## **Green Hydrogen Project**

## Archaeological Assessment of Effects

## Project Area: Kapuni, South Taranaki

Proposed Works: Wind Turbine and Power Cable Installation

### Commissioned by: Hiringa Energy Ltd

Author: Ivan Bruce. April 2021



Proposed wind turbine location, Kapuni (Image: Ivan Bruce, August 2020).

ARCHAEOLOGICAL RESOURCE MANAGEMENT 33 Scott Street/ Moturoa/ NEW PLYMOUTH (0274) 888215 itmustbesointeresting@xtra.co.nz

### **Executive Summary**

Hiringa Energy Ltd is proposing to develop a wind to hydrogen project, at Kapuni, South Taranaki. This assessment was undertaken in order to advise whether this project will affect archaeological sites and to instigate any Heritage New Zealand Pouhere Taonga (HNZPT) authority process required in this case.

The project is proposed on pastureland currently grazed by a dairy herds. There is no historic record of traditional Maori occupation at this specific location and the property contains no recorded archaeological sites. No previously unrecorded archaeological sites were noted during a field survey of the project area. The likelihood of recovering in-situ archaeological evidence on the property has been assessed as low.

At this time there is no requirement for this development to proceed under an archaeological authority from HNZPT at this time. It is recommended that all works are undertaken under an archaeological discovery protocol. This report proposes subsurface testing for the purposes of providing some assurance to all parties that unrecorded archaeological sites do not exist in the affected area.

### 1. Introduction

1.1 This archaeological assessment was undertaken in order to advise Hiringa Energy Ltd on the archaeological and historic record of the project area, and to advise of any likelihood that the development of this project will affect archaeological sites.

1.2 The assessment is based on desktop research and pedestrian survey.

1.3 Affected property appellations are:

### Wind farm site

SECT 66 SURD WAIMATE BLOCK III

SECT 67 SURD WAIMATE BLOCK III

SECT 68 SURD WAIMATE BLOCK III

**Cable installation route** 

NGATI MANUHIAKAI 21 A BLOCK

NGATI MANUHIAKAI 21 B BLOCK

PART SECTION 44 BLOCK XV KAUPOKONUI SD

LOT 2 DP 499347

PART LOT 1 DP 13121

1.4 The properties were part of an area originally set aside as Native Reserve (64) following the Waimate Survey 1878. The property containing the proposed wind farm site is currently managed by Parininihi ki Waitotara Incorporation (PKW). The power cable route from the wind farm to the Ballance site will cross farmland managed by the Luscombe family. Hydrogen will be developed within the footprint of the existing Ballance plant.

1.5 The project will require earthworks for the installation of the proposed wind turbines; access track upgrades; and cable trenching.

1.6 The archaeological assessment was conducted specifically to identify and record archaeological evidence.

1.7 While some aspects of traditional Maori history relating to the area is discussed in the background section of this report, statements describing the cultural significance of this location to Maori are considered outside the scope of this assessment and the appropriate

representatives from Ngati Tu, Ngati Manuhiakai Hapu and the Te Korowai o Ngaruahine Trust should be contacted for their views in these matters.

1.8 This assessment of the wind farm site was undertaken by Ivan Bruce in August 2020 followed by a subsequent field visit to assess the route of the proposed power cable route in April 2021. The following report outlines the results.

### 2. Statutory requirements

2.1 There are two pieces of legislation in New Zealand that control work affecting archaeological sites. These are the *Heritage New Zealand Pouhere Taonga* Act 2014 (HNZPTA) and the *Resource Management Act* 1991 (RMA)

2.2 HNZPT administers the HNZPTA. It contains a consent (authority) process for any work affecting archaeological sites, where an archaeological site is defined as:

Any place in New Zealand, including any building or structure (or part of a building or structure), that

- a. Was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
- b. Provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- c. Includes a site for which a declaration is made under section 43(1)

2.3 Any person who intends carrying out work that may modify or destroy an archaeological site, must first obtain an authority from HNZPT. The process applies to sites on land of all tenure including public, private and designated land. The HNZPTA contains penalties for unauthorised site damage or destruction.

2.4 The archaeological authority process applies to all archaeological sites, regardless of whether:

• The site is recorded in the New Zealand Archaeological Association Site Recording Scheme or included in the Heritage New Zealand List.

- The site only becomes known about as a result of ground disturbance, and/ or
- The activity is permitted under a district or regional plan, or a resource or building consent has been granted
- 2.5 The heritage places assessed in this report are prehistoric and historic archaeological

sites as defined under the HNZPTA.

2.6 The RMA requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6f).

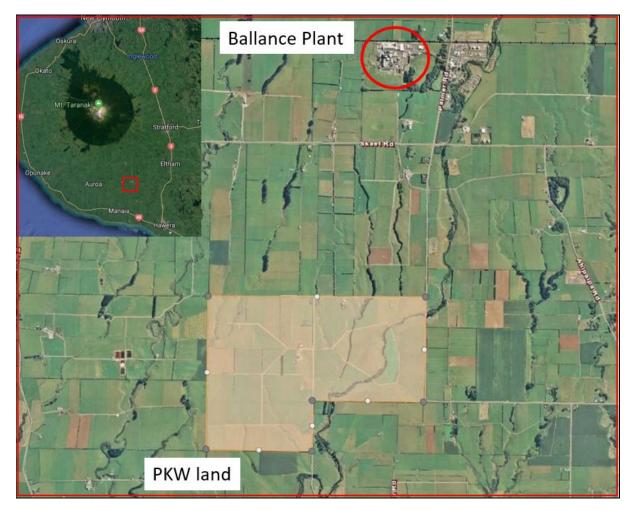


Figure 1: Project location. Image supplied by Hiringa Energy.

### 3. Physical environment and setting

3.1 Located 8km inland from the Taranaki Coast, the project area is situated between the Waiokura and Kapuni Streams. Access to the project area is gained via the network of existing farm races from Kokiri Road.

3.2 The project area is located on grazed dairy pasture land, which had been extensively ploughed for farming purposes. Small streams have been culverted and wetland areas drained over the past 140 years by farm development.

### 4. Resources and limitations

4.1 This assessment includes a review of the NZAA site recording scheme (Archsite 2021); archival material; land plans; historic literature; and a pedestrian survey of project area.

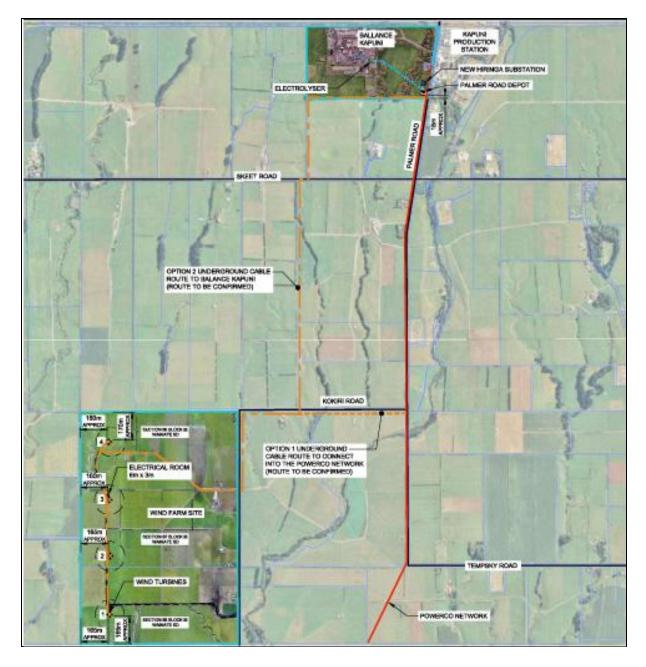


Figure 2: Proposed Hiringa wind to hydrogen development, showing locations turbines and access tracks. Image supplied by BTW Company Ltd.

4.2 The assessment is based on background research and non invasive field survey. No remote sensing was undertaken during this assessment. Stratigraphic profiles were observed in erosion faces when presented in the field.

### 5. **Project outline - Scope of earthworks**

5.1. This project involves the construction of up to four wind turbines along the western boundary of the three land parcels on which the wind farm is proposed.

5.2 Earthworks will be required for the installation of the turbines, including the removal of topsoil and sub soils for the installation of the turbine foundations and crane pads.

5.3 Access to the turbine locations will largely follow existing farm race networks. However, it can be expected that upgrades to the surfaces and widening of the races will be required in places.

5.4 Energy generated by the wind farm will be linked to the Ballance Agri-Nutrients Kapuni Plant by a buried cable, which will require trenching for installation. The cable is proposed to run across farmland to Kokiri Road, where the preferred option is to run alongside Palmer Road before entering the southeast corner the Ballance site. A second option is to run the cable north from Kokiri Road to the southwest corner of the Ballance site. Both options are taken in to account in this assessment.

5.5 Hydrogen infrastructure will constructed within the already developed area of the Ballance Site.

### 6. Historic record

6.1 To my knowledge, there are no historic images, maps, or land plans which specifically indicate prehistoric or historic Maori occupation within the project area. Furthermore, no evidence was found that indicates 19th Century European sites would be affected by this project. The earliest land plans available place the project area approximately 1km within the bush line.

6.2 The survey of the Waimate plains commenced in 1878 and the earliest land plans from this era indicate that the bush line circa 1878 stood approximately 8km inland from the coast. A number of Maori papakainga were situated near the edge of this bush line at this time, the closest recorded being Okiawa, situated 3km to the south of the project area, near the present site of Te Aroha Marae.

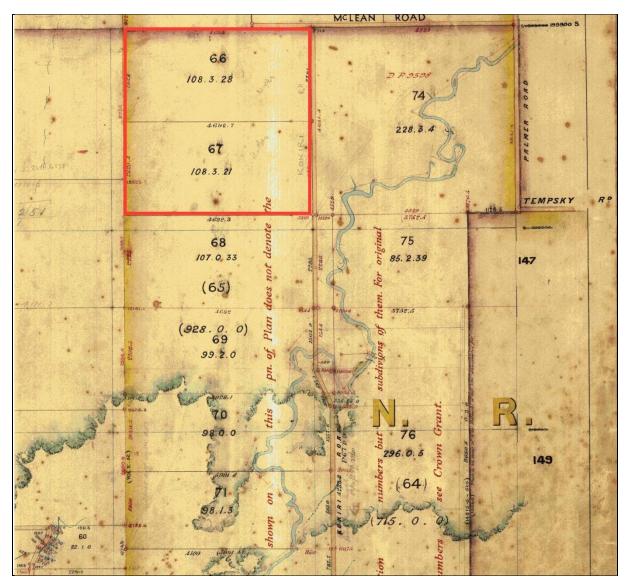


Figure 3: Early Survey of the Waimate District SO 44/5, showing the edge of the bush line approximately 1km south of the project area (Sections 66 and 67 - outlined in red).

6.3 Prior to the survey of the Waimate plains cartographic material relating to this area is limited to generalised sketch plans and campaign maps showing the approximate location of papakainga and pa; the locations of known Maori trails; and the relative extent of the bush line. These locations were generally recorded as they became the focus of military conflict during the later phases of the Taranaki Wars 1866 - 1869.

6.4 Several of these papakainga are located in the general vicinity of the project, but none were situated within 3km. Perhaps the most well known of these is Te Ngutu O Te Manu, now a historic reserve located south of the intersection of Skeet and Ahipaipa Road, 3km north east of the project area. The village of Pungarehu was situated 3km to the east, near the site of the Tempsky Road dairy factory. Te Maru was situated within the bush between Pungarehu and Te Ngutu, and Te Ruaruru is the most inland of these bush papakainga situated north of Te Ngutu. All of these villages were attacked by Colonial troops during the Taranaki Wars.

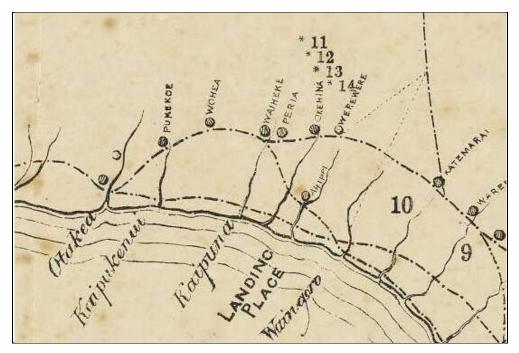


Figure 4: An example of detail from an early campaign sketch (circa 1865). Numbers 11, 12, 13, and 14 refer to the locations of Te Ruaruru, Te Ngutu O Te Manu, Te Maru, and Pungarehu in that order (discussed in Section 6.4).

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27.0 20.0 0	72 73		(-1 KOHITI Katatauru 90 91 92

Figure 5: Detail from Waimate Survey District (Gordon 1903) indicating the location of Te Pungarehu and Okiawa in relation to Sections 66 and 67.

6.5 None of these locations are recorded on the NZAA site record due to the absence of field evidence. My understanding of these site locations is based on historic land plans, campaign maps and battlefield reports from Taranaki Wars. I raise their location in this report to indicate that, as best I can discern, none of these unrecorded sites are likely to be situated within the project area.

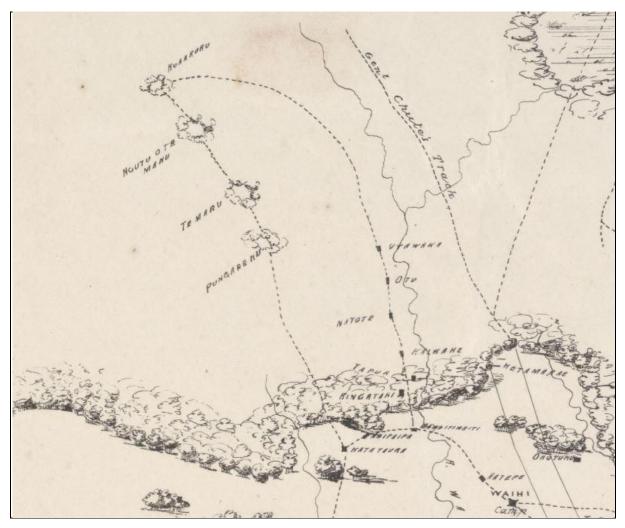
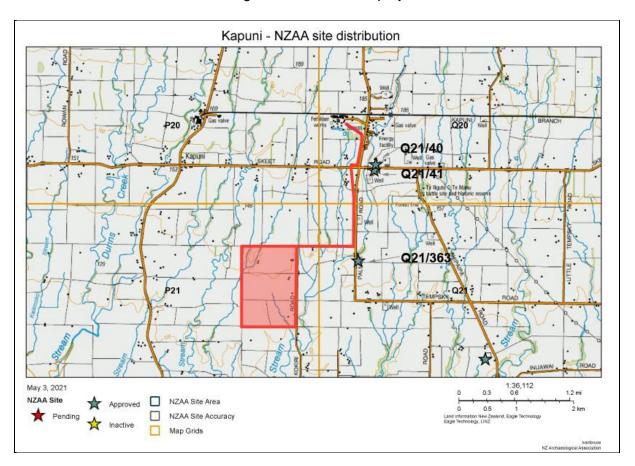


Figure 6: Detail from another campaign map (circa 1868) indicating the location of Maori papakainga outlined in report. Note that the papakainga are sited in clearings within the bush line to north east of the project area.

### 7. Archaeological background

7.1 The New Zealand Archaeological Association maintains the only comprehensive database of archaeological sites in New Zealand. The NZAA record shows a prehistoric Maori settlement pattern in which the majority of the archaeological sites in the Taranaki region have been recorded on the coastal fringe, with archaeological sites becoming increasingly less common inland of the coast. This observed settlement pattern is also



generally representative of the Waimate District in which the project is situated. Currently, this database records no archaeological sites within the project area.

Figure 6: NZAA site distribution (Archsite 2021). Project area shown in red, Archaeological sites shown as blue stars..

7.2 A review of the NZAA site recording scheme indicates that the nearest archaeological site to the project area are European homestead sites recorded on the eastern side of Palmer Road. These sites were noted as part of a wider survey of a proposed Kupe pipeline undertaken by Geometria in 2005 and recorded on the NZAA site recording scheme as the sites could potentially predate 1900. I am not aware of any record of archaeological investigation at these sites following their field recording. None will be affected by the Hiringa project.

Q19/40. European homestead, potentially late 19th Century. Bricks and earthworks noted in the field.

Q21/41. European homestead, potentially late 19th Century. Bricks and earthworks noted in the field.

Q21/363. Remains of an historic homestead. Adjacent to Palmer Road. A well is still clearly visible on eastern side of pump shed (2005).

7.3 The closest sites of prehistoric Maori provenance recorded by the NZAA are 2 small pa, P21/11 and P21/12, located some distance south of the project area.

P21/11. A small single unit platform defended by and outer ditch, located 4.5km south west of the project area. Situated on the left bank of the Kaupokonui River. Name of site unrecorded.

P21/12. A small single unit platform defended by outer ditch and banks, located 4.5km now in-filled. Located 3.5km south of the project area. Situated on the left bank of the Kapuni Stream. Name of site unrecorded.

7.4 The Waimate District was subject to a relatively comprehensive aerial archaeological survey undertaken by Alistair Buist during the early 1960s, in which most Maori pa sites with visible earthwork defences were identified, first by aerial review and then supported by field visits. A significant number of Buist's sites were also revisited; records updated; and further sites added by this author during the NZAA site recording scheme upgrade in 2006 and during the Kapuni Seismic Survey of 2015. Project specific field surveys have also been completed by Geometria (2005) resulting in the recording of new archaeological sites in the Kapuni area, all relating to 19th Century European homesteads.

7.5 While there will be an obvious bias in the data towards Maori pa due to the visibility of their earthworks, and European homesteads that can be identified on historic land plans and surviving field evidence, it is fair to say that the archaeological record of the Kapuni areas is comprehensive and gaps in the record are a result of an absence of supporting field evidence or a lack of historic information rather than oversight.

### 8. Survey Results

8.1 No archaeological evidence of human occupation predating 1900 was noted during the pedestrian survey of the project area.

8.2 A combination of factors means that the likelihood of recovering archaeological evidence during the project earthworks is assessed as low. These factors include prior land modification through drainage, re-contouring, ploughing and industrial development; absence of surface archaeological evidence; the distance of the project area from the former bush line; the distance from recorded archaeological sites; and the general lack of archival

evidence pointing to Maori occupation specifically within the project area.

### 9. Conclusion and recommendations

9.1 No archaeological sites will be affected by the project and I consider it unlikely that unrecorded archaeological sites will be encountered during these works. Consequently there is no requirement for an authority from the HNZPT with regard to the provisions of the HNZPTA to undertake earthworks involved in this project and an application for an authority is not recommended.

9.2 All earthworks involved with this project should be undertaken under the Archaeological Discovery Protocol (ADP), appended to this report.

9.3 However I accept there are limits to what an archaeological research of effects can be expected to demonstrate without some form of subsurface testing. Historical records can have "gaps", and may not necessarily record Maori oral traditions pertaining to Maori land use in the project area, especially during the period prior to European contact. Furthermore, archaeological survey is limited to the recording of visible field evidence; and given the history of ploughing and pastoral farming at this location the likelihood of recovering field evidence is significantly diminished. It understandable for tangata whenua to have concerns for the potential of unrecorded archaeological sites at these locations.

9.4 If it would further help assure tangata whenua of low risk of subsurface archaeological finds, at some stage prior to the commencement of project earthworks, test excavations involving the controlled removal of topsoil from the wind turbine foundations and crane pads could be undertaken in an exploratory manner.

9.5 This work could be completed under the supervision of the project archaeologist working alongside representatives from the Ngati Tu, Ngati Manuhiakai Hapu and the Te Korowai o Ngaruahine Trust.

9.6 Due to the low likelihood of recovery of archaeological sites as assessed in this report, this activity could progress without an archaeological authority from HNZPT and would be managed in consultation with Hiringa, the project archaeologist and representatives from the Ngati Tu, Ngati Manuhiakai Hapu and the Te Korowai o Ngaruahine Trust.

9.7 In the event that archaeological material is recovered during these investigations, then all work in the vicinity of the find must cease and the ADP appended to this report must be followed.

9.8 It is my considered opinion that if conditions of the ADP are followed then Hiringa Energy Ltd will have recognised and provided for the protection of historic heritage from inappropriate subdivision, use and development as outlined in section 6f of the RMA.

### 10. References

### 10.1 Plans and maps

Plan of the Waimate Survey District 1893.

Plan of the Kaupokonui Survey District 1893 and 1903.

SO 44/5.

So 21/15.

Sketch of the Patea district shewing military posts and native clearings (Circa 1868).

Sketch line of the country between Wanganui and Taranaki, showing the relative position to Auckland, Waikato & Hawke's Bay / G. Pulman, lithographer (Circa 1865).

### 10.2 Websites

http://www.archsite.org.nz. Accessed August 2020

### 11. Archaeological Discovery Protocol

This protocol will apply to the unexpected recovery of artefacts or archaeological material encountered during earthworks undertaken as part of this project. In the event that archaeological material is encountered during this project the archaeological evidence will most likely relate to prehistoric Maori occupation. Such evidence is expected to take the form of shell; bone; charcoal or cracked rock; artefacts including intact or partial stone implements; flaked stone; and obsidian; or in-filled pits and/or earthworks.

# PROCEDURES TO BE FOLLOWED IN THE EVENT OF UNCOVERING ARCHAEOLOGICAL SITES

The following procedure will be adopted if archaeological evidence is discovered, or are reasonably suspected to have been discovered during earthworks involved in this project.

### 1. CEASE WORK

If a contractor observes potential archaeological material or artefacts, the contractor must cease works.

The project supervisor should be called to the location of the find.

Construction work at the site will cease in the area of the discovery, for a reasonable period of time, to allow a site inspection by a qualified archaeologist.

### 2. CONTACT RELEVANT PARTIES

The project supervisor will contact the project archaeologist to confirm the find.

The project archaeologist must inform the HNZPT regional archaeologist as soon as a find is confirmed.

The relevant lwi representatives should be advised of the find at this time, if not prior.

### 3. SECURE THE SITE

The site must be secured in a way that protects the site as far as possible from further damage. Temporary fencing with a 5m buffer around the find is recommended.

### IF KOIWI TANGATA/HUMAN REMAINS ARE SUSPECTED/DISCOVERED

If koiwi tangata (human remains) are encountered during earthworks or erosion, no further modification of the site concerned shall occur until the project archaeologist, Tangata Whenua, HNZPT and the NZ Police have been advised and their responses received.

### 4. **RE-COMMENCE WORKS**

The conditions of any authority under the *Heritage New Zealand Pouhere Taonga Act 2014*, any resource consent under the *Resource Management Act 1991*, *Protected Objects Act 1975*, *Coroners Act 2006*, or any equivalent replacement legislation that may result from an archaeological discovery, are to be observed.

Kaumatua will be given the opportunity to conduct karakia and such other religious or cultural ceremonies, as required.

Earthworks activity on-site can recommence as soon as the archaeologist and other relevant parties have given approval (this may include the HNZPT, local lwi and the New Zealand Police, depending on their involvement).

Works may recommence in another area on-site away from the find at the discretion of the project archaeologist.

#### Appendix 12.

Relevant NZAA site record forms (Sites referenced in report). 12.1

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

Site Record Form	NZAA SITE NUMBER: P21/11 SITE TYPE: Pa SITE NAME(s): DATE RECORDED:
SITE COORDINATES (NZTM) Easting: 1695157 Northin	ng: 5624797 Source: On Screen
IMPERIAL SITE NUMBER: N129/128 METRIC S	ITE NUMBER: P21/11
P21	
Scale 1.2,000	Land Information New Zealand, Eagle Technology
Finding aids to the location of the site North-west of Manaia. On the east bank of the Kapuni River; approxi Road. Approached across farm land from Normanby Road.	mately 2.2 km north of the south bend of Normanby
Brief description Small cliff pa. Site consists of a single platform surrounded on three on the platform. The fourth side is defended by a natural bluff.	sides by a ditch and outer bank, with a low eroded bank
Recorded features Bank (earth), Ditch, Platform	
Other sites associated with this site	

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26/08/2020

1 of 4

SITE RECORD INVENTORY

NZAA SITE NUMBER: P21/11

Supporting documentation held in ArchSite

		SITE NUMBER 129/128
	Map number N129 HAWERA Grid reference 69035% Sq N13	SITE TYPE PA
Ι.	Aids to relocation of site	169000 N 335400
, ,	Lices on the east ban mile and a half grid north of the south be of the town of Manaia South Taranaki. App from the Normanby Road.	k of the Kapuni River about a nd of the Normanby Road, north-west roached across the farm lands
2.	State of site; possibility of damage or destruction	
	In fair state of preservation but excavated for soil.	t part of the ditch has been
3.	Owner Ten	ant
	Address Multiple Maori owners. Add	ress
_	Attitude Attit	lude
4.	Name of site	
	Source of name	
5.	Date recorded 4.11.61 Details of inves	tigation; methods and equipment used
	Visit to site with tape and map ar	d two three dogs.
•		
6.	Aerial photograph numbers 129/1 mosaic	Site shows: clearly/bodfy/Koffoffall
7.	Reported by File	keeper
	A.G.Buist,	
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26/08/2020 3 of 4

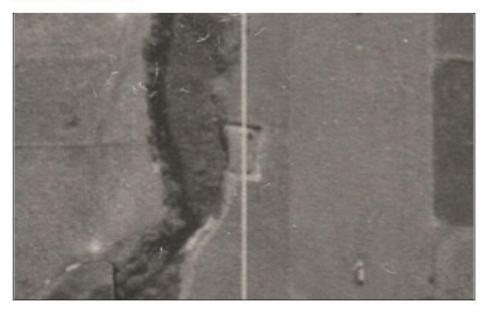
		11.1		SIT	E NUMBER	
DE	SCRIPTION	RECORD FO	RM			129/128
	Map number Map name Grid reference	N 129 HAWERA 690356	Sq N13	SITI	E TYPE	РА
				<u>, 17 - 17 - 17</u>		
ge la bu th of by Th ha th	the Kapuni cological cu und. The si leb line. F le river the level flat The s a ditch on te fourth si us an irregu e grass may Le Wi The di	River. The t and is sep te probably or some dist re are isola land streac ite consists d outer bank de is the na lar surface obscure sha ngth : infi: dth : 45ft tch is 20ft	bluff is pos arated from lay on the e ance downstr- ted circular hing to the off a single ,with a low tural bluff but no clear llow surface 96ft. - 55ft wide and some	aibly an old the river by dge of or jus eam on the ed surface pits east of the r platform sur eroded bank some fifty fe pit outlines features.	river terrad a short stre t within the ge of this t . There is iver and ter rounded on t on the platf et high. The , alyhough t	tch of flat original errace above a large expanse race. hree sides orm as well. platform he length of ts of it have
be	en eroded b	y the remova	l of soil and	i the formati	on of an ens	ilage pit.
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26/08/2020 4 of 4

Site P21/11 - Additional Information

Ivan Bruce - December 2015



P21/11. Pa site. Aerial photograph 1956.



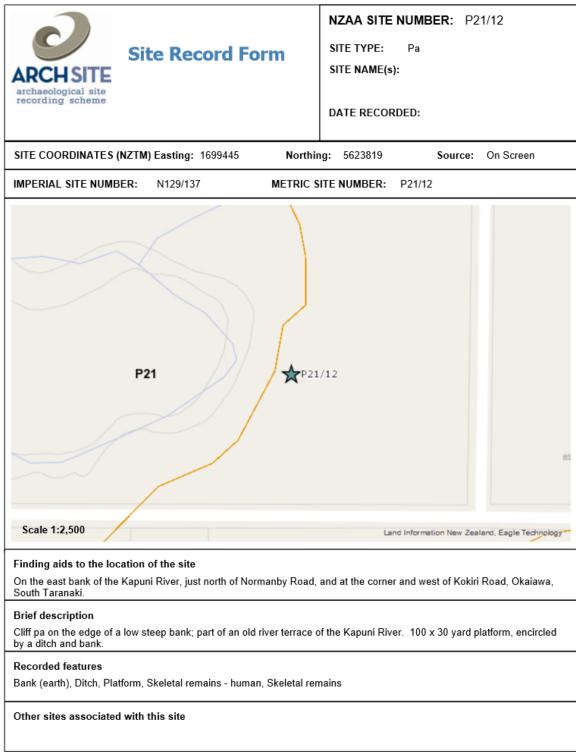
P21/11. Aerial photograph 2015



The pa can identified from a distance across the farm paddocks by the stand of pine trees planted on the site. Photo taken looking north from paddocks accessed by Normanby Road. (Image: Ivan Bruce 2015)



Northeast corner of the defensive ditch, now fenced off from the farmland. Rank grass and boxthorn generally obscure the site.



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26/08/2020 1 of 4

SITE RECORD HISTORY	NZAA SITE NUMBER: P21/12
Site description Updated 08/03/2016 (Field visit), submitted by ivanbruce, visi Grid reference (E1699445 / N5623819)	ted 09/12/2015 by Bruce, Ivan
No clear surface evidence remains. Very clear in aerial photog including the pa, have now been ploughed away. The site is to paddock. Iwi representatives visiting the site with me were awa during earthworks to remove trees from the riverbank by farme given following review of aerial photography.	day marked by a single cabbage tree standing in the are that Ko-iwi had been recovered from the site recently,
Condition of the site	
Updated 08/03/2016 (Field visit), submitted by ivanbruce, visit	ted 09/12/2015 by Bruce, Ivan
No surface evidence, ploughed flat.	
Statement of condition	
Updated: 10/05/2016, Visited: 09/12/2015 - Below surface - Se likely to be subsurface material present. Note that this is different	
Current land use:	
Updated: 10/05/2016, Visited: 09/12/2015 - Grazing	
Threats:	
Updated: 10/05/2016, Visited: 09/12/2015 - Forestry operation	is, Ploughing/ cultivation

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26/08/2020 2 of 4

SITE RECORD INVENTORY

NZAA SITE NUMBER: P21/12

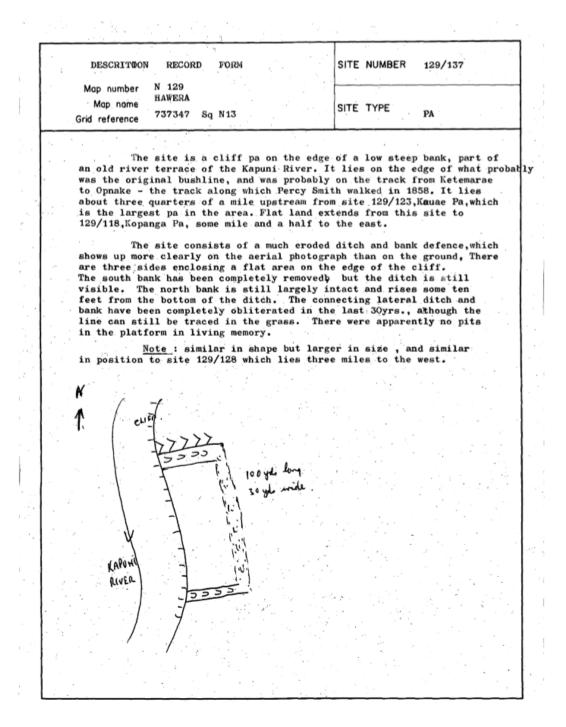
Supporting documentation held in ArchSite

	SITE REFERENCE FORM	SITE NUMBER 129/137
-	Map number N129 Map name HAWERA Grid reference 737347 Sq N13	SITE TYPE PA
I,	Aids to relocation of site	173700 N336500
	On the east bank of the Kapuni riv Road, and at the corner of the Kokiri Road, Of Approached from the Normanby road, some 200yd	kaiawa, South Taranki.
		·
2.	State of site; possibility of damage or destruction	
	Almost completely destroyed by filling	and remaoval of the ditches
	and banks.	
3.	Owner Mr S Winters, Tenant Address Normanby Rd., Address Manaia,	Ditto
<u>,</u> 2.	Attitude Co-operative, Attitude	
4.	Name of site Source of name	
5.	Date recorded 17.4.62 Details of investigation	on; methods and equipment used
	Visit to site with map, aerial mosaic	
. **		
6.	Aerial photograph numbers 129/1 mosaic.	Site shows: clearly/badly/not_at_al
7.	Reported by Filekeepe	
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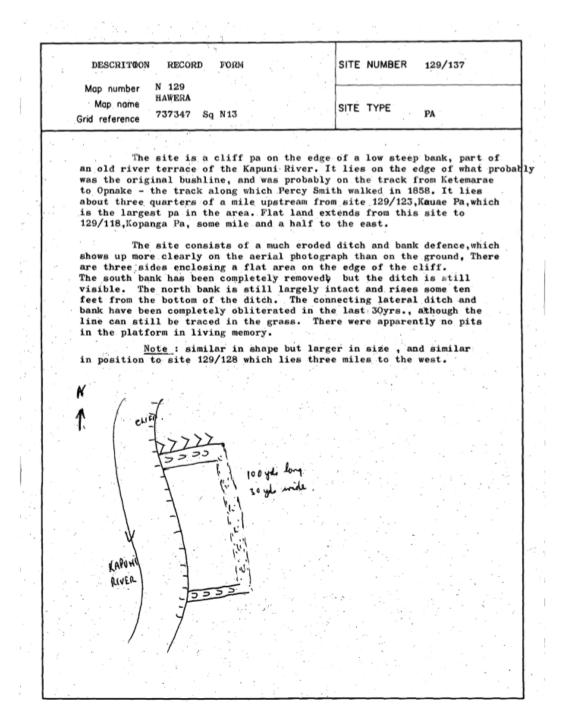
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3 of 4



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26/08/2020 4 of 4

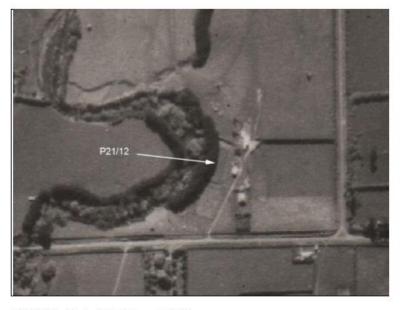


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26/08/2020 4 of 4

Site P21/12 - Additional Information

Ivan Bruce - December 2015



P21/12. Pa site. Aerial photograph 1956.



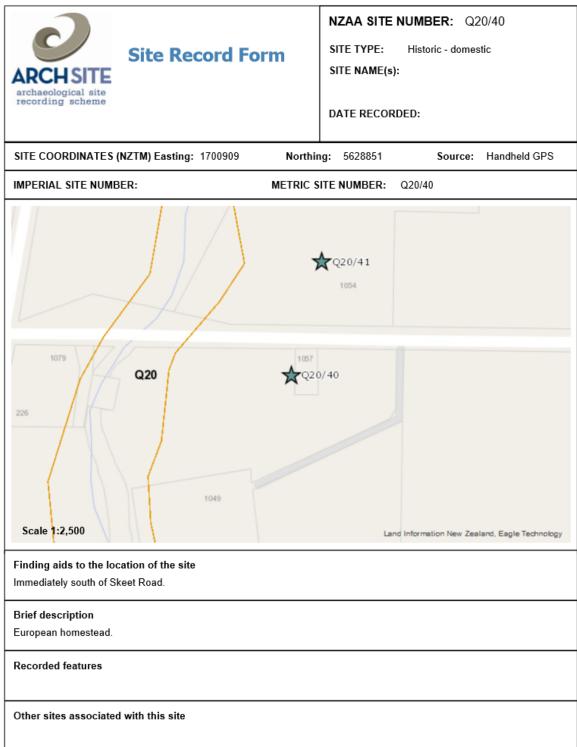
P21/12. Modern aerial image. Taranaki regional explorer. Accessed 2016



P21/12. Lone cabbage tree in paddock marks the approximate location of the northern edge of the pa site, now completely ploughed out (Image: Ivan Bruce 2015)



P21/12. photo taken looking north from the northern end of the pa. Kapuni Stream to the west left of shot. Representatives from Ngati Manuhiakai Hapu inform me that Ko-Iwi have been recovered from this area recently (Image: Ivan Bruce 2006).



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03/05/2021 1 of 3

### HIRINGA ENERGY GREEN HYDROGEN PROJECT

SITE RECO	RCHAEOLOGICAL ASSOCIATION	NZAA METRIC SITE NUMBER Q2¢/∠c⊃ DATE VISITED June 2005
NZMS 260 map n NZMS 260 map n		SITE TYPE European homestead
NZMS 260 map e		OTHER
Grid Reference	Easting 2610965	Northing 6190591
	tion of site (attach a sketch map)	
Situated 250m w	est of the Skeet rd Palmer Rd intersect	ion and is immediately to the south of skeet rd.
2.State of site a	nd possible future damage	
The site is currer	ntly under pasture	
3.Description o	f site (full details, history, local environr	nent, references, sketches)
Q20/49 is the ren	nains of a European homestead probably of	late 19 <sup>th</sup> century origin. Small scale earthworks, bricks, etc. are still
		Tenant/Manager
4.Owner Address		Tenant/Manager   Address
Address	rmation Brief walkover	
Address	rmation Brief walkover	
Address 5.Nature of info		
Address 5.Nature of info Photographs Aerial Photog		Address
Address 5.Nature of info Photographs Aerial Photog	Geometria Ltd PO Box 68653	Address   Filekeeper   Date
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address	raphs Geometria Ltd	Filekeeper
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office u	Address   Filekeeper   Date   io(5(200)?
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fit	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office u	Address   Filekeeper   Date   io(5(200)?
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fiel .atitude S	Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office u	Address Filekeeper Date io(5(2009)
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F	Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office d	Address

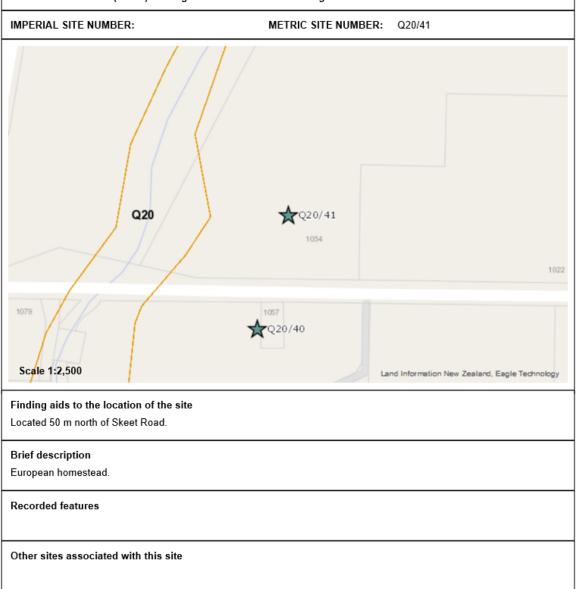
### GREEN HYDROGEN PROJECT

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NZAA METRIC SITE NUMBER Q20 40 SITE RECORD FORM (NZMS260) DATE VISITED NZMS 260 map number SITE TYPE SITE NAME: MAORI NZMS 260 map name OTHER NZMS 260 map edition PINE TREES (removal may be required) JRAFIC UCHTS 61 Ceromic/gloss scatte Possible Archaeological Si SEE SHEET 12 fatecare Martheat Control 1 Natural Gas Corporation of New IBRE OPTIC Formstead Archaeological Site 020/44 ROAD PWC WATER NGC LINE X 2 GAS CONCERSIANT NGC LINE A 23 Form Firm 026/40 Vichagological 2 23 PROPOSED CLUBIS KUPE PIPELINE (GAS LINE & LIQUIDS LINE) Tada Gi +10 0 sible pits B Possible G Ň 50m Lynette Dito Laucor Roper Ameri Lo Oat

1

NZAA SITE NUMBER: Q20/41 SITE TYPE: Historic - domestic **Site Record Form** SITE NAME(s): TE archaeological site recording scheme DATE RECORDED: Northing: 5628950 SITE COORDINATES (NZTM) Easting: 1700936 Source: Handheld GPS IMPERIAL SITE NUMBER: METRIC SITE NUMBER: Q20/41

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

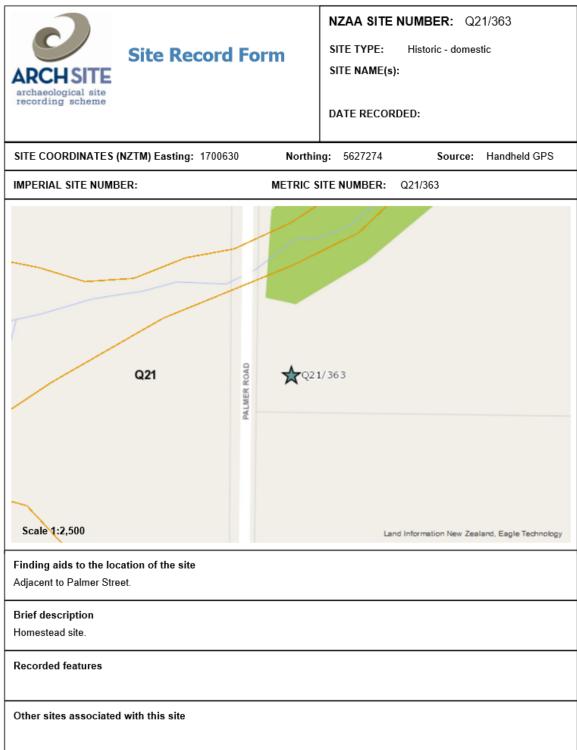


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03/05/2021 1 of 3

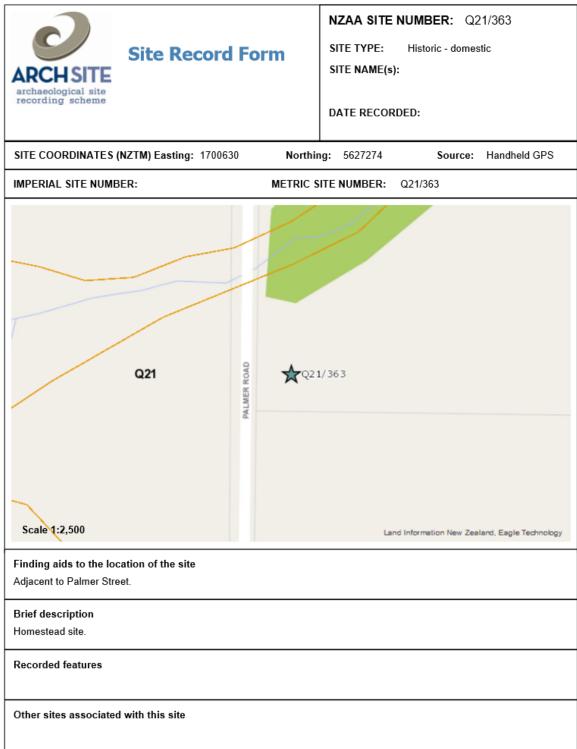
### HIRINGA ENERGY GREEN HYDROGEN PROJECT

		NZAA METRIC SITE NUMBER Q20/44 DATE VISITED June 2005 SITE TYPE European homestead SITE NAME: MAORI
NZMS 260 map e		OTHER
Grid Reference	Easting 2610992	Northing 6190690
1.Aids to reloca	ation of site (attach a sketch map)	
situated 250m w	est of the Skeet rd Palmer Rd intersed	ction and is 50m to the north of skeet rd.
2.State of site a	ind possible future damage	
Currently under	pasture	
3.Description o	f site (full details, history, local enviror	nment, references, sketches)
Q20/41 i is the netc. are still visib	emains of a European homestead. It is	s probably of late 19th century origin. Small scale earthworks, bricks,
4.Owner Address		Tenant/Manager   Address
	rmation	
Address 5.Nature of info	rmation	
Address 5.Nature of info Photographs		
Address 5.Nature of info		
Address 5.Nature of info Photographs Aerial Photog	raphs	Address
Address 5.Nature of info Photographs	Geometria Ltd PO Box 68653	Address   Filekeeper   Date
Address 5.Nature of info Photographs Aerial Photog 6.Reported by	raphs Geometria Ltd	Filekeeper
Address 5.Nature of info Photographs Aerial Photog 6.Reported by	Geometria Ltd PO Box 68653	Address   Filekeeper   Date
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fil	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office eld Code	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fin Latitude S	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office eld Code	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fin- Latitude S LLI Type of site	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office eld Code	Address     Filekeeper     Date     colsl zoog     e use only)     Longitude E     Limit Present condition & future danger of destruction



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26/08/2020 1 of 3



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26/08/2020 1 of 3

SITE RECORD HISTORY	NZAA SITE NUMBER: Q21/363
Site description	
Condition of the site	
Statement of condition	
Current land use:	
Threats:	

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26/08/2020 2 of 3

SITE RECORD INVENTORY NZAA SITE NUMBER: Q21/363	3
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Supporting documentation held in ArchSite

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26/08/2020 3 of 3

	ame	NZAA METRIC SITE NUMBER   Q21/363     DATE VISITED   June 2005     SITE TYPE   European homestead     SITE NAME:   MAORI     OTHER
Grid Reference	Easting 2610685 North	hing 6189014
1.Aids to reloca	ation of site (attach a sketch map)	
Adjacent to Paln	ner Rd	
2.State of site a	nd possible future damage	
Disturbed		
3.Description o	f site (full details, history, local environment, r	references, sketches)
situ in the hedge pump shed.	along Palmer Road. The well belonging to th	e homestead is still clearly visible on the eastern side of th
4.Owner Address		Tenant/Manager   Address 
Address 5.Nature of info Photographs		
Address 5.Nature of info Photographs Aerial Photog 6.Reported by	Geometria Ltd PO Box 68653	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office use on	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office use on	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fil	raphs Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office use on eld Code	Address
Address 5.Nature of info Photographs Aerial Photog 6.Reported by Address 7.Keywords 8.New Zealand F NZHPT Site Fin Latitude S	Geometria Ltd PO Box 68653 Newton, Auckland Register of Archaeological Sites (office use on eld Code	Address

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NZAA METRIC SITE NUMBER Q21/363 SITE RECORD FORM (NZMS260) DATE VISITED NZMS 260 map number SITE TYPE SITE NAME: MAORI NZMS 260 map name NZMS 260 map edition OTHER FIBRE OPTIC 11. Not IT. PROPOSED KUPE PIPELINE 一書 9000 River Cross 1 11-Well Î Beverley Dawn Thomas Maureen Joyce Debson Grace Ruby Johnson Pump i 2010 The Commission of the State of the State And with the state of the state FARM ACCESS TRACK \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* FIBRE OPTIC -----"In which Archaeological Site 021/363 G N 50m PROPOSED KUPE

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