



30 AUGUST 2022

Precision Built Limited

c/- Jonathan Quigley

Email: jonathan@precisionbuilt.co.nz

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Hamilton 3204
PO Box 9266
Hamilton 3240
New Zealand
64 (0)7 957 2727

HD2430 – Lake Whakamaru Private Plan Change – HAIL assessment

Dear Jonathan,

Thank you for the opportunity to provide you with a HAIL assessment to help with your proposed private plan change for 1861 Ongaroto Road, Kinleith (the site).

As part of the plan change, you have requested due diligence on the likelihood of soil contamination on site. We have completed a hazardous activities and industries list (HAIL) assessment for the site to identify whether HAIL activities have been or are being undertaken on the site. In doing so, this assessment determines whether the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) applies to the change in land use and any future development.

Site details

Site details are included in Table 1.

Table 1: Site details¹

Item	Description
Site address	1861 Ongaroto Road, Kinleith
Current legal descriptions	Lot 9 DP 425239
Zoning	Rural
Approximate site area	316,824 m ²
Current site use	Forestry
Proposed site uses	Residential
District Council	South Waikato District Council
Regional Council	Waikato Regional Council
Approximate elevation	230 m to 295 m above local datum

¹ South Waikato District Council, Intra Maps, accessed 22/08/22. <https://enterprise.mapimage.net/IntraMaps99/?configId=5ed685b3-86c1-43ba-92c6-17528e5f0ef3>



The site is located at 1861 Ongaroto Road, Kinleith. It is bounded by State Highway 30 to the north and east and a recreational area to the south and west. It is immediately surrounded by forestry land in all cardinal directions and the Waikato River to the south and west.

The majority of the site has been planted in trees and is being used as a forestry block. There is an access path along the southern and western site boundaries, which is part of the Waikato River Trail.

Historic aerial photos

We completed a review of historic² and recent³ aerial photos, dating back to 1940, to evaluate previous land uses and areas of interest. Aerial photos are provided in Appendix B.

Most of the site is an established forestry block in the earliest available aerial photo (1940), with vacant pasture located on the eastern portion of the site. It is bounded by forestry blocks to the north and south, vacant land to the north and east, and a road to the south. The Waikato River can be seen to the south of the site.

No significant changes can be seen onsite until 2019, where the trees on site have been harvested. The site has since been replanted.

Off-site, no significant changes can be seen until 1963, where a dam has been established resulting in the formation of Lake Whakamaru.

Geology and hydrogeology

The geologic map⁴ of the area indicates that the site is underlain by the Hinuera Formation, which is described as 'cross-bedded pumice sand, silt and gravel with interbedded peat'.

Lake Whakamaru is located to the south and west of the site and is within 10 m of the site at its closest point. The mouth of the Maraemanuka Stream is located approximately 1 km south-east of the site. Based on the topography of the site and immediately surrounding area, it is likely that groundwater flows south and west towards Lake Whakamaru.

According to Wells Aotearoa New Zealand⁵, there are 5 bores within 1 km of the site. Well depths ranged from 12 m to 121.90 m deep. The application of the bores nor depth to water was not available.

² Sourced from <http://retrolens.nz> and licensed by LINZ CC-BY. Accessed 25/07/22

³ Google Earth Pro

⁴ 1:250,000 Geological Map of New Zealand (QMAP). *New Zealand Geology Web Map*. GNS, 2013. <http://data.gns.cri.nz/geology/>. Accessed 22/08/22

⁵ Wells Aotearoa New Zealand, Maps, <https://wellsnz.teurukahika.nz/wells/map>. Accessed 22/08/22

Council records

We requested records from South Waikato District Council Intra Maps and Waikato Regional Council. We have included the Council records provided in Appendix C.

South Waikato District Council do not list the site in their online Intra Maps as being subject to HAIL activities.

Waikato Regional Council do not list the site in their land use information register as being subject to HAIL activities.

Because the available aerial images were adequate to evaluate the historic site use, we did not request property records.

Assessments and recommendations

Our assessment is that:

- no HAIL activities have been, or are being, undertaken on the site
- the NESCS does not apply to any proposed development

We recommend that:

- no further consideration is given to the NESCS for the proposed development
- this report is submitted to South Waikato District Council to support the private plan change

Limitations

This document does not include any assessment or consideration of potential health and safety issues under the Health and Safety Work Act 2015. HD Geo has relied upon information provided by the Client and other third parties to prepare this document, some of which has not been fully verified by HD Geo. This document may be transmitted, reproduced, or disseminated only in its entirety. This report has been prepared for our client, their professional advisers, and the relevant territorial and regional authorities for the purposes detailed above and may not be relied on by any other party for any other purposes.

From a technical perspective, the subsurface environment at the site may present substantial uncertainty. It is a heterogeneous, complex environment, in which small subsurface features or changes in geologic conditions can have substantial impacts on water, vapour, or chemical movement. HD Geo's professional opinions are based on its professional judgement, experience, and training. It is possible that testing and analysis might produce different results and/or different opinions. Should additional information become available, this report should be updated accordingly.

Certification

This report presents information from an environmental site investigation conducted by and under the oversight of a SQEP with contaminated land expertise, as required by the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health and who is a Certified Environmental Practitioner. Detailed qualifications are available upon request.



Paul Gibbins

Certified Environmental Practitioner, CEnvP #1410



Kind regards,



MATT MOORE

Geo Environmental Consultant
Matt@hdgeo.co.nz
Tel 027 701 9529

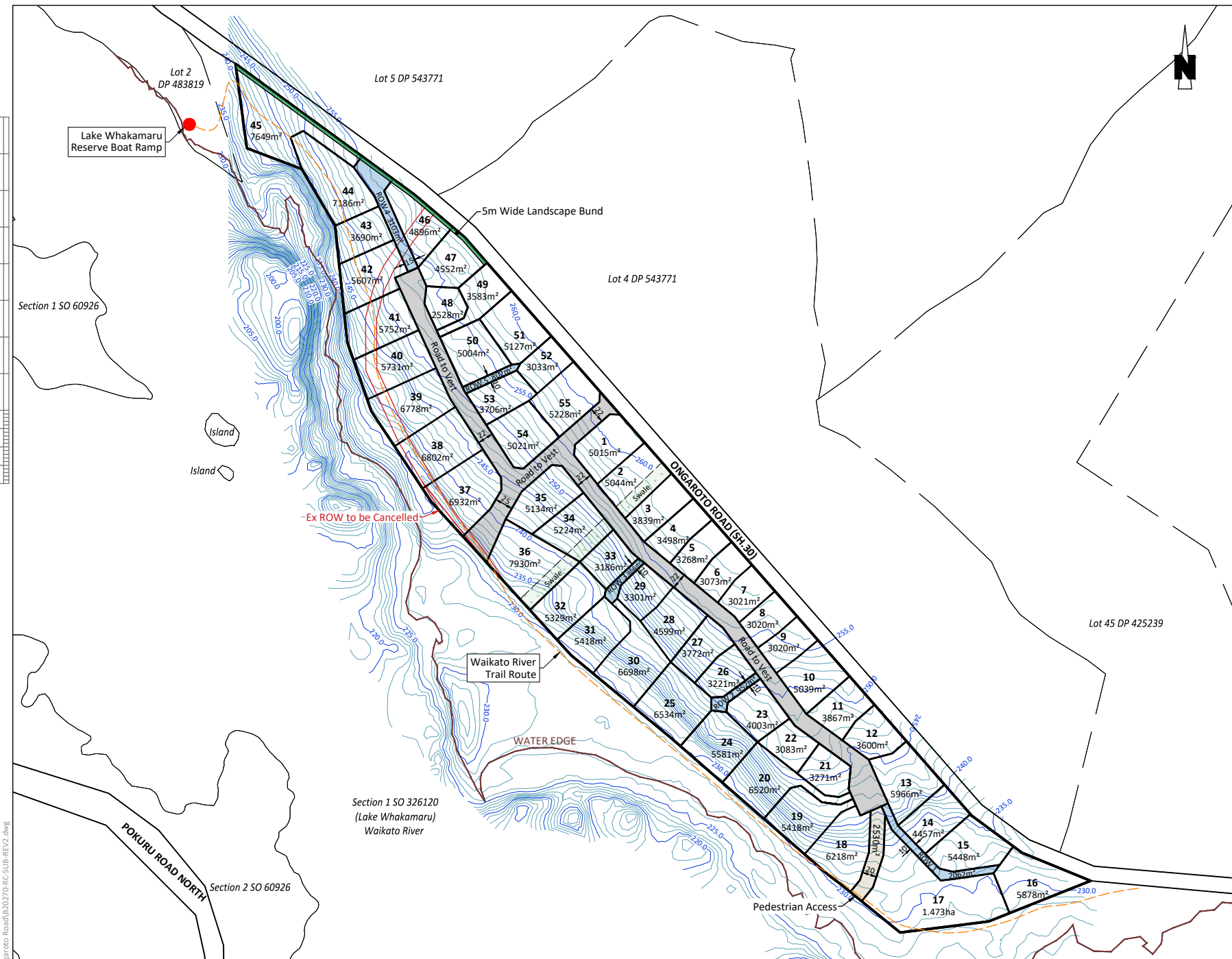


PAUL GIBBINS, CENVP

Senior Environmental Consultant
Paul@hdgeo.co.nz
Tel 022 155 8308

Attachments:

- Site development plan
- Historical aerial photos
- Council records



Applicant: Jonathan Quigley
Comprised In: RT: 499514
Local Authority: South Waikato District Council

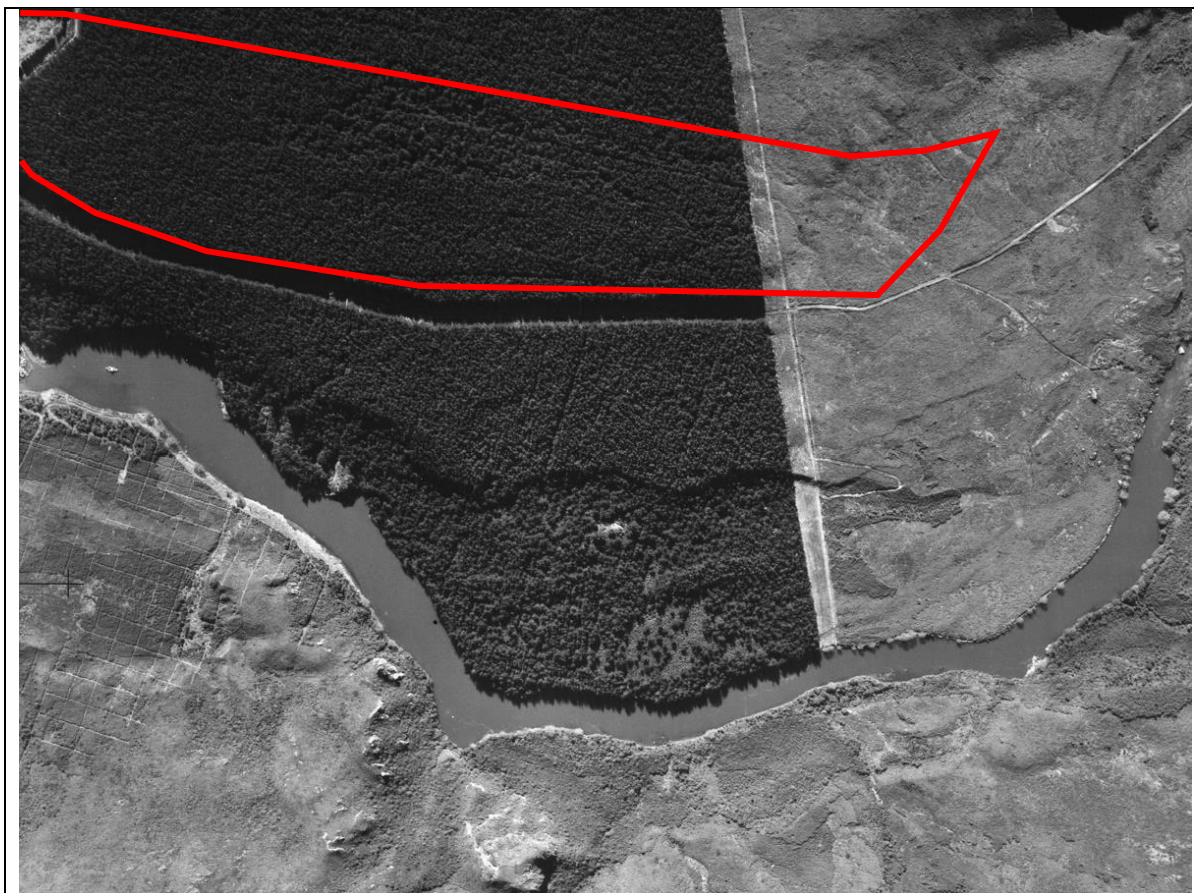
Total Area: 31.6824ha

Coordinate Datum: NZGD2000-Mt Eden Circuit
Height Datum: New Zealand Vertical Datum 2016
Major Contour Interval: 5.0m
Minor Contour Interval: 1.0m

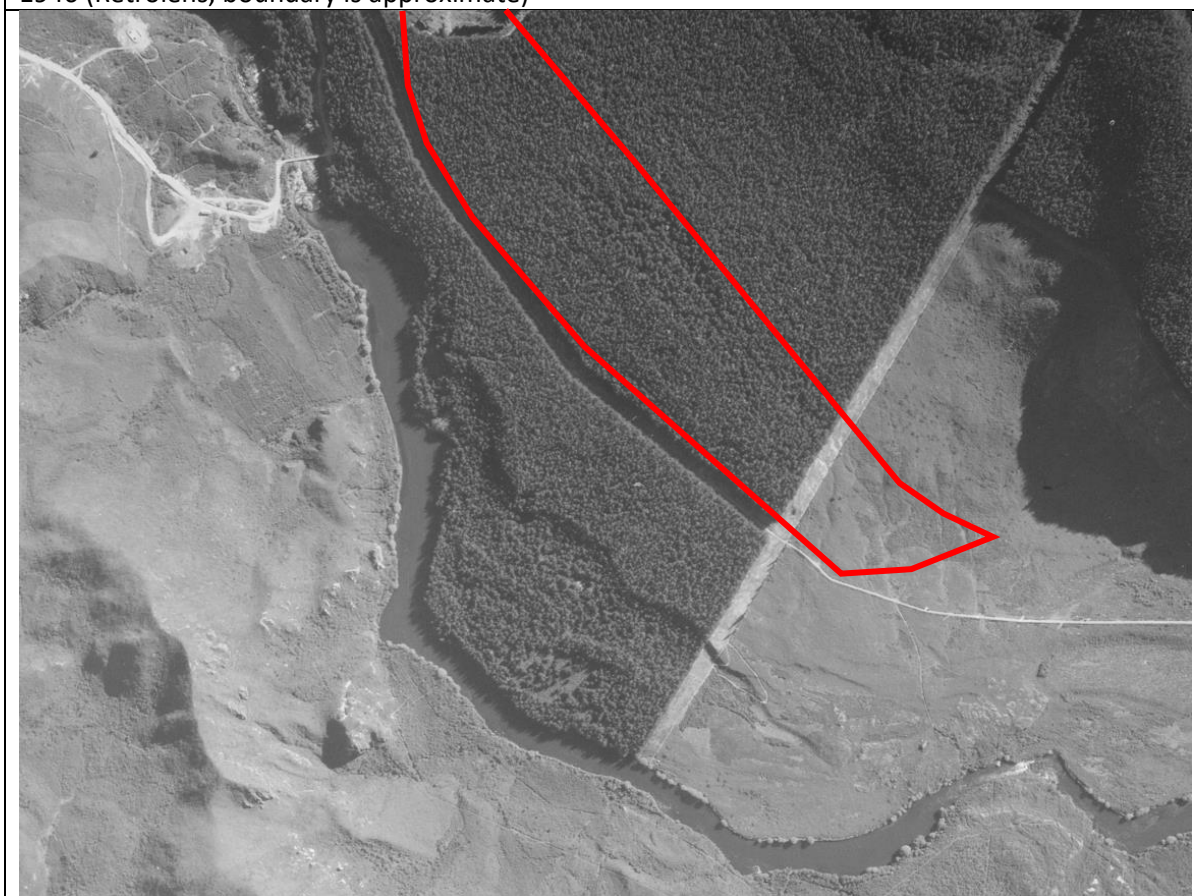
Total Lots = 55
Lots > 5000m² = 30
Lots < 5000m² = 25
Average Lot Size = 5000m²

- Notes:**
- Changes may occur to the layout of the proposal shown as a result of the Resource Consent Conditions.
 - Areas and dimensions on this plan may be subject to change following field survey.
 - The copyright and intellectual property rights for the information shown on this plan remain the property of CKL Surveys Ltd.
 - This plan has been prepared only for the purpose of illustrating an application for resource consent. It should not be used for any other purpose.

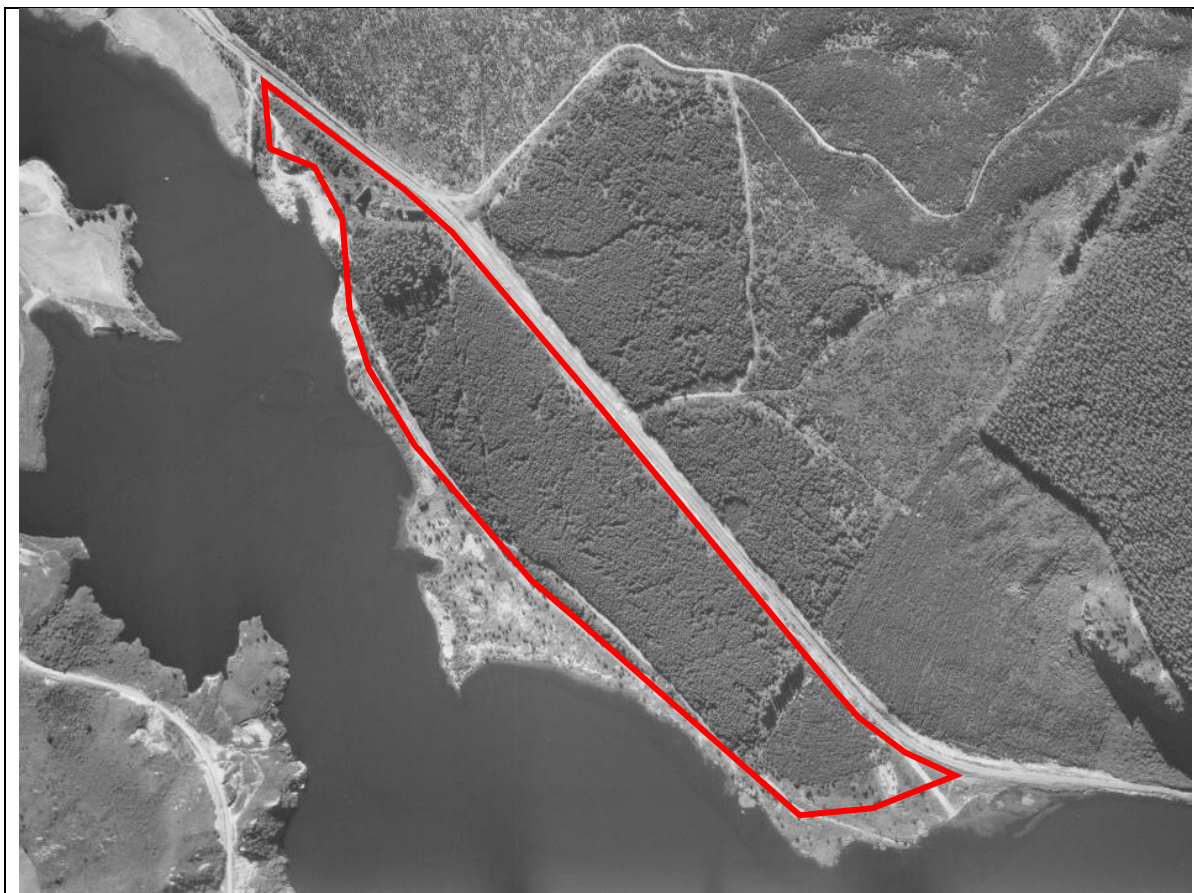
CONCEPT



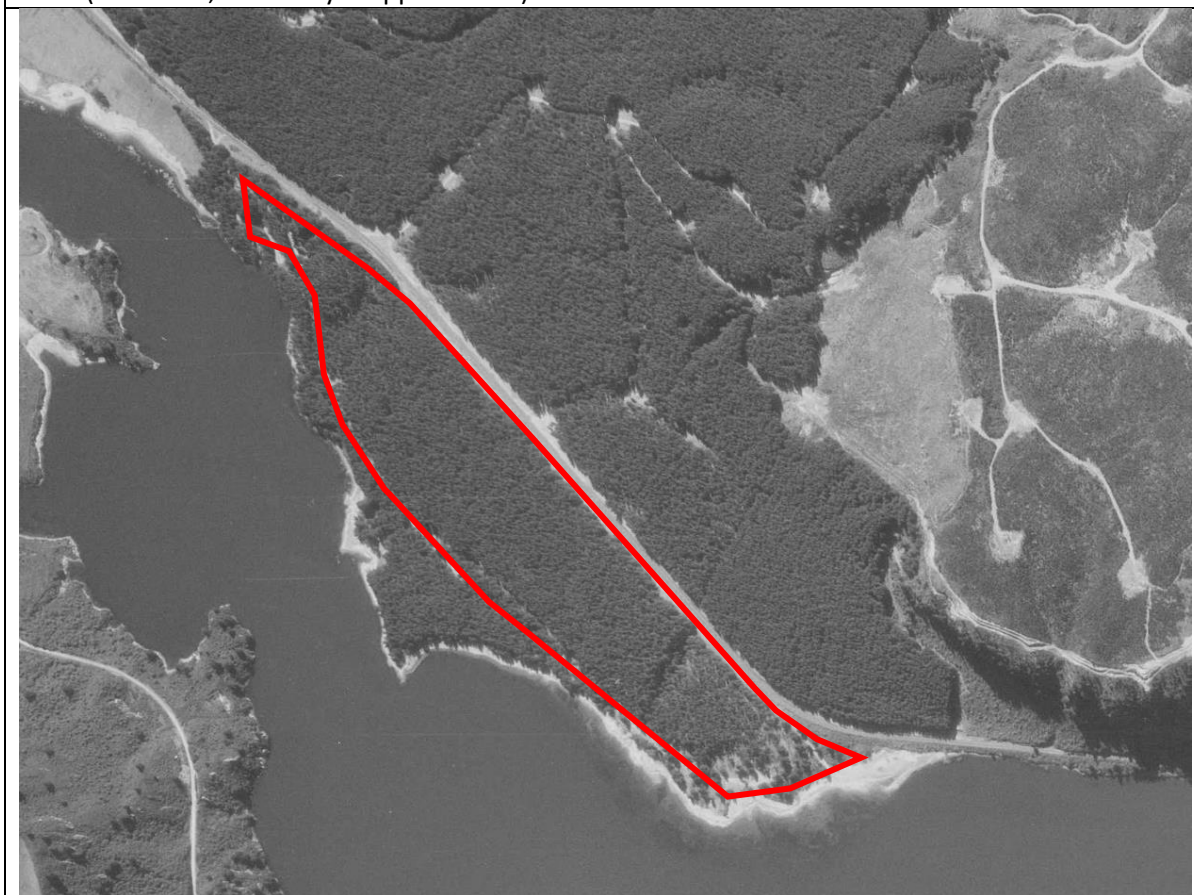
1946 (Retrolens, boundary is approximate)



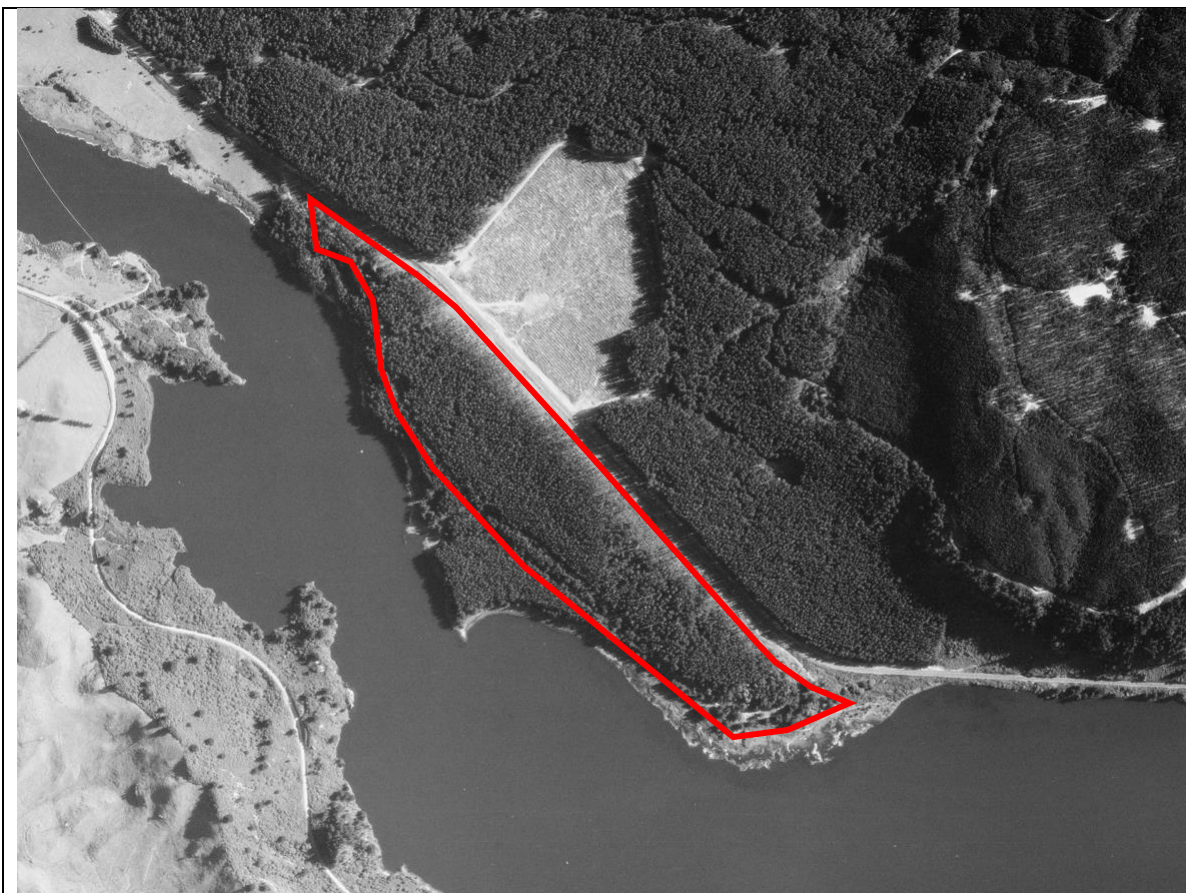
1950 (Retrolens, boundary is approximate)



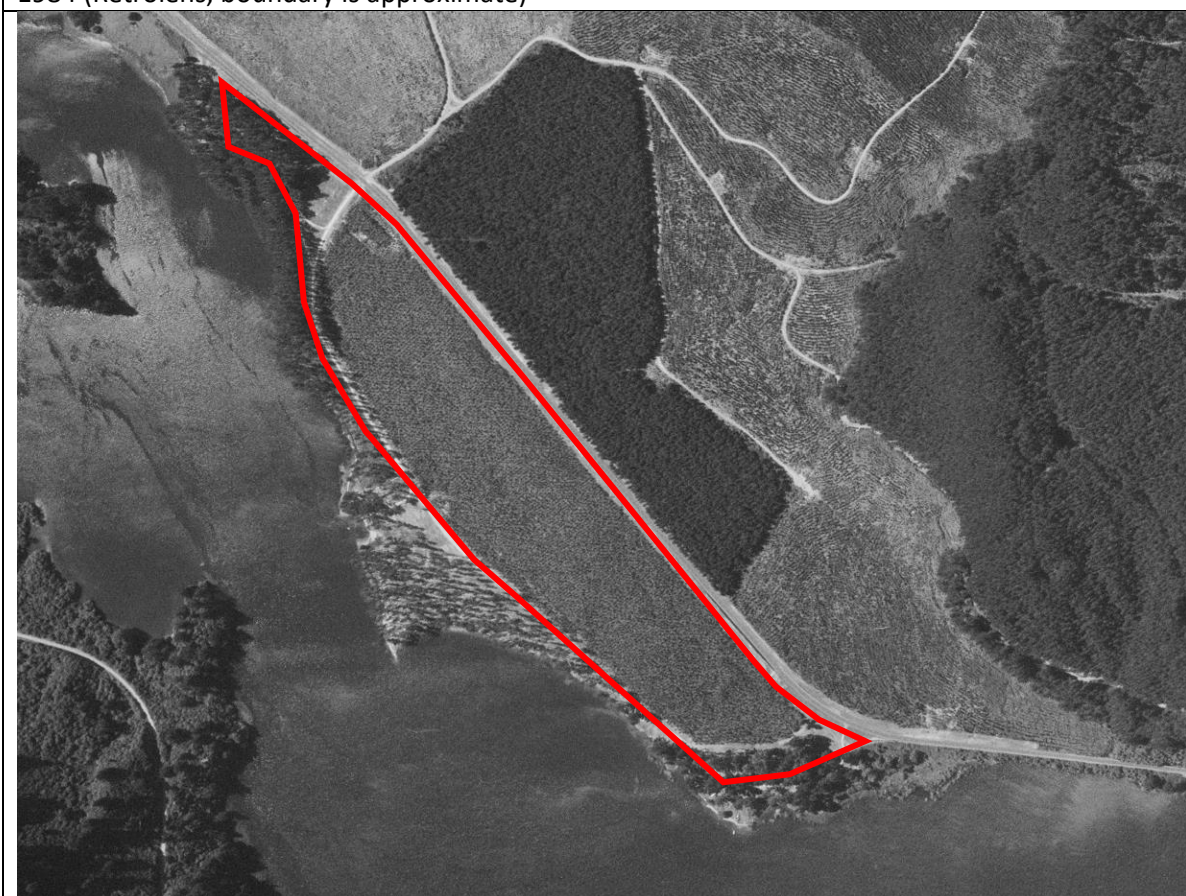
1963 (Retrolens, boundary is approximate)



1975 (Retrolens, boundary is approximate)



1984 (Retrolens, boundary is approximate)



1997 (Retrolens, boundary is approximate)



2012 (Google Earth Pro, boundary is approximate)



2021 (Google Earth Pro, boundary is approximate)

- Property

Property_Layer
- HAIL Point

HAIL Record Point
- HAIL Line

HAIL Record Line
- HAIL Polygon

HAIL Record Polygon
- Selected Land Use Site_(SLUS)_update
d_JUN2022

SOUTH_WAIKATO_SLUS_Point_ layer

SOUTH_WAIKATO_SLUS_Line_ Layer

SOUTH_WAIKATO_SLUS_Polyg on_Layer
- Hazardous Substances and Contaminat
ed Land

Subsidence_Properties

Contaminated_Properties

Removed_Contaminated_Propertie
- Noise affected properties

Noise
- Flood Areas

Flood_Areas

DESIGNED

HIGH

Historical

LOW

RURAL

all others
- Address Number

View_Address



Scale = 1:14163.660

- Property

 - Property_Layer
- HAIL Point

HAIL Record Point
- HAIL Line

HAIL Record Line
- HAIL Polygon

HAIL Record Polygon
- Selected Land Use Site (SLUS)_updated_JUN2022

 - SOUTH_WAIKATO_SLUS_Point_Layer
 - SOUTH_WAIKATO_SLUS_Line_Layer
 - SOUTH_WAIKATO_SLUS_Polygon_Layer
- Hazardous Substances and Contaminated Land

 - Subsidence_Properties
 - Contaminated_Properties
 - Removed_Contaminated_Properties
- Noise affected properties

 - Noise
- Flood Areas

Flood_Areas

 - DESIGNED
 - HIGH
 - Historical
 - LOW
 - RURAL
 - all others
- Address Number

View_Address



Scale = 1:1769.040

South Waikato District Council.

Matt Moore

From: Caitlin Holm <Caitlin.Holm@waikatoregion.govt.nz>
Sent: Monday, 29 August 2022 5:12 pm
To: Matt Moore
Subject: RE Land Use Information Register enquiry 1861 Ongaroto Road – SH 30, Kinleith (REQ188750) No SLUS

Dear Matt,

Thank you for your enquiry regarding information the Waikato Regional Council may hold relating to potential contamination at the property indicated below:

- **1861 Ongaroto Road – SH 30, Kinleith:** LOT 9 DP 425239 PT LOT 1 DP 24479 (VRN 05414/005/87)



Background: The Waikato Regional Council maintains a register of properties known to be contaminated on the basis of chemical measurements, or potentially contaminated on the basis of past land use. This register (called the Land Use Information Register) is still under development and should not be regarded as comprehensive. The 'potentially contaminated' category is gradually being compiled with reference to past or present land uses that have a greater than average chance of causing contamination, as outlined in the Ministry for the Environment's Hazardous Activities and Industries List (HAIL): <http://www.mfe.govt.nz/sites/default/files/hazards/contaminated-land/is-land-contaminated/hazardous-activities-industries-list.pdf>

This property:

- I can confirm that this property **does not** currently appear on the Land Use Information Register.

District Councils: Our records are not integrated with those of territorial authorities, so it would also be worth contacting the South Waikato District Council to complete your audit of Council records if you have not already done so. In general, information about known contaminated land will be included on a property LIM produced by the territorial authority.

Rural Land Considerations: Examples of sites that are "more likely than not" to have soil contamination (HAIL sites) include timber treatment activities, service stations and/or petroleum storage, panel beaters, spray painters, etc. Whilst pastoral farming is not included on this list, typical farming activities of horticulture, sheep dipping, chemical storage, petroleum storage and workshops are; but are more difficult to identify and may not be as well represented on the Land Use Information Register. Therefore, individuals interested in pastoral land may be interested in completing further investigations in accordance with Ministry for the Environment Guidelines prior to land purchase and/or development.

Additional Information: Please note that:

- Significant use of lead-based paint on buildings can, in some cases, pose a contamination risk; the use of lead-based paint is not recorded on the Land Use Information Register.
- Buildings in deteriorated or derelict condition which contain asbestos can result in asbestos fibres in soil; the use of asbestos in building materials is not recorded on the Land Use Information Register.
- The long term, frequent use of superphosphate fertilisers can potentially result in elevated levels of cadmium in soil; the use of superphosphate fertiliser is not recorded on the Land Use Information Register.
- We are not currently resourced to fully incorporate historic aerial photographs in our region-wide assessment of HAIL activities. A significant proportion of the Crown historical aerial image archive for the Waikato region is available to view free of charge at <http://retrolens.nz/>. We recommend this resource is consulted for any HAIL assessment.
- Due to the large volume of enquiries being received, we may not be able to respond to your enquiry as quickly as previously. We are resourced to meet **20 day** response times as per LGOIMA, but endeavour to respond more quickly when workload permits. If your enquiry is urgent, please note this first in your enquiry and we will do our best to assist.

Please feel free to contact me if you have any further queries on this matter. For any new enquiries or requests for information please continue to use the [Request for Service form](#) for 'Contaminated Land/HAIL.'

Regards,

Caitlin Holm | SCIENTIST - GEOTHERMAL AIR LAND ECOLOGY AND CONTAMINATION | Geothermal & Air, Land Ecology & Contamination, WAIKATO REGIONAL COUNCIL | Te Kaunihera ā Rohe o Waikato

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