

Proposed Draft Conditions – Northern Group

This framework comprises proposed draft conditions applicable to the following applications:

- APP.017428.02.01 Henderson Bay Avocados
- APP.040600.01.01 Far North Avocados Ltd
- APP.041211.01.01 P McGlaughlin
- APP.039859.01.01 Te Aupōuri Commercial Development Ltd
- APP.040121.01.01 NE Evans Trust & WJ Evans & J Evans
- APP.040231.01.01 P&G Enterprises (PJ & GW Marchant)
- APP.040652.01.01 SE & LA Blucher
- APP.039644.01.01 MP Doody & DM Wedding
- APP.040397.01.01 A. Matthews
- APP.040558.01.01 MV Evans (Property 1)
- APP.040979.01.01 MV Evans (Property 2)

Note: Pursuant to Section 116 of the Resource Management Act 1991, the date of commencement of this consent is **XX XX 20XX**.

[CONSENT HOLDER]

AUT.XX To take and use groundwater from the Waihopo, Houhora and Other sub-aquifers of the Aupōuri Aquifer for horticultural irrigation purposes.

LOCATION

Address of Site

[Insert address reference]

Legal Description of Site

Site of take: [Insert legal descriptions]

Sites of use: [Insert legal descriptions]

Map Reference (New Zealand Transverse Mercator Projection)

[Bore 1:XXE XXN]

[Bore 2:XXE XXN]

Note: An error accuracy of +/- 50 metres applies to these map references.

CONSENT DURATION

This consent is granted for a period expiring on **30 November 2033**.

CONDITIONS OF AUT.XX

- 1 The consent holder shall pay all charges relating to the recovery of cost for the administration, monitoring and supervision of this consent fixed by Council under Section 36 of the Resource Management Act 1991.
- 2 The exercise of this consent is bound by the Master Consent conditions **attached** as Appendix A. The Master Consent uses an alternate numbering system '1MC, 2MC, 3MC...'.
 - 3 Subject to compliance with the conditions of this consent, the activity authorised by this consent shall be carried out in accordance with the application and documents submitted as part of the application, including the following documents:
 - (a) Assessment of Environmental Effects prepared by Williamson Water & Land Advisory Ltd: *Aupōuri Aquifer Groundwater Take Consent Applications, Assessment of Environmental Effects – Aupōuri Aquifer Water User Group. WWLA0184: Rev. 2, dated 27 February 2020;*
 - (b) Model Report prepared by Williamson Water & Land Advisory Ltd: *Aupōuri Aquifer Groundwater Model, Factual Technical Report – Modelling – Aupōuri Aquifer Water User Group. WWLA0184: 3, dated 5 February 2020.*
- For the avoidance of doubt, where information contained in the application documents is contrary to the conditions of this consent and those in the Master Consent (Appendix A), or where the information contained in the application documents is internally inconsistent, the conditions of this consent and the Master Consent shall prevail.
- 4 This consent operates under an adaptive management regime. The detail of that adaptive management regime is set out in the Groundwater Monitoring and Contingency Plan for the Waihopo, Other, and (northern) Houhora sub-aquifers of the Aupōuri Aquifer Management Unit, **Dated: [XX XX 2021] (“GMCP”)**. The primary purpose of the GMCP is to set out the procedures by which the abstraction will be monitored and managed to ensure compliance with Condition 1MC. For the purpose of this consent, the GMCP is the most recent version of the GMCP which may be changed under Condition 8MC.
- 5 In the event that any of the provisions of the GMCP conflict with the requirements of these conditions of consent, these conditions of consent shall prevail. The consent holder must comply with the GMCP at all times.
- 6 The consent shall be exercised in a staged manner as follows:
 - (a) Stage 1, which shall be a minimum period of 12 months after the commencement of the consent and must include all or part abstraction of the Stage 1 annual volume as set out in Condition 9;
 - (b) Stage 2, which shall be for the minimum period of two consecutive irrigation seasons;
 - (c) Stage 3, which shall be for the minimum period of two consecutive irrigation seasons;
 - (d) Stage 4 which shall be from the irrigation season immediately following written approval to progress from Stage 3 until the expiry of the consent, unless Conditions 11-16 apply.
- 7 The combined daily volume of water taken across all bores shall not exceed the following:
 - (a) [XX] cubic metres in any 24 consecutive hours unless Conditions 11(b), 13, 15 or 16 of this consent apply; and

- (b) That required to replace soil moisture depleted by evapotranspiration over the irrigated area.
- 8 The consent holder shall take all practicable steps to ensure that:
- (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
 - (b) The irrigation does not cause surface runoff that would discharge into natural waterbodies;
 - (c) There is no leakage from pipes and structures;
 - (d) The use of water is confined to targeted areas;
 - (e) Irrigation induced soil erosion and soil pugging does not occur;
 - (f) Soil quality is not degraded as a consequence of irrigation; and
 - (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.
- 9 The annual volume of water taken from Bore [xx] for each stage shall not exceed the following, unless Conditions 11-16 apply:
- (a) Stage 1: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (b) Stage 2: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (c) Stage 3: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (d) Stage 4: [XX] cubic metres between 1 July in a year and 30 June in the following year.
- 10 Progress to the next stage shall only occur where written approval is given by the Council's Compliance Manager; and
- (a) This written approval will only be given if the council is satisfied that the Staged Implementation and Monitoring Review prepared in accordance with the GMCP confirms that the groundwater abstraction complies with Condition 1MC; and
 - (b) A decision on whether written approval will be given or not will not be made until the Council has consulted with the Consent Holder and the Director-General of Conservation over the Staged Implementation and Monitoring Review; and
 - (c) Notwithstanding Condition 10(b), written approval to progress from Stage 1 to Stage 2 will not be considered unless all the monitoring trigger levels required by the GMCP have been set; and
 - (d) A report detailing the reasons for the Council's decision in regard to progressing to the next stage, including the identification and discussion of any matters raised during the consultation described in Condition 10(b), will be provided to the Consent Holder and the Director-General of Conservation.

Breaching of Trigger Levels

- 11 In the event of a Trigger Level 2 (TL2) in the GMCP being exceeded, the following actions and requirements shall be initiated;
- (a) The Council will advise the Consent Holder in writing that a TL2 has been breached within 24 hours of the breach being realised;
 - (b) Upon receipt of this notice, the Consent Holder shall immediately reduce their daily

abstraction to 50% of the current average daily quantity, as advised by the Council in the notice. The current average daily quantity will be calculated using the previous month's water use records required by Condition 21. If the exceedance occurs within one month of a Consent Holder first taking water for irrigation purposes within an irrigation season, then the average shall be calculated using the water use records for this period only;

- (c) As required by the GMCP, the Council will commission a Groundwater Trigger Exceedance Report to assess why the trigger level has been breached, identify the pumping bores in the area of effect and review all of the available data collected in the affected area(s).
- 12 Once Condition 11(b) has been complied with, the Consent Holder may apply to the Council's Compliance Manager for an alternative reduction in its daily water take volume. Council's approval of an alternative reduction value will only be given if it is satisfied, based on the results of the Groundwater Trigger Exceedance Report, that a TL2 exceedance that is attributable to this consent will not occur. The applicable alternative reduction value is the value that is contained in the recommendations made in the Groundwater Trigger Exceedance Report required to be prepared by Condition 11(c).
- 13 If the TL2 trigger levels are still exceeded after 21 days, then the Consent Holder shall reduce their daily abstraction to 25% of the current average daily quantity calculated for Condition 11(b). The Council will advise the Consent Holder in writing of any continued exceedance and the required further reduction in the daily water take volume.
- 14 Once Condition 13 has been complied with, the Consent Holder shall also comply with the recommendations contained in the revised and updated Groundwater Trigger Exceedance Report commissioned by the Council which will be prepared for the purpose of specifying a programme of actions to achieve compliance with Condition 1MC.
- 15 If the TL2 trigger levels continue to be exceeded after the implementation of the remedial measures required under Conditions 11-14, the Council will require the Consent Holder to suspend the exercise of this consent, or continue their daily abstraction at a specified rate, until such time as the Council issues written notice that the Consent may be exercised again in accordance with the requirements of the revised and updated Groundwater Trigger Exceedance Report.
- 16 Any abstraction that results in non-compliance with Condition 1MC shall be suspended.

Notification of Irrigation

- 17 The Consent Holder shall advise the Council's assigned Monitoring Officer in writing five working days prior to the exercise of this consent when irrigation is to commence for the first time each season.

Backflow Prevention

- 18 Prior to the first exercise of this consent, a backflow prevention system shall be installed on irrigation systems used to apply animal effluent, agrichemical or nutrients to prevent the backflow of contaminants to groundwater.

Metering and Abstraction Reporting

- 19 Prior to the first exercise of this consent, a meter and datalogger(s) with at least 12 months data storage to record the rate and volume of take, and the date and time this water was taken

shall be installed and maintained to measure at least every 15 minutes the volume of water taken, in cubic metres, from each production bore. Each meter shall:

- (a) Be telemetered to the Northland Regional Council; and
- (b) Be sealed and as tamper-proof as practicable; and
- (c) Be installed at the location from which the total volume of water is taken; and
- (d) Have an accuracy of +/-5%, and
- (e) Have an international accreditation or NZ equivalent calibration endorsement, and
- (f) Be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions to ensure the meter is fully functional at all times.

The Consent Holder shall, at all times, provide safe and practical access to each meter installed for Council to undertake visual inspections, data retrieval, and record water take measurements.

20 The Consent Holder shall verify that the meter required by Condition 19 is accurate. This verification shall be undertaken prior to 30 June:

- (a) Following the first taking of water from each production bore in accordance with this consent; and
- (b) At least once in every five years thereafter.

Each verification shall be undertaken by a person, who in the opinion of the Council's Compliance Manager, is suitably qualified. Written verification of the accuracy shall be provided to the Council's assigned Monitoring Officer no later than 31 July following the date of each verification.

21 A copy of the records logged under Condition 19 shall be forwarded to the Council's assigned Monitoring Officer annually by the 31 July, for the previous period 1 July to the 30 June.

In addition, a copy of these records shall be forwarded immediately to the Council's assigned Monitoring Officer on written request. The records shall be in an electronic format that has been agreed to by the council.

Water Use Efficiency

22 The Consent Holder shall prepare an Irrigation Scheduling Plan (ISP) that outlines how irrigation decisions will be made. The purpose of the ISP is to set out how the irrigation will be undertaken to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop. The ISP shall be prepared by a suitably qualified and experienced person and submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP. The ISP shall, as a minimum, address:

- Water balance and crop water requirements;
- Subsurface drainage;
- Measures for continuous improvement in water efficiency; and
- Overall irrigation strategy.

For each irrigation area, the ISP should include:

- (a) A map of the irrigation area;
 - (b) A description of how water requirements for each irrigation cycle are calculated;
 - (c) Method(s) for assessing current soil moisture levels;
 - (d) Method(s) for assessing potential evapotranspiration (PET) and rainfall to date;
 - (e) Soil moisture target to be maintained in each zone by irrigation;
 - (f) How measured data will be used to assess irrigation requirements over the next irrigation cycle;
 - (g) A description of proposed method(s) for remaining within consent limits at each borehole or group of boreholes; and
 - (h) Continuous improvement in water efficiency.
- 23 The Consent Holder shall not exercise this consent until the ISP required by Condition 24 has been certified by the Council's Compliance Manager.
- 24 The ISP certified in accordance with Condition 25 shall be implemented prior to the first irrigation season, unless a later date has been approved in writing by the Council's Compliance Manager.
- 25 The Consent Holder must comply with the ISP at all times.
- 26 The Consent Holder shall, within six months of the first exercise of this consent, undertake an audit of the irrigation system and of the certified ISP. The audit shall be undertaken by a suitably qualified and experienced person. The irrigation system audit shall be prepared in accordance with Irrigation New Zealand's "Irrigation Evaluation Code of Practice" (dated 12 April 2010), and shall include recommendations on any improvements that should be made to the system to increase water efficiencies or any amendments to the ISP. The results of the audit and its recommendations shall be submitted in writing to the Council's assigned Monitoring Officer within one month of the audit being undertaken. Any recommended amendments to the ISP shall be submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP before they take effect. A follow-up audit shall occur at five yearly intervals throughout the term of this consent with the intent of confirming an irrigation efficiency of at least 80 percent.
- 27 The Consent Holder shall, within three months of notification in writing by the Council's Compliance Manager, implement any recommendations of the audit referred to in Condition 28.
- 28 The reticulation system and its component parts shall be maintained in good working order to minimise leakage and wastage of water.
- 29 The rate at which water is applied to the irrigated area shall not result in ponding of irrigated water within any irrigated area, or runoff from either surface or subsurface drainage to a water body, as a result of the exercise of this consent.

Advice Note: *The ISP seeks to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop.*

Review Condition

- 30 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - (b) To insert trigger level thresholds established in accordance with the GMCP as conditions of consent; or
 - (c) To review the allocation of the resource; or
 - (d) In response to any other relevant reason for review identified in Section 128 of the Resource Management Act

A review of this consent may be carried out separately or together with reviews of other consents for the purpose of managing the effects of the activities carried out under those resource consents.

The Consent Holder shall meet all reasonable costs of any such review.

Lapsing Condition

- 31 This consent shall lapse five years after the date that the consent commences in accordance with section 116(1) of the Resource Management Act 1991, unless the consent has been given effect to before this date.

APPENDIX A – MASTER CONSENT CONDITIONS

General

- 1MC. The consented activity must not, individually or cumulatively, result in:
- (a) adverse effects of saltwater intrusion into the Aupōuri aquifer;
 - (b) adverse effects on the hydrological functioning, including changes to water levels¹, of natural wetlands, springs and dune lakes;
 - (c) alterations to the extents of rivers, natural wetlands, springs and/or dune lakes;
 - (d) adverse effects on the significant indigenous vegetation and habitats in (terrestrial and freshwater environments of) dune lakes, springs and natural wetlands;
 - (e) Adverse effects on the flow levels and flow variability of rivers and streams and springs so that their habitat quality and sustainable mahinga kai, recreational, and other social and cultural values, are maintained (including sufficient flows and flow variability to maintain their habitat quality, including to flush rivers of deposited sediment and nuisance algae and macrophytes and support the natural movement of indigenous fish and valued introduced species such as trout; and
 - (f) lowering of the groundwater levels of the Aupōuri aquifer such that existing efficient bore takes operating as a permitted activity or in accordance with resource consent conditions cannot access the authorised volume of groundwater.

Prior to the Exercise of Consent

- 2MC. Prior to the exercise of this consent, new bores and all associated monitoring equipment required to be installed for the purposes of monitoring the baseline effects in accordance with the GMCP shall be constructed and installed by a suitably qualified person(s).
- 3MC. Where the GMCP requires that the frequency of monitoring for a parameter is continuous, then the monitoring equipment shall be installed as follows:
- (a) for groundwater level recording, to the requirements of the National Environmental Monitoring Standard Water Level: Water Level Field Measurement Standard, Version 3.0.0, dated July 2019.;
 - (b) for conductivity sensors they must be able to record “Specific Conductance” (corrected to 25 degrees Celsius), have available software for field calibration, and be able to record across the whole expected conductivity range for the water body measured;
 - (c) Sensors must be installed in a secure manner to ensure stationarity over time;
 - (d) Instantaneous reading recorded every five (5) minutes;
 - (e) Recording to NZ Standard Time (NZST);
 - (f) Water Level readings compensated for barometric pressure prior to transmission;
 - (g) Telemetered to Northland Regional Council with a minimum of hourly transmission of data; and
 - (h) Reference points levelled to One Tree Point datum and New Zealand Vertical Datum.

¹ Avoiding “change” means that as a result of the abstraction of water; median water levels, mean annual water level fluctuations and patterns of water level seasonality (relative summer vs winter) remain unchanged.

- 4MC. Prior to the exercise of this consent, the Consent Holder shall provide to the Council's assigned monitoring officer the installation details from the suitably qualified person of all monitoring equipment that has been installed in accordance with Condition 3MC. This information will be used by the Council's Compliance Manager to determine compliance with Conditions 2MC and 3MC.
- 5MC. Prior to the exercise of this consent, a suitable approach to detecting and responding to saline intrusion effects during Stage 1 (Year 1) shall be prepared. The Council's Compliance Manager shall certify that the approach to detecting and responding to saline intrusion will give effect to Condition 1MC. The certified information shall be inserted into the GMCP through the process set out in Condition 8MC prior to the exercise of this consent.

Monitoring and Contingency Measures

- 6MC. This consent shall be exercised and monitored in accordance with the most recent revision of the GMCP.
- 7MC. The Consent Holder shall, at all times, provide safe and easy access to the production bore wellhead(s) for the purpose of undertaking monitoring on the bore(s), as set out in the GMCP.
- 8MC. Excluding the Staged Implementation and Monitoring Programme Review process, the GMCP may be amended at any time by the following process:
- (a) Subject to Condition 8MC(d), the Council may amend the GMCP by providing notice in writing to the Consent Holder that the GMCP has been amended and providing a copy of the amended GMCP to the Consent Holder.
 - (b) Subject to Condition 8MC(d), the Consent Holder may submit a request for an amendment by giving written notice to the Council of the proposed amendment along with any supporting technical documents.
 - (c) Prior to making any decision to amend the GMCP or not, the Council will seek input on any proposed amendment from the Consent Holder and from the Director-General of Conservation.
 - (d) The Council will not approve any amendment to the GMCP unless the technical assessment of the proposed change clearly indicates that the change will not result in a breach of Condition 1MC.

Proposed Draft Conditions – South-western Group

This framework comprises proposed draft conditions applicable to the following applications:

APP.040364.01.01 Elbury Holdings Ltd

APP.020995.01.04 Te Rarawa Farming Ltd and Te Make Farms Ltd

Note: Pursuant to Section 116 of the Resource Management Act 1991, the date of commencement of this consent is **XX XX 20XX**.

[CONSENT HOLDER]

AUT.XX To take and use groundwater from the Sweetwater and Ahipara sub-aquifers of the Aupōuri-Aquifer management unit for horticultural irrigation purposes.

LOCATION

Address of Site

[Insert address reference]

Legal Description of Site

Site of take: [Insert legal descriptions]

Sites of use: [Insert legal descriptions]

Map Reference (New Zealand Transverse Mercator Projection)

Bore 1: XXE XXN

Bore 2: XXE XXN

Note: An error accuracy of +/- 50 metres applies to these map references.

CONSENT DURATION

This consent is granted for a period expiring on **30 November 2033**.

CONDITIONS OF AUT.XX

- 1 The consent holder shall pay all charges relating to the recovery of cost for the administration, monitoring and supervision of this consent fixed by Council under Section 36 of the Resource Management Act 1991.
- 2 The exercise of this consent is bound by the Master Consent conditions **attached** as Appendix A. The Master Consent uses an alternate numbering system '1MC, 2MC, 3MC...'.
- 3 Subject to compliance with the conditions of this consent, the activity authorised by this consent shall be carried out in accordance with the application and documents submitted as part of the application, including the following documents:
 - (a) Assessment of Environmental Effects prepared by Williamson Water & Land Advisory Ltd: *Aupōuri Aquifer Groundwater Take Consent Applications, Assessment of Environmental Effects – Aupōuri Aquifer Water User Group. WWLA0184: Rev. 2, dated 27 February 2020;*
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For the avoidance of doubt, where information contained in the application documents is contrary to the conditions of this consent and those in the Master Consent (Appendix A), or where the information contained in the application documents is internally inconsistent, the conditions of this consent and the Master Consent shall prevail.

- 4 This consent operates under an adaptive management regime. The detail of that adaptive management regime is set out in the Groundwater Monitoring and Contingency Plan for the Sweetwater and Ahipara sub-aquifers of the Aupōuri Aquifer Management Unit, Dated: **[XX XX 2021] ("GMCP")**. The primary purpose of the GMCP is to set out the procedures by which the abstraction will be monitored and managed to ensure compliance with Condition 1MC. For the purpose of this consent, the GMCP is the most recent version of the GMCP which may be changed under Condition 8MC.
- 5 In the event that any of the provisions of the GMCP conflict with the requirements of these conditions of consent, these conditions of consent shall prevail. The consent holder must comply with the GMCP at all times.
- 6 The consent shall be exercised in a staged manner as follows:
 - (a) Stage 1, which shall be a minimum period of 12 months after the commencement of the consent and must include all or part abstraction of the Stage 1 annual volume as set out in Condition 9
 - (b) Stage 2, which shall be for the minimum period of two consecutive irrigation seasons;
 - (c) Stage 3, which shall be for the minimum period of two consecutive irrigation seasons;
 - (d) Stage 4 which shall be from the irrigation season immediately following written approval to progress from Stage 3 until the expiry of the consent, unless Conditions 11-16 apply.
- 7 The combined daily volume of water taken across all bores shall not exceed the following:
 - (a) [XX] cubic metres in any 24 consecutive hours unless Conditions 11(b), 13, 15 or 16 of this consent apply; and

- (b) That required to replace soil moisture depleted by evapotranspiration over the irrigated area.
- 8 The consent holder shall take all practicable steps to ensure that:
 - (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
 - (b) The irrigation does not cause surface runoff that would discharge into natural waterbodies;
 - (c) There is no leakage from pipes and structures;
 - (d) The use of water is confined to targeted areas;
 - (e) Irrigation induced soil erosion and soil pugging does not occur;
 - (f) Soil quality is not degraded as a consequence of irrigation; and
 - (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.
- 9 The annual volume of water taken from Bore [xx] for each stage shall not exceed the following unless Conditions 11-16 apply:
 - (a) Stage 1: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (b) Stage 2: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (c) Stage 3: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (d) Stage 4: [XX] cubic metres between 1 July in a year and 30 June in the following year.
- 10 Progress to the next stage shall only occur where written approval is given by the Council's Compliance Manager; and
 - (a) This written approval will only be given if the council is satisfied that the Staged Implementation and Monitoring Review prepared in accordance with the GMCP confirms that the groundwater abstraction complies with Condition 1MC; and
 - (b) A decision on whether written approval will be given or not will not be made until the Council has consulted with the Consent Holder and the Director-General of Conservation over the Staged Implementation and Monitoring Review; and
 - (c) Notwithstanding Condition 10(b), written approval to progress from Stage 1 to Stage 2 will not be considered unless all the monitoring trigger levels required by the GMCP have been set; and
 - (d) A report detailing the reasons for the Council's decision in regard to progressing to the next stage, including the identification and discussion of any matters raised during the consultation described in Condition 10(b), will be provided to the Consent Holder and the Director-General of Conservation.

Breaching of Trigger Levels

- 11 In the event of a Trigger Level 2 (TL2) in the GMCP being exceeded, the following actions and requirements shall be initiated;
 - (a) The Council will advise the Consent Holder in writing that a TL2 has been breached

within 24 hours of the breach being realised;

- (b) Upon receipt of this notice, the Consent Holder shall immediately reduce their daily abstraction to 50% of the current average daily quantity, as advised by the Council in the notice. The current average daily quantity will be calculated using the previous month's water use records required by Condition 21. If the exceedance occurs within one month of a Consent Holder first taking water for irrigation purposes within an irrigation season, then the average shall be calculated using the water use records for this period only;
- (c) As required by the GMCP, the Council will commission a Groundwater Trigger Exceedance Report to assess why the trigger level has been breached, identify the pumping bores in the area of effect and review all of the available data collected in the affected area(s).

- 12 Once Condition 11(b) has been complied with, the Consent Holder may apply to the Council's Compliance Manager for an alternative reduction in its daily water take volume. Council's approval of an alternative reduction value will only be given if it is satisfied that a TL2 exceedance that is attributable to this consent will not occur. The applicable alternative reduction value is the value that is contained in the recommendations made in the Groundwater Trigger Exceedance Report required to be prepared by Condition 11(c).
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- 15 If the TL2 trigger levels continue to be exceeded after the implementation of the remedial measures required under Conditions 11-14, the Council will require the Consent Holder to suspend the exercise of this consent, or continue their daily abstraction at a specified rate, until such time as the Council issues written notice that the Consent may be exercised again in accordance with the requirements of the revised and updated Groundwater Trigger Exceedance Report.
- 16 Any abstraction that results in non-compliance with Condition 1MC shall be suspended.

Notification of Irrigation

- 17 The Consent Holder shall advise the Council's assigned Monitoring Officer in writing when irrigation is to commence for the first time each season, at least five working days beforehand.

Backflow Prevention

- 18 Prior to the first exercise of this consent, a backflow prevention system shall be installed on irrigation systems used to apply animal effluent, agrichemical or nutrients to prevent the backflow of contaminants to groundwater.

Metering and Abstraction Reporting

- 19 Prior to the first exercise of this consent, a meter and datalogger(s) with at least 12 months data storage to record the rate and volume of take, and the date and time this water was taken

shall be installed and maintained to measure at least every 15 minutes the volume of water taken, in cubic metres, from each production bore. Each meter shall:

- (a) Be telemetered to the Northland Regional Council; and
- (b) Be sealed and as tamper-proof as practicable; and
- (c) Be installed at the location from which the total volume of water is taken; and
- (d) Have an accuracy of +/-5%, and
- (e) Have an international accreditation or NZ equivalent calibration endorsement, and
- (f) Be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions to ensure the meter is fully functional at all times.

The Consent Holder shall, at all times, provide safe and practical access to each meter installed for Council to undertake visual inspections, data retrieval, and record water take measurements.

20 The Consent Holder shall verify that the meter required by Condition 19 is accurate. This verification shall be undertaken prior to June 30:

- (a) Following the first taking of water from each production bore in accordance with this consent; and
- (b) At least once in every five years thereafter.

Each verification shall be undertaken by a person, who in the opinion of the Council's Compliance Manager, is suitably qualified. Written verification of the accuracy shall be provided to the Council's assigned Monitoring Officer no later than 31 July following the date of each verification.

21 A copy of the records logged under Condition 19 shall be forwarded to the Council's assigned Monitoring Officer annually by the 31 July, for the previous period 1 July to the 30 June.

In addition, a copy of these records shall be forwarded immediately to the Council's assigned Monitoring Officer on written request. The records shall be in an electronic format that has been agreed to by the council.

Water Use Efficiency

22 The Consent Holder shall prepare an Irrigation Scheduling Plan (ISP) that outlines how irrigation decisions will be made. The purpose of the ISP is to set out how the irrigation will be undertaken to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop. The ISP shall be prepared by a suitably qualified and experienced person and submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP. The ISP shall, as a minimum, address:

- Water balance and crop water requirements;
- Subsurface drainage;
- Measures for continuous improvement in water efficiency; and
- Overall irrigation strategy.

For each irrigation area, the ISP should include:

- (a) A map of the irrigation area;
 - (b) A description of how water requirements for each irrigation cycle are calculated;
 - (c) Method(s) for assessing current soil moisture levels;
 - (d) Method(s) for assessing potential evapotranspiration (PET) and rainfall to date;
 - (e) Soil moisture target to be maintained in each zone by irrigation;
 - (f) How measured data will be used to assess irrigation requirements over the next irrigation cycle;
 - (g) A description of proposed method(s) for remaining within consent limits at each borehole or group of boreholes; and
 - (h) Continuous improvement in water efficiency.
- 23 The Consent Holder shall not exercise this consent until the ISP required by Condition 24 has been certified by the Council's Compliance Manager.
- 24 The ISP certified in accordance with Condition 25 shall be implemented prior to the first irrigation season, unless a later date has been approved in writing by the Council's Compliance Manager.
- 25 The Consent Holder must comply with the ISP at all times.
- 26 The Consent Holder shall, within six months of the first exercise of this consent, undertake an audit of the irrigation system and of the certified ISP. The audit shall be undertaken by a suitably qualified and experienced person. The irrigation system audit shall be prepared in accordance with Irrigation New Zealand's "Irrigation Evaluation Code of Practice" (dated 12 April 2010), and shall include recommendations on any improvements that should be made to the system to increase water efficiencies or any amendments to the ISP. The results of the audit and its recommendations shall be submitted in writing to the Council's assigned Monitoring Officer within one month of the audit being undertaken. Any recommended amendments to the ISP shall be submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP before they take effect. A follow-up audit shall occur at five yearly intervals throughout the term of this consent with the intent of confirming an irrigation efficiency of at least 80 percent.
- 27 The Consent Holder shall, within three months of notification in writing by the Council's Compliance Manager, implement any recommendations of the audit referred to in Condition 28.
- 28 The reticulation system and its component parts shall be maintained in good working order to minimise leakage and wastage of water.
- 29 The rate at which water is applied to the irrigated area shall not result in ponding of irrigated water within any irrigated area, or runoff from either surface or subsurface drainage to a water body, as a result of the exercise of this consent.

Advice Note: *The ISP seeks to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop.*

Review Condition

- 30 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - (b) To insert trigger level thresholds established in accordance with the GMCP as conditions of consent; or
 - (c) To review the allocation of the resource; or
 - (d) In response to any other relevant reason for review identified in Section 128 of the Resource Management Act.

A review of this consent may be carried out separately or together with reviews of other consents for the purpose of managing the effects of the activities carried out under those resource consents.

The Consent Holder shall meet all reasonable costs of any such review.

Lapsing Condition

- 31 This consent shall lapse five years after the date that the consent commences in accordance with section 116(1) of the Resource Management Act 1991, unless the consent has been given effect to before this date.

APPENDIX A – MASTER CONSENT CONDITIONS

General

1MC. The consented activity must not, individually or cumulatively, result in:

- (a) adverse effects of saltwater intrusion into the Aupōuri aquifer;
- (b) adverse effects on the hydrological functioning, including changes to water levels², of natural wetlands, springs and dune lakes;
- (c) alteration to the extents of rivers, natural wetlands, springs and/or dune lakes;
- (d) adverse effects on the significant indigenous vegetation and habitats in (terrestrial and freshwater environments of) dune lakes, springs and natural wetlands; and
- (e) adverse effects on the significant indigenous vegetation and significant habitats of indigenous fauna in terrestrial and freshwater environments of the Kaimaumu-Motutangi wetland; and
- (f) Adverse effects on the flow levels and flow variability of rivers and streams and springs so that their habitat quality and sustainable mahinga kai, recreational, and other social and cultural values, are maintained (including sufficient flows and flow variability to maintain their habitat quality, including to flush rivers of deposited sediment and nuisance algae and macrophytes and support the natural movement of indigenous fish and valued introduced species such as trout; and
- (g) lowering of the groundwater levels of the Aupōuri aquifer such that existing efficient bore takes operating as a permitted activity or in accordance with resource consent conditions cannot access the authorised volume of groundwater.

Prior to the Exercise of Consent

2MC. Prior to the exercise of this consent, new bores and all associated monitoring equipment required to be installed for the purposes of monitoring the baseline effects in accordance with the GMCP shall be constructed and installed by a suitably qualified person(s).

3MC. Where the GMCP requires that the frequency of monitoring for a parameter is continuous, then the monitoring equipment shall be installed as follows:

- (a) for groundwater level recording, to the requirements of the National Environmental Monitoring Standards Water Level: Water Level Field Measurement Standard, Version 3.0.0, dated July 2019;
- (b) for conductivity sensors they must be able to record “Specific Conductance” (corrected to 25 degrees Celsius), have available software for field calibration, and be able to record across the whole expected conductivity range for the water body measured;
- (c) Sensors must be installed in a secure manner to ensure stationarity over time;
- (d) Instantaneous reading recorded every five (5) minutes;
- (e) Recording to NZ Standard Time (NZST);

² Avoiding “change” means that as a result of the abstraction of water; median water levels, mean annual water level fluctuations and patterns of water level seasonality (relative summer vs winter) remain unchanged.

- (f) Water Level readings compensated for barometric pressure prior to transmission;
 - (g) Telemetered to Northland Regional Council with a minimum of hourly transmission of data; and
 - (h) Reference points levelled to One Tree Point datum and New Zealand Vertical Datum.
- 4MC. Prior to the exercise of this consent, the Consent Holder shall provide to the Council's assigned monitoring officer the installation details from the suitably qualified person of all monitoring equipment that has been installed in accordance with Condition 3MC. This information will be used by the Council's Compliance Manager to determine compliance with Conditions 2MC and 3MC.
- 5MC. Prior to the exercise of this consent, a suitable approach to detecting and responding to saline intrusion effects during Stage 1 (Year 1) shall be prepared. The Council's Compliance Manager shall certify that the approach to detecting and responding to saline intrusion will give effect to Condition 1MC. The certified information shall be inserted into the GMCP through the process set out in Condition 8MC prior to the exercise of this consent.

Monitoring and Contingency Measures

- 6MC. This consent shall be exercised and monitored in accordance with the most recent revision of the GMCP.
- 7MC. The Consent Holder shall, at all times, provide safe and easy access to the production bore wellhead(s) for the purpose of undertaking monitoring on the bore(s), as set out in the GMCP.
- 8MC. Excluding the Staged Implementation and Monitoring Programme Review process, the GMCP may be amended at any time by the following process:
- (a) Subject to Condition 8MC(d), the Council may amend the GMCP by providing notice in writing to the Consent Holder that the GMCP has been amended and providing a copy of the amended GMCP to the Consent Holder.
 - (b) Subject to Condition 8MC(d), the Consent Holder may submit a request for an amendment by giving written notice to the Council of the proposed amendment along with any supporting technical documents.
 - (c) Prior to making any decision to amend the GMCP or not, the Council will seek input on any proposed amendment from the Consent Holder and from the Director-General of Conservation.
 - (d) The Council will not approve any amendment to the GMCP unless the technical assessment of the proposed change clearly indicates that the change will not result in a breach of Condition 1MC.

Proposed Draft Conditions – Middle Group

This framework comprises proposed draft conditions applicable to the following applications:

APP.040919.01.01	NA Bryan Estate, SG Bryan, CL Bryan, KY Bryan, Valdares and D Bryan (Property 1)
APP.040130.01.01	Tuscany Valley Avocados Ltd
APP.040918.01.01	NA Bryan Estate, SG Bryan, CL Bryan, KY Bryan, Valadares & D Bryan (Property 2)
APP.008647.01.06	Avokaha Ltd
APP.039628.01.02	KSL Ltd
APP.040361.01.01	Tiri Avocados Ltd
APP.040362.01.01	Valic NZ Ltd
APP.040363.01.01	Green Charteris Family Trust
APP.039841.01.02	Mate Yelavitch & Co Ltd
APP.040386.01.01	Robert Paul Campbell Trust

AUT.XX **To take and use groundwater from the Paparore, Waiparera, Motutangi, and Houhora sub-aquifers of the Aupōuri-Aquifer management unit for horticultural irrigation purposes.**

LOCATION

Address of Site

[Insert address reference]

Legal Description of Site

Site of take: [Insert legal descriptions]

Sites of use: [Insert legal descriptions]

Map Reference (New Zealand Transverse Mercator Projection)

Bore 1: XXE XXN

Bore 2: XXE XXN

Note: An error accuracy of +/- 50 metres applies to these map references.

CONSENT DURATION

This consent is granted for a period expiring on **30 November 2033**.

CONDITIONS OF AUT.XX

- 1 The consent holder shall pay all charges relating to the recovery of cost for the administration, monitoring and supervision of this consent fixed by Council under Section 36 of the Resource Management Act 1991.
- 2 The exercise of this consent is bound by the Master Consent conditions **attached** as Appendix A. The Master Consent uses an alternate numbering system '1MC, 2MC, 3MC...'.
- 3 Subject to compliance with the conditions of this consent, the activity authorised by this consent shall be carried out in accordance with the application and documents submitted as part of the application, including the following documents:
 - (a) Assessment of Environmental Effects prepared by Williamson Water & Land Advisory Ltd: *Aupōuri Aquifer Groundwater Take Consent Applications, Assessment of Environmental Effects – Aupōuri Aquifer Water User Group. WWLA0184: Rev. 2, dated 27 February 2020;*
 - (b) Model Report prepared by Williamson Water & Land Advisory Ltd: *Aupōuri Aquifer Groundwater Model, Factual Technical Report – Modelling – Aupōuri Aquifer Water User Group. WWLA0184: 3, dated 5 February 2020.*

For the avoidance of doubt, where information contained in the application documents is contrary to the conditions of this consent and those in the Master Consent (Appendix A), or where the information contained in the application documents is internally inconsistent, the conditions of this consent and the Master Consent shall prevail.

- 4 This consent operates under an adaptive management regime. The detail of that adaptive management regime is set out in the Groundwater Monitoring and Contingency Plan for the Paparore, Waiparera, Motutangi and (southern) Houhora sub-aquifers of the Aupōuri aquifer management unit, **Dated: [XX XX 2021] (“GMCP”)**. The primary purpose of the GMCP is to set out the procedures by which the abstraction will be monitored and managed to ensure compliance with Condition 1MC. For the purpose of this consent, the GMCP is the most recent version of the GMCP which may be changed under Condition 8MC.
- 5 In the event that any of the provisions of the GMCP conflict with the requirements of these conditions of consent, these conditions of consent shall prevail. The Consent Holder must comply with the GMCP at all times.
- 6 The consent shall be exercised in a staged manner as follows:
 - (a) Stage 1, which shall be a minimum period of 12 months after the commencement of the consent and must include all or part abstraction of the Stage 1 annual volume as set out in Condition 9;
 - (b) Stage 2, which shall be for the minimum period of two consecutive irrigation seasons;
 - (c) Stage 3, which shall be for the minimum period of two consecutive irrigation seasons;
 - (d) Stage 4 which shall be from the irrigation season immediately following written approval to progress from Stage 3 until the expiry of the consent, unless Conditions 11-16 apply.
- 7 The combined daily volume of water taken across all bores shall not exceed the following:

- (a) [XX] cubic metres in any 24 consecutive hours unless Conditions 11(b), 13, 15 or 16 of this consent apply; and
 - (b) That required to replace soil moisture depleted by evapotranspiration over the irrigated area.
- 8 The consent holder shall take all practicable steps to ensure that:
- (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
 - (b) The irrigation does not cause surface runoff that would discharge into natural waterbodies;
 - (c) There is no leakage from pipes and structures;
 - (d) The use of water is confined to targeted areas;
 - (e) Irrigation induced soil erosion and soil pugging does not occur;
 - (f) Soil quality is not degraded as a consequence of irrigation; and
 - (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.
- 9 The annual volume of water taken from Bore [xx] for each stage shall not exceed the following unless Conditions 11-16 apply:
- (a) Stage 1: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (b) Stage 2: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (c) Stage 3: [XX] cubic metres between 1 July in a year and 30 June in the following year;
 - (d) Stage 4: [XX] cubic metres between 1 July in a year and 30 June in the following year.
- 10 Progress to the next stage shall only occur where written approval is given by the Council's Compliance Manager; and
- (a) This written approval will only be given if the council is satisfied that the Staged Implementation and Monitoring Review prepared in accordance with the GMCP confirms that the groundwater abstraction complies with Condition 1MC; and
 - (b) A decision on whether written approval will be given or not will not be made until the Council has consulted with the Consent Holder and the Director-General of Conservation over the Staged Implementation and Monitoring Review; and
 - (c) Notwithstanding Condition 10(b), written approval to progress from Stage 1 to Stage 2 will not be considered unless all the monitoring trigger levels required by the GMCP have been set; and
 - (d) A report detailing the reasons for the Council's decision in regard to progressing to the next stage, including the identification and discussion of any matters raised during the consultation described in Condition 10(b), will be provided to the Consent Holder and the Director-General of Conservation.

Breaching of Trigger Levels

- 11 In the event of a Trigger Level 2 (TL2) in the GMCP being exceeded, the following actions and requirements shall be initiated;
- (a) The Council will advise the Consent Holder in writing that a TL2 has been breached within 24 hours of the breach being realised;
 - (b) Upon receipt of this notice, the Consent Holder shall immediately reduce their daily abstraction to 50% of the current average daily quantity, as advised by the Council in the notice. The current average daily quantity will be calculated using the previous months water use records required by Condition 21. If the exceedance occurs within one month of a Consent Holder first taking water for irrigation purposes within an irrigation season, then the average shall be calculated using the water use records for this period only;
 - (c) As required by the GMCP, the Council will commission a Groundwater Trigger Exceedance Report to assess why the trigger level has been breached, identify the pumping bores in the area of effect and review all of the available data collected in the affected area(s).
- 12 Once Condition 11(b) has been complied with, the Consent Holder may apply to the Council's Compliance Manager for an alternative reduction in its daily water take volume. Council's approval of an alternative reduction value will only be given if it is satisfied that a TL2 exceedance that is attributable to this consent will not occur. The applicable alternative reduction value is the value that is contained in the recommendations made in the Groundwater Trigger Exceedance Report required to be prepared by Condition 11(c). Approval for an alternative reduction will be given to Priority A Consent Holders first, as identified in the GMCP.
- 13 If the TL2 trigger levels are still exceeded after 21 days, then the Consent Holder shall reduce their daily abstraction to 25% of the current average daily quantity calculated for Condition 11(b). The Council will advise the Consent Holder in writing of any breach and the required reduction in the daily water take volume.
- 14 Once Condition 13 has been complied with, the Consent Holder shall also comply with the recommendations contained in the revised and updated Groundwater Trigger Exceedance Report commissioned by the Council which will be prepared for the purpose of specifying a programme of actions to achieve compliance with Condition 1MC.
- 15 If the TL2 trigger levels continue to be exceeded after the implementation of the remedial measures required under Conditions 11-14, the Council may require the Consent Holder to suspend the exercise of this consent, or continue their daily abstraction at a specified rate, until such time as the Council issues written notice that the Consent may be exercised again in accordance with the requirements of the revised and updated Groundwater Trigger Exceedance Report. Any increase in abstraction will be provided to Priority A Consent Holders first, as identified in the GMCP.
- 16 Any abstraction that results in non-compliance with Condition 1MC shall be suspended.

Notification of Irrigation

- 17 The Consent Holder shall advise the Council's assigned Monitoring Officer in writing when irrigation is to commence for the first time each season, at least five working days beforehand.

Backflow Prevention

- 18 Prior to the first exercise of this consent, a backflow prevention system shall be installed on irrigation systems used to apply animal effluent, agrichemical or nutrients to prevent the backflow of contaminants to groundwater.

Metering and Abstraction Reporting

- 19 Prior to the first exercise of this consent, a meter and datalogger(s) with at least 12 months data storage to record the rate and volume of take, and the date and time this water was taken shall be installed and maintained to measure at least every 15 minutes the volume of water taken, in cubic metres, from each production bore. Each meter shall:

- (a) Be telemetered to the Northland Regional Council; and
- (b) Be sealed and as tamper-proof as practicable; and
- (c) Be installed at the location from which the total volume of water is taken; and
- (d) Have an accuracy of +/-5%, and
- (e) Have an international accreditation or NZ equivalent calibration endorsement, and
- (f) Be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions to ensure the meter is fully functional at all times.

The Consent Holder shall, at all times, provide safe and practical access to each meter installed for Council to undertake visual inspections, data retrieval, and record water take measurements..

- 20 The Consent Holder shall verify that the meter required by Condition 19 is accurate. This verification shall be undertaken prior to 30 June:

- (a) Following the first taking of water from each production bore in accordance with this consent; and
- (b) At least once in every five years thereafter.

Each verification shall be undertaken by a person, who in the opinion of the Council's Compliance Manager, is suitably qualified. Written verification of the accuracy shall be provided to the Council's assigned Monitoring Officer no later than 31 July following the date of each verification.

- 21 A copy of the records required to be kept by Condition 19 shall be forwarded to the Council's assigned Monitoring Officer annually by the 31 July, for the previous period 1 July to the 30 June.

In addition, a copy of these records shall be forwarded immediately to the Council's assigned Monitoring Officer on written request. The records shall be in an electronic format that has been agreed to by the council.

Water Use Efficiency

- 22 The Consent Holder shall prepare an Irrigation Scheduling Plan (ISP) that outlines how irrigation decisions will be made. The purpose of the ISP is to set out how the irrigation will be undertaken to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop. The ISP shall be prepared by a suitably qualified and experienced person and submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP. The ISP shall, as a minimum, address:

- Water balance and crop water requirements;
- Subsurface drainage;
- Measures for continuous improvement in water efficiency; and
- Overall irrigation strategy.

For each irrigation area, the ISP should include:

- (a) A map of the irrigation area;
- (b) A description of how water requirements for each irrigation cycle are calculated;
- (c) Method(s) for assessing current soil moisture levels;
- (d) Method(s) for assessing potential evapotranspiration (PET) and rainfall to date;
- (e) Soil moisture target to be maintained in each zone by irrigation;
- (f) How measured data will be used to assess irrigation requirements over the next irrigation cycle;
- (g) A description of proposed method(s) for remaining within consent limits at each borehole or group of boreholes; and
- (h) Continuous improvement in water efficiency.

- 23 The Consent Holder shall not exercise this consent until the ISP required by Condition 24 has been certified by the Council's Compliance Manager.
- 24 The ISP certified in accordance with Condition 21 shall be implemented prior to the first irrigation season, unless a later date has been approved in writing by the Council's Compliance Manager.
- 25 The Consent Holder must comply with the ISP at all times.
- 26 The Consent Holder shall, within six months of the first exercise of this consent, undertake an audit of the irrigation system and of the certified ISP. The audit shall be undertaken by a suitably qualified and experienced person. The irrigation system audit shall be prepared in accordance with Irrigation New Zealand's "Irrigation Evaluation Code of Practice" (dated 12 April 2010), and shall include recommendations on any improvements that should be made to the system to increase water efficiencies or any amendments to the ISP. The results of the audit and its recommendations shall be submitted in writing to the Council's assigned Monitoring Officer within one month of the audit being undertaken. Any recommended amendments to the ISP shall be submitted to the Council's Compliance Manager for written certification that it will achieve the purpose of the ISP before they take effect. A follow-up audit shall occur at five yearly intervals throughout the term of this consent with the intent of confirming an irrigation efficiency of at least 80 percent.
- 27 The Consent Holder shall, within three months of notification in writing by the Council's Compliance Manager, implement any recommendations of the audit referred to in Condition 28.
- 28 The reticulation system and its component parts shall be maintained in good working order to minimise leakage and wastage of water.
- 29 The rate at which water is applied to the irrigated area shall not result in ponding of irrigated water within any irrigated area, or runoff from either surface or subsurface drainage to a water body, as a result of the exercise of this consent.

Advice Note: *The ISP seeks to ensure that at least 80 percent of the annual volume of water applied to the irrigable area is retained in the soil in the root zone of the crop, compared to the average gross depth of water applied to the crop.*

Review Condition

- 30 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - (b) To insert trigger level thresholds established in accordance with the GMCP as conditions of consent; or.
 - (c) To review the allocation of the resource; or
 - (d) In response to any other relevant reason for review identified in Section 128 of the Resource Management Act

A review of this consent may be carried out separately or together with reviews of other consents for the purpose of managing the effects of the activities carried out under those resource consents..

The Consent Holder shall meet all reasonable costs of any such review.

Lapsing Condition

- 31 This consent shall lapse five years after the date that the consent commences in accordance with section 116(1) of the Resource Management Act 1991, unless the consent has been given effect to before this date.

APPENDIX A –MASTER CONSENT CONDITIONS

General

1MC. The consented activity must not, individually or cumulatively, result in:

- (a) adverse effects of saltwater intrusion into the Aupōuri aquifer;
- (b) adverse effects on the hydrological functioning, including changes to water levels³, of natural wetlands, springs and dune lakes;
- (c) alterations to the extents of rivers, natural wetlands, springs and/or dune lakes;
- (d) adverse effects on the significant indigenous vegetation and habitats in (terrestrial and freshwater environments of) dune lakes, springs and natural wetlands;
- (e) Adverse effects on the flow levels and flow variability of rivers and streams and springs so that their habitat quality and sustainable mahinga kai, recreational, and other social and cultural values, are maintained (including sufficient flows and flow variability to maintain their habitat quality, including to flush rivers of deposited sediment and nuisance algae and macrophytes and support the natural movement of indigenous fish and valued introduced species such as trout; and
- (f) lowering of the groundwater levels of the Aupōuri aquifer such that existing efficient bore takes operating as a permitted activity or in accordance with resource consent conditions cannot access the authorised volume of groundwater.

Prior to the Exercise of Consent

2MC. Prior to the exercise of this consent, new bores and all associated monitoring equipment required to be installed for the purposes of monitoring the baseline effects in accordance with the GMCP shall be constructed and installed by a suitably qualified person(s).

3MC. Where the GMCP requires that the frequency of monitoring for a parameter is continuous, then the monitoring equipment shall be installed as follows:

- (a) for groundwater level recording, to the requirements of the National Environmental Monitoring Standards Water Level: Water Level Field Measurement Standard, Version 3.0.0, dated July 2019.;
- (b) for conductivity sensors they must be able to record “Specific Conductance” (corrected to 25 degrees Celsius), have available software for field calibration, and be able to record across the whole expected conductivity range for the water body measured;
- (c) Sensors must be installed in a secure manner to ensure stationarity over time;
- (d) Instantaneous reading recorded every five (5) minutes;
- (e) Recording to NZ Standard Time (NZST);
- (f) Water Level readings compensated for barometric pressure prior to transmission;
- (g) Telemetered to Northland Regional Council with a minimum of hourly transmission of data; and

³ Avoiding “change” means that as a result of the abstraction of water; median water levels, mean annual water level fluctuations and patterns of water level seasonality (relative summer vs winter) remain unchanged.

- (h) Reference points levelled to One Tree Point datum and New Zealand Vertical Datum.
- 4MC. Prior to the exercise of this consent, the Consent Holder shall provide to the Council's assigned monitoring officer the installation details from the suitably qualified person of all monitoring equipment that has been installed in accordance with Condition 3MC. This information will be used by the Council's Compliance Manager to determine compliance with Conditions 2MC and 3MC.
- 5MC. Prior to the exercise of this consent, a suitable approach to detecting and responding to saline intrusion effects during Stage 1 (Year 1) shall be prepared. The Council's Compliance Manager shall certify that the approach to detecting and responding to saline intrusion will give effect to Condition 1MC. The certified information shall be inserted into the GMCP through the process set out in Condition 8MC prior to the exercise of this consent.

Monitoring and Contingency Measures

- 6MC. This consent shall be exercised and monitored in accordance with the GMCP.
- 7MC. The Consent Holder shall, at all times, provide safe and easy access to the production bore wellhead(s) for the purpose of undertaking monitoring on the bore(s), as set out in the GMCP.
- 8MC. Excluding the Staged Implementation and Monitoring Review process, the GMCP may be amended at any time by the following process:
 - (a) Subject to Condition 8MC(d), the Council may amend the GMCP by providing notice in writing to the Consent Holder that the GMCP has been amended and providing a copy of the amended GMCP to the Consent Holder.
 - (b) Subject to Condition 8MC(d), the Consent Holder may submit a request for an amendment by giving written notice to the Council of the proposed amendment along with any supporting technical documents.
 - (c) Prior to making any decision to amend the GMCP or not, the Council will seek input on any proposed amendment from the Consent Holder and from the Director-General of Conservation.
 - (d) The Council will not approve any amendment to the GMCP unless the technical assessment of the proposed change clearly indicates that the change will not result in a breach of Condition 1MC.