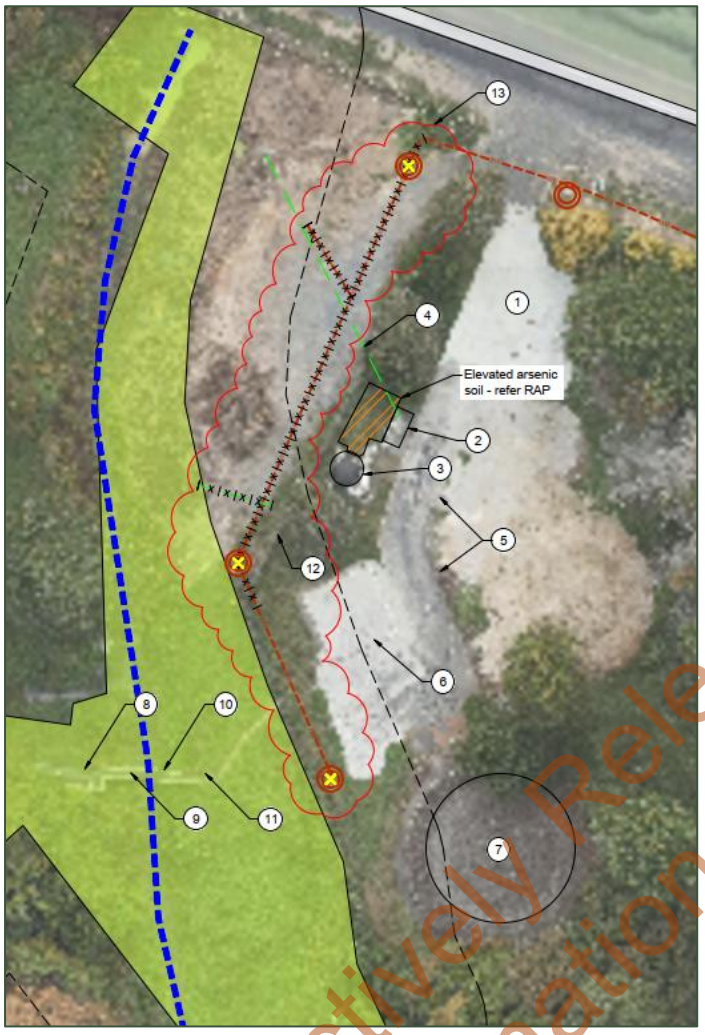


Figure 20: Combined overview of services to be removed (ref 33205/2800)

4.2.2 Redundant WWTP structures removal

As previously noted, the former WWTP on the Site was decommissioned and has been partially demolished. There is some WWTP infrastructure still to be demolished, including four wastewater/stormwater pipes and associated manholes, a flow meter and associated concrete pad, UV treatment system, outfall pipe, retaining wall, edging around former humus tank, trickling filter, grit chamber, footbridge and pipes/ducts strapped to the bridge. It is proposed that the remaining demolition will be undertaken as part of this project. Refer to Figure 21 for an overview of the required works (full plan ref 33205/2010 in **Appendix H**). Some of these works are within Wetland 1 and are further described in section 4.6.3 below which focuses on works within wetlands.



1. WWPS + Concrete pad to be protected during works.
2. Remove flow meter and associated concrete pad. (TBC)
3. Remove redundant UV treatment system. LINZ to confirm if salvage for reuse or obsolete.
4. Remove outfall pipe. (TBC)
5. Remove shallow retaining wall and steps. Better ground down to tie in with adjacent ground.
6. Remove edging around former humes tank.
7. Remove tricking filter and stone media.
8. Remove grit chamber.
9. Remove inlet pipe strapped to footbridge.
10. Remove footbridge.
11. Remove any ancillaries (cabling, etc).
12. Relocate fence to reduce compound size. LINZ to confirm extent.
13. Remove wastewater pipes down to 800mm depth out to the boundary with the road reserve and remove the stormwater pipe and associated three WWMHs shown in Figure 19. Cap the line at the road reserve boundary and at each end of the wastewater pipe greater than 800mm depth from MH23 to MH22.

Figure 21: WWTP works (ref 33205/2010)

4.2.3 Road and paving removal

Some of the main and minor roads will be repurposed as farm tracks, and a small retaining wall below a road will be kept. The rest of the existing roading and paving will be removed. Figure 22 below gives an overview of the road and paving removal. The full plan is included in **Appendix H** (ref 33205/2700).

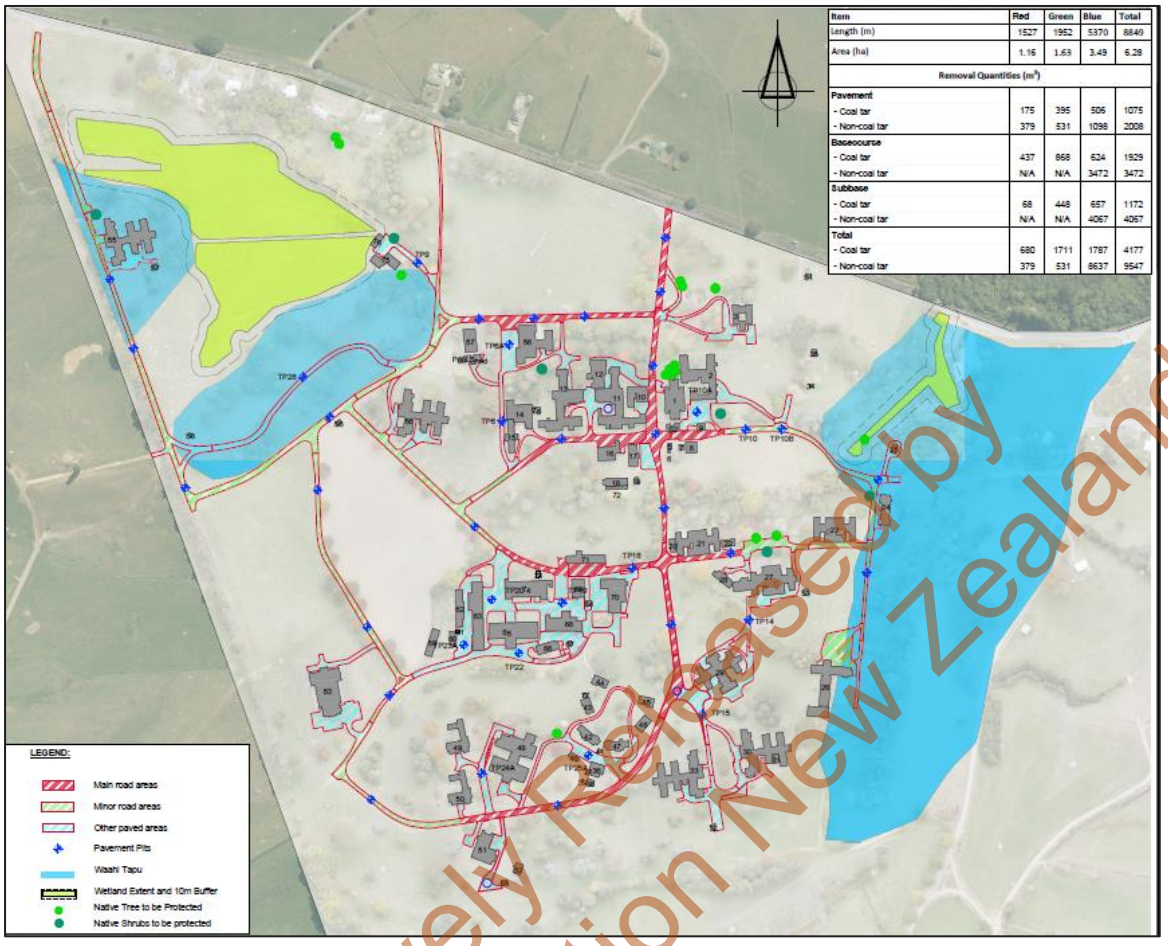


Figure 22: Overview of roads to be repurposed as farm track (red and green) and to be removed (blue) (ref 33205/2700)

The road network is approximately 8.8km in length, and has expanded over the lifetime of the hospital and been subject to ongoing repairs, resealing and maintenance works over the years.

The roading network has been split into three portions, primarily based on road function, degree of use and age. These are shown in red, green and blue on Figure 22, and each has their own management/removal requirements. Section 12.1.3 of the Draft Demolition, Deconstruction and Remediation Management Plan (DDRMP) (**Appendix P**) provides full details of the removal requirements.

The portion of the road network shown in blue (5.37km, 3.49ha) is to be fully removed (surface, basecourse and subbase). This portion of the road network will be reinstated with clean soils to existing ground level.

The red and green portions of the road network areas (3.48km, 2.79ha) will be partially removed, essentially removing the surface pavement down to basecourse, then topping up the basecourse to existing ground level, forming farm tracks for future use.

As set out in section 3.1.2, coal tar is present across all three road network colours and roading layers. All confirmed coal tar roading materials are to be removed from the site, regardless of depth within the road network. The proposed methodology for this is:

a) Remove all surface pavement in 50mm increments (to limit cross contamination), utilising excavators and/or milling plant (if proposed by contractor). Surface

material to be placed directly into bins adjacent to works area and/or stockpiled in controlled areas until sufficient volume is generated to fill trucks for offsite disposal. All excavated surface material to be placed in like for like bins or stockpiles, i.e. coal tar into coal tar bins/stockpiles, asphalt into asphalt bins/stockpile and chipseal into chipseal bins/stockpiles;

b) In red/green road network areas, any surface layers that have been identified at depth (multiple layers of surface material) will also require removal by excavator and/or milling plant. Material to be handled and placed in bins/stockpiles as detailed above;

c) In red/green road network areas, any material removed will be "topped up" with basecourse to form rural farm tracks for ongoing use;

d) In blue road network areas, all material (surface, basecourse & subbase) will be removed by excavator and/or milling plant. Material to be handled and placed in bins/stockpiles as detailed above;

e) In blue road network areas, entire removal area to be reinstated with soil and returned to grazing land use;

f) All roading material removed during this process to be disposed of offsite to suitably licensed disposal facility, or contractor facility for recycling and reuse.

- The estimated total volume of roading materials to be removed is ~13,750m³, and ~4,200m³ of this is estimated to be coal tar.

4.3 Remediation of contaminated land

The Deed requires the Site's soil to be remediated so that a minimum of 85% of total land area meets the rural residential remediation standard, and a contiguous area of no more than 15% of the total land area meets the managed remediation standard. These standards are defined in the Deed as either to be chosen in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines (CLMG) No. 2 or to be derived through a site-specific risk assessment.[7] It was determined that a site-specific risk assessment would be undertaken to derive the remedial standards to align with the overarching project principles.

As described in section 3.1.3 above, extensive desktop and intrusive investigations have been undertaken to understand the extent of current soil contamination at the Site. These found that the Site is generally *not* contaminated and those contaminants that are present are limited in extent. The appropriate remediation parameters for the Site were then considered in a Site-Specific Risk Assessment by HAIL Environmental Ltd (report "K4" in **Appendix K**). The report describes how these parameters (Site Specific remedial standards) were derived so as to pose minimal risk to food production, to people who live on the land, and to soil quality. In relevant locations, the standards also seek to protect water quality and wetland values, including the associated mahinga kai. The standards are the same or more conservative than the CLMG. The derived standards are set out in Table 6.

[7] "Site-specific risk assessment" is defined in the Property Redress Schedule as:

"means the derivation of remedial criteria based on a conceptual site model in a manner generally consistent with CLMG1."

Table 6: Tokanui Site Specific Soil Contaminant Remedial Standards

Scenario	*Wetland*[1]	*Rural residential*[1]	*Managed*[1]
Arsenic	9	9	70
Cadmium	0.3	0.9	10
Chromium	100	150	150
Copper	50	280	280
Lead	70	120	460
Mercury	3	3	3
Zinc	150	350	450
DDT[2]	1	2	2
ACM[2]	0.01 %	0.01 %	0.01 %
AF/FA[2]	0.001 %	0.001 %	0.001 %
Fuels and Oils	No odour or staining	No LNAPL[2]	No LNAPL[2]
Benzene	0.11	0.11	0.11*
BaP_{eq}[2]	6	6	35
Hazardous Wastes	Absent	Absent	-

Notes:

1. All concentrations milligrams per kilogram dry weight, except asbestos % weight for weight, fuels/oils and hazardous wastes.
2. DDT, dichlorodiphenyltrichloroethane, is an insecticide banned in the 1970s. ACM refers to fragments of asbestos-containing materials, up to 7 mm in size. AF/FA is asbestos fines and fibrous asbestos. BaP_{eq} is a way of expressing the toxicity-weighted concentration of a group of chemicals called polycyclic aromatic hydrocarbons (PAHs) that are formed by incomplete burning of organic materials. LNAPL (light non-aqueous phase liquid) is a groundwater contaminant such as petrol, diesel or oil that is less dense than water and not very soluble in water.

***Only within 100 m of surface water.**

The Remedial Options Report (report "K5" in **Appendix K**) then considered possible remediation options to achieve the requirements of the Deed, applying the Site Specific remedial standards. The preferred option was selected through a multi-criteria analysis.[8]

The selected option involves first excavating moderate and low level contaminated soils across the Site (i.e. all soils exceeding rural residential standards). In summary, soil will be removed at a 2-3m distance around those buildings that had lead and asbestos containing materials, to a depth of around 300-400mm. There will also be remediation at other identified hotspots being:

- Within the greenhouse and shed footprints in the agricultural area in the north of the land between Buildings B34 and B35.
- Where waste has been buried around the substation Building S2 and Building B26.
- Surface waste and dirt on hard standing near Building B66.

[8] The decision on the preferred option was not subject to any additional approval requirements, as all identified options met the requirements of the Deed.

- 'Area I' localised fill area with construction and demolition waste and asbestos contamination.
- Localised pockets of construction and demolition waste within the Culvert 2 embankment.
- Area of slightly elevated arsenic levels within the former WWTP compound.
- Suspected fill pockets around the site, if contamination is confirmed.

The total amount of low and moderate level contaminated soil to be removed from the identified locations is ~3,250m³ across approximately 15,900m² (1.6ha). Following this removal, an additional building halo scrape[9] and subfloor space scrape of soil will be undertaken to capture any additional contaminants that may have migrated to the ground during building demolition and soil removal. Soils around asbestos pipe watermains will also be removed, as these are inferred to be contaminated. The additional soil removal described above has an estimated volume of ~3,150m³.

The estimated total volume of contaminated soils to be removed is ~7,800m³ (which allows for a contingency for accidental discovery; see Table 7 for a breakdown of volumes). Figure 23 to Figure 25 below give an overview of the location of this soil, and detailed plans delineating the contaminated soil to be removed are included in **Appendix H** (ref 33097/R01-59). Soil to backfill the voids will likely be sourced from the removal of Culvert 2 and the redundant road embankment (discussed in section 4.5).

Table 7: Summary of contaminated soils to be removed

Contamination Level Classification	Contaminated Soils Description	Source	Estimated Volumes (m³)
Low Level (Management)	Exceeds site specific rural residential soil remedial standard but not the managed remedial standard.	Near Buildings	**977**
		Other Areas[4]	**797**
Moderate Level (Remedial)	Exceeds site specific managed remedial standard.	Near Buildings	**1,426**
		Other Areas[4]	**55**
TOTAL			**3,255**
PROVISIONAL ALLOWANCES			
Estimated halo scrape post-building demolition[2]		Some	**869**
Estimated building subfloor space scrape, post-building demolition[3]		Some	**1,930**
Inferred asbestos contaminated soil around asbestos watermains[1]		Likely	**328**
Contingency		Some Likely	**1,400**
TOTAL INCLUDING PROVISIONAL ALLOWANCES (Rounded)			**7,782 (7,800)**

[9] See Note 2 in Table 7

Contamination Level Classification	Contaminated Soils Description	Source	Estimated Volumes (m^3)

Notes:

1. Assumed that on average a 100 mm wide ring of soil around the asbestos watermains that are to be removed is contaminated with asbestos. Soil testing may be undertaken at the time of watermain removal at the discretion of the assessor to confirm the volume of soil requiring remediation. This is addressed further in the separate Demolition Management Plan for the Site.
2. Provisional allowance made for soil scrape around all buildings, post-demolition and post-contaminated soils removal, comprising 1m wide strip x 150 mm deep, excluding areas already remediated (Halo Scrape).
3. Provisional allowance made for soil scrape across the subfloor space of all buildings excluding those with concrete floor slabs, post-demolition and post-contaminated soils removal comprising building footprint areas x 150 mm depth.
4. Other areas comprises Area I, Culvert 2 embankment and the WWTP, agricultural area and a demolished structure.

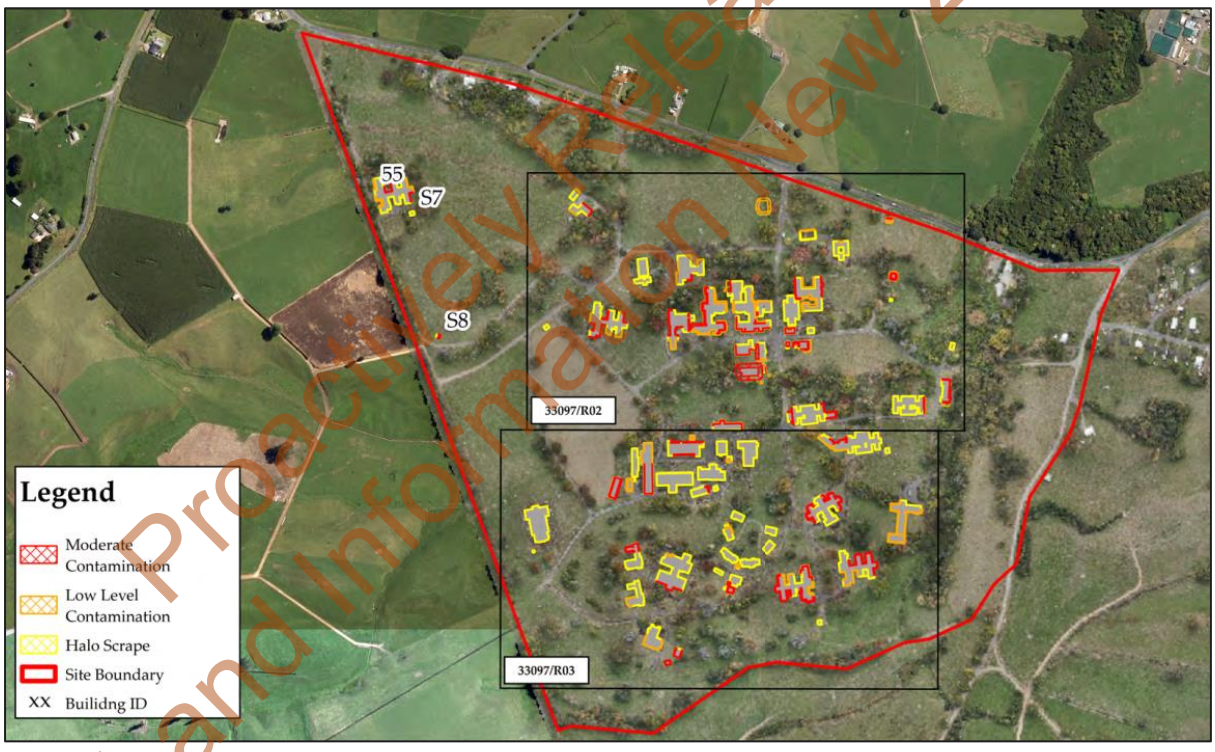


Figure 23: RAP Site Layout Plan R01

Figure 24: RAP Site Layout Plan R02

Figure 25: RAP Site Layout Plan R03

Once removed, the contaminated soil will be disposed of, either onsite or offsite. LINZ's preferred option is to temporarily reopen the existing landfill and dispose of the soil there, as sought by the Landfill Upgrade Application. However offsite disposal at an authorised landfill is also a feasible option (as set out in the Executive Summary).

The required actions to implement the remediation have been set out in a Remedial Action Plan (RAP). This is included in **Appendix K**. In summary:

- All soils containing concentrations of contaminants elevated above the site-specific remedial standards will be excavated and suitably disposed of. This includes areas around buildings and a limited number of 'non-building' areas. Soil removal in areas of the site identified and defined by the asbestos assessor will be completed under Class A asbestos controls.
- Following removal of asbestos contaminated soil materials (under Class A or B controls), visual clearance inspections will be carried out. The sub floor void spaces of all structures that have sub floor voids will also be inspected.
- A 1m wide x 0.15m deep 'Halo scrape' will be completed for every building.
- Suspected fill pocket locations will be checked to confirm whether they contain more than 5% construction and demolition waste exceeding the remedial standards. If any such contamination is confirmed, it will be removed under accidental discovery processes.
- Should the remediation area extend under tree driplines, the procedures set out in the DDRMP will be applied, being protecting larger native trees wherever practicable (which may include hand digging and retention of larger roots) and minimising any vegetation removal.
- Following removal of contaminated soils, validation sampling for identified contaminants of concern will be undertaken within the remedial areas, where necessary. If elevated levels of contaminants are found, the intention is that further remediation will occur and further validation, until the remediation objectives are achieved.
- Imported soil brought to site shall be certified as containing levels of contaminants below the site-specific rural-residential remedial standard and comply with the Waikato Regional Plan (WRP) definition of 'Clean fill material'.
- Accidental discovery processes will be employed if the contractor encounters any visually stained or odorous soil, Asbestos Containing Material (ACM), rubbish/building debris or other hazardous materials that appear to have contaminated the soil that have not previously been identified.
- Following completion of all remedial earthworks, a Site Validation Report will be prepared in accordance with the relevant CLMG and provided to WDC and WRC.

The remediation proposed will exceed the requirements of the Deed as it is intended that all of the Site will meet the Site Specific rural residential standards in Table 6, apart from the existing disposal sites which are exempt (refer to the Landfill Upgrade Application for proposed works to those sites).

4.4 Removal of building foundations

The CoC for building demolition only covers above ground works, not the removal of the foundations and any basements of the buildings. Foundation removal and associated ground disturbance forms part of this consent application.

The sub floor of relevant buildings will be tested for any ACM during Phase 1 (above ground demolition) and if found, this material will be properly removed before the remainder of foundations are removed. It is also likely that each building's foundations will be removed after

any contaminated soil around the building is removed, so that the building's location (and the distance of required soil removal from that building) is easily discernible. The final 'Halo scrape' for any remaining contaminants will be carried out after foundation removal.

Up to 9,000m³ of building foundations will be removed for offsite disposal.

4.5 Culvert removal / upgrade and pipe repairs

4.5.1 Culvert 2 removal

There is a redundant road embankment crossing the Wharekōrino Stream that provided an historical side road entrance to the Site. The location of this road crossing is shown as Culvert 2 on Figure 13 above. A site inspection of this crossing indicated that there appears to be a culvert running under the embankment, but this has not been able to be confirmed due to the culvert being completely submerged. This culvert (Culvert 2) is estimated to have a diameter of 1,350mm to be consistent with the upstream Culvert 3, and be 35m in length.

The road embankment is approximately 6m wide (at the top) by 50-60m long. It is relatively high, with an estimated height of 5.5m from the stream bed to the embankment crest. This culvert has a significant influence on flood levels affecting the existing disposal site (highlighted in pink on Figure 13 above) while the road embankment acts as a dam, affecting stream flow patterns and ecology.

The removal of Culvert 2 has been agreed to as part of the Ministerial decision on horizontal infrastructure removal in September 2023. Removal of this culvert is expected to involve the following works over an area of approximately 3,000m², involving total excavation volume (soil and roading materials) of 6,800m³:

(a) Vegetation and tree removal;
(b) Establishment of erosion and sediment controls; including temporary damming of the stream (likely both upstream and downstream) and diversion of stream runoff by pumping around the works area, with fish relocation as per the Fish Management Plan (FMP);
(c) Removal of redundant road paving, basecourse and subbase material to stockpile. Reuse suitable materials on-site as backfill material and dispose of other materials off-site to appropriate processing or disposal facility;
(d) Remove road embankment (assumed soil material) to stockpile. Reuse suitable materials on-site for backfill material and dispose of excess spoil off-site to appropriate facility;
(e) Remove culvert and associated inlet/outlet structures;
(f) Trim stream banks to tie in with existing stream profile (3,000m²);
(g) Place clean topsoil along stream batters – estimated 100-150mm thick and cover with biodegradable coir matting or similar;
(h) Grass upper stream banks and plant lower stream banks as per the Planting and Maintenance Plan (PMP); and
(i) Remove temporary dams and erosion/sediment controls.

Refer to Section 14 of the DDRMP (**Appendix P**) for details. A plan showing the works area is included as Figure 26 with full plans included in **Appendix H** (ref 33205/EMB000-004).

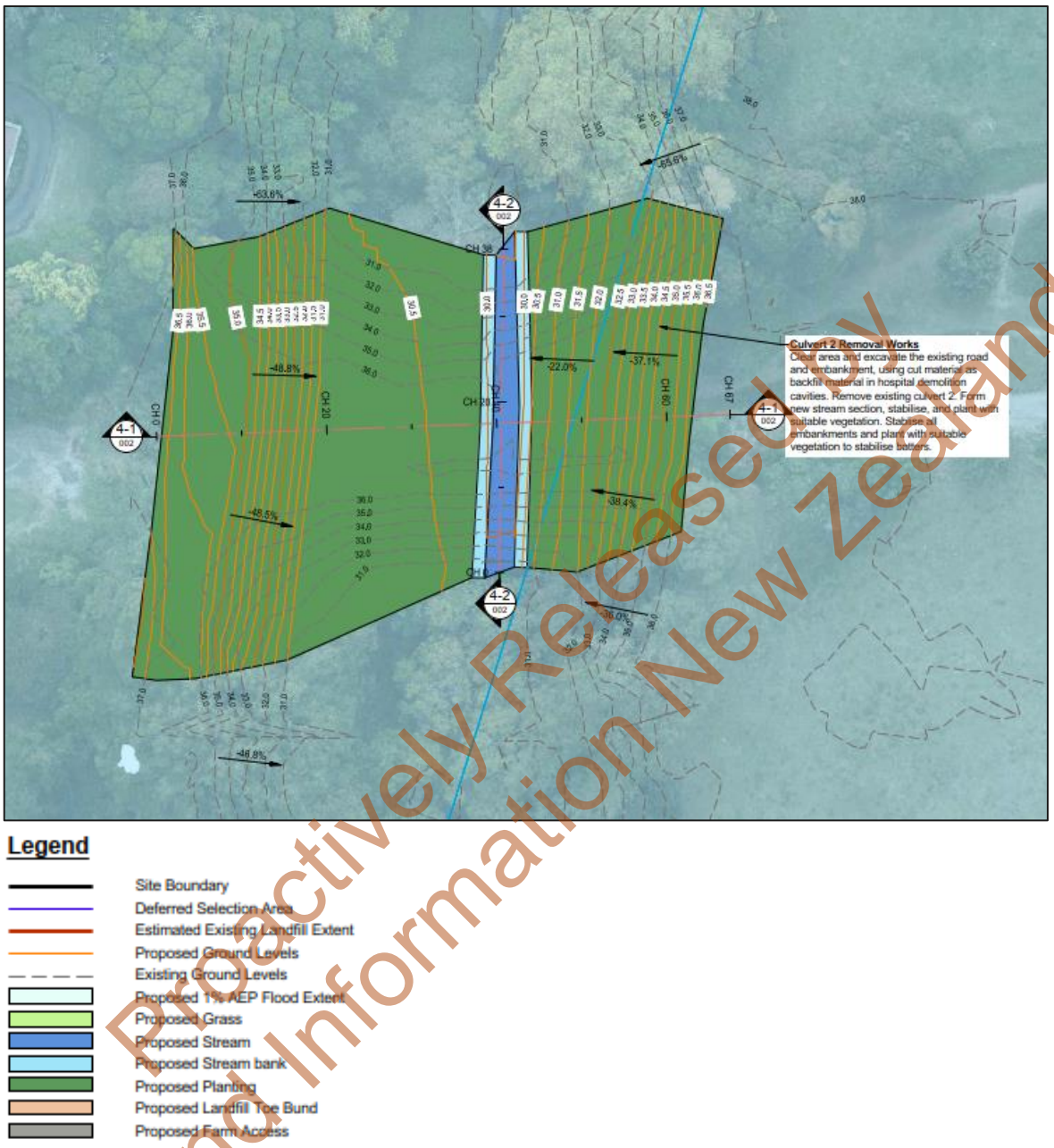


Figure 26: Works area for Culvert 2 removal (ref 33205/EMB001)

Geotechnical investigation of the embankment found that the majority of the fill material appears to be controlled fill, likely borrowed from a nearby source. It is expected that most of the fill embankment can be reused for backfilling within the hospital site, specifically, to fill cavities around buildings where contaminated land has been removed.

4.5.2 Trunk stormwater pipe repair

The trunk stormwater pipe system has 5 inlets receiving runoff from off-site, upgradient rural areas (see yellow lines on Figure 6). It also drains some flood detention basins within the Site via open grates. It discharges to a tributary of the Wharekōrino Stream. The downstream end of the pipe is flooded either due to partial blockage or backwater effects from the main stream.

The pipe system comprises the following:

- 1170m x 900dia pipe.
- 143m x 825dia pipe.
- 292m x 750dia pipe.
- 163m x 675dia pipe.

During site investigations into horizontal infrastructure, including review of CCTV, it was found that limited sections within these pipe lengths are damaged. To ensure that stormwater flow from upgradient properties is able to continue across the site, a means of conveying the runoff is required. Three options for this were presented to the Ministers as part of the horizontal infrastructure works decision, and the approved option involves lining the trunk stormwater system with an internal sleeve to extend its life by at least 50 years. The attached Horizontal Infrastructure Report provides further background information (**Appendix I**).

The lining works are likely to take around 3-6 weeks and would be conducted during dry summer conditions. Given the size of the contributing catchments and photos/videos of flow in pipes from CCTV survey, it is considered unlikely these works can be done in a time of no flow.

Plans for the works and temporary diversions are included in **Appendix H** (ref 33205/PL001-PL109) and an excerpt showing the indicative works packages is included below as Figure 27. Works are likely to involve the following steps:

(a) Sand bagging or similar at downstream end near O1 to cut off backwater from the Wharekōrino Stream. This dam would remain in place for the duration of works. Install “outlet pump” above dam to pump out backwater in pipes (one-off event) and continue pumping out flows down pipe.
(b) Divide pipe into work sections, based on approximately 3-5 day work packages. Each work package would depend on distance between manholes and magnitude of repairs required in each section.
(c) Works would proceed from O1 upstream.
(d) Install upstream dam in manhole at upper end of works package 1, with pump to divert flows around works package to outlet pump or stream itself.
(e) Undertake lining works in works package 1 area.
(f) On completion and allowing for relevant curing time, relocate upstream dam and upstream pump to upper end of works package 2. Upstream pump to pump any water in pipe past works area 2 to works area 1 upper manhole, with water flowing down lined pipe and being pumped to stream via outlet pump.
(g) Continue steps (e) and (f) until all damaged pipe is lined.
(h) Remove all internal dams and allow natural flows through pipe system from five inlets to O1.

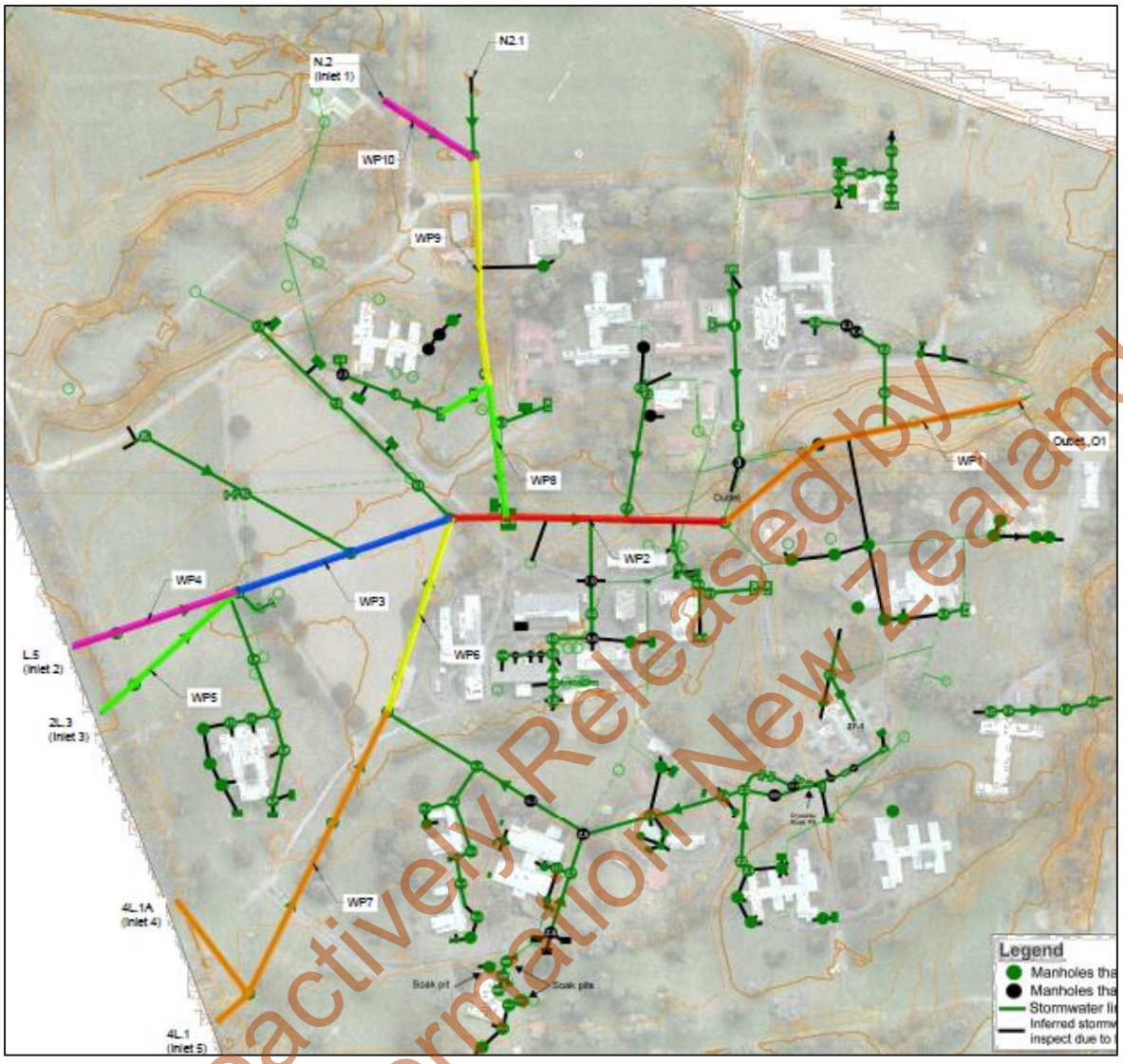


Figure 27: Indicative works packages for stormwater pipe lining

4.6 Construction methodology and management

The below information on how the construction phase will be managed is generally applicable to the whole project, rather than individual components of the demolition and remediation project.

4.6.1 Demolition, Deconstruction and Remediation Management Plan (DDRMP)

The draft DDRMP (**Appendix P**) covers the full scope of works at the Site i.e. the demolition of vertical building structures, horizontal infrastructure in/on ground, and contaminated land remediation. Phase 2 onwards is the relevant phase for this resource consent application, as the CoC covers Phase 1.

The DDRMP will be required to be adhered to by contractors, and the measures within it can be considered as forming part of this application. The DDRMP will also be updated later to include any additional requirements to comply with eventual resource consent conditions in relation to Phases 2 and 3.

Table 7 of the DDRMP sets out indicative timeframes for the works as follows:

- Phase 1 (building demolition): 8.5 months to 2.2 years
- Phase 2 (slab and foundation removal and remediation): 4.5 to 6 months
- Phase 3 (services removal): 11 to 13 months.

A summary of the parts of the DDRMP that are most relevant to understanding the nature and effects of the proposal is contained in Table 8.

Table 8: Demolition, Deconstruction and Remediation Management Plan summary

Section of DDRMP	Relevant aspects
Section 4 – Specific Requirements for Demolition Works	• The DDRMP will be updated to include any specific consent condition requirements not already covered by it. • Requires all contractors to follow applicable standards, codes, regulations and guidelines, including for asbestos, hazardous substances and contaminated land management / removal. • Requires contractors to prepare a Site Management Plan that addresses health and safety and environmental management within their work area, consistent with the DDRMP and other supporting management plans. This includes an Emergency Response Plan.
Section 5 – Cultural and Archaeological Requirements	• Requires the contractors to follow the recommendations of the CIA, including cultural induction, tree protection, archaeological discovery protocol and cultural monitoring of works. • Sets out a preliminary archaeological discovery protocol.
Section 6 – Communication	• Contains procedures for notifying neighbours of works, lines of communication, management of complaints.
Section 7 – General Requirements	• The site office will be located at Building 75 which has kitchen, toilet facilities and power. • Any vehicle refuelling areas are to be clearly indicated and located well away from streams and protected vegetation. • Any temporary fuel storage area is to comprise double skinned or bunded tanks, complying with Worksafe regulations.
Section 8 – Site Constraints	• Alerts contractors to account for the retention of large trees, compliance with Bat Management Plan, presence of wetlands and cultural areas.
Section 10 – Works Philosophy and Sequencing	• Philosophy includes to undertake demolition in accordance with industry best practice and guidelines, and maximise materials recovery. • Contains indicative sequencing and timeframes for each phase of works.
Sections 13, 14, 15 and 16	• Contain specific methodologies for the contaminated soil works; Wharekōrino Stream embankment removal; works in or near wetland areas; and pipe lining works.
Section 17 – Health & Safety	• Contains hazardous substance and contaminated material handling procedures – to be in accordance with relevant regulations / codes of practice, and undertaken by appropriately certified personnel. Together

Section of DDRMP	Relevant aspects
	with the Emergency Response Plan to be prepared by contractors, this can meet the requirements of a Hazardous Substances Spill Prevention and Response Plan. • Contains requirements for management of contaminated dust.
Section 19 – Erosion and Sediment Control	• Contains general requirements for sediment controls to be in place prior to any other works commencing, remaining in place until works complete and erosion control measures are in place. • All erosion and sediment controls are to comply with WRC's Erosion and Sediment Control Guidelines (TR 2009/02) and be in accordance with the ESCP. • Requires regular inspection of sediment controls, stabilisation of disturbed areas and mitigation for tracking of sediment by vehicles.
Section 20 – Dust, Noise and Vibration	• Requires dust control measures to be used that generally comply with MFE's Good Practice Guide for Assessing and Managing Dust (2016). • Hours of operation will be between 7:30am to 7pm Monday to Saturday, but noisy activities (e.g. hydraulic breaker and concrete crusher) will not occur after 6pm on working days so as to ensure compliance with noise limits. Other recommended noise mitigation measures from the acoustic report are also set out.
Section 21 – Materials Management	• No burning of demolition or waste materials onsite. • Larger native trees shown on the project drawings are to be protected from damage wherever practicable. Other vegetation and tree removal to be minimised as much as practicable. • Some trees close to structures and infrastructure being removed will likely be impacted by the works. Any trees needing to be removed or trimmed to be identified in advance and removed at the same time, implementing bat management protocols. • Temporary soil stockpiles and bare land from material stockpiling are to be stabilised as soon as practicable. Material stockpiles are to be contained and covered from heavy rain. • Trucks transporting contaminated material are to be lined and covered. • Imported soil is required to be certified as cleanfill in accordance with WRP definition. • Records are to be kept of all materials imported to site, reused, recycled, disposed of offsite. • A contamination accidental discovery protocol is set out.
Section 22 – Traffic Management	• A pre and post works survey of Te Mawhai Road at site entrance and Te Mawhai Road intersection with SH3 will be undertaken and any damage attributed to the project will be repaired. • Subject to the ITA / Council / NZTA requirements, a traffic management plan for works can be prepared.

4.6.2 Earthworks

To summarise the works discussed in earlier sections, the earthworks involved with the proposal include:

- Earthworks to remove horizontal infrastructure and backfill the trenches;
- Backfilling of cavities created from removal of building foundations and footings;
- Earthworks to remove contaminated soil and backfill the cavities;
- Earthworks to remove Culvert 2 and redundant road crossing embankment.

The approximate area of earthworks is 13ha, with approximate excavation volume of 38,500m³, and extra fill volume required of 31,200m³. Total earthworks volume is approximately 70,000m³. Some of these earthworks are in proximity to streams and wetlands. None of the earthworks aim to significantly alter the existing contours of the land, and where minor changes are required (due to reinstatement of stream banks after culvert removal) these will tie back into existing ground levels.

A draft Erosion and Sediment Control Plan (ESCP) is included in **Appendix Q**. Erosion and sediment control measures will be installed in compliance with Waikato Regional Council's 'Erosion & Sediment Control Guidelines for Soil Disturbing Activities TR2009/02' as set out in Section 19 of the DDRMP. The provision of a final ESCP for Council certification will be the responsibility of the relevant contractor, and LINZ anticipates a condition of consent to this effect.

In summary, draft erosion and sediment control measures are proposed as follows:

- The primary means of sediment control will be silt fences. The Site is relatively flat and silt fences will be installed on the downgradient side of works areas.
- Clean diversion drains/bunds will be installed at relevant locations around the site to divert clean runoff around works areas.
- Dirty diversion drains/bunds are likely to be required in the contractor's yard to direct dirty runoff to a sediment retention pond proposed for use in this area.
- The works near/within waterbodies will be undertaken during drier periods and flows will be diverted around earthwork areas. The banks will be stabilised before flows resume.
- Stream diversions are required for Culvert 2 embankment. The culvert will be bunded off and the stream diverted around the works area via pumping. Silt fences will be installed up and downstream with clean water diversions on the sides of the works area.
- Either a stabilised construction entrance or alternatively wheel wash or water blaster is to be provided.
- Filter socks to be used around stockpile areas and existing stormwater catchpits, where present in works areas. There are unlikely to be significant or long term stockpiles as any suitable material will be used as backfill following the removal of structures and any unsuitable material will be regularly transported away for disposal, however, any temporary stockpiles will be stabilised.
- If bench testing shows that flocculation is necessary, a Chemical Treatment Management Plan (CTMP) for the sediment retention pond will be prepared and provided to council for approval as a condition of consent.

All of the approved erosion and sediment control measures will be installed in advance of land disturbance commencing in the relevant area, and all are to be decommissioned once exposed soil surfaces are stabilised.

Temporary dewatering of trenches may be required during earthworks using a portable pump which will discharge to nearby grassed areas via a "turkey's nest" or similar device. If it is not

possible to discharge water in that particular location, water will be removed by sucker truck and taken to the onsite sediment retention pond for treatment or pumped out into an intermediate bulk container for disposal off-site.

Excavated cavities and trenches will be backfilled with compacted cleanfill, followed by topsoiling and grassing (except at road crossings which are to remain post-works, which are to be backfilled with approved, compacted hardfill).

Earthworks within the three areas identified in the Archaeological Assessment (Figure 11) will be undertaken in accordance with the requirements of the Archaeological Authority. Earthworks within the waahi tapu areas identified by Tangata Whenua will also be monitored by a cultural expert; LINZ also anticipates a condition of consent requiring this.

4.6.3 Works within and in proximity to wetlands

For ease of reference and understanding, this section sets out which of the above-described works are to occur within wetlands. The locations of the two wetlands (referred to as Wetland 1 and Wetland 2) are illustrated in Figure 15.

4.6.3.1 Wetland 1

This wetland is located toward the northeast of the site, adjacent to the decommissioned WWTP and the Wharekōrino Stream.

Demolition works that are to occur within the WWTP, as described in full in section 4.2.2, are partially located within 10m of Wetland 1. In addition, a grit chamber, footbridge and ancillary cabling are located within the wetland and stream area and will be removed either in full or part.

Details and methodology for works within or within 10m of Wetland 1 are set out as follows, with reference to their location on Figure 28 below:

- Location 6: The concrete edging located around the former humus tank and partially within 10m of the wetland will be removed and the edges regraded to tie soil in with the existing ground. All the soil to be disturbed in this area is inferred to be bedding for the former tank and therefore there will be limited disturbance to the underlying natural ground.
- Location 12: A fence will be removed from within the 10m buffer and relocated adjacent to surround the new wastewater pump station.
- Location 7: The above ground trickling filter and stone media (partially located within 10m of the wetland) will be removed. There is expected to be minor disturbance of the underlying natural ground. Only approximately 10% of the trickling filter area is located within the wetland 10m buffer zone.
- Location 4: The outfall pipe will be removed during the summer dry period. The pipe will be removed, in sections, with a small excavator (8T or 13T). Swamp mats will be utilised for the removal.
- Location 8: The concrete block grit chamber and grated metal lid, located within the wetland/stream area, will be removed to ground level. This work will be completed manually from the footbridge as it is not possible for an excavator to access this area.
- Location 9: The wastewater inlet pipe and any ancillary cabling currently strapped to footbridge will be removed by hand and/or small excavator when possible. When

access is available to an excavator, swamp matting will be used. The pipe will be removed to 0.8m depth (likely at the stream bank) and plugged with concrete.

- Location 11: Any ancillary cabling or cable ducting attached to the footbridge or found within the stream/wetland will be removed/pulled out. Any cavity will be backfilled with the same soil.
- Location 10: The footbridge, including the timber support posts will be removed, likely by a large excavator working from the WWTP.
- Location 13: Three wastewater pipes and associated manholes and one stormwater pipe will be removed down to 800mm depth. The same methodology would be used for these works as for the outfall removal.

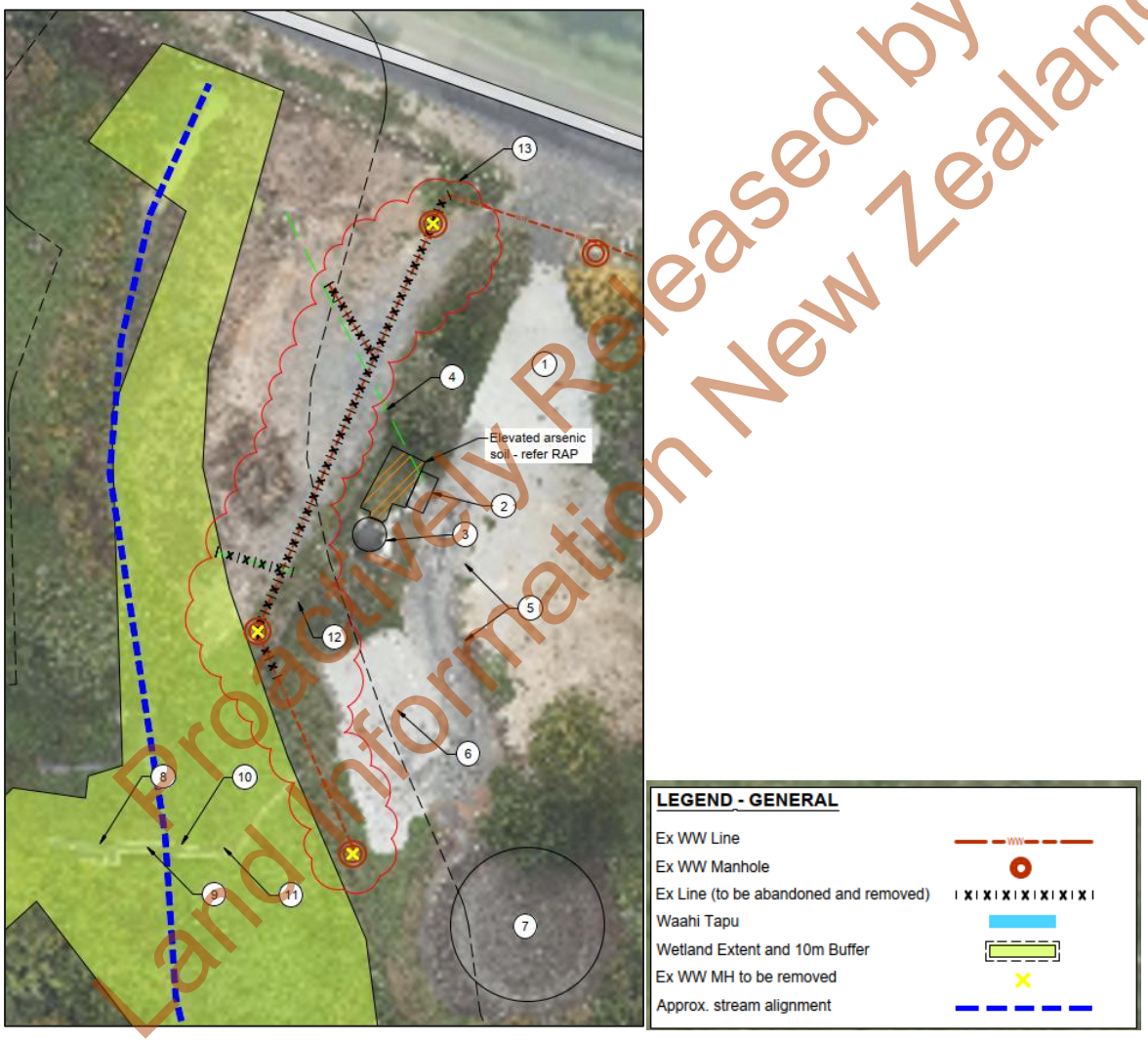


Figure 28: Works within or within 10m of Wetland 1 (ref 33205/2010)

4.6.3.2 Wetland 2

This wetland is located toward the north-west of the site, between Buildings 55 and 76. Works proposed within, and within 10m of this wetland and associated methodology are detailed below:

- An above ground wastewater reticulation network comprising 150-160mm pipework and associated support structures will be removed. The support structures are varied and described as follows and illustrated in Figure 29 below (refer to plans 33205/2011 and 2012 in **Appendix H**):
    - The pipe supports on the southern pipeline comprise metal footings (approximately 860mm in length) and are spaced at 3m intervals. These extend into a concrete foundation which is approximately 1,000mm wide and 1,200mm long and is embedded approximately 200mm into the ground in this area.
    - The pipe supports of the southern pipeline on the northern side of the waterway comprise of concrete piles that are at 3m intervals. These range from 200 – 450mm wide and 200 – 450mm high. They are embedded approximately 200mm bgl. Two concrete chambers also encase the pipeline in this area. One measures 500mm wide, 1,040mm long and 360mm high. The second measures 540mm wide, 640mm long and 340mm in height. Both are embedded approximately 200mm bgl.
    - The remaining pipelines are generally located on a concrete slab foundation which is approximately 500mm wide and 420mm high throughout the extent of the pipeline. The embedment of the concrete foundation varies across the extent of the pipeline, ranging from 150mm bgl to the entire foundation below ground level. Some parts of the western and eastern pipelines are buried, while one section of the eastern pipeline is encased in concrete – this concrete chamber extends along the eastern pipeline approximately 17m, measuring 450mm wide and 280mm high. The concrete chamber is embedded an additional 400mm into the ground.
    - At the point where all four sections of pipeline connect, the pipes connect into a concrete chamber which is approximately 1,220mm wide, 1,520mm long and 600mm high. The chamber is embedded an additional 400mm bgl.
    - An additional pipeline, that was not identified in the GIS imagery was observed during the site walkover. This was located within the eastern portion of the wetland, running under the eastern pipe across the waterway. It is not visible above ground throughout the remainder of the wetland, and it is unknown where it extends to. Further, service plans do not show any pipe in this location, therefore the full extent of the pipe is not known.

  The pipework and support structures will be removed during the summer months. A small excavator (8T or 13T) travelling on swamp mats will be used to remove the pipe in small sections and transported out of the wetland by a small excavator or truck (4 or 6 wheels) travelling on swamp mats. Pipe supports will also be lifted out by the small excavator and removed from the wetland. Voids created by the removal of the pipe supports (approximately 53m^3 and 0.2-0.4m deep) will be backfilled with topsoil that will be placed and tamped down (but not compacted) and the exposed areas revegetated with appropriate wetland vegetation (to match existing).
- Approximately 210m of underground power cabling and a small section of overhead cabling at the southern tip of the wetland will also be removed. Underground cabling is thought to be an 11kV line that is either directly buried or ducted in steel pipes. Site investigations found that electrical infrastructure is, on average, 0.9m deep. The cabling will be removed by exposing the cable at each end and lifting it out in sections. This will be carried out using a small excavator (8T or 13T), travelling on swamp mats. The narrow trench created by the removal of the cabling will then be back filled with

the same soil and tamped down and exposed areas revegetated with appropriate wetland vegetation (to match existing). The overhead cable can be removed without entering the wetland. Refer plans 33205/2401 and 2402 in **Appendix H**.

- Building 76 (being a garage to the old Doctors Flats) is located within 10m of the wetland and will be removed. The building is approximately 24m² and is constructed on a concrete plinth with post brackets. The total ground disturbance for the removal of the footings will be approximately 7m³. These will be removed with a small excavator and soil reinstated.

- An underground water pipe may run along the northern edge of Wetland 2, and its removal would require vegetation alteration within 10m of the wetland. A small excavator will be used which will not need to enter the wetland, and soil will be reinstated.

- One of the temporary pumped diversions required to facilitate the repair of the trunk stormwater pipe network, as described in section 4.5.2, will be located within 10m of Wetland 2 (near Building 76).

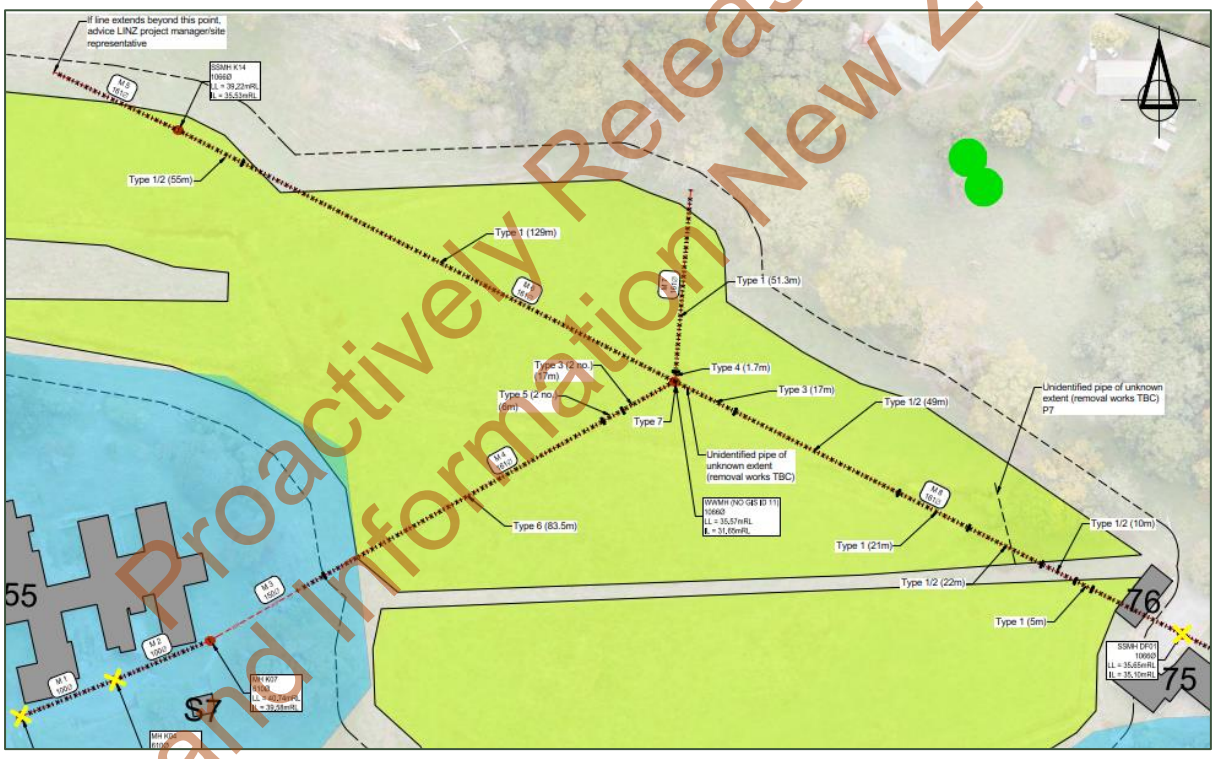


Figure 29: Wastewater demolition plan in Wetland 2

The above methodology and controls are set out in the draft DDRMP and will be certified as part of the final DDRMP, however conditions of consent have also been proposed to require the following:

- Works to occur from the edge of the wetland where possible.
- Works in the wetland to occur during summer dry periods.
- The use of swamp mats when utilising machinery within wetlands.

- That machinery used within wetlands be restricted to a small excavator of 8T-13T and a small truck (4 wheel or 6 wheel).
- Restricting the compacting of any soil when refilling voids or trenches within wetlands.
- That any cavities be backfilled with like-for-like wetland soils/topsoil.
- That any damaged vegetation or areas as a result of works within wetlands be reinstated and revegetated with like-for-like wetland plant species.

4.6.4 Traffic generation

The traffic generation from the proposal has been assessed in the ITA prepared by CKL (**Appendix N**) based on information provided by LINZ on the estimated volumes of material required to be transported to and from the Site. The traffic generated from Phase 1 (demolition of above ground structures) has been included in this assessment, as Phase 1 is likely to overlap with the Phase 2 and 3 works subject to this application.

Material to be transported offsite includes:[10]

- 45,000m³ of building construction and demolition waste (Phase 1)
- Up to 13,750m³ of roading materials, some containing coal tar
- 2,400m³ infrastructure services
- 850m³ of material associated with Culvert 2 removal
- Up to 7,800m³ of contaminated soil, should the Landfill Upgrade Application not be granted to dispose of this material onsite.

Material anticipated to be imported to site on return trips includes up to 30,000m³ soil backfill and hardfill top up.

Truck and trailer units with an 18 tonne or 28m³ to 38m³ capacity will be used. For Phases 2/3 there is expected to be up to 5 truck and trailer units doing three trips to and from Site each day while Phase 1 involves 3-4 truck and trailer units doing 2-3 trips to and from Site per day. Each heavy vehicle movement equates to 10 vehicles under the WDP.

Staff are mostly expected to travel to site in minivans. For Phases 2/3, 3 vans and 3 utes per day for 21 to 25 staff are expected. For Phase 1, 3 vans and 3 utes per day for 33 to 35 staff are expected.

The theoretical 'worst case scenario' is for Phase 1 and Phases 2/3 to be operating in full capacity and overlapping. This would generate a maximum of 80 vehicles per day and 21 vehicles in the peak hour. However, the ITA notes that because many of those will be heavy vehicles, it equates to 312 vehicles per day (based on the district plan standards).[11]

4.6.5 Noise management

An acoustic assessment has been undertaken by SLR Consulting (**Appendix O**) to model the amount of noise generated by the proposal. The acoustic assessment finds that the operation of the noisiest machinery, being concrete breakers, crusher plant and wood chippers for

[10] Please note that the volume breakdown in the ITA is not the most recent figures, but overall volumes of material to be potentially transported offsite have decreased from what is set out in the ITA.

[11] Rule 16.4.2.22 of the WDP notes that "vpd thresholds are set in car equivalents. For the purpose of these thresholds, heavy vehicles (gross vehicle mass exceeding 3.5 tonnes) are to be taken as 10 car equivalents)".

mulching, would generate up to 85 dB L_{Aeq} at 10m distance. These activities need to be located 80m or more from a receiver to comply with the NZS 6803:1999 construction noise standards.

At a distance of 25-45m from the works location, noise generation from other machinery (including excavators up to 30 tonnes, vibratory and non-vibratory compaction and chainsaws) is expected to comply with NZS 6803:1999, without any acoustic mitigation measures, between normal construction hours of 7.30am to 6pm Monday to Saturday. A number of noise management measures have been recommended and incorporated into section 20.2 of the DDRMP, including:

- Excavators no greater than 30 tonnes to be used.
- Compaction works to be undertaken using a compaction roller no greater than 15 tonnes.
- No vibratory compaction work allowed within 45m of any occupied dwelling.
- Woodchipper / mulcher plant should be located more than 80m away from any dwelling.
- Consultation with occupants shall be undertaken to determine the most suitable time for chainsaw work (when the building is unoccupied) for planned tree removal using a chainsaw within 45m of any dwelling.
- Advise the immediate neighbours in writing, no less than three (3) days prior to works commencing. The written advice should include details of the location of the works, the duration of the works, a phone number for complaints and the name of the site manager.
- Complete all work as quickly as possible and control the on-time of plant when onsite.
- Where practicable, scheduling of the works closest to the neighbouring properties to avoid periods where the buildings are occupied.

4.6.6 Bat Management Plan

As described in section 3.1.7, long-tailed bats have been recorded on site. A Bat Management Plan (BMP) has been prepared and will be implemented during construction to mitigate potential effects on this threatened species, as set out by the draft DDRMP. The BMP is primarily to ensure compliance with the Wildlife Act 1953, noting that the removal of buildings and most of the trees that may be affected by underground infrastructure removal are permitted activities under the relevant plans.

4.6.7 Vegetation removal

A review of which trees may be affected by the underground service removal has been undertaken, and is shown on the Horizontal Infrastructure plan set (**Appendix H**). Native trees over 4m in height have been located on the plans and it is anticipated that all but possibly one will be able to be protected from damage. Some trimming and removal of other trees is expected to be required where in close proximity to infrastructure to be removed, however removal and damage will be avoided where it is possible to do so through construction methodology. As described in the DDRMP, it is proposed that any trees required to be trimmed or removed are identified in advance so that the work can be undertaken ahead of other remediation works, in accordance with bat management protocols.

Riparian vegetation removal is also required for the removal of the redundant stream crossing embankment and Culvert 2. Riparian vegetation will be reinstated following the works (see

section 4.6.9). There is also a small amount of vegetation removal possible within 10m of Wetland 1 along its northern edge, and within 10m of the southern tip of Wetland 2. Removal of the riparian vegetation and vegetation within 10m of wetlands trigger resource consents while any vegetation removal elsewhere on site does not.

4.6.8 Fish Management Plan

Instream works are required for the replacement of Culvert 2 intersecting the Wharekōrino Stream. A Fish Management Plan (FMP) has been prepared to avoid injury and/or mortality of native fish species during instream works. The FMP sets out when fish relocation will be required, how fish will be captured, and how fish will be protected from being sucked up by pumps during diversions. The FMP is appended to the EcIA in **Appendix L**.

4.6.9 Planting Plan

As part of the EcIA it was identified that a Planting and Maintenance Plan (PMP) for the areas where riparian vegetation is to be removed would be required for effects management. The PMP is appended to the EcIA in **Appendix L** and delineates the extent of planting, type of planting, site preparation, pest animal and plant control and other ongoing maintenance requirements.

4.7 Any other activities that are part of the proposal

Clause 2(1)(d) of Schedule 4 of the Act requires the Applicant to identify other activities that are part of their proposal. This is intended to capture activities which need permission or licensing outside of the Act, for example, activities under the Building Act 2004 or the Hazardous Substances and New Organisms Act 1996.

The activities described as part of this proposal require authority from Heritage New Zealand Pouhere Taonga, which will be sought, as previously described.

5.0 Reasons for the application

An assessment of the proposal against the relevant statutory documents has been undertaken and the following reasons for consent have been identified. A detailed rules assessment is provided in **Appendix R**.

5.1 Waipā District Plan

The proposal requires resource consent under the WDP for the following reasons:

<u>Section 4 – Rural Zone</u>

- To undertake earthworks and the removal of buildings and structures that does not comply with the earthworks standards in Rule 4.4.2.75 is a **discretionary activity** under Rule 4.4.1.4(a), as earthworks will exceed 1,000m³.
- Noise from chainsaws could exceed the construction noise limits by up to 5 decibels at 203 and 207 Te Mawhai Road, which is a **restricted discretionary activity** under Rule 4.4.2.19.

<u>Section 16 – Transportation</u>

- To generate over 250 vehicles per day equivalent, with access to a local road, is a **restricted discretionary activity** under Rule 16.4.2.22 and an Integrated Transport Assessment is required to be provided.

Section 22 – Heritage and Archaeology

- To undertake earthworks within 20m of a cultural site is a **restricted discretionary activity** under Rule 22.4.1.1(m). While no cultural sites are identified on the Plan maps, waahi tapu areas have been identified on the Site by mana whenua.

Section 26 – Lakes and Water bodies

- To undertake earthworks and vegetation clearance within 23m of a water body is a **restricted discretionary activity** under Rule 26.4.1.3(a) and Rule 26.4.2.1. The proposal involves earthworks and vegetation clearance within 23m of two wetlands and the Wharekōrino Stream and tributaries.

5.2 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

Waipā District Council, as a territorial authority, is also required to implement the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS). The NES-CS is a relevant consideration to this application because the proposal involves activities described in the NES-CS, being disturbance of soil and change of land use, taking place on a piece of land where HAIL activities have been undertaken.

The soil disturbance to remove building foundations and remediate contaminated soil is considered to be a **restricted discretionary activity** under Regulation 10 of the NES-CS, as it will take longer than 2 months to complete (and may exceed volume restrictions for soil being taken offsite, if the Landfill Upgrade Application is not granted), and some of the soil contamination to be remediated exceeds applicable standards.

The change of use from the previous hospital activity back to rural is also considered to be a **restricted discretionary activity** under Regulation 10 of the NES-CS, due to the soil contamination currently exceeding applicable standards.

5.3 Overall activity status – Waipā District Council

Overall, the resource application to Waipā District Council is a **discretionary activity**.

5.4 Waikato Regional Plan

The proposal requires resource consent under the Waikato Regional Plan for the following reasons:

Chapter 3 – Water Module

- To undertake excavations where water may flow from the surrounding ground into the excavations is considered by WRC as a groundwater diversion, which is a **discretionary activity** under Rule 3.6.4.13.
- The water ponding within the excavations is then considered to be surface water, and a water take consent to dewater the excavations is required as a **non-complying activity** under Rule 3.3.4.26.
- The subsequent discharge of the water that is ‘taken’ from the excavations and pumped onto nearby grassed areas is a **discretionary activity** under Rule 3.5.4.5.
- To temporarily dam and divert water for the maintenance of the trunk stormwater line is a **controlled activity** under Rule 3.6.4.17.

- To temporarily dam and divert water for the removal of culvert 2 is a **discretionary activity** under Rule 3.6.4.14.

Chapter 5 – Land and Soil Module

- To undertake soil disturbance, tracking, vegetation clearance in a High Risk Erosion Area exceeding 1,000m³ in volume is a **discretionary activity** under Rule 5.1.4.15.
- To undertake soil disturbance outside of the High Risk Erosion Area which may not comply with the permitted activity conditions (specifically, suspended solids standard) is a **discretionary activity** under Rule 5.1.4.13.
- To discharge cleanfill from the removal of the redundant road crossing embankment and culvert 2 outside of a high risk erosion area is a **controlled activity** under Rule 5.2.5.5.

5.5 National Environmental Standards for Freshwater

The National Environmental Standards for Freshwater 2020 (NES-F) are implemented by regional councils, and are a relevant consideration to this application because natural inland wetlands and streams have been identified on the site.

The earthworks and potential vegetation clearance for the removal of contaminated soil, roading and other horizontal infrastructure occurring within, and within 10m of a natural inland wetland is considered to be a **non-complying activity** under Regulation 54 of the NES-F. The Hydrology memo appended to the EclA (**Appendix L**) confirms that no aspect of the proposal is prohibited under Regulation 53.

5.6 Overall activity status – Waikato Regional Council

Overall, the resource consent application to Waikato Regional Council is a **non-complying activity**.

5.7 Permitted activities that form part of the proposal

A detailed rules assessment is provided in **Appendix R** and the permitted activities that form part of the proposal are summarised below:

Waipā District Plan

- The proposed provision of parking, loading and manoeuvring space for the works is permitted under Rules 16.4.2.13 and 16.4.2.14.
- The removal of the underground electrical and telecommunications lines is permitted under Rules 17.4.1.1(c) and 17.4.1.2(f).
- The use and handling of hazardous substances required to remove contaminated building material and operate machinery is permitted under the performance standards of Rule 19.4.2.
- The site will meet the permitted standards in Rule 20.4.2.4-20.4.2.7 for maintenance of buildings and sites.
- The trimming and removal of indigenous vegetation not identified within an overlay and the planting of indigenous vegetation is permitted under 24.4.1.1.

Waikato Regional Plan

- The removal of a footbridge within the bed of the Wharekōrino Stream is a permitted activity under Rule 4.2.20.2.
- The revegetation of the streambank after the removal of the redundant road crossing embankment and Culvert 2 is a permitted activity under Rule 4.3.8.1.
- Any use of dust suppressants will meet the permitted activity conditions under Rule 5.2.9.1.
- Any discharges arising from the remediation of contaminated land are a permitted activity under Rule 5.3.4.6.
- The air discharges from crushing of road material, earthworks and contaminated soil disturbance are permitted under Rules 6.1.8 and 6.1.9.1.

NES-F

- The temporary damming and diversion of water for the stormwater pipe lining within 100m of a wetland is permitted under Regulations 46 and 55.
- The NES-F does not control vegetation removal or earthworks more than 10m from a wetland, unless earthworks within 100m of a wetland result in the drainage of a wetland. The earthworks for Culvert 2 removal will not result in the drainage of Wetland 1 therefore the NES-F is not applicable.
- The NES-F only controls damming and diversion more than 10m from a wetland if it is within 100m of a wetland and it changes the hydrological function of the wetland. The temporary damming and diversion for Culvert 2 removal will not result in changes to the hydrological function of Wetland 1 therefore the NES-F is not applicable.

5.8 Other resource consent requirements

This application covers both the territorial authority and regional council consent applications required for the remediation works. As outlined in the Executive Summary and referred to in Section 4.3, a separate application is being made for landfill upgrade works, which is related to this application. This proposal does not rely upon the Landfill Upgrade Application for the disposal of contaminated soil. However, the proposal does rely upon the works to Culvert 3 as part mitigation for the effects on flooding of removing Culvert 2. The plans for Culvert 3 have therefore been provided with this application and referred to within the draft conditions of consent, which require these works to be done before or at the same time as Culvert 2 is removed. Should the Landfill Upgrade Application be unsuccessful, a separate application would need to be made to authorise the Culvert 3 works only, or alternatively a variation to that condition would need to be obtained.

It is also noted that the existing occupied houses on the Site that are not part of the former hospital will be subdivided off as part of the property redress with TNN, however this will be through a standalone process through the settlement legislation, and subdivision consents will not be required.

6.0 Assessment of effects on the environment

6.1 Introduction

Having reviewed the relevant plan provisions, visited the site and taking into account the matters that must be addressed by an assessment of effects on the environment as outlined in clause 7 of Schedule 4 of the Act, the effects that warrant consideration as part of this application are listed below.

As this application is for a **discretionary activity** to Waipā District Council and **non-complying activity** to Waikato Regional Council, the relevant effects that the consent authorities can consider are not restricted. Notwithstanding the ability of the consent authorities to consider all effects, only the following effects are considered to be relevant:

- Positive effects
- Effects of disturbing land
- Effects on cultural values
- Effects on human health
- Effects on the transport network
- Effects on archaeological values
- Hydrological and flooding effects
- Effects on ecological values
- Effects on amenity
- Effects on soil quality.

The above list takes into account any relevant matters of discretion/assessment criteria associated with each of the consenting matters under the relevant plans and environmental standards.

An assessment of these effects, that corresponds with the scale and significance of the effects that the proposed activity may have on the environment, is provided below. Clause 7(2) notes that the requirement to address matters in the assessment of effects on the environment is subject to the provisions of any policy statement or plan. The relevant documents are also assessed in this report.

6.1.1 Permitted baseline

The “permitted baseline” is relevant to the assessments under sections 95A to 95G and 104 of the Act. Under these sections, the consent authority may disregard an adverse effect on the environment if a national environmental standard or the plan permits an activity with that effect. This is the permitted baseline. It is only the adverse effects over and above those forming a part of the baseline that are relevant when considering an application.

The purpose of the permitted baseline test is to isolate, and make irrelevant, the effects of activities on the environment that are permitted by the plan. When applying the baseline, such effects cannot then be taken into account when assessing the effects of a particular resource consent application. The baseline has been defined by case law as comprising the “existing environment” and non-fanciful (i.e., credible) activities that would be permitted as of right by the plan and/or national environmental standard in question.

In this case, the demolition of above ground buildings has been confirmed as permitted through the CoC. Section 5.7 contains a list of other aspects of the proposal which are permitted under the relevant plans. Notably, any tree and vegetation removal that is not within a High Risk Erosion Area or within 23m of a stream/wetland is permitted.

Additionally, the proposal inevitably infringes the permitted level of earthworks per site due to the large scale of the Site. No permitted baseline is applicable, however in terms of intensity (volume per area of the site, depth), it is noted that much of the proposed earthworks are comparable to permitted earthworks.

The New Zealand construction noise standard is considered to be a relevant permitted baseline.

6.1.2 Receiving environment

In assessing the potential effects on the environment, the "receiving environment" for effects must be considered.

The receiving environment is a mandatory consideration that is defined by case law, and it is the environment beyond the site upon which a proposed activity might have effects. This includes the future state of the environment upon which effects will occur, including:

- the environment as it might be modified by the utilisation of rights to carry out permitted activities; and
- the environment as it might be modified by implementing resource consents that have been granted at the time a particular application is considered, where it appears likely that those resource consents will be implemented.

In this case, the receiving environment is as described in Section 3.0 of this report.

6.1.3 Other considerations

Sections 95D(d) to 95D(e) and 104(3)(a) of the Act require that assessments must disregard:

- trade competition, or the effects of trade competition; and
- any effect on a person who has given written approval to this application.

Trade competition and written approval are not relevant to this application.

6.2 Positive effects

Overall, the remediation project is considered to provide for some very positive outcomes. The completion of the proposed works will enable the land to be offered back to TNN as part redress for whenua raupatu. The works will remove the risks and obstructions posed by abandoned buildings and structures, many of which contain ACM and pose a health and safety risk.

Contaminated soil and underground infrastructure will be removed and the site rehabilitated such that it is appropriate for a range of future land uses. The project thereby facilitates a more efficient use of this substantial land resource that is currently underutilised.

There are also other discrete benefits included in the project such as improving water flow and fish passage through removing the road embankment crossing Wharekōrino Stream and Culvert 2, and the riparian enhancement planting in this location.

The remediation project is also anticipated to have some flow on social and economic benefits for the local community. It is a substantial long term project, and LINZ's criteria for appointing

contractors include achieving broader outcomes such as local employment opportunities and upskilling.

6.3 Effects of disturbing land

As noted in section 6.1.1, there is no applicable permitted baseline for earthworks, but the intensity of the proposed earthworks across much of the site is comparable to permitted earthworks. The removal of the redundant road embankment crossing the Wharekōrino Stream is the most significant area of earthworks proposed, and the effects of earthworks in proximity to water bodies need particular consideration.

6.3.1 Permanent effects

The removal of the redundant road embankment is also the only component of the proposed earthworks which will alter existing contours. All other earthworks, to remove building foundations and underground infrastructure, will reinstate existing ground levels and be re-grassed. Therefore, there will not be any permanent effects on drainage, flooding or amenity associated with the majority of the works.

The road embankment removal will have some permanent effects on hydrology, which are discussed separately in section 6.8. The amenity effects of this work will be positive due to enhancement planting proposed around the restored stream.

6.3.2 Temporary effects

The minimum likely time to complete works is 18-24 months. Earthworks will be staged so that multiple areas are not concurrently exposed, and each area of works will be stabilised before progressing to the next. The required earthwork areas are spread out across the site and generally well separated from neighbouring sensitive land uses. The nature of the trenching also means that the width of exposed soil is relatively narrow. These characteristics of the works, both separately and in combination, limit the potential for sediment generation and effects on neighbours during earthworks.

Sediment generation and erosion potential will be managed through implementing an ESCP complying with WRC guidelines, as set out in section 4.6. A draft ESCP is included as **Appendix Q**. The implementation of the ESCP will minimise any potential for sediment generation and protect water quality and land stability. It will also require dust control measures to be implemented, which will minimise the potential for particulate matter to be discharged to air, and therefore protect air quality. LINZ anticipates a consent condition requiring a final ECSP to be prepared and certified by Council. If flocculation is required for the sediment treatment pond, the ESCP will include a Chemical Treatment Management Plan to ensure acceptable quality of the discharge from the pond.

The PMP will also be implemented for the Wharekōrino Stream banks near the former road embankment, involving riparian planting on the lower slopes and regrassing of the upper slopes.

Cultural and archaeological effects associated with land disturbance are separately discussed in sections 6.4 and 6.7 below.

Overall, the effects on water quality, air quality, land stability and amenity from disturbing land will be carefully managed so that they are less than minor.

6.4 Effects on cultural values

The CIA is attached in **Appendix B** to be read in full. Section 6 of the CIA describes the key concerns of Tangata Whenua in relation to the proposed demolition and remediation. It is

noted that this remediation application is not seen as distinct from the whakapapa of the whenua, and a cultural and historic narrative of the whenua has been provided as context for the cultural impacts.

The types of cultural effects identified with regard to the remediation of the site include:

- effects on waahi tapu, sites of cultural significance and the wider cultural landscape;
- changes to natural environment and landscapes, including view shafts to sites of cultural significance, temporary alteration of natural contours, loss of indigenous vegetation;
- effects on mauri and water quality of Wharekōrino and Pūniu awa and taonga species;
- effects on indigenous flora, fauna and mahinga kai;
- effects on mauri of air and air quality;
- effects on the tangata whenua relationship with Papatūānuku.

Key cultural impacts and risks to tangata whenua were also summarised in Table 5 of the CIA, copied as Figure 30 below. Many of these overlap with other categories of effects discussed in this AEE.

	IMPACTS	RISKS
WHENUA	Waahi Tapu Waahi Taonga Archaeology Natural heritage	Earthworks disrupt waahi tapu. Hazardous waste materials Changes to the landscape Ground disturbance impacts cultural sites of significance and destroy taonga
TE TAIAO	Ecology Bio-diversity Air quality	Pollution to waterways Dust effects bad for environment and people Destruction of wetlands Damage to ecology and bio-diversity Air pollution Loss of natural habitats (native flora and fauna) Noise pollution (traffic from construction activities)
WAAHI TAPU	Taonga and Artifacts Urupā Sites of historical significance	Disruption of culturally significant sites. Lack of protocols to deal with accidental archaeological. discoveries Ground disturbance. Disturbance of koiwi tangata (human remains)
WAI	Water/Waterways Wetlands	Loss of freshwater habitats Pollutants entering water system
TANGATA	Kaitiakitanga Mana Motuhake Wairua Tino Rangatiratanga Manaakitanga Whanaungatanga Treaty Settlements	No partnership relationship agreements give Tangata Whenua no authority to make decisions No consultation or engagement with Tangata Whenua disregards tikanga and treaty obligations to engage with Tangata Whenua Lack of consideration to kaitiaki and cultural obligations Wrong people are consulted

Figure 30: Cultural Impacts table from CIA

The CIA also notes a potential positive effect, being that should the site be returned to a state that is safe for future generations to live on, Tangata Whenua are excited to think about future opportunities for the land.

Recommendations to mitigate potential risks are set out in section 8 of the CIA. These are summarised in Table 9 below, along with comments in response to the recommendations.

Table 9: CIA Recommendations and Comments

Recommendation	Comments
Tangata Whenua rights to protect their taonga are guaranteed as stated under Article 2. of the Treaty of Waitangi.	The proposed work incorporates procedures that are intended to enable Tangata Whenua to protect their taonga.
Expect a consent condition to provide Tangata Whenua with 6 monthly ground and surface water quality reports.	Consent is not being sought for any ongoing discharges that would generally require regular monitoring as part of the Remediation Application. It is understood that this matter is relevant to the Landfill Upgrade Application.
Tangata Whenua must be involved in the development of a Remedial Action Plan for minimizing and mitigating risks arising from leachate due to earthworks and other demolition activities.	The draft Remedial Options Report has been discussed at three hui. A fact sheet and copy of the presentation was then circulated to the distribution list of attendees (refer to iwi consultation records in **Appendix D**). Following engagement, the ROR was finalised and the Remedial Action Plan to implement the preferred remediation option was subsequently prepared, and was informed by cultural considerations. The ROR and RAP will be published on the LINZ website with other supporting reports following lodgement of this application.
Protect waipuna/freshwater springs that may be discovered during remediation.	No springs have been identified to date. The DDRMP sets out that contractors are to stop work if any springs are encountered and advise the LINZ Project Engineer and Cultural Monitor.
Continue to monitor excess nitrate levels to mitigate risk of water logging on pastures	Grazing access for farming activities will be temporarily reduced during the works and may then resume on a temporary basis. Nitrate is monitored in the stream and groundwater as part of landfill monitoring. The works will not change any ground topography that would cause any increase or decrease in water logging. Removal of the stormwater pipe collection network will result in most runoff being overland flow, but conversely, there should be less runoff due to removal of most impervious surfaces.
Tangata Whenua to identify trees that need to remain standing. Protocols to be established for removal of any Tūpuna trees and Rakau mauri	Ecologists have identified large native trees across the site. These are understood to be the trees that would be significant for seed gathering. It is anticipated that their removal can be avoided.

Recommendation	Comments
	In the event that removal cannot be avoided, or additional significant trees are identified by Tangata Whenua, LINZ will establish required protocols with the Cultural Monitor.
Regard be given to the specific provisions in the Heritage New Zealand Pouhere Taonga Act (2014) and the Protected Objects Act (2006) to protect waahi tapu, significant cultural sites and taonga	LINZ has had regard to the NZHPT Act and Protected Objects Act. An archaeological authority was received as part of initial investigations to inform this consent application with cultural monitoring and archaeological management of the works in place as part of a pilot trial on how these components of the project would work in practice and incorporate any learnings. A second archaeological authority is being sought under the HNZPT Act and works will be undertaken in accordance with its conditions.
A robust Accidental Discovery Protocol be developed and adopted for the duration of construction work	The Archaeological Authority to be obtained for the work will ensure that appropriate protocols are followed for any discoveries. An Accidental Discovery Protocol is also included in the DDRMP and the RAP. A condition of consent is also anticipated. These protocols were implemented as part of initial investigations as a pilot trial for the main works.
Site management protocols be developed to ensure a precautionary approach to site works to manage the potential for waahi tapu and taonga tuku iho discovery	Several areas have been identified that require particular caution and archaeological and cultural monitoring of works. All contractors will be briefed on what to do in the event of a discovery from both a cultural and archaeological perspective as part of site induction and HNZPT requirements.
Avoid areas identified by iwi.	Works within the waahi tapu areas need to follow specific requirements, including observation by cultural monitors (see recommended conditions of consent in section 8.3).
The adverse effects of resource use and activity operations are managed so as to appropriately protect areas and sites of significance.	The works will remove obsolete structures and contaminated land. The ground will be restored following the works. Measures will be in place for the protection of areas and sites of significance.
That LINZ work in good faith with Tangata Whenua and escalate the relationship to a formal partnership reflecting Te Tiriti o Waitangi principles as part of project preplanning phase, and ensure Tangata Whenua are actively involved in key project planning, contracting and cultural monitoring roles and decision processes.	LINZ worked closely with Tangata Whenua in project planning and decision making processes, and intends to engage Tangata Whenua in cultural monitoring roles for the works (see recommended conditions of consent in section 8.3).

Recommendation	Comments
Include Tangata Whenua in the implementation of the recommendations outlined in the CIA.	Where possible, recommendations from the CIA were implemented during initial investigations. It is intended that Tangata Whenua be involved in the implementation of the CIA recommendations, as outlined in this table.
That Cultural Monitors/Kaitiaki be appointed for the project to manage and monitor cultural safety protocols.	LINZ agrees to appoint cultural monitors to manage and monitor cultural safety protocols (see recommended conditions of consent in section 8.3). It is common that HNZPT will legally require tikanga protocols to be allowed for.

Having a CIA prepared earlier in the process has enabled the identified cultural effects to be considered upfront during project design. LINZ has also continued consultation, provided additional feedback opportunities for mana whenua and endeavoured to respond to cultural concerns throughout the project design phase. However, given the importance of the site to iwi and hapū and the number of interested iwi parties, LINZ requests that this application is limited notified to iwi and hapū to ensure that they have the opportunity to identify any additional cultural effects that are not already recorded in the CIA, and/or are not accounted for by the proffered consent conditions in response to the CIA recommendations.

6.5 Effects on human health

Thorough contaminated land reporting has been undertaken to inform the approach to the remediation of the Site, as described in sections 3.1.3 and 4.3 of this report. All reporting has been prepared in accordance with the requirements of the NES-CS and of the relevant CLMG, and is adequate and fit for purpose.

During the course of the works, robust measures will be put in place to protect the health and safety of workers, including working under asbestos controls where required and implementing accidental discovery protocols, as set out in the RAP (**Appendix K.6**). Works disturbing contaminated land will be undertaken by suitably qualified and experienced contractors and observed by a Suitably Qualified and Experienced Contaminated Land Practitioner (SQEP). Additionally, LINZ requires that all contaminated land investigations are reviewed and approved by a person holding a Certified Environmental Practitioner – Site Contamination accreditation.

Material removed will be disposed of appropriately and all required records will be kept, including tracking of material taken away.

The works involve the removal of existing contaminated soil from the Site, which will reduce any potential for effects on human health for future users of the land. Upon completion, the Site Validation Report (which LINZ anticipates will be required by a condition of consent) will provide a record that the Site is in a suitable state for future rural residential development as it will meet the site specific remedial standards. It is not anticipated that any ongoing management measures will be required.

Overall, it is considered that the robust measures to be implemented during the disturbance, handling and disposal of contaminated soil are in accordance with best practice and will ensure that effects on human health are less than minor. There will also be a positive long term effect on human health.

6.6 Effects on the transport network

The ITA (**Appendix N**) provides an assessment of effects on the transport network. Note that the district plan requires only a "Simple" ITA.[12] The ITA provided for the project considers the 'worst case scenario' of all contaminated material being disposed of offsite, however it is noted that if the Landfill Upgrade Application is approved, required truck movements on the road network will decrease significantly and the traffic effects of the proposal will be insignificant and within the permitted activity parameters of the WDP.

As each truck movement is equivalent to 10 car movements under the WDP rule assessment framework, the car equivalent movements for the 'worst case scenario' equate to 312, triggering the need for the ITA.

The 'worst case scenario' construction traffic generation of 21 vehicles per hour and 80 vehicles per day has been modelled to determine potential effects on the operation of the SH3 / Te Mawhai Road intersection. In morning peak hour, it was found that the traffic generated will cause less than a second of additional average delay to intersection users. In the evening peak hour, there is expected to be a 2.4 second increase in average delay for the left turn out of Te Mawhai Road, reducing this movement from having Level of Service B to Level of Service C in the evening peak hour. However, this effect is temporary, unlikely to be noticed by drivers and is not expected to result in any adverse material effects on the surrounding road network.

There is good visibility available at the SH3 / Te Mawhai Road intersection and no changes are required to the intersection or the wider road network to accommodate vehicles associated with the proposal.

The majority of construction traffic is expected to use the main gate entrance. There is over 200m separation from this entrance to any nearby intersection or other vehicle crossing and over 300m of visibility in both directions. The access complies with the Regional Infrastructure Technical Specifications and vehicle tracking has been undertaken to demonstrate that a 25m heavy truck and trailer unit can efficiently access the site. It is proposed that the security gate and fencing will be shifted to allow two truck and trailer units to still pull off the road and queue within the site if the gate is closed. Overall, the access is compliant with the WDP and assessed as being appropriate to serve the proposed demolition.

Given the large size of the Site, sufficient space for informal parking is readily available throughout to accommodate all demolition vehicles. Any car parking or loading areas would be informal and relocated throughout the Site as different areas are decommissioned. No parking or loading is expected to be required from within the road reserve.

Overall, the ITA concludes that there are no traffic engineering or transport planning reasons to preclude approval of the proposal. On this basis, the transport effects of the proposal are considered to be less than minor and acceptable.

6.7 Effects on archaeological values

The Archaeological Assessment for asset removal by CFG Heritage in **Appendix F** contains a full assessment of the proposal's effects on archaeological values and recommends measures to mitigate these effects.

[12] The scope of a Simple ITA is defined by the NZTA guideline RR 422 Integrated transport assessment guidelines as being for situations "Expected to have an effect within the site and at the interface with the transport network". A simple ITA also implies "Low" significance of transportation effects (see Figure 6.1 in the NZTA guideline). The other types of ITA are Moderate, Broad and Extensive.

In summary, works will all be undertaken in accordance with the requirements of the Archaeological Authority from NZHPT. There are three identified areas where the risk of archaeological deposits is higher and the works could negatively impact previously unrecorded archaeological sites. It is expected that the Archaeological Authority will require that all ground disturbance in these areas be monitored by a suitably qualified archaeologist. Should any material be exposed relating to pre-European Māori land use, these will be investigated and sampled following standard archaeological best practice, and there will be a focus on radiocarbon dating to contribute to better understanding of the chronology of Māori settlement in the area. It is expected that mana whenua will provide recommendations on the cultural management of the works.

It has been recommended that the remainder of the works have periodic spot checks by an archaeologist rather than full time monitoring, and accidental discovery protocols will be in place. In the event of kōiwi being uncovered, work will cease immediately and accidental discovery protocols will be followed.

LINZ has adopted the recommendations from the Archaeological Assessment into the scope of the proposed works, and also proffers a consent condition requiring accidental discovery protocols (see section 8.3). With these mitigations in place, it is considered that effects on archaeological values will be less than minor.

6.8 Hydrological and flooding effects

6.8.1 Permanent effects

Local scale flood modelling for the Wharekōrino Stream has been completed to assess the combined effects of removing Culvert 2 (part of this application) and altering Culvert 3 (part of the Landfill Upgrade Application) on the extent and velocity of flooding upstream and downstream of the Site (see Flood Risk & Mitigation Assessment Report in **Appendix M**). The 1% Annual Exceedance Probability (AEP) storm event with climate change was used for the modelling. As preliminary flood modelling showed that the removal of Culvert 2 caused significant increases in peak flows and flood levels downstream, multiple mitigation scenarios were run to test different options to mitigate these offsite effects.

The scenarios identified for further in depth consideration were ‘Scenario 9’, involving a shorter Culvert 3 further upstream and raising the associated embankment for a farm track crossing, and ‘Scenario 14’, involving the above works as well as upgrading Culvert 1 under Te Mawhai Road with an additional 2.5m diameter culvert.

The site-specific modelling predicted that Scenario 9 would result in the following effects in the 1% AEP event:

- Minor (5%) reduction in upstream flooded extent on neighbouring land, representing an improvement on the existing situation. This includes a significant reduction in flood extent at the existing landfill.
- Increased peak flows and water levels at Te Mawhai Rd compared with the existing situation. The duration of flow across the road is predicted to be 14.3 hours, compared to 15.7 hours for the existing situation. The flood hazard is increased to H5 (unsafe for vehicles, people and buildings) from H3 (unsafe for vehicles, children and the elderly) in the existing situation.
- Increase in peak flows and water levels downstream of Te Mawhai Road, with no impact on the Marae.

Scenario 14 (an additional culvert under Te Mawhai Road) was predicted to have better results at Te Mawhai Road, reducing water levels and duration of flow across the road in the 1% AEP

event. However, the site-specific modelling did not take into account potential tailwater effects from the Pūniu and Waipā Rivers. The flood model was extended downstream and tailwater sensitivity testing was undertaken in order to understand these likely effects. This showed that two culverts under Te Mawhai Road would in fact have no measurable additional flood mitigation benefit over a single culvert in the 1% AEP storm event for tailwater levels of 33.5m RL or higher which are likely based on available WRC flood hazard information.

In respect of the WWPS located adjacent to the Wharekōrino Stream, this is predicted to be flooded under 520mm depth of water in the existing situation (1% AEP event). None of the scenarios modelled are able to stop it from being flooded. The best outcome is Scenario 14 which reduces the flood level at the pump station location to 33.25m RL (320mm flood depth).

Further modelling was then undertaken of more frequent storm events (50%, 20% and 5% AEP storms with climate change) for the existing situation and Scenario 9 to understand effects on Te Mawhai Road. This found that:

- 50% AEP storm – no flooding occurs of Te Mawhai Rd or the WWPS for the existing situation and Scenario 9.
- 20% AEP storm – no flooding of Te Mawhai Rd or the WWPS occurs for the existing situation. Some flooding of Te Mawhai Rd and WWPS will occur for Scenario 9. The WWPS will be under 170mm of water and the flood depth across Te Mawhai Rd will be 200mm and velocity 0.29m/s – this corresponds to flood hazard category H1 (generally safe for people, vehicles and buildings).
- 5% AEP storm – flooding of the WWPS occurs for all scenarios. For Scenario 9, the flood depth at the WWPS will decrease from 470mm to 460mm, while the flood depth across Te Mawhai Rd will decrease from 500 to 490mm. The flood hazard will remain the same at H2 (unsafe for small vehicles).

The modelling results show that Option 9 will have a minor effect on Te Mawhai Road in more frequent storms, causing slightly more “nuisance” flooding but no significant increased adverse effects in terms of flood hazard compared with the existing situation.

The Flood Risk & Mitigation Assessment Report also sets out that emergency access/egress is maintained for all residents living either side of Te Mawhai Road in the 1% AEP storm event. Velocities in all scenarios are within permissible velocities to control stream erosion, therefore stream erosion is unlikely to be an issue.

On the basis of the above, Scenario 9 is considered to be the best practicable option, as it has no significant increased adverse effects for more regular storms (50%-5% AEP events), and its effects on the flood hazard across Te Mawhai Road in the 1% AEP event would be unlikely to be of significance (in light of the tailwater effects that are expected in such an event). The selection of the best practicable option also takes into account that the constructability and affordability of Scenario 14 is questionable, for reasons set out in the Flood Risk & Mitigation Assessment Report.

While Scenario 9 entails works to Culvert 3 that are part of the separate Landfill Upgrade Application, a condition of consent is proposed that requires this component of the work to be carried out so that the landfill upgrade is not relied upon to mitigate the effects of the Remediation Application (see section 8.3).

To mitigate the flood risks at the WWPS it has been recommended that the pump station electrical control cabinet is raised by at least 1,000mm, up to possibly 1,310mm, to protect it from inundation. A condition has been drafted to this effect (see section 8.3).

Stream hydrology will be slightly impacted by the removal of the old access road and Culvert 2. This will result in less pooling directly upstream of the currently blocked Culvert 2. The low

gradient of the stream will result in no change in stream hydrology or flow across the subject reach, although flow will be restored in the immediate vicinity of Culvert 2.

None of the other earthworks within proximity to waterbodies are expected to result in any impediment to the passage of flood flows. For completeness, it is also noted in section 6.3.1 that there will be no permanent effects on hydrology from the remainder of the earthworks where the ground is to be reinstated to existing levels following the works.

On the above basis, permanent hydrological and flooding effects resulting from the proposal are assessed to be minor and acceptable.

6.8.2 Temporary effects

The proposed methodology for the damming and diversion of the Wharekōrino Stream to enable Culvert 2 and the redundant road embankment to be removed, and the diversions around the piped sections of the stormwater network to be relined, has been set out in section 4.5. The works will take up to 3 months, therefore any hydrological and flooding effects from the diversions are temporary. Works will all take place in low flow conditions with erosion control measures in place, in order to minimise any potential flooding and erosion effects. The temporary dams blocking off the stormwater pipe lining and Culvert 2 works areas will restrict the entire cross sectional area of the stream, and stream flows will be pumped around the works areas so that downstream flows are maintained. The effects on hydrology and flooding arising from the temporary diversions are considered to be less than minor.

The dewatering of excavations if and when required, using a portable pump, has been categorised as a water take, diversion and discharge under the WRP rules assessment set out in section 5.4. However, in most cases the depth of excavations will be above seasonal groundwater levels, therefore little inflow is expected. The discharge of water back to nearby grassed land after it is pumped out will replace the groundwater taken by the pumping, so it is considered that there will be no overall effect on hydrology from dewatering.

Hydrological effects arising from temporary works within the two wetlands are discussed in the following section of this report.

6.9 Effects on ecological values

The ecological effects of the proposal have been assessed in full in the EcIA (**Appendix L**).

The earthworks will result in several areas of exotic vegetation being removed. However the large native trees identified on site will be protected from damage wherever practicable, and the area around Culvert 2 will be replanted as per the PMP. The effect on terrestrial vegetation is considered to be Very Low.

Effects on wetland habitat were considered in the EcIA and are supplemented with the report/memo provided in respect to hydrological effects associated with works in, or within 10m of the wetland. No offsetting is considered to be required. As is set out in the Hydrology Memorandum attached to the EcIA, works adhering to the recommended construction methodology will not result in any drainage of the wetlands. The alternative to undertaking works in wetlands is that the redundant structures remain in-situ, which does not meet the agreed extent of horizontal infrastructure removal under the Deed; this is not considered to be a feasible alternative. Effects on Wetland 1 are assessed as Low and effects on Wetland 2 are assessed as Very Low.

The proposed works will result in the removal of riparian vegetation directly upstream and downstream of Culvert 2, however, the vegetation is predominantly exotic and planting of native vegetation will be undertaken after works are completed (as per the PMP). It is expected that a contiguous native canopy will fully form after 3-5 years.

These works will also reconnect habitat upstream and downstream of the old access road. Reconnecting the stream habitat will result in the pest fish, Gambusia, gaining access to upstream habitat as well as native species of fish. Reconnecting habitat for native species is considered more ecologically beneficial than not removing the infrastructure.

Removal of Culvert 2 also increases the risk of the weed Tradescantia establishing downstream of the culvert, where it is currently absent. However, the riparian margins downstream of the culvert are currently dominated by exotic vegetation that does not provide optimal habitat for native fish species. In contrast, Tradescantia provides fish cover and some species are known to utilise the pest plant as a spawning substrate.

Appropriate erosion and sediment control measures will be implemented for all instream works. It is therefore unlikely sedimentation will impact the habitat or water quality of the Wharekōrino Stream.

The overall level of effect on freshwater values is the achievement of a Net gain.

There is potential for some disturbance of avifauna during works, however, this will be temporary. The surrounding landscape provides similar habitat for avifauna to utilise if temporary displacement occurs due to disturbance from works. The works have been assessed to have a Very Low level of effect on avifauna.

It is highly unlikely that native lizards are present within the site. The works will, therefore, not impact native lizard species. As such, the effects on herpetofauna are assessed as Very low.

The removal of large exotic trees on site has the potential to impact long-tailed bats as the species may be roosting in them so there is increased risk of injury and/or mortality. As noted earlier, most tree removal on the Site is a permitted activity, however there are applicable requirements under the Wildlife Act 1953 that will be followed. Bat management protocols will be implemented in accordance with a BMP (proffered as a condition of consent) to ensure adverse effects on bats are minimised as much as possible. This will result in an overall Low level of effect on long-tailed bats.

All proposed instream works have the potential to harm native fish species that reside in the Wharekōrino Stream. An FMP has been prepared by a suitably qualified ecologist to mitigate adverse effects of instream works on native fish. The capture and relocation of native fish prior to undertaking instream works will result in a low level of effect on fish. The removal of Culvert 2 will restore and enhance fish passage for swimming and climbing fish species. These works achieve an overall Net gain for ecological values.

On the basis of the EcIA, the ecological effects of the proposal are considered to be less than minor.

6.10 Effects on amenity

6.10.1 Noise

An Acoustic Assessment for underground infrastructure removal and rehabilitation is attached as **Appendix O**. A summary of the key matters and findings outlined in the assessment is included below:

The assessment is based on works being completed in a timeframe of 18-24 months. A longer period of works would result in less machinery being used in tandem.

- The most significant noise from the proposal will be the use of large machinery, and the assessment provides details of the sound levels from concrete breakers, excavators, compactors, crushers, mulchers and chainsaws.

- Based on typical noise levels and distances to surrounding receivers, compliance with construction noise standards can generally be achieved at surrounding properties during excavation of underground structures and removal of road surface material.
- Concrete breaking, crushing and mulching activities will be located more than 80m from any occupied dwelling, and compliance with construction noise limits is likely to be achieved by these activities.
- The exception to compliance with the construction noise standards is if chainsaws are required for tree removal/alteration in the northern section of the Site, associated with the removal of a possible water pipe (currently unable to be located). Noise levels could exceed the permitted limit of 70 dB L_{Aeq} intermittently during the activity, by up to 5 dB at 203 and 207 Te Mawhai Road. This infringement would likely only occur for short periods over one to two days (and would be compliant with the construction noise limits applicable to shorter term works under 20 weeks duration).
- Noise levels at all other sensitive receivers will be compliant with construction noise standards.
- Additional mitigation measures are recommended, these include (in summary):
    - Selecting plant which produces the least possible noise for the completion of works
    - Advising neighbours in advance of works
    - Limiting noisy works to normal construction hours (7.30am to 6pm).

These measures have been incorporated within section 20.2 of the draft DDRMP (**Appendix P**). Additionally, conditions of consent to provide suitable control of construction noise and vibration levels have been proffered (refer to Section 8.3).

With the above measures in place, the majority of construction noise will comply with the construction noise standards, and the potential exceedance is considered reasonable due to its temporary and intermittent nature and the adoption of best practicable mitigation measures. On that basis, the adverse noise effects of the proposal will be less than minor.

6.10.2 Dust

The DDRMP sets out a number of measures for the management of dust, including, but not limited to:

- The use of water and polymer based solutions, along with perimeter air monitoring where any asbestos dust could be generated and the covering of any truck transporting potentially contaminated substances.
- Minimising extent of exposed surfaces.
- Limiting traffic to specified construction access and minimising travel distances.
- Controlling vehicle speeds.
- Limiting stockpile heights, sheltering them from wind and utilising textiles for temporary stabilisation.
- Use of water carts.
- Progressive re-stabilisation.
- Potential operational measures able to be employed for fixed plant.

With utilisation of the above methods, and the additional methods outlined in the DDRMP, dust can be appropriately managed so as not to have adverse effects.

6.10.3 Vibration

The Acoustic Assessment in **Appendix O** anticipates that the vibration levels generated by the works is unlikely to impact upon amenity and would avoid cosmetic damage at surrounding buildings. Compliance with the construction vibration limits would be readily expected at all receivers. On this basis, the proposal will not have adverse vibration effects.

6.10.4 Site Management

General site management will be required to manage any visual effects arising during the construction period. These measures are set out in the DDRMP and include (but are not limited to) the following:

- Stockpiling to occur in specified areas and any temporary stockpiling of soil for more than one month to be mulched or seeded.
- Mulching or revegetation of exposed areas to occur as soon as practicable.
- Storage of any recyclable materials to be in covered skip bins and removed once full.
- Signage will be limited to one potential sign at the project entrance (to comply with Council standards).

Given the site is large, the majority of existing vegetation and trees are to remain, and the majority of remediation works will be located toward the centre of the site, a large portion of the works will be screened from any public or neighbouring view by the existing vegetation and/or natural topography of the site. In addition, the above measures will ensure that any works, including those that are closer to public viewpoints and therefore visible, in part or in whole, are appropriately managed to ensure that any adverse visual effects are less than minor in nature. There is also no public access to any area of the Site and the works will therefore have no impacts on public access or recreational values.

6.11 Effects on soil quality and productivity

The removal of the horizontal infrastructure, contaminated soil and building foundations will have only temporary effects on land contours, as the excavations will be backfilled to previous ground levels. The soil quality on the Site will be improved following the removal of contaminated soil and replacement with material meeting the WRP clean fill definition and clean topsoil. Where excavated soil is not contaminated, it will be used for backfilling the excavations, thereby retaining high quality soils onsite.

The removal of in ground structures down to 800mm depth will provide a sufficient undisturbed soil depth for cultivation, and there will be more vacant land available, which will improve the productive capacity of the land.

The construction machinery will minimise compaction of soils by working from hardfill and paved areas where possible. Backfill will be compacted following engineering standards to maintain good drainage properties and stability.

Overall, the proposal is considered to have positive effects on soil quality and productivity.

6.12 Conclusion

Overall, based on the preceding assessment, the effects of the proposed activity on the environment are considered to be less than minor and acceptable, with any additional cultural effects to be further ascertained through the notification process.

7.0 Statutory assessment

Section 104(1) of the Act requires that, when considering a resource consent application, the consent authority must have regard to the matters set out in subsections (1)(a), (ab), (b) and (c). These matters are addressed below, and all are subject to Part 2.

7.1 Section 104(1)(a) (Actual and potential effects)

Section 104(1)(a) requires the consent authority to have regard to "any actual and potential effects on the environment of allowing the activity".

As assessed in Section 6.0 of this report above, the proposed activity will have actual and potential effects on the environment that are less than minor and acceptable, with any additional cultural effects to be further ascertained through the notification process.

The project is also considered to provide for some very positive outcomes. Specifically, the completion of the proposed works will enable the land to be offered back to TNN as part redress for whenua raupatu. The works will remove the risks and obstructions posed by abandoned buildings and structures, many of which contain ACM and pose a health and safety risk. Contaminated soil and underground infrastructure will be removed, and the site rehabilitated such that it is appropriate for a range of future land uses. The project thereby facilitates a more efficient use of this substantial land resource that is currently underutilised.

There are also other discrete benefits included in the project such as improving water flow and fish passage through removing the road embankment crossing Wharekōrino Stream and Culvert 2, and the riparian enhancement planting in this location.

The remediation project is also anticipated to have some flow on social and economic benefits for the local community. It is a substantial long-term project, and the Government's Broader Outcomes Framework and LINZ's criteria for appointing contractors include achieving broader outcomes such as local employment opportunities and upskilling.

7.2 Section 104(1)(ab) (Offsetting or compensation)

Section 104(1)(ab) requires the consent authority to consider "any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity".

In this case, the proposed activity is not of a scale or nature that would require specific offsetting or environmental compensation measures to ensure positive effects on the environment.

7.3 Section 104(1)(b) (Statutory documents)

Section 104(1)(b) requires the consent authority to have regard to any relevant provisions of the following:

- a national environmental standard;
- other regulations;

- a national policy statement;
- a New Zealand coastal policy statement;
- a regional policy statement or proposed regional policy statement; and
- a plan or proposed plan.

An assessment of the relevant statutory documents that corresponds with the scale and significance of the effects that the proposed activity may have on the environment is provided below.

7.3.1 National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

Under Regulation 10(3) of the NES-CS, discretion is restricted to the matters in Table 10 for the contaminated land disturbance and change of use. An assessment of these matters is provided below.

Table 10: NES-CS assessment

Matter of discretion	Assessment
(a) the adequacy of the detailed site investigation, including— (i) site sampling: (ii) laboratory analysis: (iii) risk assessment:	The DSI and SSRA are appended to this application, have been prepared by a Suitably Qualified and Experienced Person and are comprehensive and adequate.
(b) the suitability of the piece of land for the proposed activity, given the amount and kind of soil contamination:	The land will be suitable for rural residential activity as it will meet the site specific remedial standards following the proposed remediation.
(c) the approach to the remediation or ongoing management of the piece of land, including— (i) the remediation or management methods to address the risk posed by the contaminants to human health: (ii) the timing of the remediation: (iii) the standard of the remediation on completion: (iv) the mitigation methods to address the risk posed by the contaminants to human health: (v) the mitigation measures for the piece of land, including the frequency and location of monitoring of specified contaminants:	The approach to the remediation is set out in the RAP and will be undertaken to a high standard with robust mitigation measures to address risk to human health.
(d) the adequacy of the site management plan or the site validation report or both, as applicable:	The RAP sets out the proposed approach to site validation, which is considered to be suitable. A Site Validation Report will be provided following completion of works.

Matter of discretion	Assessment
(e) the transport, disposal, and tracking of soil and other materials taken away in the course of the activity:	The Landfill Upgrade Application seeks to dispose of the material on the same site, however if material is taken away, it will be disposed of to an authorised facility and documented in accordance with the requirements of the RAP.
(f) the requirement for and conditions of a financial bond:	No financial bond is required.
(g) the timing and nature of the review of the conditions in the resource consent:	Councils to impose review conditions as they see fit.
(h) the duration of the resource consent.	A duration of seven years is sought.

7.3.2 National Environmental Standards for Freshwater

There are no matters of discretion or assessment criteria in the NES-F that are applicable to this proposal, as the proposal's activity status under the NES-F is non-complying. The NES-F does not contain any objectives or policies.

Regulation 66 of the NES-F contains a requirement for information about dams to be provided to the regional council for the purpose of fish passage data. The specified information does not appear to be particularly applicable to temporary dams. However, should WRC require such information about the temporary dams, a condition of consent can be imposed as appropriate.

7.3.3 National Policy Statement for Freshwater Management

The National Policy Statement on Freshwater Management 2020[13] (NPS-FM) sets out the objectives and policies for freshwater management under the RMA. An assessment against the objectives and policies of the NPS-FM is attached as **Appendix S**. In summary, the health and well-being of water bodies and freshwater ecosystems will be maintained during the project and there will be no loss of extent of natural inland wetlands or rivers.

Overall, the proposal is considered to be consistent with the relevant objectives and policies of the NPS-FM.

7.3.4 National Policy Statement for Highly Productive Land

An assessment against the objectives and policies of the NPS-HPL is attached as **Appendix S**. Soils on site are classified as LUC 2 and 3, meaning the site meets the definition of Highly Productive Land under Clause 3.5(7) of the National Policy Statement for Highly Productive Land (NPS-HPL), and the zone is Rural. The NPS-HPL therefore applies to this application.

Clause 3.9 applies to land use activities on highly productive land, and states that territorial authorities must avoid the inappropriate use or development of highly productive land that is not land-based primary production.

The proposed works meet the following subclauses of the NPS-HPL, which indicates that the proposed land use activities are appropriate and do not need to be avoided:

[13] Incorporating various amendments that took effect from January 2023 and January 2024

- Clause 3.9(2)(c), as they are for a purpose associated with a matter of national importance under the RMA – being section 6(e), the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
- Clause 3.9(2)(g), as they are a temporary land use activity that has no impact on the productive capacity of the land.

Under clause 3.9(3), there is no actual loss of highly productive land, and the area of the site available for land-based primary production will increase as a result of the works. There are no actual or potential reverse sensitivity effects on land-based primary production activities resulting from the proposal.

The proposal is also entirely consistent with the objective of the NPS-HPL to protect highly productive land for use in land-based primary production, both now and for future generations.

7.3.5 National Policy Statement for Indigenous Biodiversity

The National Policy Statement for Indigenous Biodiversity (NPS-IB) came into force on 4 August 2024. Its objective is to maintain indigenous biodiversity across the country so that there is no overall loss. It contains policy direction for managing indigenous biodiversity in the terrestrial environment both within and outside of Significant Natural Areas (SNA).

As noted in section 3.1.9, Wetland 1 and the Wharekōrino Stream as freshwater habitats meet criteria for indigenous biodiversity significance under the WRPS. However, there are no SNA identified on the site in the WDP, nor is there any terrestrial indigenous biodiversity identified by the EcIA as meeting the SNA criteria in Appendix 1 of the NPS-IB.

Clause 3.16 of the NPS-IB states that for indigenous biodiversity outside SNAs, any significant adverse effects must be managed by applying the effects management hierarchy. There are no significant adverse effects identified in the EcIA. All other effects must be managed to give effect to the objective and policies of the NPS-IB. An assessment against the objective and policies of the NPS-IB is attached as **Appendix S**. In summary, the proposal is considered to give effect to these, as indigenous vegetation will be maintained and restored, and effects on long tailed bats will be mitigated through implementation of the BMP.

7.3.6 Waikato Regional Policy Statement

The WRPS (Te Tauākī Kaupapahere O Te Rohe O Waikato) provides an overview of the resource management issues in the Waikato region, and the ways in which integrated management of the region's natural and physical resources will be achieved. An assessment against the objectives and policies of the WRPS is attached as **Appendix S**. In summary:

- The proposal will protect the life supporting capacity of soils and primary production potential of high class soils.
- Indigenous biodiversity will be maintained or enhanced.
- Freshwater quality, riparian areas, natural character and wetland values will be maintained or enhanced.
- Remediation of contaminated soil will protect people and the environment from risk.
- The proposal avoids the creation of new intolerable natural hazard risks.
- Historical and cultural values will be recognised and provided for.

Overall, the proposal is considered to be consistent with the relevant objectives and policies of the WRPS.

7.3.7 Waikato Regional Plan

An assessment against the objectives and policies of the WRP is attached as **Appendix S**. In summary:

- The proposal will permanently improve fish passage, while implementation of the FMP during damming and diversion will mitigate potential temporary effects on fish passage/mortality.
- The extent, natural character and water quality of the water bodies present on site will be protected and enhanced.
- The proposal will not affect the availability or flows of surface water or groundwater.
- The implementation of erosion and sediment control measures will minimise any downstream effects of sediment runoff during earthworks.
- Existing soil contamination will be remediated, and replacement cleanfill will not contain hazardous substances.

Overall, the proposal is considered to be consistent with the relevant objectives and policies of the WRP.

7.3.8 Waipā District Plan

An assessment against the objectives and policies of the WDP is attached as **Appendix S**. In summary:

- The proposal contributes towards upholding the principles of Te Tiriti o Waitangi.
- Rural character and amenity and productive soil resources will be maintained and ultimately enhanced as a result of the proposal.
- Adverse effects on aquatic and riparian ecosystems and the natural character of water bodies will be avoided or mitigated through erosion and sediment control measures and reinstatement of natural ground.
- Works near potential cultural and archaeological sites will be monitored to ensure that any sites discovered are appropriately managed.
- The safety, efficiency and effectiveness of the transport network will be maintained.
- Appropriate measures will be in place for the duration of works to ensure that the risk to human health from disturbing, transporting and handling contaminated soil and hazardous substances is appropriately mitigated.

Overall, the proposal is considered to be consistent with the relevant objectives and policies of the WDP.

7.3.9 Conclusion

The above assessments demonstrate that the proposal is consistent with the relevant provisions of the relevant statutory documents, subject to fair and reasonable conditions being imposed as recommended in Section 8.0 of this report.

7.4 Section 104(1)(c) (Other matters)

In addition to the matters of regard covered under subsections (1)(a), (ab) and (b), subsection (1)(c) states that consideration must be given to "any other matters that the consent authority considers relevant and reasonably necessary to determine the application."

The Maniapoto Settlement Claims Act 2022 is a relevant other matter and has been discussed in Section 2.2 of this report. Iwi Management Plans and other legislation are also relevant to this application and are discussed below.

7.4.1 Iwi Management Plans

The CIA appended in **Appendix B** notes the following Iwi Management Plans as relevant to the proposed works:

- Ko Tā Maniapoto Mahere Taiao, Maniapoto Environmental Management Plan
- Raukawa Iwi Management Plan
- Waikato-Tainui Iwi Environmental Management Plan.

These Iwi Environmental Management Plans are important documents as they provide a mechanism for Councils (in exercising their functions and powers) to consider Iwi cultural environmental values. The relevant objectives and policies of these Iwi Management Plans as they relate to the proposed works are addressed in the following sections.

7.4.1.1 Ko Tā Maniapoto Mahere Taiao, Maniapoto Environmental Management Plan

Ko Tā Maniapoto Mahere Taiao is Maniapoto's second generation Environmental Management Plan (2018) prepared by the Maniapoto Māori Trust Board. Ngāti Ngutu, Ngāti Paia, and Ngāti Paretekawa (Tangata Whenua for the Tokanui site) are listed in the plan as hapū who are entitled to exercise kaitiakitanga within their section of Maniapoto. Sections B to E of the plan are deemed relevant in the CIA.

Sections B and C contain objectives and policies relating to engagement with Maniapoto and Protecting and Enhancing Cultural Capital. It is considered that through ongoing consultation with Maniapoto, prior to lodgement of this application and through the limited notification process, these objectives and policies will be met.

Section D concerns Protecting and Enhancing the Natural Environment and includes objectives and policies relating to the management of air, freshwater, wetlands, land, natural heritage and biodiversity, and natural hazards.

Those objectives and policies under Part 14 (Fresh Water) are considered particularly relevant to this application. These objectives and policies seek to recognise the Rangatira and kaitiaki role of Maniapoto in management of freshwater resources, improving water quality and aquatic ecosystems, managing sedimentation, enhancing the physical characteristics of waterways, and monitoring activities which may affect waterbodies. In this case, it is considered that the proposal is consistent with these objectives and policies as the works will ultimately result in enhancements of water quality and aquatic ecosystems in Wharekōrino Stream by restoring and daylighting an increased portion of the stream. Sediment generation during construction will be well managed.

Part 15 includes objectives and policies relating to wetlands and include enhancing the mauri of wetland areas and making sure adjacent land-use activities do not adversely affect wetlands. It has been assessed that the two wetlands on site will not be adversely affected by the works, which will be undertaken in accordance with the specified methodologies.

Part 18 includes objectives and policies relating to inappropriate land use activities. Policy 18.3.1.2 is particularly relevant as it seeks to ensure contaminated land is managed effectively and contamination is mitigated, and land restored where possible. The proposed works will achieve this policy as the land will be restored to site-specific rural residential standards.

Part 19 concerns natural heritage and biodiversity with objectives and policies seeking to maintain, enhance and restore indigenous biodiversity. Through restoration of part of Wharekōrino Stream and planting of the new riparian area, it is considered that indigenous biodiversity at the Site can be enhanced.

Part 20 includes objectives and policies relating to natural hazards. As the proposal will reduce the risk of flood inundation of the landfill area and will not exacerbate the existing flood risk, the proposal is considered to be consistent with these objectives and policies.

Section E concerns Infrastructure and Industry and includes management of Solid and Hazardous Waste (Part 24.0) which is relevant to this application. The objectives and policies in this part seek to avoid the adverse effects of solid and hazardous waste disposal. Through appropriate transport and disposal of ACM, and recycling of removed materials wherever possible, it is considered that these objectives and policies will be met.

7.4.1.2 Raukawa Iwi Management Plan

The CIA notes that "*although Ngāti Raukawa do not have exclusive or predominant interests in the project area their environmental management plan includes several matters of relevance to Tangata Whenua and the project*". It states that "*the Raukawa Iwi Management Plan takes a holistic view towards best practice environmental management which includes three domains:*

- Mana atua (spiritual),
- Mana whenua (physical/natural), and
- Mana tāngata (human).

Tangata Whenua have strongly expressed the importance of these domains as the core foundations of their cultural beliefs. To give authenticity to their voices, in view of their status as indigenous people, it would be helpful for non-Māori State agency, Local Government employees and Contractors to understand these beliefs, how they are intricately connected and how they can be incorporated into planning and decision making in order to meet statutory obligations."

The project team has attended a cultural induction and has worked with Tangata Whenua to incorporate cultural beliefs into the planning and decision making for this project.

7.4.1.3 Waikato-Tainui Environmental Plan, Tai Tumu, Tai Pari, Tai Ao

The CIA states that "*the relationship between Tangata Whenua and Waikato-Tainui stem from the waka Tainui. Tangata Whenua have a shared history with Waikato-Tainui since time immemorial and whakapapa that intertwines. It is obvious then that Tangata Whenua share the sentiments and values as described in the Waikato-Tainui Iwi Environmental Plan - Tai Tumu, Tai Pari, Tai Ao*."

The Tai Tumu, Tai Pari, Tai Ao is the Waikato-Tainui environmental planning document. The CIA identifies several matters in the Waikato-Tainui Environmental Plan that correspond with Tangata Whenua cultural values, particularly in Section C: Chapter 14 – Customary Activities. It identifies that the following matters are also of relevance to Tangata Whenua:

- Recognising customary activities including fishing and hunting - Enhancing biodiversity particularly restoration of wetlands
- Identifying and protecting Sites of significance including wāhi tapu
- Managing the accidental discovery of taonga koiwi and Sites of significance

- Apply cultural and environmental principles to design.

The proposal is considered to have a positive effect on the ability to undertake customary activities on the site in future. A robust approach is proposed in relation to waahi tapu sites and accidental discovery. There is no new development proposed as part of this application that cultural and environmental principles can be applied to.

7.4.2 Ngā Wai o Maniapoto (Waipā River) Act

The Ngā Wai o Maniapoto (Waipā River) Act was enacted in 2012. The purpose of the Act is to *restore and maintain the quality and integrity of the waters that flow into and form part of the Waipā River for present and future generations*.

The Wharekōrino Stream running through the site flows into the Pūniu River which is a tributary of the Waipā River. The CIA states that the principles in the Waipā River Act are consistent with their cultural views.

The Maniapoto Priorities for the Restoration of the Waipā River Catchment was published in 2014 and is a direction setting document for the clean up of the Waipā River.

Through its proposed construction methodologies to protect water quality and the daylighting of part of the Wharekōrino Stream, the proposal is aligned with the Ngā Wai o Maniapoto (Waipā River) Act.

7.4.3 Te Ture Whaimana o Te Awa o Waikato – Vision and Strategy for the Waikato River

Te Ture Whaimana is the primary direction-setting document for the Waikato River and activities within its catchments affecting the Waikato River. Its goal is to restore and protect the health and wellbeing of the Waikato River.

The subject site is within the catchment of the Waipā River and Waikato River, and Te Ture Whaimana is relevant. As per above, the proposal will protect the health and wellbeing of the Awa by ensuring that water quality is protected during construction.

Additionally, the proposal achieves betterment for the Waipā and Waikato Rivers through the net gain to freshwater values achieved by removing Culvert 2 and undertaking native riparian planting, as assessed in section 6.9.

7.4.4 Heritage New Zealand Pouhere Taonga Act 2014

All archaeological sites, whether recorded or not, are protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 and may not be destroyed, damaged or modified without an authority issued by HNZPT. While there are no recorded archaeological sites on the subject site, there are three identified areas where the risk of archaeological deposits is higher and the works could negatively impact previously unrecorded archaeological sites. For this reason, archaeological authority is being conservatively applied for under the HNZPT Act.

7.4.5 Wildlife Act 1953

The Wildlife Act 1953 provides statutory protection for and directs the management of indigenous fauna species, excluding those species listed in Schedules 1 to 5. This involves safeguarding them from harm, disturbance, or exploitation. The Wildlife Act does not specifically extend to the protection of the habitat which supports these species.

A BMP is proffered as a condition of consent, which will also ensure that the works comply with the requirement of the Wildlife Act not to harm pekapeka (long tailed bats).

7.4.6 Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020

These regulations apply to water permits allowing freshwater to be taken at a rate of 5 litres per second or more. Any dewatering of excavations associated with the proposal will be below this rate and the regulations will not apply.

8.0 Other relevant sections of the Act

8.1 Section 104D (Non-complying activities)

The resource consent application to WRC is a non-complying activity. Under section 104D, to be able to grant resource consent for a non-complying activity, the consent authority must be satisfied that either:

> (a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or
>
> (b) the application is for an activity that will not be contrary to the objectives and policies of—
>
> (i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or
>
> (ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or
>
> (iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

This consideration is commonly known as the "threshold test" or "gateway test". If either of the limbs of this test can be passed, then the application is eligible for approval, but the proposed activity must still be considered under section 104. No primacy is given to either limb; if one limb can be passed then the test can be considered as passed.

The preceding assessments conclude that:

- the proposed activity's adverse effects on the environment will be minor; and
- the proposed activity will not be contrary to the objectives and policies of the plan.

As such, the application can be considered under section 104 and a determination can be made on the application under section 104B.

8.2 Section 105 (Discharge or coastal permits)

Discharge consents are being applied for to discharge water that may need to be taken out of excavations to ground and to discharge cleanfill to land. Under section 105(1), and in addition to the matters under section 104(1), the consent authority must have regard to:

> (a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
>
> (b) the applicant's reasons for the proposed choice; and
>
> (c) any possible alternative methods of discharge, including discharge into any other receiving environment.

In the case of the proposed discharges, they will be acceptable due to:

- the nature of the proposed discharges;
- the nature of the receiving environment; and
- effects that will be avoided, remedied or mitigated by the nature of the activity and the proposed conditions of resource consent.
    - It is not considered necessary to consider any alternative methods or locations of discharge due to the less than minor nature of the proposed discharges, which will not be to a sensitive receiving environment.

8.3 Section 108 (Proposed conditions of consent)

As identified in the preceding assessments, several conditions of consent are proposed to avoid, remedy or mitigate the potential adverse effects of the proposed activity on the environment. It is anticipated that the consent authority will adopt conditions relating to the following matters (a set of draft conditions is included in full in **Appendix T**):

- Preparation/finalisation and certification of management plans (DDRMP, ESCP, CTMP, BMP)
- Facilitating the cultural monitoring of ground disturbance in waahi tapu areas
- Accidental discovery protocols (archaeology and contamination)
- Contaminated soil handling and disposal procedures
- Pre- and post- works road condition survey and repair as required
- Works in and near waterbodies to be undertaken in summer / low flow periods
- Specific construction methodology requirements for works in wetlands
- Stream design requirements and implementation of PMP and FMP
- Construction noise to comply with construction noise standards with the exception of tree removal works near 203 and 207 Te Mawhai Road, with those occupants to be informed prior to works commencing
- Requirement to raise WWPS control panel and alter culvert 3 / farm road embankment to mitigate flood effects associated with Culvert 2 removal
- Management of erosion and sediment generation, including dust
- Minimising removal of mature trees and substantial undergrowth wherever practicable
- Stabilisation of exposed soil, and reinstatement of site
- Standards for imported fill
- Site Validation after contaminated soil is removed
- Complaints management.

It is requested that draft conditions of consent are shared to SLR in advance of a decision being made on the application.

8.4 Section 123 (Duration of consent)

It is requested that a seven year duration for the regional consents be applied in order to align with the requirements of the Deed. Section 9.15.3 of the Property Redress Schedule of the

Deed requires the Crown to complete the demolition and remediation works no later than seven years following the consent commencement date.

In accordance with s123(b), the duration of the land use consents required from WDC would be unlimited, however a seven year duration would also be acceptable.

8.5 Section 125 (Lapsing of consent)

Section 125 prescribes a standard consent period of five years in which all works must be undertaken, but this may be amended as deemed appropriate by the consent authority. It is requested that the standard five year period be applied in this case.

9.0 Notification assessment

9.1 Public notification assessment

Section 95A of the Act requires the consent authority to follow specific steps to determine whether to publicly notify an application. An assessment of the application against these steps is provided below.

9.1.1 Step 1: Mandatory public notification in certain circumstances

An application must be publicly notified if it meets any of the criteria under section 95A(3):

> (3) (a) the applicant has requested that the application be publicly notified:
>
> (b) public notification is required under section 95C:
>
> (c) the application is made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977.

The Applicant does not request public notification and the application is not made jointly with an application to exchange recreation reserve land.

Therefore, Step 1 does not apply, and Step 2 must be considered.

9.1.2 Step 2: Public notification precluded in certain circumstances

An application must not be publicly notified if it meets any of the criteria under section 95A(5):

> (5) (a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification:
>
> (b) the application is for a resource consent for 1 or more of the following, but no other, activities:
>
> (i) a controlled activity:
>
> (iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:

None of these criteria apply to the application.

Therefore, Step 2 does not apply, and Step 3 must be considered.

9.1.3 Step 3: Public notification required in certain circumstances

An application must be publicly notified if it meets any of the criteria under section 95A(8):

(8) (a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:

(b) the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.

There is no rule or national environmental standard that requires public notification. However, an assessment of adverse effects on the environment is required.

The assessment of environmental effects undertaken in Section 6.0 of this report concluded that the proposed activity will have minor effects on the environment as a whole.

Therefore, Step 3 does not apply, and Step 4 must be considered.

9.1.4 Step 4: Public notification in special circumstances

Under section 95A(9), an application must be publicly notified if the consent authority determines that "special circumstances" exist, notwithstanding that Steps 1 to 3 do not require or preclude public notification.

Special circumstances are not defined by the Act. Case law has, however, identified special circumstances as being "outside the common run of things which is exceptional, abnormal or unusual, but less than extraordinary or unique. A special circumstance would be one which makes notification desirable despite the general provisions excluding the need for notification."[14] The consent authority should also be satisfied that public notification may elicit additional information on those aspects of the proposal which require resource consent.

However, special circumstances must be more than:

- where the consent authority has had an indication that people want to make submissions;
- the fact that a large development is proposed; or
- the fact that some persons have concerns about the proposal.

No special circumstances exist that require the application being publicly notified as:

- The proposal is to implement actions that have already been agreed to in a Treaty Settlement and by relevant Ministers, and thereby have been thoroughly considered through a robust decision making process.
- While there is known public interest in the site, the proposal is not considered to be controversial, and is considered to have positive effects.
- The proposal primarily involves below ground removal of structures, soil remediation and reinstatement of land, which is neither exceptional nor unusual.
- The application and its supporting material have been prepared by a set of qualified professionals, and best practice management measures will be implemented during the works, according to the recommendations of those professionals. It is unlikely that notification would elicit any additional, relevant information.

[14] *Far North District Council v Te Runanga-a-iwi o Ngati Kahu* [2013] NZCA 221 at [36] and [37].

- It would not be desirable in all of the circumstances above to publicly notify the application.

9.1.5 Public notification summary

From the assessment above it is considered that the application does not need to be publicly notified, but an assessment of limited notification is required.

9.2 Limited notification assessment

If the consent authority determines not to publicly notify an application, it must then follow the steps of section 95B of the Act to determine whether to give limited notification of the application. An assessment of the application against these steps is provided below.

9.2.1 Step 1: Certain affected groups and affected persons must be notified

An application must be limited notified to the relevant persons if it meets the criteria under sections 95B(2) to 95B(4):

> (2) (a) affected protected customary rights groups; or
>
> (b) affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).
>
> (3) (a) whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11; and
>
> (b) whether the person to whom the statutory acknowledgement is made is an affected person under section 95E.
>
> (4) Notify the application to each affected group identified under subsection (2) and each affected person identified under subsection (3).

There are no protected customary rights groups or customary marine title groups that are relevant to this application. The site is within a Maniapoto statutory acknowledgment area mapped by the WRC. This applies to the Waipā River and its catchments and was provided for by the Ngā Wai o Maniapoto (Waipa River) Act 2012. TNN, the Ngāti Maniapoto Post Settlement Governance Entity, is considered an affected person under section 95E (see assessment following).

9.2.2 Step 2: Limited notification precluded in certain circumstances

An application must not be limited notified to any persons if it meets any of the criteria under section 95B(6):

> (6) (a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification:
>
> (b) the application is for a controlled activity (but no other activities) that requires a resource consent under a district plan (other than a subdivision of land).

None of these criteria apply to the application.

Therefore, Step 2 does not apply, and Step 3 must be considered.

9.2.3 Step 3: Certain other affected persons must be notified

Other affected persons must be notified in the following circumstances specified by section 95B(7) and (8):

> (7) In the case of a boundary activity, determine in accordance with section 95E whether an owner of an allotment with an infringed boundary is an affected person.
>
> (8) In the case of any other activity, determine whether a person is an affected person in accordance with section 95E.

The proposal is not for a boundary activity.

In deciding whether a person is an affected person under section 95E, the consent authority under section 95E(2):

> (2) (a) may disregard an adverse effect of an activity on a person if a rule or national environmental standard permits an activity with that effect;
>
> (b) must disregard an adverse effect that does not relate to a matter for which a rule or environmental standard reserves control or restricts discretion; and
>
> (c) must have regard to every relevant statutory acknowledgement made in accordance with a statute set out in Schedule 11 of the Act.

The consent authority must not consider that a person is an affected person if they have given their written approval, or it is unreasonable in the circumstances to seek that person's written approval.

9.2.3.1 Adjacent land

With respect to section 95D(a), the following land is adjacent to the subject site.

Table 11: Land adjacent to the subject site.

#	Address	Legal description
1	1/117 and 2/117 Cruickshank Road	Lot 2 DP 451755
2	194 and 158 Te Mawhai Road	Wipaea Manu Block
3	178 Te Mawhai Road	Pokuru 1A1A Block
4	168 Te Mawhai Road	Pokuru 1A1B1 Block
5	Te Mawhai Road	Part Tokanui 1B 2B 2C 3B Block & Part Tokanui 1B 2B 2C 3B Block
6	Tokanui Village Symonds Road / Croasdale Road	Section 1 SO 59771
7	23 Farm Road (AgResearch)	Section 3 SO 534156
8	Cruickshank Road	Lot 4 DP 361320
9	Cruickshank Road	Pokuru 3B2 Block

The Tokanui village marked as number 6 is part of the same site as the hospital, but no works are proposed on this site, therefore the additional properties adjacent to the village have not been included.

Figure 31: Adjacent land

The assessment of environmental effects undertaken in Section 6 of this report found that the potential adverse effects on the environment will be less than minor, with the exception of effects on cultural values. This includes effects on adjacent landowners and occupiers being less than minor, given that:

- There are no boundary-related non-compliances.
- The construction noise non-compliance at 203 and 207 Te Mawhai Road may not occur if the possible nearby water pipe does not exist. If it does occur, due to required chainsaw use, it will be intermittent, very short term (1-2 days) and the occupants will be contacted to organise a suitable time for the chainsaw works that is least disruptive to them. With windows closed, the noise would not impact on the ability to undertake general office type work. It is noted that the works would comply with the shorter term construction noise standards, and do not comply only because the wider site works have a duration of longer than 20 weeks – therefore the applicable construction noise standards are lower. Further, these dwellings are on the subject Site.
- The proposal complies with lighting and general amenity rules.

- There are no air discharges anticipated beyond the site boundary, and no water or sediment discharges that will impact upon neighbouring properties.
- Contaminated soil will be managed in accordance with industry standards and will not affect human health on neighbouring properties.
- Additional vehicle movements will not have a significant impact on the local road network.
- Flood risk is not increased for adjacent properties.
- The majority of effects from the proposal are temporary.

Therefore, persons at adjacent properties will not be affected to a minor or more than minor degree.

The New Zealand Transport Agency (NZTA) Waka Kotahi as manager of State Highway 3 is not considered to be an affected party. The application does not involve any changes to the State Highway network and worst case trip generation is at 21 vehicles per hour, which is negligible in terms of effects. The ITA modelling shows no material increase in delay or queuing at the intersection of Te Mawhai Road and State Highway 3.

9.2.3.2 Statutory acknowledgements

With respect to section 95E(2)(c), when deciding who is an affected person, the consent authority must have regard to every relevant statutory acknowledgement made in accordance with an Act that is specified under Schedule 11. Those named in that schedule are affected if the adverse effects are minor or more than minor.

The statutory acknowledgement which is relevant to the application is Ngā Wai o Maniapoto (Waipa River). Additionally, the site is a deferred selection property under the Maniapoto Settlement Claims Act 2022.

As set out in section 6.4, a CIA was prepared earlier in the process, the identified cultural effects were considered upfront during project design, and each of the recommendations of the CIA has been responded to – with the intention of mitigating those effects so as to be less than minor. LINZ has also continued consultation, provided additional feedback opportunities for mana whenua and endeavoured to respond to cultural concerns throughout the project design phase.

However, given the importance of the site to iwi and hapū and the number of interested iwi parties, LINZ requests that this application is limited notified to iwi and hapū to ensure that they have the opportunity to identify any additional cultural effects that are not already recorded in the CIA, and/or are not accounted for by the proffered consent conditions in response to the CIA recommendations.

Based on the statutory acknowledgement, Treaty Settlement legislation, the CIA and hui, the potentially affected iwi and hapū have been identified as per Table 12.

Table 12: Potentially affected iwi and hapū

Iwi/hapū	Contact person(s) as advised by TNN
Te Nehenehenui Trust, the Ngāti Maniapoto Post Settlement Governance Entity	Tramaine Murray Alethea Hikuroa
Ngāti Paia	June Elliot

Iwi/hapū	Contact person(s) as advised by TNN
	John Thomson Gordon Thomson
Ngāti Ngutu	June Elliot Kaawhia Te Muraahi
Ngāti Huiao	No contacts known - Ngāti Huiao was recorded in the CIA as a hapū with affiliations to the Site. At present, LINZ is not aware of which individuals we have engaged with who may be affiliated with Ngāti Huiao; the CIA also notes *"Those of Huiao would be under Ngutu when Huiao went south and never returned"*.
Ngāti Paretekawa	Robert Te Huia Maria Maniapoto Kelly Johnson Tuhiao Halling
Ngāti Rahurahu	Niketi Toatua Samuel Roa

A contact list for the above persons as well as other persons that have provided contact details at any of the hui will be provided for the councils' use.

9.2.3.3 Step 3 summary

As affected persons have been identified, the application must be limited notified to them. In addition, Step 4 must be considered.

9.2.4 Step 4: Further notification in special circumstances

As required by section 95B(10), the consent authority must determine the following:

> (10) Determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected persons).

A consideration of special circumstances has been undertaken under section 9.1.4 where it was concluded that there are no special circumstances that warrant public notification of the application. Equally, there are considered to be no special circumstances that warrant limited notification of any other persons who have not been identified in Step 3.

9.2.5 Limited notification assessment summary

It is recommended that the persons identified in Section 9.2 of this report above are given limited notification of this application.

9.3 Notification assessment conclusion

Pursuant to sections 95A to 95G of the Act, it is recommended that the application is limited notified based on the following reasons:

- The application does not require public notification in accordance with section 95A.
- Step 3 of section 95B: Limited notification must be given to the following certain other affected persons:
  - Te Nehenehenui Trust;
  - Ngāti Paia;
  - Ngāti Ngutu;
  - Ngāti Huiao;
  - Ngāti Paretekawa; and
  - Ngāti Rahurahu.

10.0 Part 2 of the Act

We consider that those aspects of the plan relevant to this application have been "competently prepared under the Act", in the sense referred to by the Court of Appeal.[15] The consent authority is therefore not obliged to conduct an evaluation under Part 2 of the Act, and Part 2 considerations should not be used to override the plan provisions.

However, for the sake of completeness, and to remove any doubt, the following assessment against Part 2 has also been undertaken.

Section 5 identifies the purpose of the Act as being the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

The proposal will provide for social, cultural and economic well-being by restoring the Site so that it is safe and suitable for future generations to occupy.

Section 6 of the Act sets out several matters of national importance, including:

> *(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
>
> *(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
>
> *(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*
>
> *(f) the protection of historic heritage from inappropriate subdivision, use and development:*
>
> *(h) the management of significant risks from natural hazards.*

[15] *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316.

The proposal, including construction methodology, will preserve the natural character of the wetlands and rivers on the Site and protect significant habitats of indigenous fauna. The relationship of Mana whenua with this land, water, waahi tapu and other taonga has been taken into account through extensive iwi consultation that has informed the parameters of this proposal, as well as the proffered consent conditions. Monitoring of works and accidental discovery protocols will be put in place to manage effects on any archaeological and cultural sites. Changes to natural hazard risk associated with the proposal will be managed so as not to give rise to any significant risk.

Section 7 identifies a number of "other matters" to be given particular regard to in the consideration of any assessment for resource consent, including:

(a) kaitiakitanga:

(b) the efficient use and development of natural and physical resources:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(i) the effects of climate change:

The above matters have been addressed in the assessment of effects of this proposal, in particular cultural values (kaitiakitanga), and the intrinsic values of ecosystems particularly those associated with Wharekōrino Stream and wetlands. The works will ultimately enhance the amenity values and quality of the environment at this location and have an overall positive effect on the existing environment.

Section 8 requires the consent authority to take into account the principles of the Treaty of Waitangi. This proposal gives effect to the requirements of a Treaty Settlement, and on that basis is entirely consistent with the principles of the Treaty.

Overall, the application is considered to be consistent with the relevant provisions of Part 2. Given this consistency, it is concluded that the proposal achieves the purposes of sustainable management set under section 5.

11.0 Conclusion

Through this Remediation Application, LINZ seeks resource consent to remove underground infrastructure, contaminated soil and building foundations and remediate the ~79 hectare former Tokanui Psychiatric Hospital site at 149 Te Mawhai Road, Tokanui.

In terms of section 104(1)(a) of the Act, the actual and potential effects of the proposed activity on the environment will be minor, with the exception of cultural effects which will be further explored as part of the limited notification process, as discussed in sections 6 and 7 of this report.

In particular:

- The earthworks will largely reinstate existing ground levels without having any permanent effects, and erosion and sediment control measures will protect water quality and land stability during the construction phase;
- Robust measures will be put in place for archaeological and cultural monitoring to mitigate the impacts of any accidental discovery;

- Robust measures will also be put in place to protect the health and safety of workers during the remediation of contaminated land;
- Construction traffic (should material need to be disposed of offsite) will not result in any adverse material effects on the surrounding road network;
- The removal of Culvert 2 will have only minor flooding effects on Te Mawhai Road compared with the existing situation, and will reduce flooding upstream, including at the landfill. Emergency access/egress will be maintained for residents.
- The hydrological function of wetlands and their habitat values will be maintained.
- There will be a net gain to freshwater values as a result of the project, and temporary effects on freshwater quality and habitat values can be mitigated through the proposed erosion and sediment controls along with fish management protocols.
- Vegetation removal will be minimised and will be primarily exotic vegetation with low ecological values; bat management protocols will be implemented to ensure adverse effects on long tailed bats are avoided.
- The Site will be kept tidy and will be largely screened from any public or neighbour's view. The DDRMP and proffered conditions of consent will manage dust and noise so that amenity effects are less than minor.

The proposed activity will also generate substantial positive effects, including facilitating the land being offered back to iwi as redress for whenua raupatu; removing health and safety risks and obstructions on the land; enabling future efficient use of the land resource, and creating social and economic benefits during the construction phase.

In terms of section 104(1)(b) of the Act, the proposal is considered to be consistent with the relevant objectives and policies of the NPS-F, NPS-HPL, NPS-IB, WRPS, WRP and WDP. The proposal has also been assessed against the relevant iwi management plans, other relevant legislation and the matters of discretion in the NES-CS.

It is also considered that the proposal will have minor adverse effects on the wider environment, and no special circumstances exist. As such, the application does not need to publicly notified.

Hence, in accordance with sections 104B and 104D in relation to non-complying activities and discretionary activities, it is considered appropriate for consent to be granted after limited notification, subject to fair and reasonable conditions (such as those that have been proffered in this application).

A seven-year duration is requested.