

1. Discharge consent, condensate wastewater

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2010011593.03
Activity Type	Discharge to Water
Activity Class	Discretionary Activity
Activity Primary Industry	Manufacturing, Processing or Production
Activity Primary Purpose	Waste Management Wastewater, Condensate or Leachate Management
Replaces Authorisation	ATH-2010011593.01

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	STATE HIGHWAY 49 WAIOURU
Valuation Number	12700/052.00
Legal Description	LOTS 1 2 DP 70426 LOT 1 DP 70973 LOTS 1-3 5 DP 70969 SEC 1-6 SO 569642 LESS SUB LICENCE RT 460073 on SEC 4 SO 569642 - 4.92HA - ASSESSED AT 1270 / 05220
Map References	LOC-0000073830 (Centroid: BJ34:223-287)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Area	Whangaehu
Water Management Area	Whangaehu Catchment, Upper Whangaehu, Upper Whangaehu (Whau_1a)
Associated River	WHANGAEHU RIVER (331000)

Activity Specific Conditions for condition framework

Definitions – Applying to both authorisations:

Abnormal operating conditions: operating conditions outside the normal design parameters of the torrefaction process or Torr Gas burner that could materially alter condensate quality, including failure to achieve the minimum temperature or residence time required by **Condition 14**.

CMR: Commissioning Monitoring Report.

CTMP: Chemical Treatment Management Plan.

Commencement of the discharge: the date on which condensate wastewater is first discharged to the Whangaehu River under this consent following commissioning of the torrefaction plant and constructed wetland.

Construction Quality Assurance (CQA) documents means the Construction Quality Assurance Plan, associated inspection and testing records, certifications, as-built information, and the final Construction Quality Assurance Report required by these conditions.

Constructed wetland: the engineered wetland system authorised by the consents through which the condensate wastewater passes prior to discharge to the Whangaehu River.

ESCP: Erosion and Sediment Control Plan.

GWRC: Greater Wellington Regional Council, *Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region*, February 2021.

HDPE: High-density polyethylene.

Leak monitoring system: the system incorporated into the final wetland design to identify seepage or leakage from the constructed wetland beneath the HDPE liner.

Placeholder condition: A condition identified as a Placeholder condition represents the present condition framework based on the information available at the time of preparing this section 42A report. The wording and/or requirements of these conditions may be updated following consideration of the Applicant's section 41B evidence, evidence presented at the hearing and matters canvassed through the hearing process.

RAP: Remedial Action Plan.

SQEP: Suitably qualified and experienced person.

Virgin forestry material: For the purposes of this consent, virgin forestry material means wood or woody biomass that has not previously been used and has not been chemically treated, painted or coated, and excludes demolition or recycled timber.

Descriptive Specification

1. This consent authorises the discharge of condensate wastewater via the constructed wetland to the Whangaehu River located at the boundary of property legally described as LOTS 1 2 DP 70426 LOT 1 DP 70973 LOTS 1-3 5 DP 70969 SEC 1-6 SO 569642 LESS SUB LICENCE RT 460073 on SEC 4 SO 569642 - 4.92HA - ASSESSED AT 1270 / 05220 (the property) at approximate map reference NZTopo50 BJ34:223-287 which is shown in Site Plan LOC-0000073830 attached to and forming part of this resource consent.
2. The Consent Holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Manawatū-Whanganui Regional Council on **9 July 2026** including:
 - a. Document 4: Planning Report – Karioi Wood Processing for Winstone Pulp International Limited.” Prepared by Babbage Consultants Limited;
 - b. Document 5: Technical Memo 1 – Torrefaction Technical Memo. Prepared by Babbage Consultants Limited;
 - c. Document 6: Technical Memo 2 – Water Quality Assessment Memo. Prepared by Babbage Consultants Limited; and
 - d. Document 14: Response to the Section 92 Response – APP-2006012018.02, prepared by Babbage Consultants Limited and dated 11 June 2026, including the Torrefaction Process Diagram included as Attachment 1.

Where there may be inconsistencies between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Pre-Development Assurance

3. **Place holder condition.** The Consent Holder must advise the Manawatū-Whanganui Regional Council in writing at least **ten (10) working days** before the first discharge authorised by this consent commences.
4. The discharge authorised by this consent must not commence until the constructed wetland has been completed and commissioned in accordance with the relevant requirements of Land Use Consent **ATH-2026209463.00**, including provision of the required Construction Quality Assurance documentation.

5. Prior to the commencement of the discharge, the Consent Holder must have a flow meter installed by an accredited installer capable of continuously measuring the total condensate wastewater discharge volume and rate. The flow meter must:
- a. be located on the condensate wastewater discharge line; and
 - b. have a pulse counter output traceably calibrated to +/- 5% or better; and
 - c. be capable of providing the daily volume of condensate wastewater discharged as well as a pulse counter output; and
 - d. be positioned to measure the entire daily volume discharged under the authorisation of this consent; and
 - e. be installed in accordance with the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020; and
 - f. be installed in accordance with the IrrigationNZ "The New Zealand Water Measurement Code of Practice" September 2018.

ADVICE NOTE: An accredited installer refers to an individual with a current accreditation certificate for water measurement installation from Irrigation New Zealand (also referred to as IrrigationNZ) represented by the 'Blue Tick' logo. A list of accredited installers can be found at www.irrigationnz.co.nz

6. Prior to the commencement of the discharge the Consent Holder must install and maintain, in fully operational condition, a telemetry unit compatible with the Manawatū-Whanganui Regional Council's Telemetry System. The telemetry unit must:
- a. be installed on the condensate discharge wastewater line; and
 - b. be traceably calibrated to +/- 5% or better; and
 - c. be set to New Zealand Standard Time.

ADVICE NOTE: The Manawatū-Whanganui Regional Council will monitor the logger to ensure compliance with the resource consent conditions.

7. The Consent Holder must ensure that the monitoring equipment detailed in **Conditions 5** and **6** in respect to the flow meter and telemetry equipment is located in a position where it can be read and safely accessed at all times.

Environmental Standard

8. The Consent Holder must ensure that only condensate wastewater associated with the processing of virgin forestry material is discharged under this consent.

9. The Consent Holder must ensure that the volume of condensate wastewater discharge to the Whangaehu River must not exceed **750 m³/day** in any **24-hour period**.

Clarification is required via s41B regarding whether this limit should also apply to the discharge volume entering the wetland.

10. The Consent Holder must ensure that after reasonable mixing, the discharge must not give rise to any of the following effects in the Whangaehu River:
- a. the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - b. any conspicuous change in the colour or visual clarity of the receiving water;
 - c. any emission of objectionable odour;
 - d. the rendering of the water unsuitable for consumption by farm animals; or
 - e. any significant adverse effects on aquatic life.

Operational Restrictions

11. The Consent Holder must ensure that all condensate wastewater authorised by this consent passes through the constructed wetland before the discharge into the Whangaehu River.
12. Within **three (3) months** of installation, the Consent Holder must have the flow meter (required by **Condition 5**) verified by an Irrigation New Zealand “Blue Tick” accredited verifier.

The flow meter shall be verified by an Irrigation New Zealand “Blue Tick” accredited verifier every five (5) years thereafter to ensure compliance with **Condition 5**. The Consent Holder shall provide evidence of the verification in writing to the Manawatū-Whanganui Regional Council’s Consents Monitoring Team within **one (1) month** of the verification being completed.

ADVICE NOTE: Written verification can be sent to the Consents Monitoring Team by email consents.monitoring@horizons.govt.nz –OR– mail addressed to C/- The Consents Monitoring Team, Horizons Regional Council, Private Bag 11025, Manawatū Mail Centre, Palmerston North 4442.

13. **Placeholder condition.** The constructed wetland must be operated and maintained so that the discharge pathway and hydraulic performance remain consistent with that described in the application, including the stated minimum residence time of not less than 2.8 days.
14. **Placeholder condition.** The Consent Holder must ensure that the Torr Gas burner associated with generation of condensate be designed and operated so that the process gas achieves a residence time of at least **two seconds at a temperature of not less than 850°C** prior to condensation.

15. **Placeholder condition.** The Consent Holder must provide and maintain a means of preventing condensate generated during abnormal operating conditions from being discharged to the constructed wetland and/or the Whangaehu River where those abnormal conditions could materially alter condensate quality. The system must provide for detention, diversion or other appropriate management of that until operating conditions have returned to normal and the suitability of the condensate for discharge has been confirmed.

Monitoring Provision

16. The Consent Holder shall allow any Manawatū-Whanganui Regional Council staff member and its agents to attach monitoring or telemetry equipment to monitor volume and rate of the condensate wastewater discharge to ensure compliance with consent conditions and as part of the total catchment monitoring programme.
17. In the event that the equipment detailed in **Condition 5** in respect to the flow meter and/or **Condition 6** being the telemetry unit is removed for servicing or replacement, the Consent Holder shall notify the Manawatū-Whanganui Regional Council's Consents Monitoring Team within **one (1) working day**.
18. **Placeholder condition.** The Consent Holder must take representative samples of the condensate immediately prior to it entering the constructed wetland. For the first six months following commencement of the discharge, samples must be collected at least fortnightly. Following the initial six-month period, samples must be collected at least monthly, unless the monitoring frequency is subsequently amended in accordance with **Condition 26**. All samples must be analysed for the following parameters:
- a. pH;
 - b. temperature (on-site measurement);
 - c. total suspended solids (TSS);
 - d. total ammoniacal nitrogen;
 - e. nitrite and nitrate nitrogen;
 - f. chloride;
 - g. sulphate;
 - h. mineral oil;
 - i. Total lead;
 - j. Total cadmium;
 - k. Total chromium;
 - l. Total copper;
 - m. Total mercury;
 - n. Total nickel;

- o. Total zinc;
- p. polycyclic aromatic hydrocarbons (PAHs);
- q. carbonaceous biochemical oxygen demand over five days (cBOD₅);
- r. volatile organic compounds (VOCs);
- s. phenol; and
- t. furans.

19. **Placeholder condition.** All samples collected under **Conditions 18 and 20**, other than parameters required to be measured on site, must be analysed by an International Accreditation New Zealand (IANZ) accredited laboratory using accredited analytical methods, where available.

The Consent Holder must provide the analytical results to the Manawatū-Whanganui Regional Council within **ten (10) working days** of receiving the results from the laboratory.

20. **Placeholder condition.** Following an initial stabilisation period of **[period to be confirmed]** after full commissioning of the torrefaction plant and the constructed wetland, the Consent Holder must, for a period of 12 consecutive months, take representative samples of the final discharge leaving the constructed wetland. Samples must be collected at least monthly and, where practicable, on the same day as samples of the condensate entering the wetland are taken under **Condition 18**. Samples must be analysed for the same parameters specified in **Condition 18**.

21. **Placeholder condition.** The Consent Holder must ensure that the quality of condensate immediately prior to entering the constructed wetland complies with the limits specified in Table 1.

For parameters expressed as a concentration:

- a. the average concentration measured over any six-month period where fortnightly sampling applies, or any 12-month period where monthly sampling applies, must not exceed the Average Concentration Limit specified in Table 1; and
- b. no individual sample must exceed the Maximum Individual Sample Limit specified in Table 1

Table 1: Condensate wastewater quality limits *

Parameter	Average concentration limit	Maximum individual sample
pH		Limit to be confirmed
Temperature		48°C**
Total suspended solids	3.4 mg/L	10.2 mg/L***
Total ammoniacal nitrogen	4.6 mg/L	13.8 mg/L

Nitrite and nitrate nitrogen	3.5 mg/L	10.5 mg/L
Chloride	15.3 mg/L	45.9 mg/L
Sulphate	27 mg/L	81 mg/L
Mineral oil	<1 mg/L	
Total lead	0.016 mg/L	0.048 mg/L
Total cadmium	0.0018 mg/L	0.0054 mg/L
Total chromium	0.0177 mg/L	0.0531 mg/L
Total copper	0.0137 mg/L	0.0411 mg/L
Total mercury	0.00006 mg/L	0.00018 mg/L
Total nickel	0.0021 mg/L	0.0063 mg/L
Total zinc	0.42 mg/L	1.26 mg/L
PAHs, sum of detected compounds	<0.00001 mg/L	To be confirmed
cBOD ₅	<2 mg/L	To be confirmed
Volatile organic compounds (VOCs)	<screening-level laboratory detection limit	To be confirmed
Phenol	<screening-level laboratory detection limit	To be confirmed
Furans	<screening-level laboratory detection limit	To be confirmed

* Technical Memo 2, Water Quality Assessment

** Assessed condensate temperature before passage through the wetland.

*** Three times average concentration limit.

ADVICE NOTE: For parameters where Table 1 specifies a laboratory detection limit, the Consent Holder must ensure that the parameter is not detected above the specified analytical detection limit, unless otherwise confirmed through the section 41B evidence and hearing process.

22. **Placeholder condition:** Any exceedance of an Average Concentration Limit or Maximum Individual Sample Limit specified in Table 1 constitutes non-compliance with Condition 21 and must be managed in accordance with **Conditions 23 and 24**.
23. **Placeholder condition.** Where monitoring identifies a non-compliance under **Condition 22**, the Consent Holder must:
 - a. notify the Manawatū-Whanganui Regional Council and Ngā Waihua o Paerangi Trust as soon as practicable and no later than **48 hours** after discovering the non-compliance;
 - b. investigate the cause of the non-compliance and undertake any immediate actions necessary to manage the discharge;
 - c. within **ten (10) working days** of discovering the non-compliance, provide the Manawatū-Whanganui Regional Council with a written interim report setting out:
 - i. the investigation undertaken to date;
 - ii. the identified or likely cause of the non-compliance;
 - iii. any immediate corrective actions undertaken; and

- iv. any further investigation or specialist assessment required under **Condition 24** below to prevent the non-compliance occurring again.
24. Where further investigation or specialist assessment is required under **Condition 23**, the Consent Holder must provide a final report prepared by a suitably qualified and experienced person within a **twenty (20) working days** of providing the interim report required by **Condition 23.c**.

The final report must:

- a. identify the cause of the non-compliance, where practicable;
- b. compare the monitoring results with the discharge quality values specified in **Table 1** of **Condition 21**, including consideration of the actual discharge volume and contaminant loads;
- c. assess whether the discharge could result in greater effects than those assessed in the application; and
- d. identify any further corrective action required to prevent the non-compliance occurring again.

ADVICE NOTE: Corrective action may include changes to process operation, improvements in discharge quality, reduction in discharge volume, detention or diversion of condensate, or temporary cessation of the discharge where necessary.

Post-Development Assurance

25. **Placeholder condition.** Within **twenty (20) working days** following completion of the 12-month monitoring period required by **Condition 20**, the Consent Holder must provide the Manawatū-Whanganui Regional Council with a Commissioning Monitoring Report (CMR) prepared by a suitably qualified and experienced person (SQEP).

The report must:

- a. summarise discharge volume and rate monitoring;
- b. summarise the results of condensate and discharge quality monitoring;
- c. assess compliance with the condensate wastewater quality limits in Table 1 of **Condition 21**;
- d. identify any non-compliance with **Condition 21** and any corrective action undertaken
- e. assess whether passage through the constructed wetland has materially changed discharge quality;
- f. recommend the ongoing monitoring parameters and frequency appropriate for ongoing compliance monitoring.

26. **Placeholder condition.** Following consideration of the Commissioning Monitoring Report, the monitoring frequency and/or parameter suite may be reduced where the Manawatū-Whanganui Regional Council certifies in writing that the monitoring demonstrates sustained compliance with the conditions of this consent, including the limits in **Condition 21**, and that the reduced monitoring regime is consistent with the recommendations of the CMR.
27. **Placeholder condition.** The Consent Holder must provide an annual compliance report to the Manawatū-Whanganui Regional Council within **twenty (20) working days** following each anniversary of commencement of the discharge.

The report must summarise, for the preceding 12-month period:

- a. the total volume and rate of condensate wastewater discharged;
- b. the results of monitoring required by this consent;
- c. any non-compliance identified under **Conditions 21 and 22**;
- d. any investigations, corrective actions or changes to process operation undertaken in response to monitoring results;
- e. any changes to the monitoring frequency or parameter suite certified by the Manawatū-Whanganui Regional Council under **Condition 26**.

Review

28. The Regional Council may, during the three months following each anniversary of commencement of this consent, serve notice under section 128(1)(a) of the Resource Management Act 1991 of its intention to review the conditions of this consent for the purposes of:
- a. addressing any adverse effect arising from the exercise of the consent that was not anticipated at the time the consent was granted;
 - b. responding to monitoring that demonstrates the volume or composition of the discharge differs materially from that assessed in the application;
 - c. reviewing the adequacy of discharge quality, volume and process monitoring requirements;
 - d. requiring changes to monitoring frequency, parameters or reporting; and
 - e. requiring changes to discharge management where necessary to ensure the nature and magnitude of effects remain consistent with those assessed when the consent was granted.

Lapsing

29. **Placeholder condition.** Pursuant to section 125 of the Resource Management Act 1991, this consent lapses **five years** after commencement unless it has been given effect to before that date.

Duration

30. **Placeholder condition.** This consent expires on **1 July 2039.**

DRAFT



1. Land use consent, Land disturbance – wetland construction

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2026209463.00
Activity Type	Land Use, Land
Activity Class	Controlled
Activity Primary Industry	Commercial or Retail Trade
Activity Primary Purpose	Construction Water Abstraction or Control Structure

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	STATE HIGHWAY 49 WAIOURU
Valuation Number	12700/056.00
Legal Description	SEC 3 BLK XI KARIOI SD
Map References	LOC-2026101715 (Centroid: BJ34:212-284)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Zone	Whangaehu
Water Management Zone	Whangaehu Catchment, Upper Whangaehu, Upper Whangaehu (Whau_1a)
Associated River	WHANGAEHU RIVER (331000)

Activity Specific Conditions

Descriptive Specification

1. This consent authorises land disturbance, together with any ancillary diversion of water and discharge of sediment arising from the land disturbance, for the purpose of constructing a wetland at the property legally described as SEC 3 BLK XI KARIOI SD (the property) at approximate map reference NZTopo50 BJ34:212-284 which is shown in Site Plan LOC-2026101715 attached to and forming part of this resource consent.

ADVICE NOTE: This consent does not authorise the discharge of contaminated soil, contaminated water, or contaminants associated with disturbed material to land or water, other than the discharge of sediment authorised by this consent. Any such discharge must either comply with the relevant permitted activity provisions of the One Plan or be separately authorised by resource consent before it occurs. In particular, the discharge of contaminated dewatering water may require resource consent under **Rule LF-LW-R38**.

2. The Consent Holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Manawatū-Whanganui Regional Council on **9 July 2026** including:
 - a. Document 4: Resource Consent Application APP-2006012018.02 Planning Report – Karioi Wood Processing, prepared by Babbage Consultants Limited and dated 30 April 2026, incorporated into APP-2006012018.03;
 - b. Babbage Consultants Limited 1002 State Highway 49, Tangiwai, Ohakune Wetland Construction – Erosion and Sediment Control Plan Rev 2.” Prepared by Cheal Consultants Limited and dated 10 June 2026; and
 - c. Karioi Wood Processing Remedial Action Plan Rev 2”, prepared by Babbage Consultants Limited and dated 10 June 2026 (RAP).

Where there may be inconsistencies between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Pre-Development Assurance

3. The Consent Holder must be responsible for all contracted operations related to the exercise of this resource consent and must ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.

4. A copy of this consent must be kept onsite at all times that physical works authorised by this resource consent are being undertaken and must be produced without unreasonable delay upon request from a Manawatū-Whanganui Regional Council officer.

ADVICE NOTE: Having a digital copy of this consent available onsite considered acceptable for complying with **Condition 4**.

5. Prior to activities commencing as authorised by this resource consent, the Consent Holder must appoint a representative(s) who must be the Manawatū-Whanganui Regional Council's principal contact person(s) in regard to matters relating to this resource consent. The Consent Holder must inform the Manawatū-Whanganui Regional Council of the representative's name and how they can be contacted, prior to this resource consent being exercised. Should that person(s) change during the term of this resource consent, the Consent Holder must immediately inform the Manawatū-Whanganui Regional Council and must also give written notice to the Manawatū-Whanganui Regional Council of the new representative's name and how they can be contacted.
6. The Consent Holder must inform the Manawatū-Whanganui Regional Council's Consents Monitoring Team of the intended start date of the works authorised by this resource consent no less than **ten (10) working days** prior to commencement. The Consent Holder must confirm the actual date on which physical works commence in writing within twenty-four (24) hours of commencement and must notify the Consents Monitoring Team within twenty-four (24) hours of completion of the works.

ADVICE NOTE: The Consents Monitoring Team can be contacted on Freephone 0508 800 800 OR consents.monitoring@horizons.govt.nz.

7. The Consent Holder must arrange and conduct a pre-construction site meeting and invite, with a minimum of **5 working days'** notice, the Manawatū-Whanganui Regional Council, the site representative(s) nominated under **Condition 5** of this consent, the contractor, and any other party representing the Consent Holder within **10 working days** of granting of this consent.

The following information must be made available at the pre-start meeting:

- a. Timeframes for key stages of the works authorised under this consent;
 - b. Resource consent conditions;
 - c. Finalised Remedial Action Plan; and
 - d. Finalised Erosion and Sediment Control Plan.
8. A pre-construction meeting must be held prior to the commencement of earthworks in each earthworks season between 1 October and 30 April during which works authorised by this resource consent are to be undertaken.

ADVICE NOTE: In the case that any of the invited parties, other than the site representative does not attend this meeting, the Consent Holder will have complied with this condition, provided the invitation requirement is met.

Remedial Action Plan

9. At least **ten (10) working days** prior to the commencement of bulk earthworks authorised by this resource consent, the Consent Holder must submit a Finalised Remedial Action Plan (RAP), prepared by a suitably qualified and experienced contaminated land practitioner, to the Manawātū-Whanganui Regional Council for technical certification.
10. The Finalised RAP must be based on the Karioi Wood Processing Remedial Action Plan Rev 2, prepared by Babbage Consultants Limited and dated 10 June 2026, and must incorporate any additional contaminated land management measures identified through detailed design, supplementary site investigations, construction planning, or consent requirements, and amendments necessary to reflect the final wetland design, Construction Quality Assurance Plan, Finalised ESCP and the conditions of this resource consent. The Finalised RAP must also:
 - a. set out the procedures for excavation, handling, reuse, containment and lawful disposal of potentially contaminated soil and anthropogenic material;
 - b. identify any potential pathways for the discharge of contaminants arising from the works and the measures that will be implemented to avoid or manage those pathways;
 - c. demonstrate how the works will be undertaken so that contaminated soil, contaminated water or contaminated soil-laden water is not discharged to land or water unless that discharge is otherwise lawfully authorised; and
 - d. identify any activities associated with implementation of the RAP that may require separate resource consent or other authorisation.

ADVICE NOTE: Technical certification of the Finalised RAP does not constitute approval of any activity that requires separate resource consent. The Consent Holder remains responsible for determining whether any additional resource consent is required and for obtaining that consent before undertaking the relevant activity.

Erosion and Sediment Control Plan

11. At least **ten (10) working days** prior to the commencement of construction activities authorised by this resource consent, the Consent Holder must submit a Finalised ESCP prepared by a Suitably Qualified and Experienced Person (SQEP) in erosion and sediment control to the Manawātū-Whanganui Regional Council for technical certification.

12. The Finalised ESCP must be prepared in accordance with Greater Wellington Regional Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (February 2021) (GWRC Guidelines) document.

The Finalised ESCP must include the following information:

- a. Details of all principles, procedures and practices that will be implemented to achieve compliance with relevant conditions of this resource consent;
 - b. Identification of key personnel, including their roles, responsibilities, training and contact details;
 - c. The overarching erosion and sediment control design standards and principles with reference to GWRC Guidelines;
 - d. A general description of the stages of, and sequencing of works;
 - e. The approach to establishing, modifying and/or decommissioning erosion and sediment control measures;
 - f. Application and/or cross-referencing of other Management Plans where appropriate;
 - g. A programme of any progressive site rehabilitation and/or re-vegetation proposed;
 - h. Hourly and 24-hour rainfall trigger events proposed for monitoring frequency and evaluation of device performance;
 - i. Rainfall response and contingency measures including procedures to minimise adverse effects in the event of extreme rainfall exceeding the applied rainfall trigger event and/or the failure of any key erosion and sediment control structures;
 - j. Procedures for and timing of reviews and/or amendments to the certified Finalised ESCP; and
 - k. Details on the frequency of inspections and monitoring of all stormwater and erosion and sediment control measures throughout the construction works including details of the person(s) responsible for inspections and monitoring.
13. Construction activities authorised under this resource consent may not commence until the ESCP and RAP have been certified in writing by the Manawatū-Whanganui Regional Council.
14. Any changes proposed to the certified Finalised ESCP must be confirmed in writing by the Consent Holder and certified in writing by the Manawatū-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
15. The Consent Holder must ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within **5 working days** of any amendments being certified.
16. Prior to bulk earthworks commencing for each stage, a certificate signed by a suitably qualified and experienced person must be submitted to the Manawatū-Whanganui Regional Council, to certify

that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plan.

Certified controls must include the dirty water diversions and clean water diversions. The certification for these subsequent measures must be supplied immediately upon completion of construction of those measures. Information supplied if applicable, must include:

- a. Contributing catchment area;
- b. Shape and volume of the structure (dimensions of structure); and
- c. Stabilisation of the structure.

ADVICE NOTE: The format for certification is available on the Manawātū-Whanganui Regional Council website.

Flocculation

17. Should flocculation be proposed in the Finalised ESCP, prior to the commencement of activities authorised by this consent a Chemical Treatment Management Plan (CTMP) must be prepared by an appropriately qualified and experienced person and submitted to the Manawatu-Whanganui Regional Council for technical certification. No flocculation of sediment laden water may commence until written certification is provided by Council that the CTMP meets the requirements of GWRC Guidelines, and the measures referred to in that plan have been put in place.
18. The CTMP must include as a minimum:
 - a. Specific design details of a chemical treatment system based on a rainfall or flow activated methodology for any impoundment and treatment devices;
 - b. Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
 - c. Details of optimum dosage (including assumptions);
 - d. Results of initial chemical treatment trial;
 - e. A spill contingency plan; and
 - f. Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.
19. Where a CTMP has been certified under **Condition 17**, any discharge to which the CTMP applies must be chemically treated throughout the duration of earthworks in accordance with the certified CTMP.

20. Any changes proposed to the CTMP must be confirmed in writing by the Consent Holder and certified in writing by the Manawatū-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.

Contaminated Land and Remedial Action Plan

21. At least **ten (10) working days** prior to any earthworks commencing, the Consent Holder must submit the final detailed wetland design and a Construction Quality Assurance Plan, prepared by suitably qualified and experienced persons, to the Manawatū-Whanganui Regional Council for technical certification. The final design and Construction Quality Assurance Plan must demonstrate how the engineered containment approach in the RAP will be achieved and must include, as a minimum:
- a. the final wetland footprint, cell layout, design levels and cut and fill arrangement, together with the specification and installation requirements for the high-density polyethylene (HDPE) liner, including subgrade preparation, seams, penetrations and anchoring;
 - b. quality assurance and quality control procedures, including inspection and testing sufficient to verify liner integrity prior to commissioning;
 - c. a leak monitoring system and the means by which leakage from the wetland to underlying soils will be identified. The leak monitoring system shall be capable of demonstrating whether seepage beneath the HDPE liner has occurred and shall include trigger levels, investigation criteria and response actions; and
 - d. how the final wetland design, the RAP and the Finalised ESCP will operate together.
22. The Consent Holder must ensure that the RAP is reviewed by a suitably qualified and experienced contaminated land practitioner:
- a. prior to the commencement of bulk earthworks;
 - b. prior to the commencement of each subsequent stage of bulk earthworks; and
 - c. following any change to the proposed construction methodology or the discovery of unexpected contamination.
23. Where a review identifies that changes to the certified Finalised RAP are required, those amendments must be submitted to the Manawatū-Whanganui Regional Council for technical certification before the relevant stage of works or changed methodology is implemented, except for immediate measures required to secure the affected area and prevent contaminant migration.

Environmental Standard

24. Unless site specific analysis provides evidence to the contrary, as detailed in the CTMP, the Consent Holder must ensure that the soluble aluminium concentration of any discharge to the receiving environment must not exceed 0.2 grams per cubic metre.

25. Unless site specific analysis provides evidence to the contrary, as detailed in the CTMP, the Consent Holder must ensure that the pH of any discharge to the receiving environment must not be less than 5.5 or greater than 8.5 pH units.

Operational Restrictions

26. There must be no discharge of airborne particulate matter that causes an adverse effect beyond the boundary of the site.

ADVICE NOTE: For the purpose of this consent, a Consents Monitoring Officer may assess the Frequency, Intensity, Duration, Offensiveness/Character and Location of Exposure (FIDOL) of any discharge to air to determine whether the discharge is Offensive, Objectionable, Noxious and/ or Dangerous; definitions of these are provided in the Air Chapter of the One Plan 2026, or any superseding Regional Plan.

27. Should airborne particulate matter resulting from the exercise of this consent generate a complaint, the Consent Holder must provide a written report to the Manawatū-Whanganui Regional Council within five (5) working days of the complaint being made known to the Consent Holder. The report must specify:
- a. The cause or likely cause of the event and any factors that influenced its severity;
 - b. The nature and timing of any measures implemented by the Consent Holder to avoid, remedy or mitigate any adverse effects;
 - c. The steps to be taken in future to prevent recurrence of similar events; and
 - d. If required by the Manawatū-Whanganui Regional Council, the Consent Holder must carry out immediate sealing of any problematic dust generating surfaces within the site using hydro-seed/hydro-mulch, polymer soil stabilisers or a similar dust control product to provide instant remediation of dust effects to the satisfaction of the Manawatū-Whanganui Regional Council.
28. The Consent Holder must ensure that an adequate supply of water for dust control and an effective means for applying that quantity of water is available at all times during construction, and until such time as the site is fully stabilised unless otherwise agreed in writing with the Manawatū-Whanganui Regional Council.

Winter works

29. The Consent Holder must ensure that the site is appropriately stabilised by **30 April** of each year unless otherwise certified in writing by the Manawatū-Whanganui Regional Council. Stabilisation must be undertaken by providing adequate measures (vegetative and/or structural and including, pavement, metalling, hydro-seeding, re-vegetation and mulching) that will minimise erosion of exposed soil to the extent practical.

30. Earthworks must not be conducted during the period **1 May to 30 September** inclusive during any year that this resource consent is current, apart from necessary maintenance works, unless certified in writing by the Manawatū-Whanganui Regional Council.
31. Requests to undertake earthworks during the period **1 May to 30 September inclusive**, for any year that this resource consent is current, must be submitted in writing to the Manawatū-Whanganui Regional Council by **1 April** and must be in the form of amendments to the finalised ESCP.
32. In considering a request for the continuation of winter earthworks, the Manawatū-Whanganui Regional Council will consider a number of factors including:
- a. The nature of the site and the winter soil disturbance works proposed;
 - b. The quality of the existing/proposed erosion and sediment controls;
 - c. The compliance history of the site/operator;
 - d. Seasonal/local soil and weather conditions;
 - e. Sensitivity of the receiving environment; and
 - f. Any other relevant factor.
33. Sediment losses to natural water arising from activities authorised by this resource consent must be minimised for the duration of the physical works authorised by this resource consent and until the expiry of the resource consent through the establishment, operation and maintenance of erosion and sediment control measures in accordance with GWRC Guidelines except where a higher standard is referred to in the Finalised ESCP, in which case the higher standard applies.
34. The Consent Holder must ensure that, as far as practicable, all clean water runoff from stabilised surfaces including catchment areas above works areas is diverted away from exposed areas via a stabilised system to prevent erosion, including erosion at any associated outfall(s).
35. The Consent Holder must, ten **(10) working days** prior to commencement of any dewatering on site, prepare and submit a Dewatering Management Plan to the Manawatū-Whanganui Regional Council. The Dewatering Management Plan must include but not be limited to the following information:
- a. Details of the anticipated location, timing, duration and volume or rate of any dewatering that will be necessary on-site during construction;
 - b. Dewatering methodologies to be implemented;
 - c. Any water quality criteria to be achieved as part of the dewatering activity. Consistent with Section G1.0 of the GWRC Guidelines;
 - d. Alternatives to dewatering methodologies, including details of erosion and sediment controls, if dewatering activity cannot be implemented as envisaged;

- e. the anticipated quality of water to be dewatered, including the potential for contaminants associated with potentially contaminated soils within the wetland footprint; and
- f. the proposed treatment, reuse, discharge or disposal method for dewatered water, including how any contaminated water will be managed to prevent the mobilisation or discharge of contaminants.

ADVICE NOTE: This condition does not authorise any take, diversion or discharge of water that requires resource consent under the One Plan. If dewatering is required, the Consent Holder must determine whether the activity complies with the relevant permitted activity rules before dewatering commences and obtain any additional resource consent required.

- 36. The Consent Holder must ensure that site-sourced soil proposed for reuse within the wetland footprint must be screened during handling. Visible anthropogenic material, including concrete, rubber, wood, plastic and metal, must be separated from the soil, must not be placed as fill as part of the wetland construction, and must be removed to a facility lawfully authorised to receive it. Screening must also include observation for evidence of staining, odour, discolouration, free product, stressed vegetation, or other indicators of contamination.
- 37. An Unexpected Contamination Protocol must be implemented throughout the earthworks. If unexpected contamination is encountered, works in the affected area must stop and the material must be characterised by a suitably qualified and experienced contaminated land practitioner. That practitioner must determine whether the material is suitable for reuse beneath the wetland liner. Material that is not suitable for reuse must be removed to a facility lawfully authorised to receive it. The Consent Holder must notify the Manawatu-Whanganui Regional Council within 24 hours of discovery of unexpected contamination.
- 38. Following completion of profiling and cut and fill works, all site-sourced soil retained within the wetland footprint must be encapsulated beneath the HDPE liner in accordance with the RAP and the certified final wetland design. Site-sourced soil from beneath the liner must not be used above the HDPE liner for wetland finishing or landscaping unless a suitably qualified and experienced contaminated land practitioner confirms in writing that the material is suitable for that use.
- 39. The HDPE liner and leak monitoring system must be installed in accordance with the certified final wetland design and Construction Quality Assurance Plan. Any damage, failed seam or other defect identified during installation or testing must be repaired and retested before the liner is covered or the affected wetland cell is commissioned.
- 40. The Consent Holder must ensure that those areas of the site where earthworks have been completed must be stabilised against erosion as soon as practically possible and within a period not exceeding **five (5) days** after completion of any works authorised by this resource consent. Stabilisation must be undertaken by providing adequate measures (vegetative and/or structural)

that will minimise sediment runoff and erosion to the satisfaction of the Manawatū-Whanganui Regional Council acting in a technical certification capacity. The Consent Holder must monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any water body.

ADVICE NOTE: Stabilisation is defined within the GWRC Guidelines as “Means inherently resistant to erosion or rendered resistant to erosion through the application of the proven methods of stabilisation, specified in Section E3 of these guidelines, or alternative methods with the prior agreement of Wellington Regional Council. Where seeding, grassing or hydroseeding is used, the surface is considered stabilised once a minimum of 80% vegetative cover has been established over the entire surface.

41. The removal of any erosion and sediment control measure from any area where soil has been disturbed as a result of the exercise of this resource consent must only occur after consultation and written approval has been obtained from the Manawatū-Whanganui Regional Council acting in a technical certification capacity. In this respect, the main issues that will be considered by the Manawatū-Whanganui Regional Council include:
 - a. The quality of the soil stabilisation and/or covering vegetation;
 - b. The quality of the water discharged from the rehabilitated land; and
 - c. The quality of the receiving water.
42. In the event that an archaeological site, wāhi tapu, taonga tūturu or kōiwi tangata is discovered or disturbed during the exercise of this resource consent, the Consent Holder must:
 - a. immediately cease all works in the vicinity of the discovery and secure the affected area;
 - b. immediately notify Ngā Waihua o Paerangi Trust on behalf of Ngāti Rangi, Heritage New Zealand Pouhere Taonga and the Manawatū-Whanganui Regional Council;
 - c. where kōiwi tangata or other human remains are discovered, immediately notify the New Zealand Police; and
 - d. not recommence works in the affected area until the appropriate statutory and tangata whenua processes have been completed and the Consent Holder has been advised that works may recommence.

ADVICE NOTE: In accordance with section 14(1) of the Coroners Act 2006, where human remains are discovered the New Zealand Police should be contacted immediately and works in the immediate vicinity must cease until advice is received that works may recommence.

Post-Development Assurance

43. Before the constructed wetland is commissioned, the Consent Holder must provide the Manawatū-Whanganui Regional Council with an as-built Construction Quality Assurance Report prepared by suitably qualified and experienced person(s). The report must include:

- a. as-built plans of the completed wetland;
 - b. records and test results demonstrating that the HDPE liner has been installed and tested in accordance with the certified final wetland design and Construction Quality Assurance Plan;
 - c. confirmation that the leak monitoring system has been installed and commissioned;
 - d. confirmation from a suitably qualified and experienced contaminated land practitioner that soil disturbance, reuse, capping and remediation works have been completed in accordance with the RAP;
 - e. records of anthropogenic material and any soil unsuitable for reuse that was removed from the site, including the receiving facility;
 - f. a photographic record of pond infilling, soil encapsulation and installation of the HDPE liner; and
 - g. details of any departures from the certified final wetland design, Construction Quality Assurance Plan or RAP, and how those departures were addressed.
44. Before the constructed wetland is commissioned, the Consent Holder must submit a Wetland Monitoring, Management and Aftercare Plan, prepared by suitably qualified and experienced persons, to the Manawatū-Whanganui Regional Council for technical certification. The plan must include:
- a. monitoring and response measures to verify that contaminants remain effectively contained and do not migrate beyond the constructed wetland footprint, and
 - b. the methods and frequency of leak detection monitoring;
 - c. groundwater monitoring where considered necessary by the SQEP;
 - d. inspection and maintenance requirements for the HDPE liner and leak monitoring system; and
 - e. contingency and remedial measures to be implemented if leakage or saturation of underlying soils is identified, including measures to address the potential for anaerobic degradation of residual pulp and methane generation.
- If the discharge operates for longer than the earthworks, then this condition should move to the discharge permit.*
45. The Consent Holder must implement the certified Wetland Monitoring, Management and Aftercare Plan and maintain records of all monitoring, inspections, maintenance and remedial works undertaken in accordance with that plan. Those records must be provided to the Manawatū-Whanganui Regional Council on request.

Review

46. The Regional Council may, during the three months following each anniversary of the commencement of this consent, serve notice of its intention to review the conditions of this consent pursuant to section 128(1)(a) of the Resource Management Act 1991 for the purposes of:
- a. dealing with any adverse effect on the environment arising from exercise of the consent that was not anticipated when the consent was granted;
 - b. responding to monitoring that identifies leakage, loss of containment, mobilisation of contaminants or inadequacy of erosion and sediment controls;
 - c. reviewing the adequacy of the Final ESCP, Remedial Action Plan, Wetland Monitoring, Management and Aftercare Plan or associated monitoring requirements; and
 - d. requiring additional monitoring or remedial measures where reasonably necessary to ensure contaminated and potentially contaminated soils remain isolated from environmental receptors

Duration and Lapsing

47. Pursuant to section 125 of the Resource Management Act 1991, this consent lapses five years after the date of commencement unless it is given effect to before that date, or the Regional Council grants an extension of the lapse period.
48. Once this consent has been given effect to, all earthworks authorised by the consent, together with associated stabilisation and establishment works, must be completed within five years of the date on which physical works first commence.

Site plan LOC-2026101715



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NOTES:

1. All work shall be done in accordance with NZS 4404:2015 Land Development and Subdivision Infrastructure.
2. Heights in terms of NZVD 2016.
On site datum: MSL
RL: 695.30
Coordinates: NZGD 2000
Datum: Tairāwhiti 2000
Contour Interval: 0.2m.
3. Contractor to locate and identify existing utility location and depths prior to construction. The project engineer shall be informed of any discrepancies to the information depicted on these plans immediately for revised drawings.
4. Contractor shall install and maintain all stormwater, silt and erosion control during construction as per earthworks management plan and the Horizons Regional Council Erosion and Sediment Control - "Guidelines for soil disturbing activities".
5. All disturbed areas shall be re-topsoiled and grassed within 30 days upon completion of contract work.
Dust control shall be maintained until grassed areas have become established.

LEGENDS:

- Bottom of Wetland
- Top of Wetland Bund
- Toe of Wetland Bund

A	01/04/26	Issued For Client Review	AC	A1	SP
Rev	Date	Amendment	By	CHK	APP

Project Title
Babbage Consultants Limited
1002 State Highway 49
Tangiwai, Ohakune

Drawing Title
Finished Contours Plan

Surveyed	-	-	-
Designed	A. Chard	01/04/26	AC
Drawn	A. Chard	01/04/26	AC
Checked	A. Thomas	01/04/26	AI
Approved	S. P. 2026	01/04/26	SP

Status **REVIEW**

Scale	A1	1:500	A1
	A3	1:1000	

Drawing Number
260156-200

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Wetland Concept Design

