

# MEMORANDUM

**FILE:** Palmerston North City Council LU 6962 and Manawatū -Whanganui Regional Council APP-2022203991.00

**DATE:** 27 April 2023

**TO:** All parties for the hearing of consents LU 6962 and APP-2022203991.00

**FROM:** Natasha Adsett – Consultant Planner for Palmerston North City Council and Manawatū -Whanganui Regional Council

**SUBJECT:** **Update on additional information received since the application for the expansion of the Linton Quarry was notified on the 20<sup>th</sup> of February 2023**

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In response to Minute 1, Paragraph 9, issued by David McMahon, Independent Hearing Commissioner, the following details the updates received from the applicant following the notification of the application for the expansion of the Linton Quarry at 167-257 Kendall's Line, Linton on the 20<sup>th</sup> of February 2023.

Broadly there are four matters where updates have been received.

1. Provision of a Bat Survey. This was provided by the applicant on the 31<sup>st</sup> of March 2023, and is attached.
2. I am aware of a memorandum of understanding (MoU) which has been signed between the applicant and Best Care (Whakapai Hauora) Charitable Trust (Rangitane O Manawatu). A number of conditions have been offered by the applicant as a result of this MoU as detailed in the attached memo from the applicant.
3. I am also aware of a MoU which has been signed between the applicant and the Roding Team at Palmerston North City Council. A baseline road survey condition has been offered by the applicant as a result of this MoU as detailed in the attached memo from the applicant.
4. The applicant advised verbally on the 28<sup>th</sup> of March 2023 of their intention to engage an air quality expert to undertake dust monitoring in and around Kendall's Line, particularly where feedback has been received by submitters that dust is a concern. On the 4<sup>th</sup> of April 2023 the applicant provided a draft proposal for monitoring for review by councils Air Scientist. Feedback was provided to this on the 5<sup>th</sup> of April 2023. It is my understanding that a report will be made available, by the applicant, prior to the hearing.

Yours Sincerely,

A handwritten signature in blue ink, consisting of a stylized, cursive 'N' followed by a horizontal line extending to the right.

**Natasha Adsett**

Consultant Planner for the Palmerston North City Council and Manawatū -Whanganui Regional Council

**BAT SURVEY REPORT FOR PROPOSED  
QUARRY EXPANSION AT LINTON QUARRY,  
PALMERSTON NORTH**

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# BAT SURVEY REPORT FOR PROPOSED QUARRY EXPANSION AT LINTON QUARRY, PALMERSTON NORTH

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## **Contract Report No. 6016d**

February 2023

### **Project Team:**

Nyree Fea - Field survey  
Alexis Clark - Report author  
Des Smith - Peer review

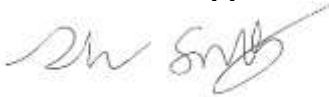
### **Prepared for:**

Hirock Ltd  
167 Kendalls Line  
Linton  
Palmerston North 4472

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**Reviewed and approved for release by:**



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Des Smith  
Senior Principal Ecologist/South Island Regional Manager  
Principal Ecologist  
Wildland Consultants Ltd

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# 1. INTRODUCTION

Wildland Consultants previously prepared an ecological assessment on the impacts of the proposed expansion of quarrying activity on indigenous biodiversity at the Linton Quarry in Palmerston North (Wildlands 2022). The assessment of effects recommended an acoustic bat survey be undertaken within the indigenous forest remnant, as well as within exotic shelterbelts and along stream corridors, to determine the likelihood that bats visit or are present at the site. This report describes the methods and results of the acoustic survey undertaken at the project site in December 2022.

## 2. METHODS

### 2.1 ABM Deployment

All forested habitats (nīkau treeland, forest-farmland edges, and exotic shelterbelt) at the quarry were examined to determine whether they are potential bat habitat. Large pukatea (*Laurelia novae-zelandiae*), tawa (*Beilschmiedia tawa*), mahoe (*Melicytus ramiflorus*), and kahikatea (*Dacrycarpus dacrydioides*) were considered for Acoustic Bat Monitor (ABM) placement because they could contain cavities suitable for bat roosting. Before deployment in the field, the ABMs were tested using the Department of Conservation Bat Recorder Tester app<sup>1</sup>.

Six ABMs (Department of Conservation, AR4 model, version 1.4) were deployed from 1-20 December 2022 at Linton Quarry, Palmerston North. Five ABMs were deployed in the Pukatea-tawa-māhoe forest in mature trees with cavities, and one ABM was deployed in vegetation in the adjacent wetland (Figure 1 and Plates 1-5, Appendix 1). The ABMs were programmed to record for 11.25 hours between 19:30 (one hour before sunset) and 06:45 (one hour after sunrise).

Temperature data was obtained from the temperature sensor built into the ABMs and verified with NIWA CliFlo data. Rainfall and windspeed data for the deployment period was obtained from NIWA CliFlo. Weather data was used to identify valid nights for analysis. A valid night is defined as one where the temperature is 10°C or greater at sunset, with light winds, and precipitation <2.5 millimetres in the first two hours after official sunset, and <5 millimetres in the first four hours after official sunset. The night of the full moon and one night either side are also excluded. Any nights that did not meet these criteria were deleted from the analysis.

### 2.2 ABM Analysis

ABM data were analysed using the Department of Conservation BatSearch 3.11 software.

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<sup>1</sup> DOC – Bat Recorder Tester application developed by Tussock Innovation Limited.

### 3. SURVEY RESULTS

Temperatures recorded at sunset by the ABMs were all above 10°C, except for two nights of the survey. There was one night with disqualifying precipitation, but no high winds occurred across the 20 nights. There were no apparent device malfunctions. A total of 17 nights of the survey were valid. No bat passes were detected.

### 4. DISCUSSION

Although no bats were detected across the 17 valid survey nights, lack of detection does not entirely rule out the possibility that they use the site occasionally. However, it is unlikely that they are roosting in the habitats surveyed.

It is likely that both long-tailed bat (*Chalinolobus tuberculatus*, nationally critical) and short-tailed bat (*Mystacina tuberculata rhyacobi*, declining) occurred in the area before it was deforested. If indigenous forest habitat is protected and enhanced per the 2022 Assessment of Ecological Effects, it could potentially provide roosting and foraging habitat for these indigenous bats in the future.

## REFERENCES

Wildland Consultants 2022: Assessment of Ecological Effects of Quarry Expansion at Linton Quarry, Palmerston North. *Wildland Consultants Ltd Contract Report No. 6016*. Prepared for Hirock Ltd. 44 pp.





Figure 1. ABM locations at Linton Quarry, Palmerston North

Map contains data sourced from LINZ  
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 www.wildlands.co.nz, 0508 WILDZ

Scale: 1:25,247  
 Date: 1/02/2023  
 Cartographer: KM  
 Format: A3R



EXAMPLES OF MATURE TREES  
SURVEYED FOR POTENTIAL BAT  
ROOST HABITAT AND  
SUITABILITY FOR ABM  
DEPLOYMENT AT LINTON  
QUARRY, PALMERSTON NORTH



Plate A1-1: Large pukatea and tawa trees that were surveyed as potential bat roost habitat due to the presence of large cavities.



Plate A1-2: Large tawa tree (left) and pukatea tree (right) that were surveyed as potential bat roost habitat due to the presence of large cavities.





Plate A1-3: Large kahikatea tree (left) and tawa tree (right) that were surveyed as potential bat roost habitat due to the presence of large cavities.



Plate A1-4: ABM deployed in tawa tree.





Plate A1- 5: Large dead standing tree that was surveyed as suitable bat habitat (left) and ABM deployed in tawa tree, with large pukatea behind (right).



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## MEMORANDUM

### MANA ENHANCING AGREEMENT CONSENT CONDITIONS - LINTON QUARRY EXPANSION JOINT CONSENT APPLICATION APP-2022203991.00 & RC-LU-6962

To: Horizons Regional Council and Palmerston North City Council

From: Good Earth Matters

Date: 27 April 2023

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This memorandum has been prepared to provide Horizons Regional Council and Palmerston North City Council with the Augier consent conditions agreed to following consultation with Best Care (Whakapai Hauora) Charitable Trust (representing Rangitāne o Manawatu) in the Mana Enhancing Agreement (MEA), signed by both parties in March 2023.

Hirock offer the following Augier conditions:

1. A Concept Quarry Closure and Rehabilitation Plan (CQCRP) shall be submitted two (2) years after the grant of this consent for approval by PNCC and Horizons, including a summary of consultation undertaken with Best Care (Whakapai Hauora) Charitable Trust in the development of the plan. The CQCRP shall cover the entire quarry site and shall include but not be limited to:
  - i. Measures to ensure long term slope stability
  - ii. Filling of pit and measures required to ensure water quality is suitable
  - iii. Riparian planting of pit areas where applicable
  - iv. Pest control and maintenance / protection of indigenous vegetation
2. A Final Quarry Closure and Rehabilitation Plan (FQCRP) shall be submitted at least 12 the months prior to closure of the quarry to PNCC and Horizons for approval, including a summary of consultation undertaken with Rangitāne o Manawatū in the development of the plan. The FQCRP shall cover the entire quarry site and shall include but not be limited to:
  - i. Measures to ensure long term slope stability
  - ii. Filling of pit and measures required to ensure water quality is suitable
  - iii. Riparian planting of pit areas where applicable
  - iv. Pest control and maintenance / protection of indigenous vegetation.
3. Where a water quality performance target is not achieved, an investigation by Hirock must be undertaken to:
  - i. confirm the reason why performance target has not been achieved, with reference to the relevant catchment; and
  - ii. develop and implement response measures to achieve the performance targets in the future.
4. Following the completion of the investigation required by condition 3, all recommended response measures must be implemented within fifteen (15) working days, except where the Manawatū-Whanganui Regional Council and Whakapai Hauora agrees in writing to a longer timeframe for the implementation of response measures.
5. A report that summarises the investigation and response measures required by condition 3 must be provided to the Manawatū-Whanganui Regional Council and Whakapai Hauora in writing within fifteen (15) working days of the performance target not being achieved.
6. The final planting plan for the reforestation area along the unnamed tributary of the Kahuterawa Stream and the Indigenous Vegetation Monitoring Plan shall be prepared in consultation with Whakapai Hauora, and feedback shall be incorporated into the final documents.

7. Prior to removal of the nikau palms, Whakapai Hauora shall be invited to undertake any desired procedures and tikanga, Hirock shall provide two (2) weeks' notice of their intention to remove the trees.
8. Undertake all works in accordance with the Ecological Management Plan prepared by Wildlands and the Indigenous Vegetation Monitoring Plan.
9. Follow accidental discovery protocol.

These conditions generally match those proffered in the notified consent application Section 5.1.1 (Conditions 26, 28, 31, 34, 35, 36 and 37) and in the memorandum provided by Good Earth Matters, 22 December 2022 on discharge treatment and volumes (Condition 5iv-vi), with the following changes:

- Best Care (Whakapai Hauora) Charitable Trust request they be notified alongside Horizons in the event a water quality target is not achieved.
- A notable change from condition 36 in the consent application is the reduced timeframe to submit for approval the Final Quarry Closure and Rehabilitation Plan from 24 months to 12 months. Hirock and MEA consider 12 months is a sufficient timeframe for this approval process.

With the exception of Condition 37, describing accidental discovery protocol in more detail, the MEA conditions 1-9 are intended to replace the corresponding conditions in Section 5.1.1 of the notified consent application and Condition 5 in the discharge treatment and volumes memo, referred to above.



## MEMORANDUM

### MEMORANDUM OF UNDERSTANDING CONSENT CONDITION - LINTON QUARRY EXPANSION JOINT CONSENT APPLICATION APP-2022203991.00 & RC-LU-6962

To: Horizons Regional Council and Palmerston North City Council

From: Good Earth Matters

Date: 27 April 2023

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This memorandum has been prepared to provide Horizons Regional Council and Palmerston North City Council with the consent condition agreed to in a Memorandum of Understanding (MOU) between PNCC and Hirock Limited, following consultation with Palmerston North City Council's Roading Department.

Hirock offer the following condition:

#### 1. **Baseline Road Condition Survey**

- a. *A baseline road condition survey of Kendalls Line is to be undertaken by Hirock annually, the first baseline survey shall take place one (1) month after the completion of upcoming summer 2022/2023 repairs and re-seal, and then annually thereafter.*
- b. *The first baseline survey after the completion of upcoming summer 2022/2023 repairs and re-seal shall use a laser profilometer to identify road pavement shape and condition and this will determine more accurately future pavement rutting and micro cracking caused by heavy commercial vehicles (HCV) wheel track loadings.*
- c. *Laser profiling baseline survey shall be undertaken once every three (3) years. In other years, the annual baseline road condition survey may be a visual survey carried out by a suitably qualified roading contractor.*
- d. *The annual baseline road condition survey is to be submitted to PNCC within one (1) month of being undertaken.*

This condition is intended to replace Condition 4 in Section 5.1.1 of the notified consent application.