

4.0 SOIL CLASSIFICATIONS

4.1 Highly Productive Land

The NPS-HPL came into effect in October 2022. This policy seeks to protect the productivity potential of our most productive land by regulating non-productive land uses and inappropriate subdivision. The policy statement requires all regional authorities to identify the HPL within their region. Until this work has been completed an interim definition applies that includes all land in LUC classes 1, 2 and 3. The following definition is taken from section 1.3, page 4 of the NPS-HPL:

LUC 1, 2, or 3 land means land identified as Land Use Capability Class 1, 2, or 3, as mapped by the New Zealand Land Resource Inventory or by any more detailed mapping that uses the Land Use Capability classification.

4.2 Site Classifications

The table below shows the LUC area breakdown for the proposed site as well as the percentage of HPL.

LUC Unit	Area (ha)	HPL Classification	% of total Area
3w 2	5.32	HPL	58.5
4w 1	0.24	Not HPL	2.7
6e 8	3.53	Not HPL	38.8
Total area	9.09		
Area HPL	5.32	Total % HPL	58.5
Total area non-HPL	3.77	Total % non-HPL	41.5

4.3 NZLRI Mapping

The NZLRI is based on an LUC assessment of the whole of New Zealand and has been carried out at a scale of 1:50,000. It is intended for regional use and planning and is not meant to be used at a farm scale. The 3rd Edition of The Land Use Capability Survey Handbook (Lynn et al 2009) cautions against enlarging LUC data beyond the scale at which it was gathered as it can produce unreliable and misleading results. At a scale of 1:50,000 the smallest area that can be reliably delineated for regional scale use is 10ha. (Lynn et al 2009). The total area surveyed at this site was 9.09ha. As such, it is outside of the recommended area for which meaningful information can be obtained. It is expected therefore that the NZLRI data used at the scale of this report will only provide an indication of the possible LUC units present.

4.4 Reclassification of the NZLRI LUC Units

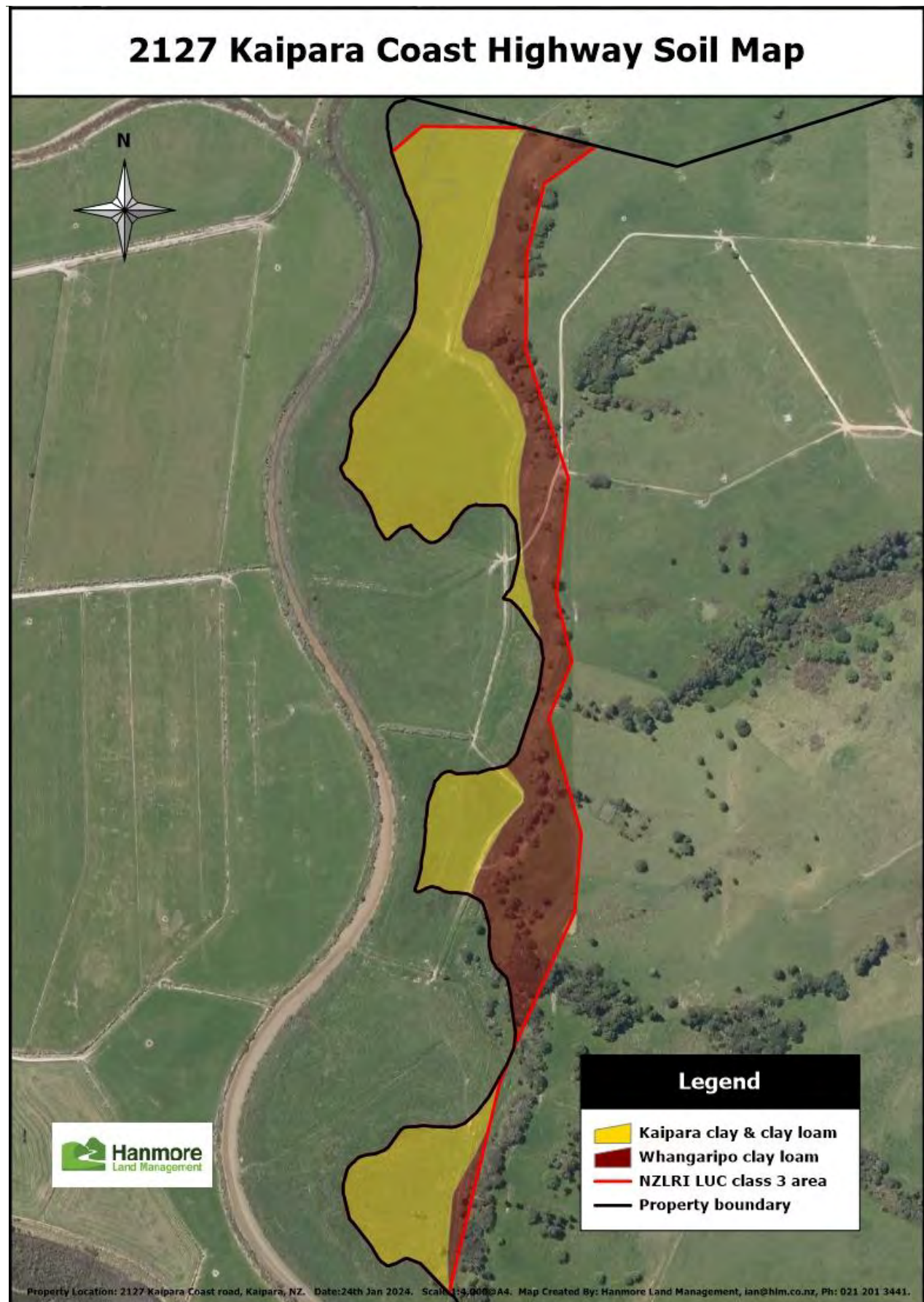
Due to the detailed site mapping carried out for this report the 9.09ha area mapped by the NZLRI as LUC unit 3w 2 has been remapped. The updated mapping retains the original 3w 2

unit on 58.5% of the area and adds LUC units 4w 1 and 6e 8. The reasons for these changes are discussed below.

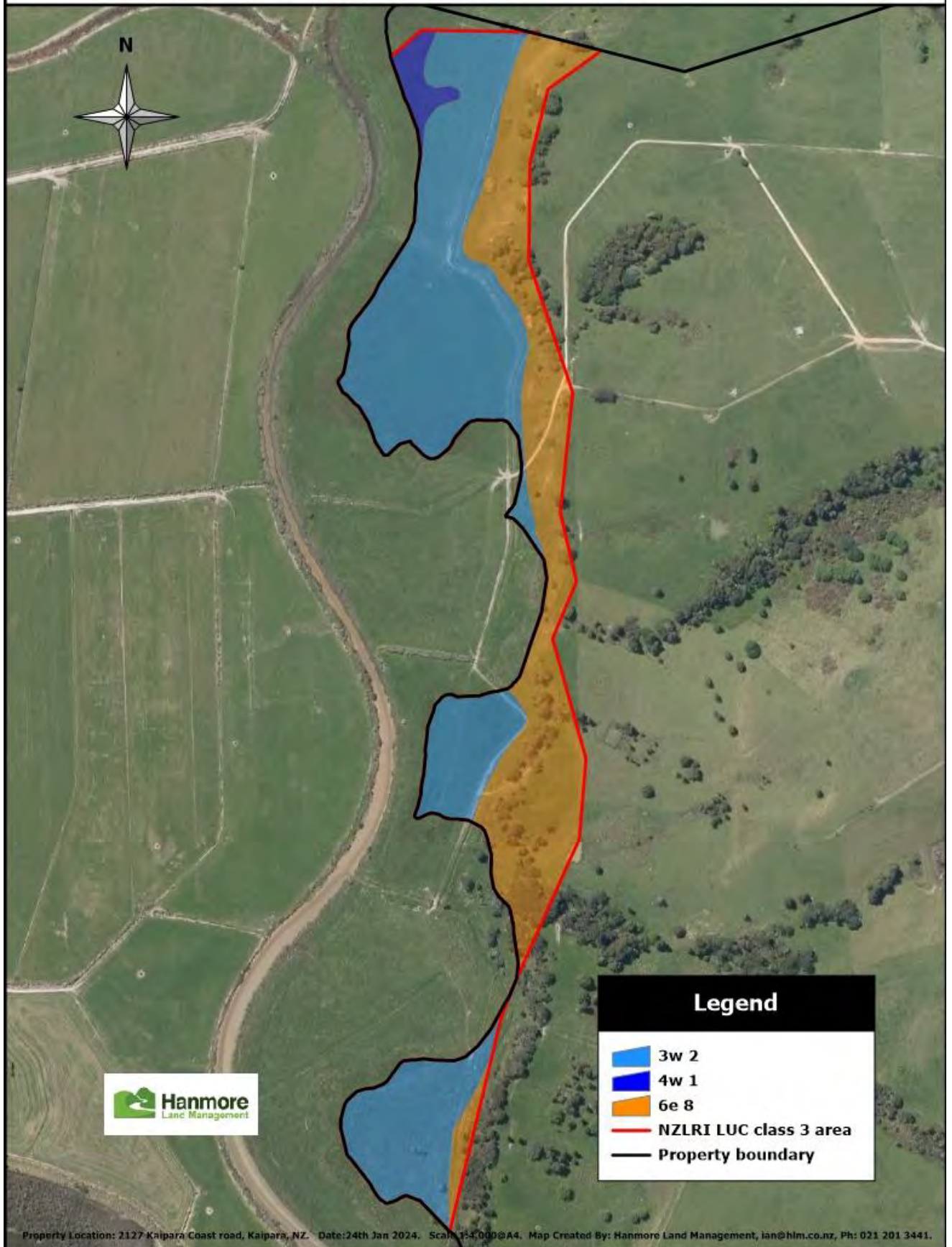
- 3w 2 to 4w 1 – This unit was added to an area of a lower lying estuarine terrace with poorer soil drainage and a greater vulnerability to flooding than the area of LUC unit 3w 2.
- 3w 2 to 6e 8 – Due to the inaccuracy of the NZLRI at a farm scale it had mapped sandstone hills as estuarine plains (3w 2). Site mapping corrected the position of the change in landform and assigned the correct LUC unit to the moderately steep to steep sandstone hills landform.

5.0 SITE ASSESSMENT

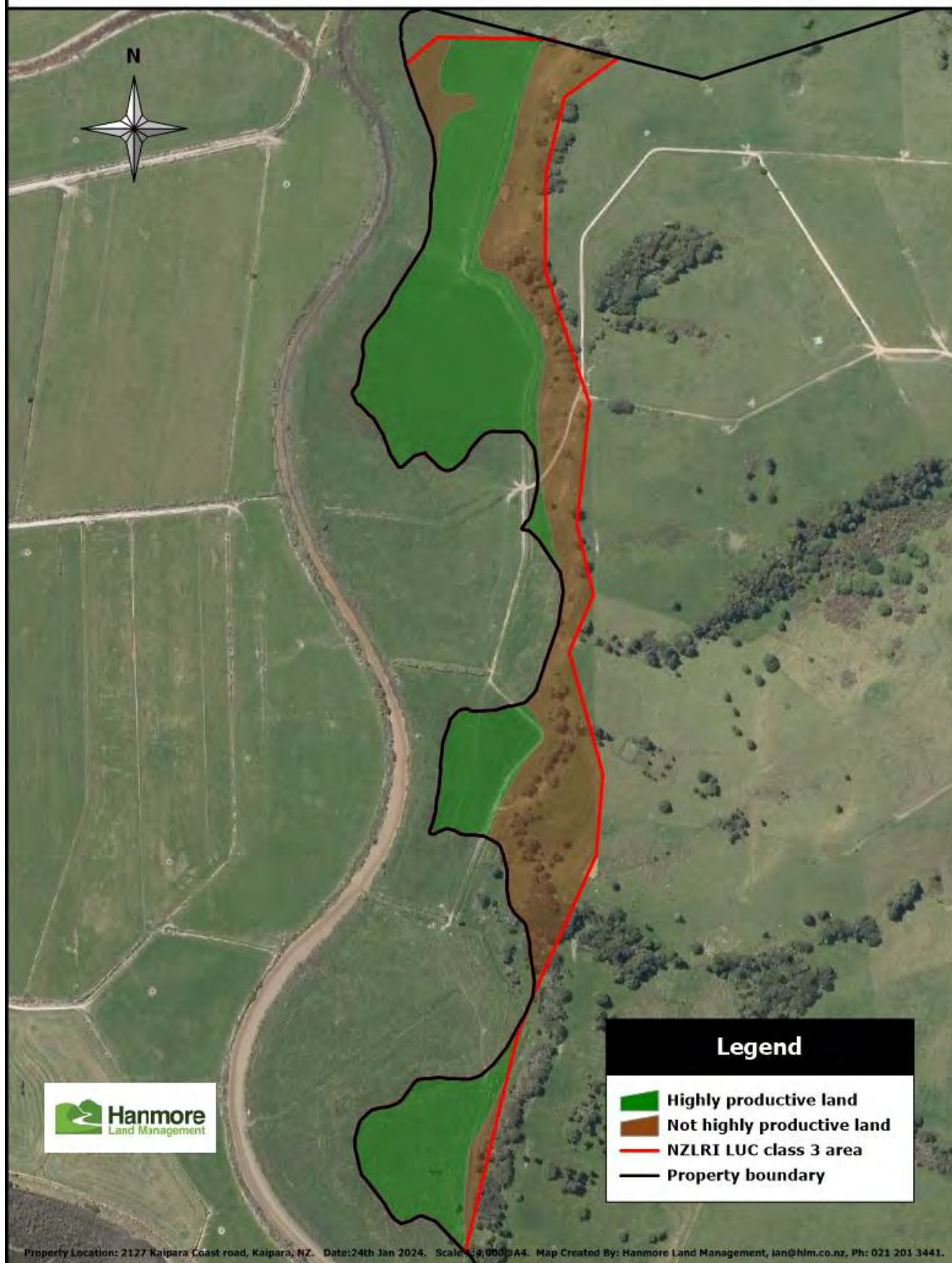
Under the NPS-HPL interim regime all LUC units in LUC classes 1, 2 and 3 are classified as HPL. As such, the area of LUC unit 3w 2 will come under this classification. This unit covers 5.32ha or 58.5% of the area of interest with the remaining 41.5% being LUC classes 4 and 6 and outside of the HPL classification.



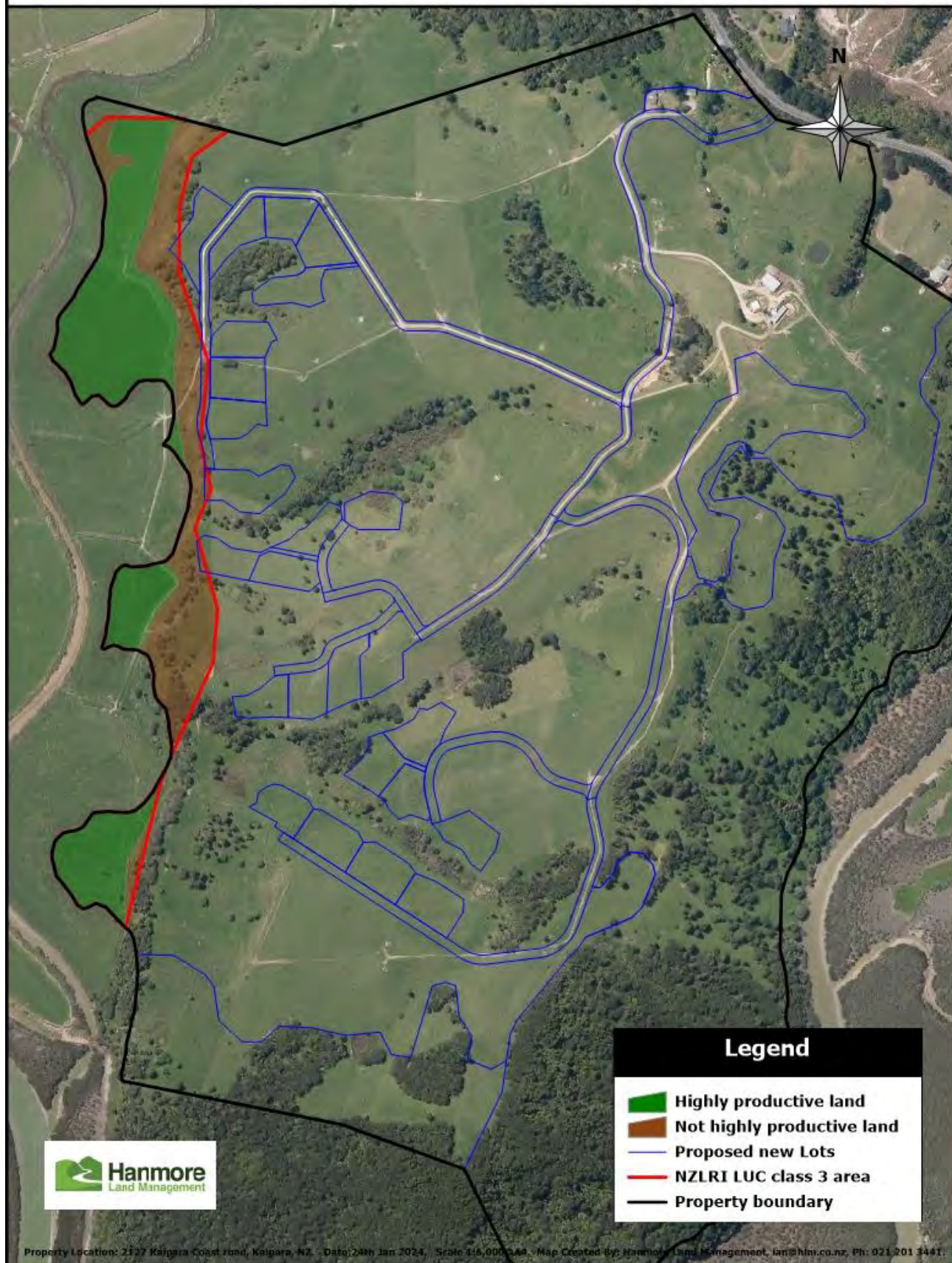
2127 Kaipara Coast Highway Land Use Capability Classifications



2127 Kaipara Coast Highway Highly Productive Land Classifications



2127 Kaipara Coast Highway Highly Productive Land Classifications with Proposed Scheme Plan Overlay



122 LUC UNIT DESCRIPTIONS

LUC unit:	IIlw2 (19 394 ha)
LUC suite:	2. Alluvial and estuarine plains and low terraces
LUC subsuite:	2b. Estuarine plains with gley soils: (LUC units IIw2, IIlw2)
Description:	Poorly drained flat areas within floodplains, valley plains and on low terraces with gley fertile soils developed on sedimentary and volcanic alluvium. Has moderate wetness limitation for arable use, but can be effectively drained.
Type location:	P08/887775 Notorious West Road
Altitudinal range:	0–60 m
Slope:	Flat (A), 0–3°
Landform:	Floodplains, plains.
Rock type:	Fine alluvium (Af).
Soils:	Gley soils on estuarine clays, sands and alluvium. Gley soils of Kaipara suite (KP, KPy, KA, KAy, TZ, TZy), Waipu suite (YUa, YUay, YU, YUy, YA) and Waipapa suite (KO, KOr, KOI, KOy, YF).
Erosion:	<i>Present:</i> Negligible (0) to slight (1) streambank (Sb) and deposition (D) <i>Potential:</i> Slight (1) streambank (Sb) and deposition (D)
Vegetation:	Improved pasture (gl), rushes, sedges (hR), vegetables, nurseries (CV).
Annual rainfall range:	1200–1400 mm
Land use:	<i>Present:</i> - Grazing – Intensive incl. dairying – Present average carrying capacity (s.u./ha) = 17 – Top farmer carrying capacity (s.u./ha) = 20 <i>Potential:</i> - Cropping – Root and green fodder crops. Cereals. - Cropping – Root and green fodder crops. Cereals. Vegetables. Horticulture. - Grazing – Intensive – Attainable physical potential carrying capacity (s.u./ha) = 24 - Forestry – Production – site index for <i>Pinus radiata</i> = 18–21
Soil conservation management:	– Potential for occasional flooding. Suitable flood protection should be carefully planned; management should be considered over broader catchment area. – Drainage required for management of watertable levels. Maintain condition of drains. – Streambank protection may be necessary in some areas. – Stopbanks recommended close to flood prone areas. – Maintain clearance of vegetation within stream and river channels.
Comments:	Some horticulture on Waipapa suite soils if deep drained.

LUC unit:	IVw1 (35 423 ha)
LUC suite:	2. Alluvial and estuarine plains and low terraces
LUC subsuite:	2c. Poorly drained floodplains and low terraces: (LUC units IVw1, VIw1, VIIw1)
Description:	Flat to gently undulating areas on floodplains, valleyplains and low terraces on alluvium, with continuing severe wetness or flooding limitation to arable use. Severe limitations to cropping because of runoff from adjacent hills, flooding of streams and high watertables. Potential for moderate streambank erosion and deposition. Recent soils on alluvium characteristic of this unit. Weakly to strongly leached yellow-brown earths and brown granular loams and clays with severe wetness limitations recorded on higher terraces. Waipuna clay on higher terraces included because of continuing wetness due to poor internal drainage of soils. Areas assessed as requiring on-farm drainage.
Type location:	Q06/pt R06/217305
Altitudinal range:	0–100 m
Slope:	Flat to undulating with limited areas of undulating land (A, B), 0–7°
Landform:	Floodplains and low terraces.
Rock type:	Fine alluvium (Af). Undifferentiated fine-grained alluvium, floodplain alluvium (Af), and fine alluvium intercalated with organic-peat deposits (Af + Pt).
Soils:	Recent soils on sedimentary and volcanic alluvium. Recent soils of Whareora suite (WFa, WF, WFa) and Kohumaru suite (MF, MFm). Moderately to strongly leached yellow-brown earths of Whareora suite (WU). Moderately to strongly leached brown granular loams and clays of Kohumaru suite (KM, KMm). Gley soils of Kaipara suite (TZ, TZy, KP, KPy, KA, KAy), Waipapa suite (KO, KOr, KOI, KOy, YF), Waipu suite (YUa, YUay, YU, YUy, YA) included where wetness is considered a severe limitation to arable use.
Erosion:	<i>Present:</i> Negligible (0) to moderate (2) streambank (Sb). Negligible (0) to slight (1) deposition (D). Some areas may show moderate (2) to severe (3) deposition after floods <i>Potential:</i> Moderate streambank (Sb) and deposition (D)
Vegetation:	Improved pasture (gl), rushes, sedges (hR), wetland vegetation (hW), gorse (sG), manuka, kanuka (sM).
Annual rainfall range:	1200–1600 mm
Land use:	<i>Present:</i> Grazing – Intensive – Present average carrying capacity (s.u./ha) = 17 – Top farmer carrying capacity (s.u./ha) = 20 Cropping – Root and green fodder crops <i>Potential:</i> Grazing – Intensive – Attainable physical potential carrying capacity (s.u./ha) = 24 Cropping – Root and green fodder crops Forestry – Production – site index for <i>Pinus radiata</i> = 20–23.
Soil conservation management:	These areas may be prone to occasional flooding (deposition and erosion). Suitable flood protection such as drainage and stopbanks should be

considered on a long-term basis, management should be directed over whole catchment.

- On-farm drainage required. Maintain condition of drains.
- Stopbanks should be constructed in flood prone areas and their condition maintained.
- Streambank protection may be required. Erosion can be locally severe and difficult and expensive to repair or control.
- Maintain clearance of vegetation within stream and river channels.
- Watertables need to be monitored and controlled.

Comments:

Soils may range from well to poorly drained. Much land can be effectively drained, but high watertables, periodic flooding, and runoff from surrounding hills add to the drainage difficulty. Many areas require stopbank protection.

LUC unit:	Vle8 (61 022 ha)		
LUC suite:	4. Sedimentary rock terrain excluding greywacke		
LUC subsuite:	4a. Interbedded and massive sandstone and mudstone: (LUC units Ille3, Ive5, Vle1, Vle8, Vle4)		
Description:	Moderate to steep slopes forming hilly to steepland terrain where interbedded sandstones and mudstones are dominant lithologies with less extensive areas on massive sandstones, mudstones and conglomerate. Rock types, often of Miocene age, may be associated with minor constituents of argillite and jointed mudstone. Steeper version of Vle1 and Vle7. Potential for moderate soil slip, earthslip, and sheet erosion and slight tunnel gully erosion.		
Type location:	Q09/435265 Glorit – Kaipara Hills Road		
Altitudinal range:	0–400 m		
Slope:	Moderately steep to steep (E, F), 21–35°		
Landform:	Steep hills, escarpments.		
Rock type:	Interbedded sandstones (Sb), massive sandstones (Sm), interbedded mudstones (Mb), massive mudstones (Mm), argillite (Ar), jointed mudstone (Mj).		
Soils:	Yellow-brown earth hill soils on stratified sandstones and mudstones. Yellow-brown earths of Puhoi suite (PBH, PBuH, TMH, WRH, WReH, OFH, MXH, WAH, AYH, AYfH) and Waitotira suite (WCS, YCgH, YCH, YCrH, RPH, RPaH, PVH).		
Erosion:	<i>Present:</i>	Slight (1) to moderate (2) sheet (Sh) and soil slip (Ss). Slight (1) earthflow (Ef) and gully (G). Negligible (0) to slight (1) tunnel gully (T)	
	<i>Potential:</i>	Moderate (2) sheet (Sh), soil slip (Ss), gully (G) and earthflow (Ef). Slight (1) tunnel gully (T)	
Vegetation:	Improved pasture (gl), semi-improved pasture (gS), manuka, kanuka (sM), mixed indigenous scrub (sX), mixed indigenous scrub with tree fern (sT), lowland podocarp–broadleaved forest (fO), exotic conifer forest (ff), rushes, sedges (hR), kauri forest (fk).		
Annual rainfall range:	1200–1600 mm		
Land use:	<i>Present:</i>	Grazing – Present average carrying capacity (s.u./ha) = 7 – Top farmer carrying capacity (s.u./ha) = 8 Undeveloped land Forestry – Production – exotic spp. Reversion to scrub	
	<i>Potential:</i>	Grazing – Attainable physical potential carrying capacity (s.u./ha) = 9 Cropping – Unsuitable Forestry – Production – site index for <i>Pinus radiata</i> = 31–34	
Soil conservation management:	– Maintain good-quality pastures/apply adequate fertiliser levels – major elements and trace element requirements. – Open plant soil conservation trees on areas susceptible to mass movement. Block planting of trees (indigenous scrub and forest and exotic trees) should be considered on steepest slopes or potentially unstable sites.		

- Maintain dense vegetative cover on steeper slopes. Oversow and fertilise slip scars.
- Pair plant soil conservation trees in tunnel gullies and gullies.
- Control runoff away from steep slopes and potentially unstable sites.
- To minimise soil erosion and maintain water quality, carefully plan all earthworks and excavation of roads, drains, dams.
- Control grazing by avoiding overstocking and concentrated stock movement (repeated tracking).
- Control feral (noxious) animals in forested areas. Protect conservation planting adequately from damage by cattle, goats, possums.

8.0 REFERENCES

Harmsworth, G.R. 1996. Land Use Capability classification of the Northland region. A report to accompany the second edition (1:50,000) NZLRI worksheets. Landcare Research Science Series 9. Lincoln, Manaaki Whenua Press.

Lynn IH, Manderson AK, Page MJ, Harmsworth GR, Eyles GO, Douglas GB, Mackay AD, Newsome PJF 2009. NZ Land Use Capability Survey Handbook – a New Zealand handbook for the classification of land 3rd Edition. Hamilton, AgResearch; Lincoln, Landcare Research; Lower Hutt, GNS Science.



Hanmore
Land Management

P. 021 201 3441 E. ian@hlm.co.nz

hanmorelandmanagement.co.nz

18 March 2024

Auckland Council
C/- Hannah Thomson
Consultant Planner
Planning Plus
PO Box 310 174
Red Beach
Auckland 0945

Via email: hannah@planningplus.co.nz

Kia ora Hannah,

**RE: GOODLAND COASTAL FARM, 2127 KAIPARA COAST HIGHWAY, KAKANUI 0984
COUNCIL REFs: BUN60406128 (LUC60406129, SUB60406160), WAT60412104 &
DIS60412103**

Thank you for your three formal s92 requests dated 16 November 2023, 5 December 2023 and email dated 16 January 2024. We have responded to these requests in three sections.

1. s92 Request for further information #1 (16 November 2023)

1.1 *The Record of Title refers to the Conservation Act and protection of natural features. Please clarify what area this protects. The purpose of this request is to ensure that it is clear what natural areas on the site are already legally protected, and which are proposed for (new) legal protection.*

The title (refer Attachment 1) contains a memorial relating to Part IV of the Conservation Act 1987. That Part contains provisions relating to marginal strips. These strips are depicted on the title (attached) they border the Kakanui Creek. Among their purposes is the provision of access as highlighted below:

s.24C Purposes of marginal strips

Subject to this Act and any other Act, all marginal strips shall be held under this Act—

(a) for conservation purposes, in particular—

(i) the maintenance of adjacent watercourses or bodies of water; and

(ii) the maintenance of water quality; and

(iii) the maintenance of aquatic life and the control of harmful species of aquatic life; and

(iv) the protection of the marginal strips and their natural values; and

(b) to enable public access to any adjacent watercourses or bodies of water; and

(c) for public recreational use of the marginal strips and adjacent watercourses or bodies of water.

They are also shown on the scheme plan.

- 1.2 *Please note that the NZTA affected parties' approval contains a lapse date, being February 2024; it is unlikely that the application will be determined by this time. Please provide an updated approval.*

NZTA have been contacted and will be forwarding their approval shortly. Upon receipt it will be forwarded to you. Their approval is on the basis of the following conditions forming part of our resource consent:

NZTA Conditions:

1. *The proposed vehicle crossing shall be constructed prior to construction commencement in accordance with the NZ Transport Agency's Diagram E standard as outlined in the Planning Policy Manual (2007) and to the satisfaction of the NZ Transport Agency Network Manager in accordance with the following plans prepared by Crang Civil Consulting Engineers, titled:*
 - a. *"Kaipara Coast Highway Intersection Plan", dated 18/02/22, drawing no C304 Rev 3.*
 - b. *"Roading Typical Cross Sections – NZTA", dated 18/02/22, drawing no C320 Rev 2.*
2. *CP 135 shall be permanently closed, including reinstatement of any fence line, grassed areas, berm, highway drainage or kerb. Reinstatement works shall be consistent with the adjacent road reserve treatment, to the satisfaction of the NZ Transport Agency Network Manager.*
3. *The proposed retaining wall within the state highway road reserve will be designed and installed in accordance with the latest version of the Waka Kotahi Bridge Manual and to the satisfaction of the NZ Transport Agency structural engineer.*
4. *Prior to the installation of the proposed barriers and retaining wall, detailed designs are required to be submitted to the NZ Transport Agency for approval to ensure installation quality and safety meets the requirements of the NZ Transport Agency traffic safety engineer and structural engineer.*
5. *Prior to the issuing of a certificate pursuant to Section 224(c) of the Resource Management Act 1991, the consent holder shall provide to Council confirmation that NZ Transport Agency has been advised of relevant documentation (such as proposed title references, draft LT (Land Transfer) plan, ML plan (for Maori Land) or SO (Survey Office) plan) to facilitate the registration of any new Crossing Place (CP) Notices against those new titles, under Section 91 of the Government Roadway Powers Act 1989.*

These conditions are acceptable to the applicant and form part of our methodology of works.

- 1.3 *The community building/ facilities form part of the proposal and requires consent. Please provide plans for the proposed building (site plan to scale, floor plans and elevations) and surrounding areas, and detail how this will operate and be managed. Please also provide details of the proposed servicing, and confirm this will be a permitted activity. Section 6 of the Design Guidelines is noted where it refers to kitchen, meeting room, bathrooms and 20 car parks. The plans in Attachment K of the LVEA are also noted but further information and assessment are required.*

These will form part of a future consent alongside the new dwellings. An identified building platform location has been shown below Lot 14.

- 1.4 *Please provide a Cultural Values Assessment from Ngā Maunga Whakahii O Kaipara Development Trust for the application. It is noted that you are having difficulties getting responses from Ngā Maunga Whakahii O Kaipara Development Trust, however a CVA is considered necessary to assess the application.*

We have taken every practical step to obtain a CVA, as shown in our consultation section. We are copying in Ngā Maunga Whakahii O Kaipara Development Trust to our section 92 responses so they are updated. We have had no response from Ngā Maunga Whakahii O Kaipara Development Trust to our emails following our second hui.

- 1.5 *Please confirm that a current copy of the proposal has been provided to Manuhiri Kaitiaki Charitable Trust; some aspects of the proposal (for examples earthworks) do not appear to be the same as noted in the application documents.*

We have provided a link to both Manuhiri Kaitiaki Charitable Trust and Ngā Maunga Whakahii O Kaipara Development Trust with this s92 response, the latest plans and reports.

- 1.6 *Please provide copies of the e-mail/s to all iwi with an interest in the area, as noted in section 8.1 of the AEE.*

Please find a copy of these in Attachment 2.

- 1.7 *Please confirm the management (including any stock grazing) and protection proposed for the Pa.*

The Pa paddock is proposed to be only grazed with sheep at no more than 6-8 sheep per hectare. As detailed in the Farm Management Plan the paddocks will be fenced with 7 wire with battens, with the third wire down electric to keep stock off fences. This type of fencing looks more appealing and is stock proof for both sheep and cattle. In addition, and in accordance with the Authority to Modify, Condition 6 (refer Attachment 3), forms part of the applications methodology of works:

- a) *Access for Ngāti Whātua o Kaipara and Ngāti Manuhiri shall be enabled in order to undertake tikanga consistent with any requirements of site safety.*
- b) *Ngāti Whātua o Kaipara and Ngāti Manuhiri shall be informed 48 hours before the start and finish of the archaeological work.*
- c) *If any kōiwi (human remains) are encountered, all work should cease within 5 metres of the discovery. The Heritage New Zealand Pouhere Taonga Archaeologist, New Zealand Police and Ngāti Whātua o Kaipara and Ngāti Manuhiri must be advised immediately in accordance with Guidelines for Kōiwi Tangata/Human Remains (Archaeological Guideline Series No.8) and no further work in the area may take place until future actions have been agreed by all parties.*
- d) *Ngāti Whātua o Kaipara and Ngāti Manuhiri shall be informed if any possible taonga or Māori artefacts are identified to enable appropriate tikanga to be undertaken, so long as all statutory requirements under the Heritage New Zealand Pouhere Taonga Act 2014 and the Protected Objects Act 1975 are met.*
- e) *Ngāti Whātua o Kaipara and Ngāti Manuhiri shall be provided with a copy of any reports completed as a result of the archaeological work associated with this authority and be given an opportunity to discuss it with the s45 approved person if required.*

- 1.8 *Please confirm if any works to trees within the legal road is proposed and demonstrate that rules and Standards in E17 are met.*

The proposed new accessway results in the removal of up to 97 trees, being greater than 4m in height or greater than 400mm in girth and is a restricted discretionary activity. In terms of the assessment criteria list under E17.8.2, Geraldine Bailey has commented (refer to Attachment 5) and states:

"The purpose of this removal is for the widening of the road to provide for turning bays into a new access onto the state highway.

The new access is required for safety reasons given that the sight lines of the existing farm access were not deemed appropriate (by a traffic engineer) for an increased number of vehicle movements.

The trees are predominantly native, the majority of them mature kanuka with some understorey vegetation. These trees are likely to have been self-seeded. Included in the mix are pine trees and wattle, with one Yunnan Poplar. With the exception of the poplar the other exotic trees are weed species that should ideally be eradicated.

There is only one native canopy tree (a totara that stands approximate 6 metres tall) that is over four metres that is to be removed. The rest of the native vegetation includes either colonising species (kanuka, mahoe, mapou) or large shrubs and cabbage trees (Ti kouka).

Kanuka trees are a first generation/colonising plant species that establishes first in restoration areas, acting as a nursery for other slower growing species and then dying as a result of being shaded. They do not have the long term value associated with some of the larger canopy trees such as pohutukawa, totara, rimu or puriri.

The removal of the trees will change the nature of this stretch of road by removing the sense of enclosure currently experienced, to one that is more open, with views through to the open pasture of 2127 Kaipara Coast Highway. This would still be in keeping with the character of the surrounding rural landscape.

It is understood that it would not be possible to widen this stretch of road without removing these trees.

The removal of some of these tall trees could have positive effects on the long term safety of users of this state highway given that many of the trees are located in close proximity to this 100km / hour road and tree fall can be problematic. This is particularly applicable to pine trees.

In the large storms of 2023 a number of trees blew down along the stretch of state highway within one kilometre of the subject land and had to be removed off the road.

Given the safety issues with trees along the state highway it is not uncommon to see arborist teams removing trees along the state highway in close proximity to the road, such as those included in the proposal.

The removal of the pines and wattle trees is considered to be at least part mitigation for the removal of the native trees.

If the Council arborist determines that mitigation is required for the removal of these trees along the state highway some restoration of low growing native vegetation could be included as conditions of consent for the works."

For the reasons outlined above by Mrs Bayly, the proposed tree removals is considered appropriate to allow for the new vehicle crossing. A Tree Owner Approval is currently being prepared and will be provided upon receipt.

1.9 Please provide details of the proposed signage.

The signage is yet to be designed. It is envisaged that two posts extending 3m above the top of the fencing along the retaining wall on either side of the site access are to be used for either signage into the property or a sculpture. These posts will be in amongst the riparian vegetation adjacent to the stream. These will be designed around the following parameters:

- in the form of a large post on either side of the entry
- to be used for either entry signage, or for sculptural purposes (e.g. a carved post, or to support a sculptural element)
- limited to extending a maximum of 3.5m above the top of the fencing along the top of the retaining wall
- carved posts to be designed in keeping with the overall nature and character of the proposal which is a working farm located in this relatively rugged and wild coastal location on the edge of the Kaipara Harbour.

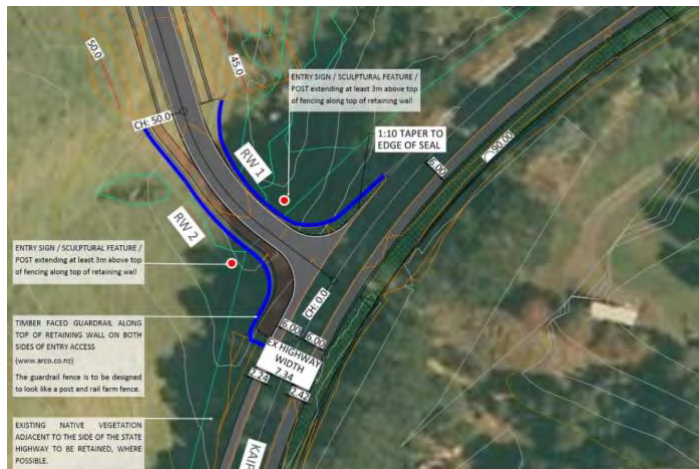


Figure 1: Entry Landscape Treatment, LVEA July 2023

1.10 Please confirm if any lighting (such as of the communal areas, roads etc) is proposed and demonstrate that rules and Standards in E24 are met. Comments regarding lighting on individual lots is noted thank you.

No lighting is proposed on the internal roads / communal areas, as such the standards in E24 are met.

1.11 Please confirm that relevant standards in E11 and E12 are met. If not, please apply for the relevant consents.

Zibo Yang from Crang Consulting has confirmed that the “proposed civil works are in compliance with E11.6.2. general standards, E12.6.1 Accidental discovery rule and E12.6.2. general standards.” Please refer to the Attachment 4 for the latest Civil Engineering Plan, s92 memo and supporting Engineering Report.

1.12 As noted in previous correspondence and the AEE, the western extent of the site is indicated as containing Highly Productive Land and the National Policy Statement on Highly Productive Land is relevant. While assessment in the AEE is noted, please provide a detailed analysis in the context of the NPS- HPL, having regard to the language used in this document (such as “avoid”) and the limited exclusions present.

A Soil and Resource Report has been prepared by Mr Ian Hanmore of Hanmore Land Management to assess the Land Use Capability (LUC) classifications at a potential subdivision site at 2127 Kaipara Coast Highway (refer Attachment 6). It is noted that the New Zealand Land Resource Inventory (NZLRI) maps have classified a part of the site as LUC class 3. As such, this area could potentially fall under the National Policy Statement for Highly Productive Land (NPS-HPL). Mr Hanmore has mapped the area of potential LUC class 3 land and assessed them in relation to the NPS-HPL. This report details that the highly productive soils (noted as green in Figure 2) are in three locations on the site.

Sarah Budd, Ecologist from Wildlands, also notes in her s92 response (refer Attachment 7) that:

Most of the area identified as “highly productive” is in the low-lying flats along the western edge of the property. These low-lying flats once formed part of an extensive wetland habitat that has been drained to create grazing land. However, the water table in this area is still very high and the vegetation in some parts is dominated by hydrophytic plants species (rushes), indicating that large parts of this area meet the definition of a ‘natural inland wetland’. Grazing in this area is therefore not appropriate under the Resource Management (Stock Exclusion) Regulations 2020, which state “All stock on low slope land must be excluded from any natural wetland that is 0.05 hectares or more”.

Grazing in the low-lying flats on the western edge of the property is proposed to be discontinued, including in the neighbouring Makarau Stewardship Area. Although this area is classified as “Arable,

*moderate limitation” under the NZLRI Land use Capability classification system, continuing to graze this area would not provide good ecological outcomes. Allowing this area to revert to wetland would significantly increase the extent of wetland habitats in the local area, provide improved habitat values for ‘Threatened’ and ‘At Risk’ wetland birds such as Australasian bittern (*Botaurus poiciloptilus*) and spotless crane (*Porzana tabuensis tabuensis*), and provide improved natural water treatment for water discharging to the Kaipara Harbour.*

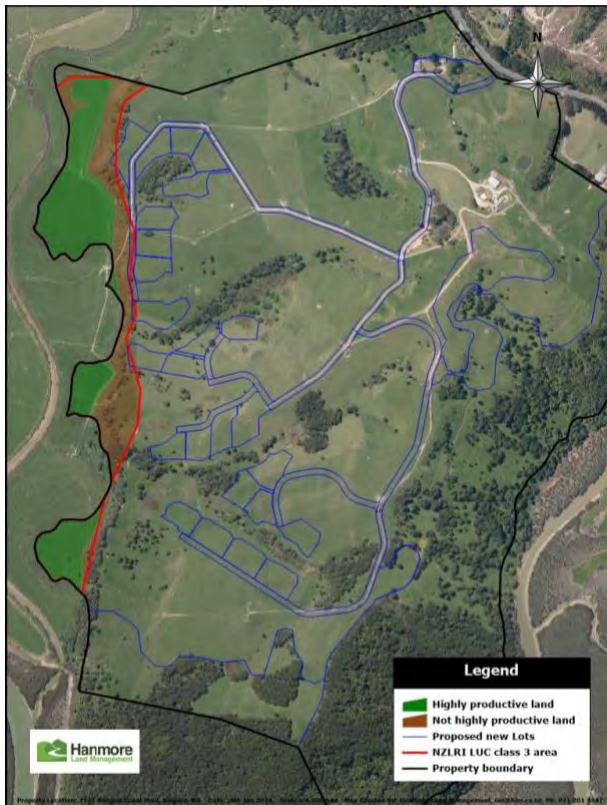


Figure 2: Highly Productive Land Classification with Proposed Scheme Overlay, Soil and Resource Report for 2127 Kaipara Coast Highway, January 2024

As such, these productive land areas are proposed to be protected from development, noted as Da, L and N on the Management and Maintenance Planting Plan, refer Attachment 5. The land around this area is reclaimed and it is proposed for these three areas to be regenerated with native grassland species. The productive nature of the soils will not be developed upon. As the proposal “provides for the retirement of land from land-based primary production for the purpose of improving water quality” then that use is consistent with NPS:HPL clause 3.9(2)(f). Based on this, it is considered that the proposal is not contrary to clause 3.8 NPS-HPL in terms of s104D.

1.13 *Please provide further assessment of rural productivity, including how this will be maintained after the subdivision, and how reverse sensitivity will be managed. The report from Hollis & Schofield is noted, but this focuses on productive uses after the subdivision is completed.*

Rural productivity and reverse sensitivity will be maintained via the Residents Association (Incorporated Society) and Covenants. It is important to note that the proposal is not of an ‘urban scale’ and it relies on the rural amenity and setting for its very function. The recommended condition of consent 17 relating to the Residents Association, covenants and a reverse sensitivity covenant will maintain rural productivity.

- 1.14 The application proposes a number of sites, and these are all significantly smaller than provided for in the zone. Please provide a detailed analysis of potential adverse rural character and amenity effects.*

Please note that the scale of the development in this location is a fundamental concern, both in terms of potential adverse effects and in relation to relevant objectives and policies.

The LVEA provided a detailed assessment of the potential effects of the proposal on the rural character and amenity. The protection and enhancement of the areas rural character and appreciated amenity has guided the location and design of the rural lots. As noted in the LVEA, the associated design guidelines ensure that the proposal can be achieved in a way that retains rural character, amenity, landscape and biodiversity values. This is achieved through the protection and location of large tracts of native vegetation of sensitive land and woven around the land suitable for pasture. The LVEA noted that the proposed new access to the subject land would be noticeable to the motorists driving along the state highway but that measures had been taken to ensure that this new access blends into the rural character of the surrounding landscape with farm fencing and large tracts of vegetation proposed.

The farm is to be communally owned by and managed by the overall Residents Association and run by a farm manager on the property. It is important to note that the proposal while creating additional lots it does not fragment productive rural land because of the current limitations at the site and the soil quality over the majority of the site (notwithstanding the productive 3 portions of land). The proposal is not of an 'urban scale' and it relies on the rural amenity and setting for its very function.

- 1.15 Please provide a plan that identifies all natural features on the site, the proposed earthworks, lot boundaries and roads. Crang Civil Plan 900 and the Wildlands Appendices are noted however this request seeks to understand what works are proposed in relation to each specific feature, associated setbacks etc.*

Crang Civil have prepared a new plan (ref: Plan 908, Attachment 4) that includes the proposed earthworks, boundaries, roads/accessways, alongside natural features, such as existing streams, wetlands, archaeology extents and associated setbacks from streams and wetlands. Please refer to Wildlands drawings for other natural features such as vegetation habitat.

- 1.16 Please confirm the vegetation on site that meets the SEA threshold in the AUP(OP), identify this on the plans and confirm the size of these areas.*

The application is for a non-complying activity and not seeking the SEA threshold requirement.

- 1.17 Please confirm the width of streams and watercourses on the site, as determined by a surveyor, and confirm if esplanade reserves are required to vest. The reference to the Ecological Impact Assessment is noted, but this report does not appear to assess these features in the context of potential esplanade reserves, or utilise surveying practises to confirm width.*

Please refer to Attachment 7 where Sarah Budd, Ecologist from Wildlands notes that none of the waterways on the property exceed three meters in width and all of which are quite narrow, measuring between 30 and 60 centimetres across. While formal survey methods were not applied to measure the streams, Ms Budd considers attached photos will adequately demonstrate their dimensions. Therefore, there is no need for an Esplanade Reserve in this instance.

- 1.18 The application proposes access via a series of JOAL. Please confirm how these are proposed to be managed, and how ongoing maintenance can be assured.*

The applicant proposes to establish an agreement with respect to contributions towards JOALs for maintenance via Residents Association. The Property Law Act 2007 would provide for default position relating to management and maintenance under:

- s298 Rights of proprietors of access lot that is or includes driveway or proposed driveway new line

- Schedule 5 (1) Right to pass and re-pass
- Schedule 5 (2) Right to establish and maintain driveway

1.19 The Design Guidelines (section 3.5) refer to yard setbacks that are less, in some cases, than the AUP requires (noting also AUP(OP) definitions of front vs rear sites). The AEE refers to this on pages 28 and 29 and seeks consent as a non-complying activity. Can you please clarify what is sought in this regard and on what sites (for example construction of a single dwelling within yard setbacks once the new sites are created would typically be a restricted discretionary activity).

Consent is sought for the construction of a single dwelling within the 12m yard setbacks once the new sites are created. This is a restricted discretionary activity, for the following yard infringements:

Table 1: Yard Infringements, LVEA

SETBACK INFRINGEMENTS (12m yard on all yards)			
Lot number	Boundary	Width of Setback	Infringement Comment/ nature of the effect
1 to 4		No infringements	
5	Southern side	Between 7 to 10m	Between 2-5m. LVEA notes: No adverse effect as adjacent to proposed communal native bush.
6	Southern side	Between 12m to 8m	Between 0-4m. LVEA notes: No adverse effect as adjacent to proposed communal native bush.
7	Western rear	Between 7m to 18m	Between 0-5m. LVEA notes: No adverse effect as adjacent to proposed communal native bush.
	Northern side	7m	5m. LVEA notes: No adverse effect as adjacent to mitigation planting on southern boundary of Lot 8.
8	Western side	Between 6m to 16m	Between 0-6m. LVEA notes: No adverse effect as adjacent to existing communal native bush.
	Eastern side	8m	Between 0-4m. LVEA notes: No adverse effect as adjacent to communally owned paddock.
9	Southern rear	6 to 7m	Between 5-6m. LVEA notes: No adverse effect as adjacent to existing communal native bush.
10	Southern rear	7m	5m. LVEA notes: No adverse effect as adjacent to existing communal native bush.
	Western side	7m	5m. LVEA notes: Very low adverse effect as 18m setback from building platform on Lot 11 to the west and due to additional controls on building envelopes and privacy planting. Also, strategic placement of buildings so

SETBACK INFRINGEMENTS (12m yard on all yards)			
Lot number	Boundary	Width of Setback	Infringement Comment/ nature of the effect
			<i>that they are staggered to maximise afternoon sun and views of Kaipara Harbour.</i>
	Eastern side	8m	4m. LVEA notes: <i>Very low adverse effect as 18m setback from building platform on Lot 9 (which is max 5m tall) and due to additional controls on building envelopes and privacy planting. Also strategic placement of buildings so that they are staggered to maximise afternoon sun and views of Kaipara Harbour.</i>
11	Southern rear	7m	5m. LVEA notes: <i>No adverse effect as adjacent to existing communal native bush.</i>
	Western side	8m	4m. LVEA notes: <i>Very low adverse effect as building platform setback of 16m from building platform on Lot 12 and additional controls on building envelopes and privacy planting.</i>
12	Southern rear	4m	8m. LVEA notes: <i>No adverse effect as adjacent to existing communal native bush.</i>
	North western side	10m	2m. LVEA notes: <i>No adverse effect as complies with 20m setback from wetland and is located adjacent to proposed communal pathway and wetland planting.</i>
	Eastern side	8m	4m. LVEA notes: <i>Very low adverse effect as building platform setback of 16 from building platform on Lot 11 & additional controls on building envelopes & privacy planting.</i>
13	Southern side	5 to 6m	Between 6-7m. LVEA notes: <i>No adverse effect as adjacent to planting on communal lot.</i>
	Northern side	5m	7m. LVEA notes: <i>Very low adverse effect as is adjacent to right of way to Lot 14.</i>
	Western rear	8m	4m. LVEA notes: <i>No adverse effect as adjacent to mitigation planting on eastern boundary of Lot 14.</i>
14	Southern, western & northern	Between 5 to 10m	Between 2-7m. LVEA notes: <i>No adverse effects as adjacent to existing and proposed planting on adjacent communal lots.</i>
15	Eastern front	7m	5m. LVEA notes: <i>Very low adverse effect due to the 5m max height and the contour which means that the floor level of a future dwelling will be located below the level of the road and therefore will not dominate the road environment. Also, controls are in place to ensure that vegetation will</i>

SETBACK INFRINGEMENTS (12m yard on all yards)			
Lot number	Boundary	Width of Setback	Infringement Comment/ nature of the effect
			<i>soften the road view if buildings are located closer than 10m from the private access boundary.</i>
	Southern side	8m	4m. LVEA notes: <i>Very low adverse effect due to the boundary being located adjacent to a right of way and the controls in place ensuring that any building located closer than 12m to a shared boundary with another residential lot will have vegetation to ensure privacy.</i>
	Western rear	Between 3m to 8m	Between 4-9m. LVEA notes: <i>No adverse effect as adjacent to existing native bush in communal ownership.</i>
16	Southern side	7 to 8m	Between 4-5m. LVEA notes: <i>No adverse effect as adjacent to open paddock in communal ownership.</i>
	Western side	10m	2m. LVEA notes: <i>Very low adverse effect as adjacent to walkway connection in communal ownership. Activities on Lot 16 will assist in providing informal surveillance over path.</i>
	Northern rear	5m	7m. LVEA notes: <i>No adverse effect as adjacent to existing native bush in communal ownership.</i>
17	Southern rear	5 to 20m	Between 0-7m. LVEA notes: <i>No adverse effect as adjacent to proposed native bush and a communal walking track in communal ownership.</i>
18	Southern side	8 to 12m	Between 0-4m. LVEA notes: <i>No adverse effect as is outside the riparian setback and is adjacent to proposed wetland vegetation on communal land.</i>
	Northern side	7m	5m. LVEA notes: <i>Very low potential adverse effect as the setback to the building platform on Lot 19 is 14m and the maximum building heights are 5m. There are also controls to ensure that planting is undertaken to ensure privacy for construction of any buildings closer to the shared boundary than 12m.</i>
19	Southern side	7m	5m. LVEA notes: <i>Very low potential adverse effect as the setback to the building platform on Lot 18 is 14m and the maximum building heights are 5m. there are also controls to ensure that planting is undertaken to ensure privacy for construction of any buildings closer to the shared boundary than 12m.</i>
	Western front	8m	4m. LVEA notes: <i>Very low potential adverse effect as the maximum building height is 5m tall and the setback is enough that buildings will not overpower the road environment. Controls are in place to ensure that any buildings located closer to the private road than 10m are to be softened by vegetation.</i>

SETBACK INFRINGEMENTS (12m yard on all yards)			
Lot number	Boundary	Width of Setback	Infringement Comment/ nature of the effect
	Northern side	8m	4m. LVEA notes: Very low potential adverse effect as the setback to the building platform on Lot 20 is 18m and the maximum building heights are 5m. There are also controls to ensure that planting is undertaken to ensure privacy for construction of any buildings closer to the shared boundary than 12m.
	Eastern side	0m	12m - No yard provided LVEA notes: The building platform is located approximately 15m from the edge of a small area of sedges that comply with the natural wetland species classification. This means that this proposed building platform is located within the 20m wetland buffer zone. The landform around this cluster of planting is very small and not in the atypical depression that would usually signify a wetland. Given the size of this vegetation and the location it is possible that this may have been the location of an historic water trough. The area in and around this cluster of wetland species is to be protected and enhanced with additional wetland species however the buffer is not as large as in other areas of the proposal. Given the nature of the vegetation and its location it is considered that the placement of the building platform just within the 20m wetland buffer would have potential adverse effects that are very low.
20	Southern side	9m	3m. LVEA notes: Very low potential adverse effect as the setback to the building platform on Lot 19 is 18m and the maximum building heights are 5m. there are also controls to ensure that planting is undertaken for privacy in relation to any buildings closer to the shared boundary than 12m.
	Northern side	4m	8m. LVEA notes: No adverse effect as adjacent to existing native bush in communal ownership. The setback is enough to protect the bush.
21	Western rear	3m	9m. LVEA notes: No adverse effect as adjacent to existing native bush in communal ownership. The setback is enough to protect the bush.
	Eastern front	9m	3m. LVEA notes: Very low potential adverse effect given the maximum building height of 5m and the setback which will ensure that buildings will not dominate the private road. In addition, controls are in place to plant along the boundary to ensure that buildings within the 10m front boundary setback are softened by vegetation.
22	Western front	4m	8m. LVEA notes: Very low potential adverse effect given the maximum building height of 5m and the setback which will ensure that buildings will not dominate the private road. In addition, controls are in place to plant along the boundary to ensure that buildings within the 10m front boundary setback are softened by vegetation.
	South eastern rear	3m	9m. LVEA notes: No adverse effect as adjacent to existing native bush in communal ownership. The setback is enough to protect the bush.

SETBACK INFRINGEMENTS (12m yard on all yards)			
Lot number	Boundary	Width of Setback	Infringement Comment/ nature of the effect
23	Western side	3m	9m. LVEA notes: No adverse effect as is located adjacent to mitigation planting on the eastern boundary of Lot 23 ensuring the privacy between the lots will be maintained.
	Northern front	7m to 10m	Between 2-5m. LVEA notes: Very low potential adverse effect given the maximum building height of 5m and the setback which will ensure that buildings will not dominate the private road. In addition, controls are in place to plant along the boundary to ensure that buildings within the 10m front boundary setback are softened by vegetation.
24	Western side	7m	5m. LVEA notes: Very low potential adverse effect given that part of the boundary abuts existing native bush, and the other part abuts a shared boundary with Lot 23 where the closest corner of the building platform is over 20 metres away. In addition, controls are in place to ensure that vegetation be planted along the shared boundary where buildings are located closer to the boundary than 12m to ensure privacy.
	Eastern front	8m	4m. LVEA notes: Very low potential adverse effect given the maximum building height of 5m and the setback which will ensure that buildings will not dominate the private road. In addition, controls are in place to plant along the boundary to ensure that buildings within the 10m front boundary setback are softened by vegetation.
25	Northern side	3m	9m. LVEA notes: No adverse effect as is located adjacent to existing native bush in communal ownership. The setback is enough to protect the bush.
	Southern side	8m to 12m	Between 0-4m. LVEA notes: No adverse effect as is located outside the 20 m riparian buffer and adjacent to existing and proposed native bush.

Based on the above noted assessment from Mrs Geraldine Bayly, it is concluded that the adverse effects of the proposal from the internal yard infringements are low.

1.20 The application proposes fill retaining walls and fencing associated with the new access. It appears these would meet the AUP(OP) definition of "building" and are located within the front yard. Please confirm if consent is sought in this regard and provide the relevant assessment.

Consent is sought for the retaining walls that meet the definition of "building" across the proposal where these vary along the new JOALs, with a maximum height of 4.6 m, refer to Crang Civil drawings 240 to 242. Portions of these meet the definition of building under AUP(OP) and resource consent is also sought for this retaining within the front yard.

The retaining in the front yard is required to provide safe access to the site, required sightlines and the materials chosen to reflect the rural farming setting. Planting is proposed around this building to help soften the edges. No elite soils are noted in this location. Geraldine Bayly, Landscape Architect, has

assessed the visual effect of this retaining within the front yard as have a low effect – as detailed in her LVEA:

“The access to the site off the state highway is to be moved to a revised location that will comply with Waka Kotahi NZ Transport Agency requirements for state highways. This includes the widening of the state highway in and around the revised site access which will likely require the removal of existing patches of vegetation along the roadside edge. This will open up views into the existing pasture and proposed orchard of the subject land which is in keeping with the character of this rural landscape. The landscape treatment in and around this intersection is to be rural in nature with the fencing along the top of the retaining walls adjacent to the entry to be compliant with Waka Kotahi safety fencing and to have the appearance of post and rail timber farm fencing.

...The potential adverse effects on the rural landscape character of this land and the broader surrounding catchment because of this proposal will be very low.”

For the reasons noted above, it is considered that the retaining walls and retained earth that meets the definition of being a building will have less than minor adverse effect.

1.21 The Design Guidelines refer to accessory buildings. Is it also proposed that these would be located within the identified building platforms shown on the scheme plan?

Yes, all accessory building will be located within the identified building platforms.

1.22 Please confirm if any restrictions are proposed relating to additional dwellings on the balance site.

The applicant proposes to include a covenant on all titles stating additional dwellings, minor dwellings or addition units for workers accommodation are not permitted.

1.23 The Design Guidelines (section 6.6) refers to stream crossing associated with the pedestrian/ cycle way. Please confirm the works proposed, and provide assessment demonstrating that this is a permitted activity.

This is an existing crossing, no additional works are proposed.

1.24 The Engineering Report states that all private roads will be sealed. Please provide information on finishing, and provide rural character, visual and landscape assessment in this regard.

Please refer to the LVEA which states that the:

...roads are to be constructed out of asphalt with sections of exposed aggregate concrete where they abut animal crossing points, as indicated on ‘The Farm Plan’. All of the paving is to be recessive in colour in order to blend in with the surrounding natural landscape.

1.25 Please confirm that all works, including those associated with the entranceway construction, remain within the application site boundaries or the legal road. Figure 18 in the LVEA for example appears to indicate a retaining wall in another property.

All works, including those associated with the entranceway construction, remain within the application site boundaries or the legal road.

1.26 Section 8.6 of the Ecological Impact Assessment refers to earthworks and vegetation removal close to stream and/ or wetlands. Please confirm which plans show these works, or provide a plan showing this.

Please refer to Crang Civil plan 908 in Attachment 4 or previous plans submitted with informal s92 response, being:

- Proposed works (earthworks and vegetation removal) within a 10 and 20 metre setback of natural wetland areas are shown in drawing number C901 prepared by Crang Civil (page 58 of the Engineering drawing set issued for the informal s92).
- Proposed works within a 20-metre setback from permanent and intermittent streams are shown in drawing number C903 prepared by Crang Civil (page 60 of the Engineering drawing set issued for the informal s92).

1.27 Section 8.6 of the Ecological Impact Assessment refers to mitigation planting. Please provide a planting and maintenance plan in this regard.

A planting and maintenance plan has been prepared by Kaipara Coast Landscape Architecture, with input from Wildland Consultants for the preparation of the planting schedules. This is included within Attachment 5 the document titled "Management & Maintenance Programme & Plant Species Schedules", dated 15 February 2024 and the previous version 8 July 2023

1.28 Section 8.14 of the Ecological Impact Assessment refers to restoration and revegetation. Please:

- *Provide planting and maintenance plans for this planting,*
- *Provide an assessment of the restoration and planting proposed, and how this compares to the outcomes sought by the AUP(OP), including Standard E39.6.4.5.*

As noted above, the planting and maintenance plan has been prepared by Kaipara Coast Landscape Architecture, with input from Wildland Consultants for the preparation of the planting schedules.

The proposal has been submitted as a non-complying activity and is not being applied for on the basis of the "in-situ subdivision creating additional sites through establishing indigenous revegetation planting" rules and does not comply with some of the standards outlined in E39.6.4.5. (Table 1). Ms Sarah Budd, Wildlands Ecologist considers that the proposal meets the overall objectives of the AUP(OP). Ms Budd has made the assessment (detailed in Attachment 7) and states:

"When considered in combination with the protection and management of existing SEA and SEA quality vegetation, the proposal will result in ecological benefits.

The proposal also meets the objectives of the National Policy Statement for Indigenous Biodiversity (NPS-IB) as it will result in no overall loss in indigenous biodiversity."

1.29 The proposed walking and cycling paths appear to move within some of the proposed covenants. Are these paths to be excluded from the covenant areas? This is not indicated on the scheme plan. How will edge effects in this regard be managed, including potential weed incursion?

Yes, this is correct and paths are not intended to be excluded from the covenanted areas. The edges and potential weeding have been described by Ms Budd in Attachment 7 as:

"Some of the restoration areas will contain narrow (single track) walking and cycling paths c.0.8 metres wide. These will be narrow enough to ensure that canopy closure can be achieved/maintained over the tracks. As such, these tracks will not result in habitat fragmentation or edge effects. Pest plants will be managed within all covenant areas in perpetuity, so any potential pest plant incursions that may occur as a result of the tracks (e.g. through seeds being carried in on shoes) will be addressed through regular maintenance."

1.30 The application refers to waste and recycling being managed by a private contractor. Figure 1 of the Design Guidelines is noted in this regard, but the area identified appears to be away from the internal road and it is unclear how residents and trucks will access this area safely, and be able to maneuver. It is also unclear how the communal waste area will be managed or what its appearance will be. Please clarify and provide relevant plans (including tracking curves).

Please find Waste Management Plan and details in Attachment 8.

1.31 *The AEE refers to a condition that only one dwelling may be on Lots 1-26 but goes on to state that this restriction does not relate to Minor Dwellings or Workers Accommodation. Noting the small sizes of these sites, please clarify why you consider a similar restriction for Minor Dwellings or Workers Accommodation is not required.*

As stated above in 1.22, the applicant proposes to include a covenant on all titles stating Minor Dwellings or additional Workers Accommodation units are not permitted.

1.32 *The AEE, in conditions, seeks a lapse date of 10 years. Noting that the engineering report indicates earthworks are to be completed in the next earthworks season, please clarify why a 10 year timeframe is sought and is justified in this case.*

5 years is acceptable to the applicant.

1.33 *The scheme plan refers to 26 new lifestyle sites but the landscape plans appear to indicate 25. Is this correct?*

Lot 26 is the existing farmhouse.

1.34 *The Kaipara Coast Landscape Architecture Plans and the scheme plans indicate the planted wastewater irrigation fields. The scheme plans don't appear to indicate that these areas are to be legally protected. Is that correct?*

Yes, that is correct as these fields are preliminary design areas and may change, depending on wastewater and house design. These areas will be planted.

1.35 *Lots 9- 12 also appear to require access over Lot 158 but will not own part of this JOAL. The right of way easement is however noted. Was this intended?*

Yes, this was intended.

1.36 *Lots 1- 8 also appear to require access over Lot 156 but will not own part of this JOAL. The right of way easement is however noted. Was this intended?*

Yes, this was intended.

1.37 *Please confirm what the square to the south of Lot 14 on scheme plan SP495 is indicating.*

This was indicating the general location of the communal structure (indicative building platform).

Wastewater

1.38 *The wastewater site plans do not show all the surface waters that need to be considered under TP58. Please update the plans to show all surface waters including permanent and ephemeral streams, overland flow paths, ponds, wetlands, swamp, and storm water drains. As part of your assessment, please give consideration to any minor overland flow paths shown on Auckland Council Geomaps (these should be subject to a site-specific assessment). Please consider any stormwater management devices associated with the new accessways such as kerb and channel.*

Mr Tom Rishworth, Engineering Geologist, KGA Geotechnical has provided the following response as detailed in Attachment 9:

"Our amended GIR (reference K200826-1A) and corresponding KGA drawings, KGA 2 and KGA 2A to 2F, have been updated to include the requirements above. As discussed in Section 14.3 of our GIR, the surface waters (flow paths etc) have been taken from Wildland's Ecological Impact Assessment for the proposed development. The surface waters (flow paths etc) have been determined from a site-specific assessment. In addition, setbacks from kerb and channels of the proposed accessways have been implemented where preliminary wastewater fields are located upslope."

- 1.39 Please site the wastewater land disposal areas to be at least 20m from the nearest surface water. This is required to provide a level of conservatism. For example, setback distances must be measured from the edge of the stream bank rather than the centreline of a watercourse. Please provide updated plans/ information in this regard.

Mr Rishworth, has provided the following response as detailed in Attachment 9:

“As per Section 14.3 of our GIR, the current assessment assumes an advanced secondary level of treatment. As per Table 5.2 of TP58, minimum recommended separation distances from surface water for a Soil Category 5 is 15m. In addition, the proposed Lots have a minimum 20m offset from the identified overland flow paths, which are planned to be completely revegetated. This results in the current wastewater dispersal areas to be offset from overland flow paths by a minimum 21.5m (1.5m offset from the boundary), we therefore consider the assumed 15m setback used in our assessment suitable.

In addition to above, Wildlands Ecological RFI report discusses stream widths in their response to Item 17. After a site walkover they have observed all streams onsite to be very narrow (30 to 60 centimetres). As such for preliminary assessment we consider using the centre line of the watercourses appropriate.”

- 1.40 The area upstream of the wetland areas northeast of the communal building appears to be low-lying swampy ground with elevated groundwater. This means the wastewater land disposal area for Lot 13 and the communal building do not comply with the minimum setback distance to surface water. Borelogs should be provided in this area to ensure the minimum setback to seasonal high groundwater table is achievable. Please apply for relevant consents for the communal building if permitted activity rules and standards cannot be achieved.

Mr Rishworth, has provided the following response regarding wastewater disposal:

“As part of the response to this RFI, KGA has conducted 14 additional wastewater disposal area boreholes (WWAH1 to WWAH14) across the site to improve our understanding of the ground conditions where the initial subsurface investigation in the proposed wastewater dispersal areas was sparse. The boreholes were taken to an approximate depth of 1.2m below existing ground to confirm the potential presence of groundwater near surface. The location of the additional wastewater borehole logs is indicated on our Plans, Drawing No. KGA 1, 1A, 2, and 2A to 2F. The detailed borehole logs are presented within Appendix A of our amended GIR.

Wastewater boreholes WWAH8 (Communal dispersal area), WW AH8 (Lot 13 dispersal area), and WH AH9 (Lot 14) were drilled near to and/or within the proposed dispersal areas for Lot 13 and the Communal area. These boreholes indicate dry soils to a nominal depth of 1.0m (becomes dry to moist below), with no groundwater encountered. Notably, even considering a conservative 500mm increase for winter groundwater from the base of the boreholes, it remains over 600mm below current ground level, remaining compliant with TP58 separation distances.”

- 1.41 Please reassess the layout of Lot 4. Access to the building area should be not be over the wastewater land disposal areas. Please provide updated plans.

The Geotech Report and corresponding KGA drawings, KGA2 and KGA 2A, have been updated to include the requirements above.

- 1.42 The wastewater land disposal area on Lot 2 appears to be located on wetland-type vegetation suggesting an elevated groundwater in this area. Please assess.

Mr Rishworth, has provided the following response regarding elevated groundwater:

“As discussed in our response to Item 40, KGA has conducted 14 additional wastewater disposal area boreholes (WWAH1 to WWAH14). Wastewater borehole WWAH3 was drilled within the proposed dispersal area of Lot 2. The borehole indicated dry to moist silt and clayey silt material to termination depth (1.2m), with no groundwater being encountered. As above, even considering a conservative

500mm increase for winter groundwater from the base of the borehole, it remains over 600mm below current ground level, remaining compliant with TP58 separation distances.

Onsite observations during our investigation did not suggest ponding or standing water near surface.

In addition, Wildland's ecologists conducted further assessment of the wetland area immediately north of Lot 2 and have not identified any areas within the Lot 2 boundary as being significant wetland-type plant growth."

1.43 Some of the wastewater land disposal areas overlie areas of earthworks (Lot 9 to 11). TP58 states that 'fill may be poorly suited for land disposal of wastewater, depending on the composition and level of compaction. If this is the case, the proposed land disposal area should be relocated, the fill removed or the land disposal system specifically designed to accommodate the soil constraints'. Please relocate the wastewater land disposal areas off any soils subject to earthworks and/or compaction. Please provide further assessment in this regard/ updated plans.

Mr Rishworth, notes in his response: "After review of CCC's latest subdivision earthwork plans, Lots 13 and 15 contain significant fill earthworks (Lots 9 to 11 are located in areas of cut earthworks). The areas of the potential wastewater dispersal located within the areas of proposed fill are highlighted (yellow hatch) on our Wastewater Dispersal Area Plan, Drawing KGA 2B, presented in Appendix A of our amended GIR.

As discussed in our amended GIR, the wastewater dispersal assessment conducted as part of the Resource Consent application is preliminary only, with final layout and design to be confirmed during building consent detailed design for each Lot. Areas impacted by the fill earthworks will be highlighted in our Geotechnical Completion Report following completion of the site formation works.

Where wastewater fields are to be constructed within these fill areas, the designers will need to consider raised topsoil beds or alternate dispersal methods. The design will also need to take into account the potential for short circuiting along in the interface between the fill dispersal field material (appropriate restrictions/requirements will be placed on the Lots as part specific design at Building Consent stage). This could be reflected in the Auckland Council conditions."

1.44 The vegetation within the wastewater land disposal areas is a fundamental component of the wastewater land treatment system. Plant species must be selected that are both water tolerant and have a high capacity for evapotranspiration to assist with the uptake and removal of contaminants. Appendix G in TP58 provides a list of suitable plant species. Please confirm the proposed landscape plant species within the wastewater land disposal areas are consistent with TP58.

Mr Rishworth has confirmed that the plant species are suitable and will be consistent with TP58.

Ecology

1.45 The application proposes orchards adjacent to natural areas proposed for protection. Please advise the reason for these locations and provide assessment on the potential ecological effects of this co-locations.

Communal orchard areas have been selected based on aspect, location to lots, walkways and shared area, spread around the farm. The purpose is that these areas can be easily accessed by property owners. Ms Sarah Budd, Ecologist at Wildlands notes in her report regarding the potential ecological impact (Attachment 7) that:

"Planting of fruit trees and edibles will be limited to species that are not listed in the Auckland Regional Pest Management Plan (ARPMP) or National Pest Plant Accord (NPPA), and do not pose a threat to adjacent forest areas. Edible pest plant species such as loquat (*Eriobotrya japonica*) and blackberry (*Rubus fruticosus*) will be prohibited both within residential lots and in communal orchard areas. As such, there will be no adverse effect of the orchards on the adjacent natural areas."

- 1.46 *The AEE refers to stock-proof fencing on the parent site boundaries. How is it proposed to prevent stock from within the site, such as that on the proposed sites or on the balance farm lot, entering the covenant areas?*

All covenanted areas will be fenced. As detailed in the Farm Management Plan prepared by Kaipara Coast Landscape Architecture, fencing around paddocks will be 7 wire with battens, with the third wire down electric to keep stock off fences. This type of fencing looks more appealing and is stock proof for both sheep and cattle.

- 1.47 *A plan is requested as per E39.6.1.6 clearly identifying SEA areas and other areas of indigenous vegetation, wetlands, and watercourses on site.*
- 1.48 *Please provide an assessment of areas of vegetation proposed for protection that are already identified as SEA or areas meeting the factors for Significant Ecological Areas in Policy B7.2.2(1) and confirm the areas (m2) each of the areas within the site cover.*
- 1.49 *Please quantify how many lots would have had the potential to have been developed under the rural subdivision Rules E39.4.2(A16), (A17C) and or (A18) as per Table E39.6.4.4.1 and Table E39.6.4.5.1 through bush, wetland and revegetation protection at the site. It is acknowledged that this is not the basis the application is being applied under but does set the baseline for the provisions for subdivision that may be possible under the unitary plan rules. Limited in-situ subdivision is provided for under the Unitary Plan in rural zones.*

Ms Budd has updated the maps in the Ecological Impact Assessment as detailed in her response below. We note, as described in the AEE the application is for a non-complying subdivision and not on the basis of in-situ subdivision through protection of indigenous vegetation or Significant Ecological Areas factors. Ms Budd confirms that the proposal will, when considered in the whole, result in ecological benefits.

“The maps provided in the original Ecological Impact Assessment (EclA) have been updated to include the SEA overlay and any areas that are of ‘SEA Quality’ (Appendix 2). As outlined in the EclA, this includes all areas of forest, treeland, and scrub at the site as they are likely to provide habitat for indigenous fauna species that have been classified as ‘Threatened’ or ‘At Risk’ (Factor 2b: Threat status and rarity). These fauna habitat values are discussed in more detail in Section 6 of the EclA. These vegetation types also form part of a network of sites that cumulatively provide important habitat for indigenous fauna (Factor 4c: Stepping-stones, migration pathways and buffers).

All natural inland wetland areas that are dominated by indigenous plant species also meet the criteria to be classified as SEA (Factor 2d: Threat status and rarity) and have therefore been mapped accordingly (Appendix 2).

All areas of SEA and SEA quality vegetation are proposed to be protected.

The subdivision is acknowledged to be a non-complying activity and is not being applied for on the basis of the “in-situ subdivision creating additional sites through protection of indigenous vegetation or wetland identified in the Significant Ecological Areas Overlay... or... not identified in the Significant Ecological Areas Overlay but meeting the Significant Ecological Areas factors” rules. As such, an assessment against Table E39.6.4.4.1 and E39.6.4.5.1 is not considered necessary.

...the proposal is considered to meet the overall objectives of the AUP(OP) and NPS-IB. When considered in combination with the proposed revegetation activities, the proposal will result in ecological benefits.”

- 1.50 *While most of the vegetation appears to be correctly mapped there are some areas that a greater area is covered as mapping is shown at a coarse scale. One location noted is on the southern edge and northeastern end of wetland 11 (areas 15 and 16 in the ecological assessment) where wetland rushes are located beyond the mapped area. Correct vegetation extent is especially important in the case of wetlands where wastewater dispersal fields are proposed in proximity to these to ensure required offset is provided. Please provide updated plans and information.*

Ms Budd has revisited the site and updated the maps in the Ecological Impact Assessment as detailed in her response (Attachment 7):

“Wetland 11 was revisited on 11 December 2023 to reassess the boundary. A revised boundary map has been provided (Appendix 3). While some areas of scattered rushes fall outside of the new mapped boundary, these are much sparser than within the wetland area. As such, the pasture grasses and herbs continue to be dominant in the areas that have been excluded.

Ground conditions were also considered during the assessment, with the soil within the wetland area being damp to saturated, while outside of the new boundary it was dry.

There are differences between the new boundary and that shown in the original report. However, these are minor and they extend in both directions (i.e., in some areas the new line goes out, and in others it goes in from the original boundary). The largest change is the reclassification of a small area of kānuka as a dryland habitat.”

1.51 *While the encroachment area as a whole of the site has been indicated the earthworks area within 20m of wetlands and streams have not been quantified. The table in section 8.6 of the ecological report indicates earthworks within 10m of wetland but not within 20m. It also does not indicate earthworks within 20m of stream. Confirmation is required not just of encroachment areas but vegetation clearance and earthworks areas within these. Please provide this information and provide the relevant assessments.*

Ms Budd states: “An assessment of the extent of encroachment within 20 metres of wetlands and streams is provided in Section 8.6 of the EclA. This encroachment area is considered to represent both the extent of earthworks and vegetation removal within these zones. No vegetation removal is proposed outside of the earthworks area.

Section 8.6 of the EclA breaks down the area of encroachment within 20 metres of wetlands into two zones (0 to 10 metres, and 10 to 20 metres), as this affects the activity status of the activity. Earthworks within 10 metres of wetland is a non-complying activity under the National Environmental Standards for Freshwater (NES-F), while vegetation removal within 20 metres of a wetland is a restricted discretionary activity under the Auckland Unitary Plan (AUP).

The table from Section 8.6 of the EclA has been repeated (Table 3), with an additional row providing the combined total of the two wetland buffer zones.”

Table 2: Summary of encroachment into stream margins and wetland buffers

Zone	Area of Encroachment	Total Area within Zone	% Encroachment	Activity Status
0-20 metre stream margin	1,810	87,787	2.06%	Vegetation removal Restricted Discretionary (AUP)
0-10 metre wetland buffer	1,629	70,573	2.31%	Vegetation removal and earthworks Non- Complying (NES-F)
10-20 metre wetland buffer	5,278	81,070	6.51%	Vegetation removal Restricted Discretionary (AUP)
0-20 metre wetland buffer	6,907	151,643	4.55%	Combined

1.52 *Wetlands protected under rural subdivision rules of the AUP(OP) require a 20m setback as outlined by Note 3 for Table E39.6.4.4.1(3). As such it is expected that this setback is provided as far as possible for the development areas for both building footprints and wastewater dispersal fields, and roads. Please either amend the proposal or provide further justification and assessment of what’s proposed.*

Ms Sarah Budd makes the following comments in response to the request:

"It is acknowledged that the proposal does not comply with the standards for rural subdivision for wetland protection, and that the proposal is therefore a non-complying activity. However, I note that the 20-metre setback expected to meet these standards does not require the setback area to be planted. Reduced setbacks are frequently allowed for under the rural subdivision rules if the buffer is to be planted, as it is in this case. A full assessment of the ecological effects of the proposed encroachment of the development into the 20-metre-wide wetland buffer is provided in the EclA and the extent of encroachment is discussed in Question 51 above.

Affected vegetation in the wetland buffer areas comprises exotic grassland of negligible ecological value. The magnitude of the effect of the loss of this vegetation is low, and the potential effect on the streams and wetlands themselves is also likely to be low provided best practice sediment and erosion controls are in place.

It appears that reference to Wetland 13 in the comment associated with this question may be an error. Wetland 13 is located away from the proposed lots near the entrance to the site, and no earthworks is proposed within the associated 20 metre buffer."

1.53 Culvert 5 is proposed to be length of 12 metres. This is a wide length for one lot and much wider than the current crossing area. The width should be reduced particularly given the wetland located flush with the upstream end of the culvert which would likely be impacted by culvert of this length. Please either amend the proposal or provide further justification and assessment of whats proposed.

Mr Zibo Yang, Crang Civil, has confirmed in Attachment 3 that the length of culvert 5 "is determined by the width of the accessway, which is measured in 12m from boundary to boundary. The current length and cross sectional area of the culvert are considered optimised to ensure it runs perpendicularly across the road in its shortest length to convey stormwater from upstream to downstream up to the 100 year storm event. The proposed design intends to maintain the current flow regime of the stream and reduce adverse potential water ponding effects upstream, therefore the effect on the wetland upstream is considered less than minor." Mr Yang has included culvert calculations in Appendix C of the engineering report and wetland hydrological assessment memorandum. Ms Budd has also confirmed:

"...the engineering team have indicated that the culvert will be designed to ensure water levels within the wetland are maintained. I therefore see no reason why the length of the culvert would affect the ecological values of the wetland on the upstream side."

1.54 Deer are known to be present in the area. Deer should also be added to pest control proposed at the site; please update.

The Management and Maintenance Plan has been updated to include deer and pig control (refer Attachment 10).

1.55 Please advise if the existing driveway and associated culvert to the farm dwelling will be disestablished

The proposal is for the entrance to be fenced (i.e. driveway disestablished as we will have a new state highway access) but the physical driveway and culvert will remain.

Archaeology

1.56 To safeguard the pa and associated sites on the property, please provide a Historic Heritage Management Plan that effectively outlines the requirements (or protocols) for the management and protection of the historic heritage /archaeological sites through the development and ongoing use of the property as a residential area and operational farm that includes substantial areas of vegetation

The Historic Heritage Management Plan should include (but is not limited to):

- *Conservation recommendations for managing the pa site (Q10/1122) (fencing/ stock erosion, vegetation management and access);*
- *Protocols for the ongoing management of sites Q10/1124, Q10/1125; Q10/1123; Q10/1127, Q10/1128; Q11/1130 and Q10/1131 as part of revegetation areas; including protection mechanisms around access and ongoing vegetation management.*
- *Set timeframes for implementation, review and monitoring of the state and condition of all sites Q10/1122, Q10/1124, Q10/1125; Q10/1123; Q10/1127, Q10/1128; Q10/1129, Q11/1130 and Q10/1131 as well as agreed roles and responsibilities.*

Without practical (straightforward) guidelines for the ongoing management, protection, and monitoring of the archaeological sites on the property, the development, revegetation and ongoing farming/use could adversely affect the condition of the archaeological sites, and their access, amenity and long-term survivability. The provision of a Heritage Management Plan will provide a structured and informed approach to the sites' management that will safeguard their stability and the integrity of the remaining features for present and future generations. A condition to this effect is provided at section 9.2.(e-f).

Note: The Council's Heritage Unit agrees with the archaeological assessment recommendation that an HNZPT (2014) Archaeological Authority is required from Heritage NZ before any work can be carried out that may affect recorded and/or unrecorded archaeological sites. The applicant is advised to obtain this Authority.

This is a Plan that would need to be developed with Mana Whenua and can form a condition of consent. Please refer to Attachment 3 for the approved Authority to Modify.

Landscape & Visual

1.57 What is the proposed materiality of the retaining walls?

Mr Zibo Yang, Crang Civil, has confirmed (refer Attachment 3) the retaining wall material will be confirmed at detailed design / building consent stage. The design will ensure a recessive colour is chosen to maintain the rural character and the site and minimise any adverse visual effect.

Ms Geraldine Bayly confirms (refer Attachment 5) that:

"Retaining walls have been minimised as much as possible. The preference has been to recontour the land to grade it back as naturally as possible into the surrounding landform."

Where required for stability and for preservation of adjacent vegetation, retaining walls are to be timber up to 2.5 metres and are to be stained dark grey tones. These walls either have vegetation located in front of them to screen them, or have vegetation spilling over the top of them to soften their appearance.

Where walls are over 1 metre high a simple black pool fence is to be attached to the top.

Some of the walls, such as those in and around the stream crossing at the site entry, are to be either gabion basket, stacked concrete blocks, or a reinforced soil system that can be planted. The exact nature of these walls have not yet been finalised and will likely change during the detailed design process. However, the intention is for these walls to be as narrow as possible so that they have as small a footprint as possible and for them to disappear into the surrounding landscape and be as inconspicuous as possible."

1.58 Section 5.1.1 of the LVA from Kaipara Coast Landscape Architecture discusses the potential adverse effect of the proposal on the ONL and on the HNCA. The LVA notes that (in particular) the values of the HNCA are linked to the unbuilt and rural / natural character of the landscape. Further, it was noted in Schedule 8 of the AUP that "the peripheral modification associated with the reclaimed flats disrupts the sense of cohesion and intactness within the wider coastal environment.."

It is acknowledged that the proposed areas for development are separate from the ONL and HNCA, but it is questioned whether the development of a sequence of clusters of settlement, with associated infrastructure may have the potential to detract from the perceptual naturalness of the HNCA. Please provide further assessment in relation to this matter.

Ms Geraldine Bayly of Kaipara Coast Landscape Architecture states:

"A lot of thought and care has been taken in the strategic design of the proposal to ensure that the natural landscape features and characteristics of the subject property and the surrounding landscape are retained and enhanced. The underlying factors that were considered during the design phase of this proposal have been articulated in the background assessment of the LVEA."

The subject property is currently in a state of degradation, with stock allowed to roam through the established native vegetation and wetland areas that are pugged which no doubt results in silt entering into the adjacent waterways and the Kaipara Harbour. There are tufts of mature canopy trees located in and around the majority of the riparian areas however the current grazing practices mean that any potential regeneration under these trees do not have a chance to establish.

One of the big challenges currently facing the Kaipara Harbour environs is the pollution of the waterways, predominantly through silt entering the stream networks and making its way out to the harbour. Given this issue, the Kaipara Moana Remediation Programme has been set up to restore the health and mauri of the Kaipara Moana catchment area and reduce the amount of sediment entering the harbour. This is primarily focusing on fencing and planting riparian, coastal and eroding hill country areas. This is similar to the areas on the subject land that are to be restored. Over time, this will positively contribute to the reinforcement of the natural landscape values of the Kaipara Moana broader area. Landscape patterns associated with native vegetation in and around riparian areas will have a stronger influence on the character of the Kaipara Harbour environs, with pasture associated with grazing woven around these areas. The proposal for the subject land is very complementary to this land management regime."

The proposal to fence off, protect and replant large areas of native bush in broad areas around the existing vegetation will significantly enhance the natural landscape values and enable the existing native vegetation to thrive. When viewed from the surrounding landscape, including the Kaipara Harbour, the landscape patterns, with vegetation planted on steep slopes and within gully systems, will be strong and clear. This outcome to restore the health and vitality of large areas of native vegetation and enhance the natural landscape values has been one of the guiding principles behind the proposal. The open pasture is to be woven in and around the vegetation linkages in an organic layout and using management regimes that protects the soils.

The overriding strategy for the design of the development in and around this farm is to ensure that built form is subservient to the natural landscape features. This is why the building platforms are tucked in adjacent to existing mature vegetation, and why they are to be framed in existing and proposed vegetation. The convoluted nature of the landform is such that the only place in which it would be possible to see all possible building platforms is from the air, with discrete pockets of development potentially visible from any one location in the broader surrounds. Design controls are in place to ensure that the potential adverse visual impact of buildings is minimised. The recessive colours, complex style and nature of the built form, prevalence of vegetation in and around the buildings and the low impact on the landform assist in this.

The anticipated outcome is that the proposal will represent a significant enhancement of the natural landscape values of the subject property when viewed from the broader surrounds. There will be clear landscape patterns with the natural complexity of the native vegetation forming strong patterns within the gully systems and with the pasture wrapping around this. From different locations, such as on the Kaipara Harbour, parts of buildings will be visible in amongst vegetation which will be visually associated with the complexity of the surrounding native bush. The large areas of the reclaimed flats at the base of the property will revert back to rushes and native vegetation bringing back a cohesion and connection with the coastal environment in and around this large peninsula of land. This includes the large flat areas located between the Kakanui Stream and the subject land that are currently included as part of the grazing regime for the farm, but are outside the farm boundary.”

1.59 In 5.1.1, the LVA discusses the biotic / biophysical benefits that will be provided, notes that the perceptual elements of landscape character will be advantaged by the enhancement of the natural vegetation patterns. It opines that the enhanced vegetation patterns will enable the integration of the proposed development, and that this will be facilitated by the design guidelines. The relevant AUP(OP) provisions have a strong focus on the maintenance and enhancement of rural character, amenity values and biodiversity values. Given the existing pastoral character of the Harbour hinterland hills with very low existing density of development, the integration of built form, and landscape patterns associated with the domestic use of the landscape (including roading, accessory buildings and structures, gardens etc) is potentially challenging and some reliance is therefore placed on the guidelines achieving the stated objectives of the development.

The Design Guidelines explain that prior to Building Consent being lodged, the plans must be reviewed against the guidelines by a design review group.

A consent notice condition relating to the Design Guidelines is proposed in the AEE (and it is agreed that references to development controls would be necessary in a consent notice condition) however this approach would require review and approval by both the design review group and the Council.

- a) *How is the design review group proposed to operate, and who will be on this group?*
- b) *The language used in some aspects of the Design Guidelines enables a degree of flexibility and could result in different conclusions by the design review group and the Council. Is this your expectation (i.e. that this could occur) and that this could require individual future owners to obtain consents (such as 221 RMA variation)?*

Ms Bayly states in her response regarding the Design Review Group:

“Goodland Coastal Farm Residents Association will employ independent experts in landscape architecture, architecture and / or urban design to form a design review panel to confirm that the

buildings, surrounds and landscaping meets the approved guidelines prior to lodging the application with Auckland Council.

This panel is to be put in place to provide constructive feedback for designers, and may request changes if buildings / proposals don't meet expectations.

The Design Guidelines have been constructed to enable as much flexibility as possible within the parameters created to achieve an outcome where the buildings are to visually and physically be tucked into, or disappear into, existing and proposed vegetation. The intention is not for the buildings to look the same, but that the buildings all be recessive and comply with the development vision statement, core values and objectives.

The Goodland Coastal Farm Residents' Association panel of experts will assess the proposals prior to them being lodged with the Council and therefore the Council can be satisfied that the design intent for the subdivision has been satisfied. It is anticipated that future owners should not need to obtain a 221 RMA variation."

1.60 When considering the effect of the proposed built form and associated infrastructure on the character of the landscape, what assumptions were made in the LVA - ie, was the potential for a dwelling, minor household unit and accessory building (cumulatively up to the maximum allowable coverage of 500m2) on the majority of lots, as well as the subdivision roading / driveways, retaining walls, communal building and car park taken into account in the assessment?

Ms Bayly states in her response:

"From the outset, the proposed capacity of development of this landscape and the overriding design principles were guided by landscape architecture outcomes. The sensitive nature of this landscape, proximity to the Kaipara Harbour and value placed on the land by Mana Whenua were primary considerations. All aspects of the design have been rigorously assessed during the design process to ensure that they will result in an outcome that has positive visual and environmental outcomes.

Future development has been kept away from the state highway with proposed building platforms kept off ridgelines and tucked down in the lower reaches of the property and adjacent to existing and proposed vegetation which will assist in screening and softening any structures which is intended to merge into the complexity of the adjacent native bush.

The relatively contained nature of the building platforms and maximum controls on allowable building coverage, combined with the controls detailed within the design guidelines restrict the size, nature and style of the built form. It is considered that providing that built form complies with these controls a degree of flexibility as to the exact nature of the outcome is desirable. They will provide enough controls to have the desired outcome, but enough flexibility to enable future owners to put their own stamp on their properties.

The aim is to construct the subdivision roading/driveways so that they blend in as much as possible. If they are visible from the surrounds, they are to appear to be farm tracks. The land surrounding them is to be blended back into the natural contours of the landform and reseeded with grass. In the areas where retaining walls are required they are to either be screened by vegetation in the front, or have vegetation spilling over them. They are to be recessive in colour.

The communal building is to be single level and located on a lower elevation. As with other buildings it will be recessive in colour and will be largely screened behind vegetation. The car parking associated with the communal building will be tucked in behind the building and adjacent to proposed vegetation."

1.61 The LVA determines that the landscape effect of the proposal will be very low, that the effect on the ONL and HNCA will be positive, that the effect on rural character will be very low, and that the potential adverse visual effect will be very low. Since the establishment of a vegetative structure on the Site is a key integrative and mitigative measure proposed in the application, will the level of adverse effect be very low (or positive) from the outset, or is a temporary elevated level of adverse effect anticipated? What will temporary effects be?

Ms Bayly states in her response regarding temporary effects:

"It is anticipated that one of the first elements of the development to be constructed will be the roading network. There will be some temporary adverse visual effect as this is established given that there will likely be some scarring on the landform with the exposure of soil as the earthworks are being undertaken. This is to be remedied as soon as possible and is only expected to have short term adverse effects that may be low – _moderate in nature.

With few exceptions, the proposed planting can be implemented within the first planting season following issuing of consent (provisional on adequate supply of plants). Given the steep nature of the site and the soil type, the installation of the fencing will likely need to be undertaken during the dryer summer months. This means that the planting programme over most of the site will not have to wait until other works have been completed. This is able to be achieved as the only earthworks anticipated is that required for the construction of the roading network.

As noted within the Design Guidelines, the building platforms for each site are to retain their natural form which means that any earthworks on each site will be minor and will likely occur immediately prior to the construction of each dwelling on the site. This will minimise potential visual scarring when viewed from the surrounds and will ensure that earthworks is undertaken incrementally, in a piecemeal fashion, which will be less visually intrusive.

The proposed vegetation will take a while to establish and therefore for the first five years, while vegetation is establishing and not yet at a point where the canopies join, buildings will likely be more prominent. It is noted that there will likely be a delay of one to two years between the planting of the proposed vegetation required (and restoration of the native bush) as part of subdivision consent and construction beginning on future dwellings. This is due to the time delays between subdivision consent being granted then purchase of a title followed by design and building consent being granted and construction beginning.

It is concluded that the potential adverse temporary landscape and visual effects of the proposed development for the first five years are likely to be low to moderate in nature reducing to very low and positive once the vegetation has established enough to adequately screen future built form with the vegetative patterns being more visible."

Streamworks

1.62 The application reports that the culverts are a permitted activity. However insufficient information has been provided with the application to confirm this assessment. Please provide:

- Culvert designs in plan form
- Culvert design calculations
- Stream information (for assessment against Regulation 70(2) of the NES:FW)
- The location of all culverts
- An assessment of each culvert against the permitted activity condition of Regulation 70(2) of the NES:FW.
- An assessment of each culvert against the permitted activity standards associated with rule E3.4.1(A32).

This information is required to confirm the culverts are a permitted activity. Note that following the receipt of the requested information, should any individual culvert or the culverts cumulatively not meet the permitted activity rules, then an updated effects assessment will be required, and it is likely that measures would be required to address any identified effects.

In preparing your response to the above, you are advised to refer to the definition of culvert in the AUP and NES:FW, which does not cover such structures that have an inlet/outlet to wetlands.

Additional November 2023 comments: Multiple proposed culverts have inlets within wetlands. These structures are therefore inconsistent with the definition of a culvert from the AUP:OP and the NES:FW, and would therefore be considered as a pipe (and reclamation in terms of activity).

Notwithstanding the above point, the applicant's engineers have provided the requested assessment; however there is not the necessary supporting information to confirm compliance with the permitted activity condition of Regulation 70(2) of the NES:FW principally as the width of the streams has not been provided.

The collective length of the 'culvert' structures exceeds 30 m, this cumulative length, exceeds the permitted activity standard (E3.6.12(2)(a)) that relates to rule E3.4.1(A32) from the AUP:OP. IF these structure were to be considered as 'culverts' consent would therefore required under rule E3.4.1(A44). As a discretionary activity (for culverts) or non-complying (for new reclamation) under the AUP:OP it would be envisioned that a measure for address adverse effects is proposed as part of the application.

Response is required to these points and the various requests therein remain.

Mr Zibo Yang, Crang Civil, has provided (refer Attachment 3) culvert designs in plan form alongside the of all culverts (plans C470 series); culvert design calculations (Crang Civil's engineering report Appendix C); stream information (for assessment against Regulation 70(2) of the NES:FW); an assessment of each culvert against the permitted activity condition of Regulation 70(2) of the NES:FW; and an assessment of each culvert against the permitted activity standards associated with rule E3.4.1(A32) based on the revised engineering design. Wildlands, Ms Sarah Budd has provided confirmation that all streams are less than 3m wide and the adverse effect of loss of permanent and intermittent stream habitat as a result of the proposed culverts is considered very low (refer Attachment 7).

- 1.63 *The application material shows a number of stormwater outfalls that are proposed; however there is no design information to confirm that these outfalls can be designed to the permitted activity standards associated with rule E3.4.1(A39).*

Please provide the necessary design calculations to confirm the outfalls are a permitted activity; and a plan that shows the outfalls relative to the wetlands

November 2023 comments: A location plan has been provided; however the length of the erosion protection at the outfall has not. Specific design information is required to support the response that has been provided by the applicant's engineers. As this relates to a reason for consent under the AUP:OP it is not considered appropriate to defer this detail to building consent stage.

Request remains.

Mr Yang states:

"Please refer to the revised drawings 470 series as well as the culvert calculations in Appendix C of the engineering report for the proposed erosion & sediment measures at the culvert outlets. An assessment of each culvert against the permitted activity standards associated with rule E3.4.1(A32) based on the revised engineering design, see the summary tables provided in query 62."

- 1.64 *Section 8.2 of the EclA refers to the reclamation of permanent and intermittent streams; yet reclamation has not been identified as a reason for consent or assessed in the AEE. Please clarify the nature of this activity.*

November 2023 comments: In light of question 62 above, this request remains.

Ms Budd has noted in her response (attachment 7) that:

"The use of the term 'reclamation' was incorrect in this case and should be ignored. This section should read as follows:

Under the Freshwater Fisheries Regulations 1983 it is an offence to intentionally kill or destroy indigenous fish, unless they are taken for the purpose of scientific research or for human

consumption. As such, regardless of the level of the effect associated with potential harm to indigenous fish described above, a Fish Management Plan (FMP) will be prepared, approved by Auckland Council, and implemented before any stream works take place. The FMP will detail methods for capturing indigenous fish species and identify a suitable release site beyond the extent of works. It will also detail methods of capture and euthanasia for pest fish species (if present) to ensure that they are not inadvertently introduced to neighbouring watercourses or catchments."

- 1.65 *For all in-streamworks, please provide a streamworks methodology to confirm compliance with the relevant permitted activity standard that relates to such works being carried out in accordance with best practice erosion and sediment control measures to minimise any discharge of sediment.*

November 2023 comments: Following the site visit it is considered this point needs to be considered in terms of the culvert removal and construction in respect to the potential to drain any up-gradient wetlands.

Request remains.

Please refer to Crang Civil's engineering plan C226 (Rev A in Attachment 4) that details stream work methodology for constructing stormwater outlet. Mr Yang details:

"The existing culvert under the accessway to the farm dwelling will remain on site, no removal work is proposed as part of this application.

For new culvert installation, the proposed methodology is outlined below in sequence, note that the final details of the construction methodology will be determined and agreed between council and contractor on site prior to work commencement:

- 1. Form a temporary cleanwater stream diversion channel around the proposed culvert construction area. Channel to be lined with geotextile to minimise risk of erosion;*
- 2. Construct clay filled coffer damn at the upstream and down stream ends. Pump and sandbag will be used when necessary to create a dry environment and prevent sediment into the construction area;*
- 3. Following that, contractor to muck out and backfill to form culvert foundation, lay culvert unit and rip rap*
- 4. Once the culvert is in place, contractor to hardfill backfill to designed accessway level on top of the culvert and remove all temporary devices*

Crangcivil drawing C477(Rev A) illustrates the temporary stream diversion works for culvert construction mentioned above."

Regional earthworks

- 1.66 *Please provide a construction methodology for the Sediment Retention Ponds (SRPs), that addresses how these sediment controls will be physically constructed on-site, including how these areas will be accessed. From the review of the application material it would appear that the earthworks that the SRPs would provide sediment control to would need to be completed or substantially advanced prior to their construction. Please clarify how SRPs will be constructed, given the earthworks they would be controlling are needed for their construction?*

November 2023 comments: The response does not address the main purpose of this request and has not considered how the areas where SRP are proposed will be accessed in a manner that reduces the potential for erosion to occur and that minimises sediment generation.

Request remains.

Mr Yang states in Attachment 3 that:

"The drawings indicate potential locations for the SRPs following GD05 design guideline. After obtaining the resource consent, contractor shall liaise with Auckland council prior to work commencement to finalise the erosion and sediment management including SRP location. During earthwork, the SRPs will potentially be adjusted again to suit unforeseen site constraints upon agreement with sediment erosion control officer.

There are a few existing farm tracks, which the new roads are following as much as possible, they can be utilised for diggers and other machinery to access the SRPs, and haul road can be created for access if required by contractor.

Construction methodology of the SRPs was provided in the previous response (memo dated 13/7/2023). Temporary measures such as super silt fence, drop out pit and diversion bunds will be determined by contractor to control runoff before constructing the SRPs, those details will be confirmed and agreed between the contractor and council officer."

- 1.67 *Please confirm how the access ways will be stabilised upon completion.*

November 2023 comments: The response does not address the main purpose of this request. The request relates to the stabilisation of the access ways upon completion; and not the erosion control structure 'stabilised access way'.

Crang Civil have confirmed the accessways within the development site will be sealed with asphalt concrete (refer to engineering plan 321 for further details).

Traffic

- 1.68 *The response states that 221m and 210m of visibility is needed to the south and 'east' (north-east) respectively, but the drawing only shows a road alignment just beyond 90m in each direction. Based on this, the drawing is not sufficient to demonstrate that the required visibility is achieved. Please see below excerpt from Crang Civil Drawing C304 Revision A. Please update the plans.*

Commute Transportation Consultants have provided plans and the assessment in their revised Final Traffic Assessment dated 12 February 2024 (Attachment 11). Crang Civil have also updated their drawing C304 (Attachment 4). Mr Nixon considers in his traffic assessment that:

"The access is located on an arterial road and therefore a Vehicle Access Restriction applies to the proposed vehicle crossing. The access has been assessed and given the low traffic volumes, compliant sight distances, low pedestrian volumes and no apparent road safety concerns, the vehicle crossing location is considered acceptable."

- 1.69 *Section 8.4.3 of the Commute Traffic Impact Assessment states that visibility is achieved in each direction and provides photos to show this. Looking south appears to be an over-vertical crest*

curve in the road which could conceal an approaching vehicle as it goes through the 'dip'. It is difficult to be certain from the photo as the upper part of the approaching car might still be visible (at night you would want to see enough of the vehicle to see the headlights).

Can Commute please confirm that they assessed that approaching vehicles did not disappear from view when they did their site visit and took the photo below.

The Traffic Assessment provided is noted as draft and is unsigned. Please provide a final version of this report.

Commute Transportation Consultants have provided their Final Traffic Assessment dated 12 February 2024 (Attachment 11) which is signed. Mr Nixon confirms in his section 92 response (dated 14 February 2024) that:

"While there is a 'dip' in the vertical alignment of Kaipara Coast Highway north of the site, the top of vehicles approaching from that direction are still visible for the whole length of road shown in Photograph 1 of our original traffic report. We can provide video footage of an approaching vehicle if required. In addition, we consider the sight distance will be further improved by the proposed widening in front of the site which will remove vegetation on the eastern side of Kaipara Coast Highway (that can partially impede visibility to an oncoming southbound vehicle)."

1.70 Please confirm that section 8.4.1 of the Traffic Assessment is a typographical error or provide an updated assessment for State Highway 16.

This is a typographical error. Please refer to Final Traffic Assessment.

2. s92 Request for further information #2 (5 December 2023)

Engineering

2.1 A large degree of common infrastructure is proposed. Please clarify specifically how these will be managed (it is noted that a residents group is proposed).

Please note maintenance manuals will need to be provided at s224c stage.

Crang Civil have, in their response dated 31 January 2024 (Attachment 4), confirmed that:

"The new common infrastructures such as accessways and roads, grassed table drains, bioretention swales, stormwater pipes and culverts within the proposed road reserve on site will be managed and maintained by resident group. Other private infrastructure within each residential lot such as water tank and wastewater disposal field will be managed by individual lot owner.

Noted that relevant maintenance manuals will be provided at 224c stage."

2.2 Please provide relevant information to show how road drainage will be collected and disposed. The information should include but may not be limited to: drainage plans to show swales / channels, catchment plans, hydrological calculations, swale/channel sizing, location of existing OLFPs and how runoff from road will tie into existing OLFPs

Crang Civil have provided the information (Attachment 4) on drawings 400 series and 906 for road drainage network and OLFPs. The design calculations are detailed in Appendix D to E of the Engineering Report (Rev C).

2.3 We understand the roadside swales are purely for treatment and conveyance of road runoffs. In this case, please clarify if upstream flows will be intercepted and diverted so they can be directed into bypass culverts

Crang Civil have confirmed in their memorandum dated 31 January 2024 that:

“...the stormwater infrastructures proposed for road drainage have been renamed, see the revised legends on drawings 400 series, the primary design function of each device is listed below:

- grassed table drain, trapezoidal grass channel used to collect and convey stormwater on road*
- bioretention swale, swale channel equipped with engineered media for water quality treatment and provided stormwater SMAF mitigation*

Majority of the proposed new roads will be constructed along ridge lines of the stormwater catchment and have minimal interperior of the existing overland flows, as illustrated in drawing 400 906. Where there is a cross point between the new road and overland flow, a culvert will be provided to pass flow up to 100-year storm event, calculations and sizing of the culvert can be found in Appendix C of the Engineering report (Rev C).”

2.4 *We acknowledge the proposed private roads and accessways are not related to high contaminate areas as defined in the AUP(OP). However, GD01 treatment still applies to achieve E8.6.1 requirements. We note there are a number of sections on roads and accessways that are in relatively steep gradients. Please clarify the following, with details on all treatment swales:*

- a. how water quality velocity can be maintained,*
- b. how 9 mins residence time can be achieved*

Crang Civil have confirmed in their memorandum dated 31 January 2024 that:

“As mentioned in the response for query 3 above, the grassed table drain is designed to serve primarily as stormwater device for conveyance, hence the 9-min residence time is not applicable. The GD01 treatment will take place in the bioretention swale where water filters through the engineered layers to triggers physical and chemical treatment reactions. Where there are steep gradients, check damns will be installed to maintain flow velocity as appropriate. see bioretention swale calculations in Engineering report Appendix D.”

2.5 *Please show indicative locations and details of stormwater dispersal system for all lots.*

Please refer to Attachment 4 Engineering drawings 400 series, each lot has been assigned with an indicative stormwater outlet.

2.6 *We note there are a number of existing OLPF on site. Please provide a plan showing these and clarify if (and how) they will be affected by proposed works on site. If yes, please provide relevant plans (including catchment plan) and calculations to explain how they will be rerouted and how relevant permitted activity rules and standards will be met.*

Please refer to the engineering plan 906 that shows OLFPs on site. Crang Civil state in their memorandum dated 31 January 2024 that:

“On the western portion of the site, where the development is proposed, the Wildlands ecologist has conducted an assessment on site and depicts the overland flow paths as ephemeral, intermittent and permanent streams.

No rerouting of the existing OLFP is proposed, majority of the proposed new roads will be constructed along ridge lines of the stormwater catchment and have minimal interperior of the existing overland flows, as illustrated in drawing 906. Where there is a crossing between the new road and upstream flow, a culvert will be provided to convey flow up to 100-year storm event. Relevant calculations and sizing of the culvert can be found in Appendix C the Engineering report (Rev C).”

2.7 *Please explain how firefighting water supply will be provided to achieve relevant requirements from SNZ PAS 4509.*

Mr Yang states in their memorandum that each of the lots will meet the firefighting requirements in accordance with SNZ PAS 4509 where residential dwellings are classified under FW1, requiring a minimum water storage volume of 7m³. The current proposal is to have 2 of the 25m³ tanks per lot.

Transportation

2.8 *Please provide the attachments from the Traffic Assessment Report (and a final version of the report as requested in the s92 request dated 16/11/2023). A full transportation review can be undertaken once this is provided.*

As noted above, a final Transport Assessment has been provided in Attachment 11.

2.9 *Please provide further assessment related to visibility to the north of the proposed access point over the area affected by the blind spot and consider mitigation measures to improve this.*

Mr Nixon has confirmed there is no blind spot in the s92 response letter dated 14 February 2024 that states:

“While there is a ‘dip’ in the vertical alignment of Kaipara Coast Highway north of the site, the top of vehicles approaching from that direction are still visible for the whole length of road shown in Photograph 1 of our original traffic report. We can provide video footage of an approaching vehicle if required. In addition, we consider the sight distance will be further improved by the proposed widening in front of the site which will remove vegetation on the eastern side of Kaipara Coast Highway (that can partially impede visibility to an oncoming southbound vehicle).”

2.10 *Please provide information on other options that may have been considered for an alternative access intersection location which would not be affected by the above visibility constraints.*

Mr Nixon has provided information on other options under 1.3 of the section 92 response letter dated 14 February 2024.

2.11 *Please confirm whether the visibility assessment undertaken in the Traffic Assessment has considered the need to apply Grade Corrections to the assessed sight distances, based on Table 3.4 of Austroads Guide 4A.*

Mr Nixon has confirmed regarding the visibility assessment that:

“The vertical alignment of Kaipara Coast Highway to the north has a relatively flat alignment and therefore no grade correction was applied for sight distance calculations in this direction.

The vertical alignment of Kaipara Coast Highway to the south has a ‘downgrade’ initially but an ‘upgrade’ closer toward the proposed sight access. Given grade corrections only affect braking distances on the section of road in which a vehicle is actually braking i.e. the section closest to the access, we conservatively did not apply a grade correction.”

2.12 *The Transport Assessment’s Road Safety Assessment considers crashes which occurred between 2016 and 2020 inclusive. Please update this to cover a more recent 5 year period, based on the latest data available.*

Updated crash information is provided in Appendix A of the final traffic report (Attachment 11).

2.13 *Please provide an assessment, confirming compliance or otherwise, with the following Unitary Plan Transport Chapter requirements that are not covered in the Transport Assessment Report*

- *Bicycle Parking Provisions, in accordance with E27.6.2.5,*

- Confirmation that any future parking provisions and parking at the communal building can comply with the requirements of E27.6.3.6 in relation to formation and gradient,
- Confirmation of the provision of lighting where appropriate, in accordance with the requirements of E27.6.3.7,
- Confirmation of compliance of the communal parking area and access to it with E27.

It is confirmed that the proposal is a vacant lot subdivision and will comply with above mentioned vehicle and bicycle parking requirements. No lighting is proposed as part of this development.

Stormwater

2.14 *Riparian/offset planting as means to not provide SMAF retention is not accepted by Council under E8. Please provide SMAF retention for the proposed impervious areas on site, noting the dwellings can be fitted with water reuse from the proposed tanks on site. Please include SMAF calculations in the response.*

Mr Yang of Crang Civil confirms in his memo (Attachment 4) that:

“The SMAF retention will be provided via bioretention swale for the proposed impervious areas on roads, see bioretention calculations in Engineering report (Appendix D).

Each dwelling will be fitted with 2 of the 25 m3 tanks for water supply, which is considered sufficient for meeting 5 mm of SMAF retention requirement.”

2.15 *The private JOALS on site appear to exceed grades of 15%, please provide detailed calculations for the roadside swales with check dams, noting that detailed drawings have been provided as part of the engineering plans, calculations were not found in the appendices of the engineering report.*

Refer to response under 2.3 and 2.4 above. Bioretention swale design calculations are in Appendix D of the Engineering Report (Attachment 4).

2.16 *Please provide calculations for outfall/rip rap apron sizing for the proposed impervious areas on site.*

Design calculations are in Appendix E of the Engineering Report (Attachment 4).

Policy Feedback

Overall, the proposed farm park development is not supported from a policy perspective because:

- The farm park method of rural subdivision was intentionally omitted from the subdivision pathways in Chapter E39 – Rural Subdivision.
- The proposed number of rural-residential lots (25 lots) is far in excess of what the proposed “restoration” and “revegetation” would otherwise enable (5 lots) under the AUP.
- The method of determining the number of rural-residential lots in the farm park proposal is not clear and gives no certainty or limits to the overall amount of rural-residential development that might occur in the rural area (should this application be granted). The proposal has not demonstrated how it will avoid or mitigate potential reverse sensitivity issues with surrounding rural land.
- The proposed lot sizes for the rural-residential lots are far smaller than enabled in the Rural Coastal zone and the lot sizes are more akin to a residential development.
- The proposal has not undertaken a proper assessment against the NPS-HPL.

- *If granted, the proposal could result in precedent/plan integrity issues as neither the site, nor the proposal, are sufficiently distinguishable from other sites and potential applications.*

Thank you for sharing the policy team feedback. We note that:

- 'Rural lifestyle' was intentionally not defined in the AUP OP in order to enable a case-by-case evaluation of any proposed rural development. The proposal utilises a different financial model in order to increase productivity and amenity of otherwise barren land. As such, in my opinion warrants a unique consideration.
- The proposal is not of an 'urban scale' because, while there are additional rural-residential lots, these rely on the rural amenity, setting (rural and coastal outlook and space between other activities) and the rural production activity on the balance shared lot. This is an experience that could not easily be undertake in an urban setting.
- Although the proposal results in lot sizes smaller than provided for in a rural subdivision section of the AUP OP, that is not in itself justification to refuse the application.
- The proposal will not result in fragmentation of productive rural land because the limited productive land will remain on the shared lot, and position of the lots proposed to be created.
- When looked at in the round, the AUP OP does not preclude this kind of development and in fact contemplates it where it is appropriate.
- Because of the distinguishing features of the Proposal, no adverse precedent effects arise.

3. s92 Request for further information #3 (16 January 2024)

Geotechnical

3.1 *Please provide a geomorphology plan to identify geomorphic features discussed in Section 2.2.*

KGA Geotechnical have amended their Geotechnical Investigation Report (Attachment 9) and corresponding KGA drawing (referenced KGA1D in Appendix A of the report).

3.2 *Section 4.2 referenced a historical geotechnical report which is not presented in Appendix B. Please provide a copy of this report and include historical borehole information on the site plan and geological cross sections.*

Mr Tom Rishworth states in his letter dated 1 March 2024:

"The referenced report prepared by KR Miller & Associates Report entitled "Geological Investigation of Aggregate Resources on the Goodlands Group Property, Makarau", dated November 2004 has been included in Appendix B on our amended GIR. The machine boreholes MAK1 to MAK7 have been included on our Site Plan, Drawing No. KGA 1, and on the relevant cross-section (A-A'), presented in Appendix A of our amended GIR."

3.3 *It is noted that surcharge load was omitted in some sections. Please apply suitable surcharge loads for proposed building platform and accessway in the slope stability analysis.*

Mr Tom Rishworth confirms in the section 92 response letter that:

"A surcharge of 12 kPa has been added to the appropriate slope stability models. The revised assessment has been updated in our amended GIR (reference No. K200826-1B)."

3.4 *The review found that Weathered Rock was not identified in the intrusive investigations. We require further evidence to substantiate the Weathered Rock unit shown in the slope stability models. If this could not be provided, the slope stability models would need to be updated to align with the intrusive testing results.*

Regarding weathered rock, Mr Rishworth confirms in the section 92 response that:

"Weathered rock was inferred from the results of the 2004 KR Miller & Associates Report. However, for conservatism the weathered rock material has been removed from all models except Cross-Section A-A', where it was observed in the quarry face. The revised assessment has been updated in our amended GIR (reference No. K200826-1B)."

3.5 Please clarify how the proposed wastewater disposal fields have been considered in the slope stability analysis

Mr Rishworth confirms in relation to the wastewater disposal fields that:

"The stability assessments conducted as part of our report are evaluating global stability of the proposed subdivision, with the models generally extending over 100m in horizontal distance. The effects of wastewater dispersal on subgrade generally extends to approximately 500mm below ground level. It should be noted that the dispersal rates are adopted to mitigate oversaturation of soils. As such, the current scale of the models are unsuitable for assessing the impacts of wastewater dispersal. Proposed wastewater dispersal areas identified are preliminary only, and will require detailed design and geotechnical assessment during building consent application for each individual Lot, as recommend in Section 15 of our amended GIR."

The s92 response letter details the stability analysis and its results confirming the design is in accordance with *Auckland Code of Practice for Land Development and Subdivision, Chapter 2: Earthworks and Geotechnical*, July 2022 and that the proposed wastewater dispersal areas feasible.

3.6 It is understood that 0.12g was adopted for 1 in 150 year seismic event, however, following CoP Version 2 ULS PGA should be used for the seismic assessment. Please update your analysis accordingly.

Mr Rishworth states that the original report was submitted in 2021 and that the amended assessment has:

"...adopted a horizontal peak acceleration of 0.19g (required factor of safety of greater than 1.0). For conservatism, the models have also been assessed using effective strength parameters."

3.7 Please provide comments on liquefaction and lateral spreading risks.

Mr Rishworth has stated, based on his assessment and Councils Geomaps information, that this site is within an area of 'very low' risk of liquefaction.

We trust that the above is sufficient to satisfy your requests for further information. If you have any queries or would like to discuss this further, please contact me at 021 832 908 or alternatively via email zoe@theurbanist.nz.

Ngā mihi | Kind regards,



Zoë Avery

MURbDes, MLA, BPlan(Hons), MNZPI, MNZILA(Affiliate)

Director

The Urbanist

- Attach 1:** Certificate of Title
- Attach 2:** Mana Whenua emails 6 October 2021
- Attach 3:** Authority to Modify 2023/251:Q10/1123, Q10/1128, Q10/1130 and Q10/1131, prepared by Heritage New Zealand, Pouhere Taonga dated 30 November 2022
- Attach 4:** Civil Engineering Report Rev C dated 31 January 2024, Engineering Drawings and Section 92 memo dated 31 January 2024, prepared by Crang Civil Consulting Engineers
- Attach 5:** Landscape Attachments including Landscape and Visual s92 Response dated 15 February 2024, Tree Removal Along State Highway 16 Assessment dated 14 March 2024, prepared by Geraldine Bayly, Kaipara Coast Landscape Architecture
- Attach 6:** Soil and Resource Report for 2127 Kaipara Coast Highway, dated 24 January 2024, prepared by Mr Ian Hanmore of Hanmore Land Management
- Attach 7:** Ecology response to Section 92 questions for a proposed subdivision 2127 Kaipara Coast Highway, Makarau, dated January 2024, prepared by Ms Sarah Budd or Wildland Consultants
- Attach 8:** Waste Management Report dated March 2024
- Attach 9:** Geotechnical Investigation Report and s92 letter dated 1 March 2024, prepared by KGA Geotechnical Group Limited
- Attach 10:** Management & Maintenance Programme & Plant Species Schedules dated 15 February 2024, prepared by Geraldine Bayly, Kaipara Coast Landscape Architecture
- Attach 11:** Final Traffic Assessment dated 12 February 2024 and Section 92 letter dated 14 February 2024, prepared by Commute Transportation Consultants
- CC:** Hari De Alwis, ABIB (Oamaru) Ltd

Ecology Response to Section 92 Questions for a Proposed Subdivision 2127 Kaipara Coast Highway, Makarau

Contract Report No. 5807b

Providing outstanding ecological
services to sustain and improve
our environments



Ecology Response to Section 92 Questions for a Proposed Subdivision 2127 Kaipara Coast Highway, Makarau

Contract Report No. 5807b

March 2024

Project Team:

Sarah Budd – Site survey and report author
Nick Goldwater – Report review

Prepared for:

Abib (Oamaru) Ltd
PO Box 302247
North Harbour
Auckland 0751

Reviewed and approved for release by:

11/03/2024
Nick Goldwater
Senior Principal Ecologist
Wildland Consultants Ltd

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Auckland Office

12 Nixon Street, Grey Lynn, P.O. Box 46299, Herne Bay, Ph 09 360 6083

Head Office

99 Sala Street, PO Box 7137, Te Ngae, Rotorua Ph 07-343-9017 Fax 07-343-9018 Email: rotorua@wildlands.co.nz

www.wildlands.co.nz



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Introduction

ABIB (Oamaru) Ltd, on behalf of its client, has applied for resource consent for a residential subdivision at 2127 Kaipara Coast Highway. The site is located 10 kilometres north of Kaukapakapa and covers c.134 hectares. Vegetation largely comprises rolling pasture on gentler slopes, with gullies characterised by indigenous forest and shrubland. Most of the woody vegetation is located at the southern end of the property and is contiguous with forest vegetation on the adjacent Pareparea Burial Reserve and Makarau Bridge Reserve. This vegetation has been classified as a Significant Ecological Area (SEA_T_6713). The property is zoned Rural Coastal Zone (Kaipara South Head and Harbour Coastal Area) under the Auckland Unitary Plan (AUP).

As part of the consenting process, Auckland Council issued a Request for Further Information (RFI) to the client under Section 92 of the Resource Management Act. This included questions relating to ecology, and the client has engaged Wildland Consultants Ltd (Wildlands) to provide additional information in response to the RFI.

Project Scope

This report addresses specific questions in the RFI that relate to the ecology, or where an ecological perspective on an issue may be helpful. The questions addressed have been identified in consultation with the client and the wider project team.

Methods

Most of the information provided in this report is from knowledge and information gathered during previous visits and site surveys. However, an additional site visit was carried out on 11 December 2023 to review the vegetation type boundaries in the vicinity of Wetland 11. To avoid issues relating to GPS accuracy, this remapping was carried out by hand using aerial imagery and on the ground landmarks.

Planning Questions

Question 12 – Highly productive land

Question

As noted in previous correspondence and the AEE, the western extent of the site is indicated as containing Highly Productive Land, which means the National Policy Statement on Highly Productive Land is relevant. While an assessment in the AEE is noted, please provide a detailed analysis in the context of the NPS- HPL, having regard to the language used in this document (such as “avoid”) and the limited exclusions present.

Response

Most of the area identified as “highly productive” is in the low-lying flats along the western edge of the property. These low-lying flats once formed part of an extensive wetland habitat that has been drained to create grazing land. However, the water table in this area is still very high and the vegetation in some parts is dominated by hydrophytic plants species (rushes), indicating that large parts of this area meet the definition of a ‘natural inland wetland’. Grazing in this area is therefore not appropriate under the Resource Management (Stock Exclusion) Regulations 2020, which state “*All stock on low slope land must be excluded from any natural wetland that is 0.05 hectares or more*”.



Grazing in the low-lying flats on the western edge of the property is proposed to be discontinued, including in the neighbouring Makarau Stewardship Area. Although this area is classified as “Arable, moderate limitation” under the NZLRI Land use Capability classification system, continuing to graze this area would not provide good ecological outcomes. Allowing this area to revert to wetland would significantly increase the extent of wetland habitats in the local area, provide improved habitat values for ‘Threatened’ and ‘At Risk’ wetland birds such as Australasian bittern (*Botaurus poiciloptilus*) and spotless crane (*Porzana tabuensis tabuensis*), and provide improved natural water treatment for water discharging to the Kaipara Harbour.

Question 17 – Stream width and esplanade reserves

Question

Please confirm the width of streams and watercourses on the site, as determined by a surveyor, and confirm if esplanade reserves are required to vest. The reference to the Ecological Impact Assessment is noted, but this report does not appear to assess these features in the context of potential esplanade reserves, or utilise surveying practises to confirm width.

Response

None of the streams within the site are wider than three metres. All are very narrow (30 to 60 centimetres wide) and can generally be crossed in a single stride. A selection of photographs showing representative examples of stream widths at the site is provided in Appendix 1. While surveying practices were not used to determine the stream widths, it is hoped that the photographic evidence provided is sufficient in this case.

A wider stream channel that exceeds three metres width in some places is located to the west of the site. However, this stream is already separated from the subject site by the Makarau Stewardship Area. This stream is c.26 metres from the property boundary at its closest point. As such, an Esplanade Reserve is not required in this case.

Question 23 – Pedestrians/cyclists stream crossings

Question

The Design Guidelines (section 6.6) refers to stream crossing associated with the pedestrian/cycle way. Please confirm the works proposed, and provide assessment demonstrating that this is a permitted activity.

Response

All stream crossings for pedestrians and cyclists will use existing crossings that have been established for the purposes of the existing farming activities. No additional crossings are proposed.

Question 26 – Works in stream margins and wetland buffers

Questions

Section 8.6 of the Ecological Impact Assessment refers to earthworks and vegetation removal close to stream and/ or wetlands. Please confirm which plans show these works, or provide a plan showing this.

Response

Proposed works (earthworks and vegetation removal) within a 10 and 20 metre setback of natural wetland areas are shown in drawing number C901 prepared by Crang Civil (page 58 of the Engineering drawing set issued for the informal S92).



Proposed works within a 20-metre setback from permanent and intermittent streams are shown in drawing number C903 prepared by Crang Civil (page 60 of the Engineering drawing set issued for the informal S92).

Question 27 – Mitigation planting

Question

Section 8.6 of the Ecological Impact Assessment refers to mitigation planting. Please provide a planting and maintenance plan in this regard.

Response

A planting and maintenance plan has been prepared by Kaipara Coast Landscape Architecture, with input from Wildland Consultants for the preparation of the planting schedules. This is included within the document titled “Management & maintenance Programme & Plant Species Schedules”, dated 8 July 2023.

Question 28 – Restoration and planting

Question

Section 8.14 of the Ecological Impact Assessment refers to restoration and revegetation. Please:

- Provide planting and maintenance plans for this planting; and
- Provide an assessment of the restoration and planting proposed, and how this compares to the outcomes sought by the AUP(OP), including Standard E39.6.4.5.

Response

As identified in Question 27, a planting and maintenance plan has been prepared by Kaipara Coast Landscape Architecture, with input from Wildland Consultants for the preparation of the planting schedules.

The subdivision is acknowledged to be a non-complying activity and is not being applied for on the basis of the “*in-situ subdivision creating additional sites through establishing indigenous revegetation planting*” rules. As such, the proposed planting does not comply with some of the standards outlined in E39.6.4.5. (Table 1). However, the proposal is considered to meet the overall objectives of the AUP(OP), as summarised below in Table 2. When considered in combination with the protection and management of existing SEA and SEA quality vegetation, the proposal will result in ecological benefits.

The proposal also meets the objectives of the National Policy Statement for Indigenous Biodiversity (NPS-IB) as it will result in no overall loss in indigenous biodiversity.

Table 1 – Assessment of the proposal against the standards outlined in E39.6.4.5.

Standard	Status
1(a): Revegetation planting not located on elite soil or prime soil	Not Met: Wetland restoration is proposed on low-lying flats. See response to Question 12 for further discussion
1(b): Revegetation planting located Outstanding Natural Character (ONC), High Natural Character (HNC) or Outstanding Natural Landscape (ONL) overlays	Not Met: Planting is proposed within HNC Area 26 and ONL Area 11.



Standard	Status
1(c): Revegetation contiguous with existing indigenous vegetation or wetland identified in the Significant Ecological Area Overlay or meeting the Significant Ecological Area factors identified in Policy B7.2.2(1); and	Not met: While planting areas are generally contiguous with SEA or SEA quality vegetation, some areas have been selected to provide other ecological benefits (such as stream and wetland buffering.
1(d): Revegetation planting meets the criteria as set out in Appendix 15 Subdivision information and process and Appendix 16 Guideline for native revegetation plantings.	Partially met: While some of the specific items in Appendices 15 and 16 may not be specifically stated in the management plan, the intent is that the requirements that relate to the implementation and monitoring of the works will be complied with.
2: Maximum number of new sites created as per Table E39.6.4.5.1	Not Met: Proposal exceeds the maximum lot yield allowed for in Table E39.6.4.5.1.
3: Any new in-situ site must have a minimum site size of one hectare and a maximum site size of two hectares.	Not Met: Lot sizes are smaller than one hectare.
4: Any established revegetation planting proposed must be legally protected.	Met
5(a): Legal protection must protect all the existing indigenous vegetation on the site at the time of application as well as the additional area subject to any revegetation.	Met
5(b): Legal protection must meet the requirements as set out in Appendix 15 Subdivision information and process.	Met
6(a): All applications must include a plan that specifies the protection measures proposed to ensure the indigenous vegetation and buffer area remain protected in perpetuity. Refer to the legal protection mechanism to protect indigenous vegetation, wetland or revegetation planting as set out in Appendix 15 Subdivision information and process for further information;	Partially Met: While it may not be explicitly stated in the management plan, the intent is for all protections to comply with the legal protection mechanisms outlined in Appendix 15.
6(b): All applications must include a planting plan for revegetation planting which outlines the revegetation planting proposed to be carried out within or adjacent to the indigenous vegetation proposed to be protected in accordance with Appendix 15 Subdivision information and process and Appendix 16 Guideline for native revegetation plantings	Partially Met: While some of the specific items in Appendices 15 and 16 may not be specifically stated in the management plan, the intent is that the requirements that relate to the implementation and monitoring of the works will be complied with.
6(c): The plans required in E39.6.4.5(6)(a) and (b) must be prepared by a suitably qualified and experienced person.	Met
7(a): All applications must include the establishment of secure stock exclusion	Met
7(b): All applications must include the maintenance of plantings that must occur until the plantings have reached a sufficient maturity to be self-sustaining, and have reached 80 per cent canopy closure. The survival rate must ensure a minimum 90 per cent of the original density and species;	Met: While the management plan currently states that "the plantings will be intensively maintained until at least 75% canopy closure is achieved", this can be updated to 80%.



Standard	Status
7(c): All applications must include the ongoing replacement of plants that do not survive	Met
7(d): All applications must ensure that all invasive plant pests are eradicated from the planting site both at the time of planting and on an on-going basis to ensure adequate growth	Met
7(e): All applications must ensure animal and plant pest control occurs	Met
8: The subdivision resource consent must be made subject to a condition that requires the subdivision plan creating the sites to be deposited after, and not before, the protective covenant has been registered against the title of the site containing the covenanted indigenous vegetation to be protected.	Met

Table 2 – Summary of how ecological objectives for rural subdivision (E39) are met.

E39 Objectives relevant to ecology	How this objective is met
Land is subdivided in a manner that provides for the long-term needs of the community and minimises adverse effects of future development on the environment.	Proposal minimises adverse effect of future development by protecting streams, wetlands, and forest habitats in perpetuity.
Subdivision maintains or enhances the natural features and landscapes that contribute to the character and amenity values of the areas.	Natural features including streams, wetlands, and forest habitats are maintained and enhanced. These areas will feature walking and cycling tracks to enhance amenity values.
Rural lifestyle subdivision is primarily limited to the Rural – Countryside Living Zone, and to sites created by protecting, restoring or creating significant areas of indigenous vegetation or wetlands.	Although the proposal is not based on A16 or A18, the proposal includes protecting, restoring, and creating indigenous habitats and provides net ecological benefits to the site.
Subdivision maintains or enhances the natural features and landscapes that contribute to the character and amenity values of rural areas.	Natural features at the site are maintained and enhanced.
Rural subdivision avoids or minimises adverse effects in areas identified in the Outstanding Natural Features (ONF), Outstanding Natural Character (ONC), High Natural Character (HNC), Outstanding Natural Landscape (ONL) and Significant Ecological Areas (SEA) Overlays.	All areas of SEA or SEA quality habitat will be protected and enhanced. Development is also concentrated away from areas classified as HNC or ONL.
Subdivision maintains the function of flood plains and overland flow paths to safely convey flood waters while taking into account the likely long-term effects of climate change.	Floodplains, wetlands, and streams will be protected and enhanced. Retiring low-lying flats will also enhance resilience to climate change and sea level rise.



Question 29 – Walking and cycle paths

Question

The proposed walking and cycling paths appear to move within some of the proposed covenants. Are these paths to be excluded from the covenant areas? This is not indicated on the scheme plan. How will edge effects in this regard be managed, including potential weed incursion?

Response

Some of the restoration areas will contain narrow (single track) walking and cycling paths c.0.8 metres wide. These will be narrow enough to ensure that canopy closure can be achieved/maintained over the tracks. As such, these tracks will not result in habitat fragmentation or edge effects. Pest plants will be managed within all covenant areas in perpetuity, so any potential pest plant incursions that may occur as a result of the tracks (e.g. through seeds being carried in on shoes) will be addressed through regular maintenance.

Ecology Questions

Question 45 – Orchards

Question

The application proposes orchards adjacent to natural areas proposed for protection. Please advise the reason for these locations and provide assessment on the potential ecological effects of this co-locations.

Response

Planting of fruit trees and edibles will be limited to species that are not listed in the Auckland Regional Pest Management Plan (ARPMP) or National Pest Plant Accord (NPPA), and do not pose a threat to adjacent forest areas. Edible pest plant species such as loquat (*Eriobotrya japonica*) and blackberry (*Rubus fruticosus*) will be prohibited both within residential lots and in communal orchard areas. As such, there will be no adverse effect of the orchards on the adjacent natural areas.

Question 46 – Fencing

Question

The AEE refers to stock- proof fencing on the parent site boundaries. How is it proposed to prevent stock from within the site, such as that on the proposed sites or on the balance farm lot, entering the covenant areas?

Response

Issues relating to fencing are addressed in the Farm Management Plan prepared by Kaipara Coast Landscape Architecture.

Questions 47 to 49 – SEA and SEA quality vegetation

Questions

A plan is requested as per E39.6.1.6 clearly identifying SEA areas and other areas of indigenous vegetation, wetlands, and watercourses on site.



Please provide an assessment of areas of vegetation proposed for protection that are already identified as SEA or areas meeting the factors for Significant Ecological Areas in Policy B7.2.2(1) and confirm the areas (m²) each of the areas within the site cover.

Please quantify how many lots would have had the potential to have been developed under the rural subdivision Rules E39.4.2(A16), (A17C) and or (A18) as per Table E39.6.4.4.1 and Table E39.6.4.5.1 through bush, wetland and revegetation protection at the site. It is acknowledged that this is not the basis the application is being applied under but does set the baseline for the provisions for subdivision that may be possible under the unitary plan rules. Limited in-situ subdivision is provided for under the Unitary Plan in rural zones.

Response

The maps provided in the original Ecological Impact Assessment (EcIA) have been updated to include the SEA overlay and any areas that are of 'SEA Quality' (Appendix 2). As outlined in the EcIA, this includes all areas of forest, treeland, and scrub at the site as they are likely to provide habitat for indigenous fauna species that have been classified as 'Threatened' or 'At Risk' (Factor 2b: Threat status and rarity). These fauna habitat values are discussed in more detail in Section 6 of the EcIA. These vegetation types also form part of a network of sites that cumulatively provide important habitat for indigenous fauna (Factor 4c: Stepping-stones, migration pathways and buffers).

All natural inland wetland areas that are dominated by indigenous plant species also meet the criteria to be classified as SEA (Factor 2d: Threat status and rarity) and have therefore been mapped accordingly (Appendix 2).

All areas of SEA and SEA quality vegetation are proposed to be protected.

The subdivision is acknowledged to be a non-complying activity and is not being applied for on the basis of the *"in-situ subdivision creating additional sites through protection of indigenous vegetation or wetland identified in the Significant Ecological Areas Overlay... or... not identified in the Significant Ecological Areas Overlay but meeting the Significant Ecological Areas factors"* rules. As such, an assessment against Table E39.6.4.4.1 and E39.6.4.5.1 is not considered necessary.

Further comment regarding the applicability of these standards to the proposal will be provided by the planning team. However, as discussed above, the proposal is considered to meet the overall objectives of the AUP(OP) and NPS-IB. When considered in combination with the proposed revegetation activities, the proposal will result in ecological benefits.

Question 50 – Boundary of wetland 11

Question

While most of the vegetation appears to be correctly mapped there are some areas that a greater area is covered as mapping is shown at a coarse scale. One location noted is on the southern edge and northeastern end of wetland 11 (areas 15 and 16 in the ecological assessment) where wetland rushes are located beyond the mapped area. Correct vegetation extent is especially important in the case of wetlands where wastewater dispersal fields are proposed in proximity to these to ensure required offset is provided. Please provide updated plans and information.

Response

Wetland 11 was revisited on 11 December 2023 to reassess the boundary. A revised boundary map has been provided (Appendix 3). While some areas of scattered rushes fall outside of the new mapped boundary, these are much sparser than within the wetland area. As such, the pasture grasses and herbs continue to be dominant in the areas that have been excluded.



Ground conditions were also considered during the assessment, with the soil within the wetland area being damp to saturated, while outside of the new boundary it was dry.

There are differences between the new boundary and that shown in the original report. However, these are minor and they extend in both directions (i.e., in some areas the new line goes out, and in others it goes in from the original boundary). The largest change is the reclassification of a small area of kānuka as a dryland habitat.

Question 51 – Stream margins and wetland buffers

Question

While the encroachment area as a whole of the site has been indicated the earthworks area within 20m of wetlands and streams have not been quantified. The table in section 8.6 of the ecological report indicates earthworks within 10m of wetland but not within 20m. It also does not indicate earthworks within 20m of stream. Confirmation is required not just of encroachment areas but vegetation clearance and earthworks areas within these. Please provide this information and provide the relevant assessments.

Response

An assessment of the extent of encroachment within 20 metres of wetlands and streams is provided in Section 8.6 of the EclA. This encroachment area is considered to represent both the extent of earthworks and vegetation removal within these zones. No vegetation removal is proposed outside of the earthworks area.

Section 8.6 of the EclA breaks down the area of encroachment within 20 metres of wetlands into two zones (0 to 10 metres, and 10 to 20 metres), as this affects the activity status of the activity. Earthworks within 10 metres of wetland is a non-complying activity under the National Environmental Standards for Freshwater (NES-F), while vegetation removal within 20 metres of a wetland is a restricted discretionary activity under the Auckland Unitary Plan (AUP).

The table from Section 8.6 of the EclA has been repeated below (Table 3), with an additional row providing the combined total of the two wetland buffer zones.

Table 3 –Summary of encroachment into stream margins and wetland buffers.

Zone	Area of Encroachment	Total Area within Zone	% Encroachment	Activity Status
0-20 metre stream margin	1,810	87,787	2.06%	Vegetation removal Restricted Discretionary (AUP)
0-10 metre wetland buffer	1,629	70,573	2.31%	Vegetation removal and earthworks Non-Complying (NES-F)
10-20 metre wetland buffer	5,278	81,070	6.51%	Vegetation removal Restricted Discretionary (AUP)
0-20 metre wetland buffer	6,907	151,643	4.55%	Combined Total



Question 52 – Wetland setbacks

Question

Wetlands protected under rural subdivision rules of the AUP(OP) require a 20m setback as outlined by Note 3 for Table E39.6.4.4.1(3). As such it is expected that this setback is provided as far as possible for the development areas for both building footprints and wastewater dispersal fields, and roads. Please either amend the proposal or provide further justification and assessment of what's proposed.

Comment: Significant earthworks are required around wetland 13 and the number and location of lots and driveway location should be reconsidered in this area. Providing a greater setback means that some of the other lots may also need their location adjusted or the total number of lots reduced to better take into account the site constraints

Response

It is acknowledged that the proposal does not comply with the standards for rural subdivision for wetland protection, and that the proposal is therefore a non-complying activity. However, I note that the 20-metre setback expected to meet these standards does not require the setback area to be planted. Reduced setbacks are frequently allowed for under the rural subdivision rules if the buffer is to be planted, as it is in this case. A full assessment of the ecological effects of the proposed encroachment of the development into the 20-metre-wide wetland buffer is provided in the EclA and the extent of encroachment is discussed in Question 51 above.

Affected vegetation in the wetland buffer areas comprises exotic grassland of negligible ecological value. The magnitude of the effect of the loss of this vegetation is low, and the potential effect on the streams and wetlands themselves is also likely to be low provided best practice sediment and erosion controls are in place.

It appears that reference to Wetland 13 in the comment associated with this question may be an error. Wetland 13 is located away from the proposed lots near the entrance to the site, and no earthworks is proposed within the associated 20 metre buffer.

Question 53 – Culvert 5

Question

Culvert 5 is proposed to be length of 12 metres. This is a wide length for one lot and much wider than the current crossing area. The width should be reduced particularly given the wetland located flush with the upstream end of the culvert which would likely be impacted by culvert of this length.

Please either amend the proposal or provide further justification and assessment of what's proposed.

Response

The reviewer refers to the length and width of the culvert interchangeably, which is a little confusing. However, it is assumed that this question relates to the length of the culvert.

Questions relating to the need for this length of culvert will need to be addressed by the engineering team. However, the engineering team have indicated that the culvert will be designed to ensure water levels within the wetland are maintained. I therefore see no reason why the length of the culvert would affect the ecological values of the wetland on the upstream side.



Question 54 – Deer control

Question

Deer are known to be present in the area. Deer should also be added to pest control proposed at the site; please update.

Response

Deer control will be added to the pest animal control plan for the site.

Question 55 – Existing driveway

Question

Please advise if the existing driveway and associated culvert to the farm dwelling will be disestablished.

Response

The entrance will be fenced to prevent it being used for access on and off Kaipara Coast Highway. However, the physical driveway and culvert will remain.

Streamworks questions

Question 64 – Stream ‘reclamation’

Question

Section 8.2 of the EclA refers to the reclamation of permanent and intermittent streams; yet reclamation has not been identified as a reason for consent or assessed in the AEE. Please clarify the nature of this activity.

Response

The use of the term ‘reclamation’ was incorrect in this case and should be ignored. This section should read as follows:

“Under the Freshwater Fisheries Regulations 1983 it is an offence to intentionally kill or destroy indigenous fish, unless they are taken for the purpose of scientific research or for human consumption. As such, regardless of the level of the effect associated with potential harm to indigenous fish described above, a Fish Management Plan (FMP) will be prepared, approved by Auckland Council, and implemented before any stream works take place. The FMP will detail methods for capturing indigenous fish species and identify a suitable release site beyond the extent of works. It will also detail methods of capture and euthanasia for pest fish species (if present) to ensure that they are not inadvertently introduced to neighbouring watercourses or catchments”.



Appendix 1

Representative stream width photographs



Plate 1 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.



Plate 2 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.



Plate 3 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.



Plate 4 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.



Plate 5 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.



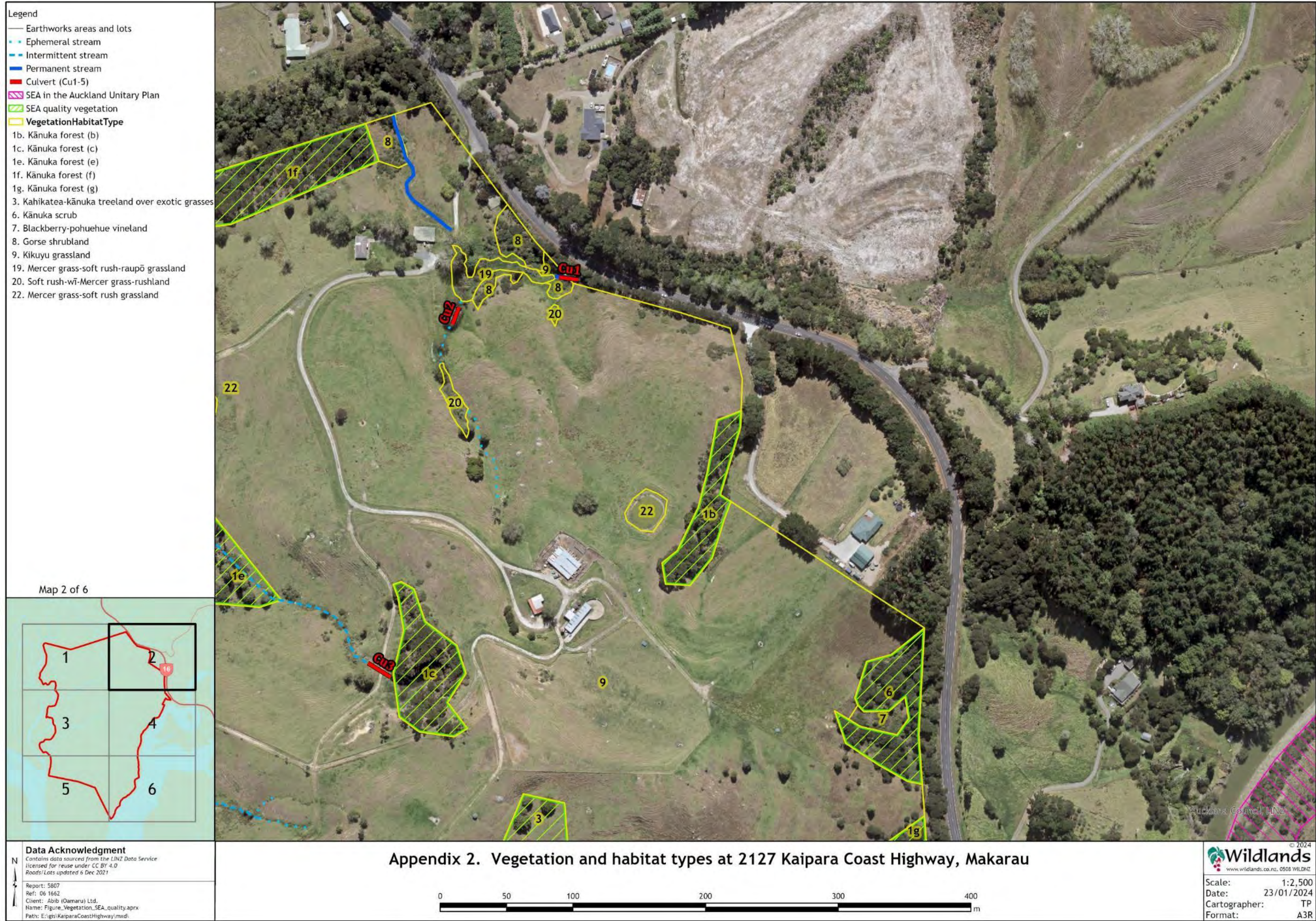
Plate 6 — Representative photograph of a stream within the site. Stream width is less than three metres. 12 August 2021.

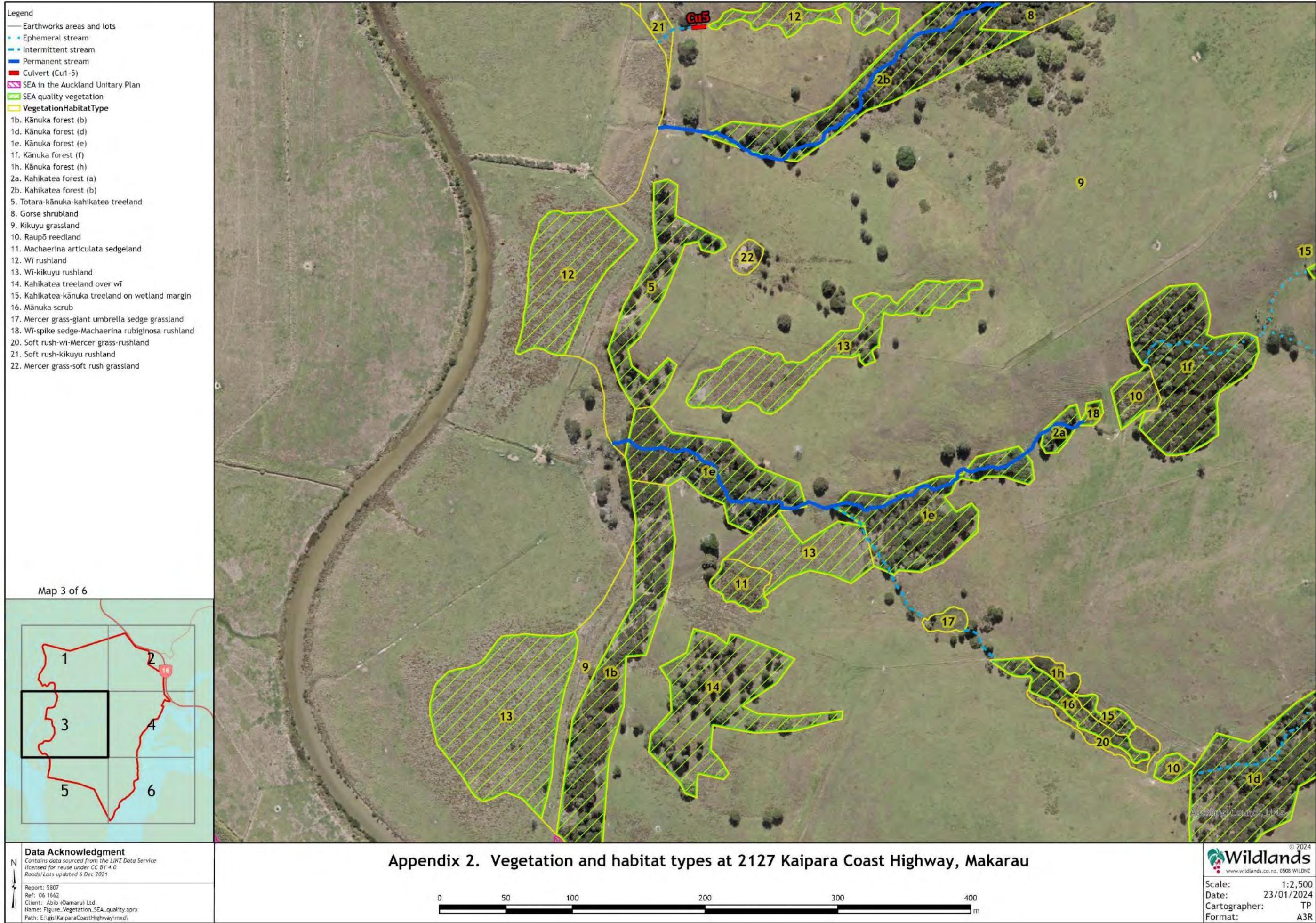


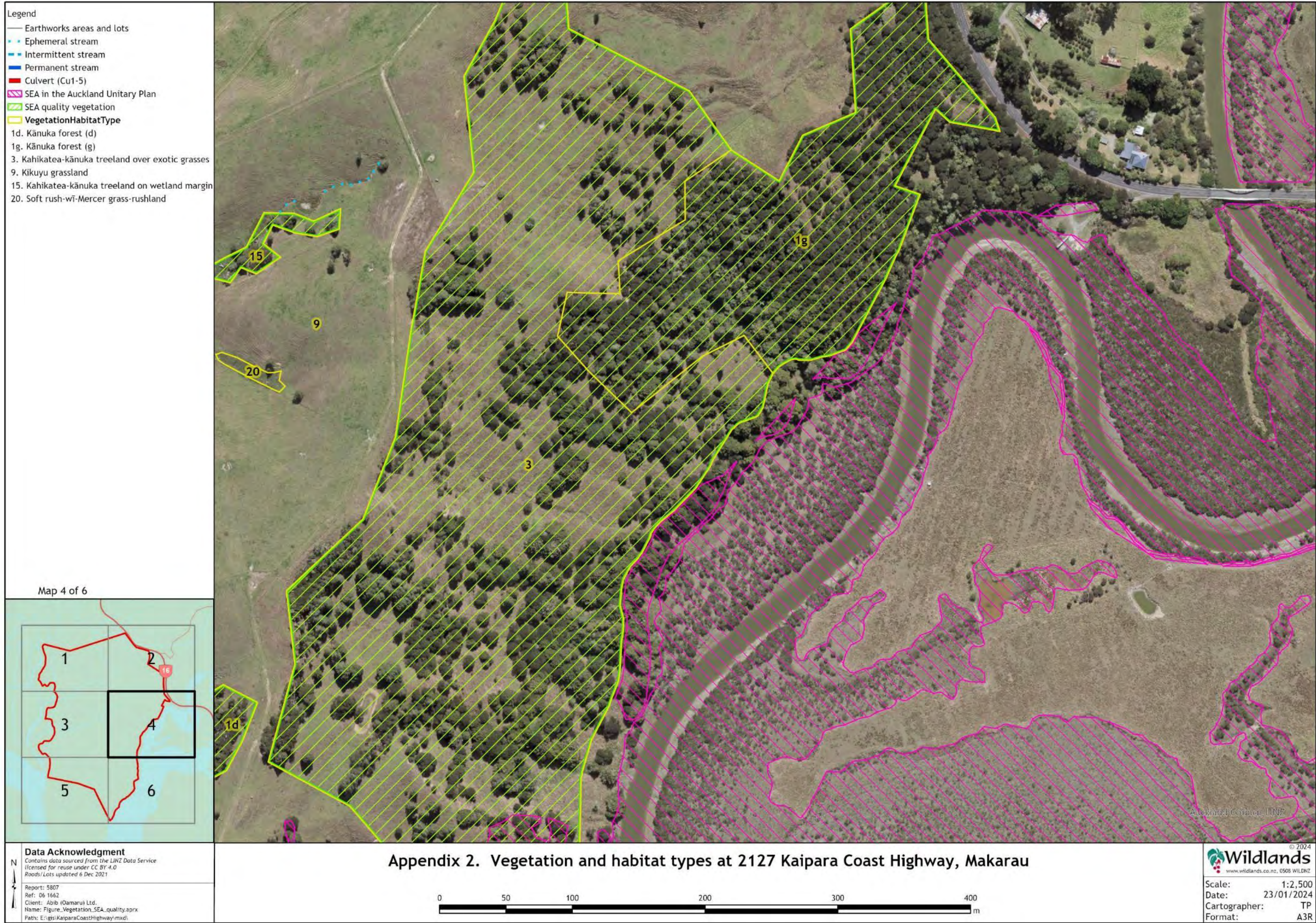
Appendix 2

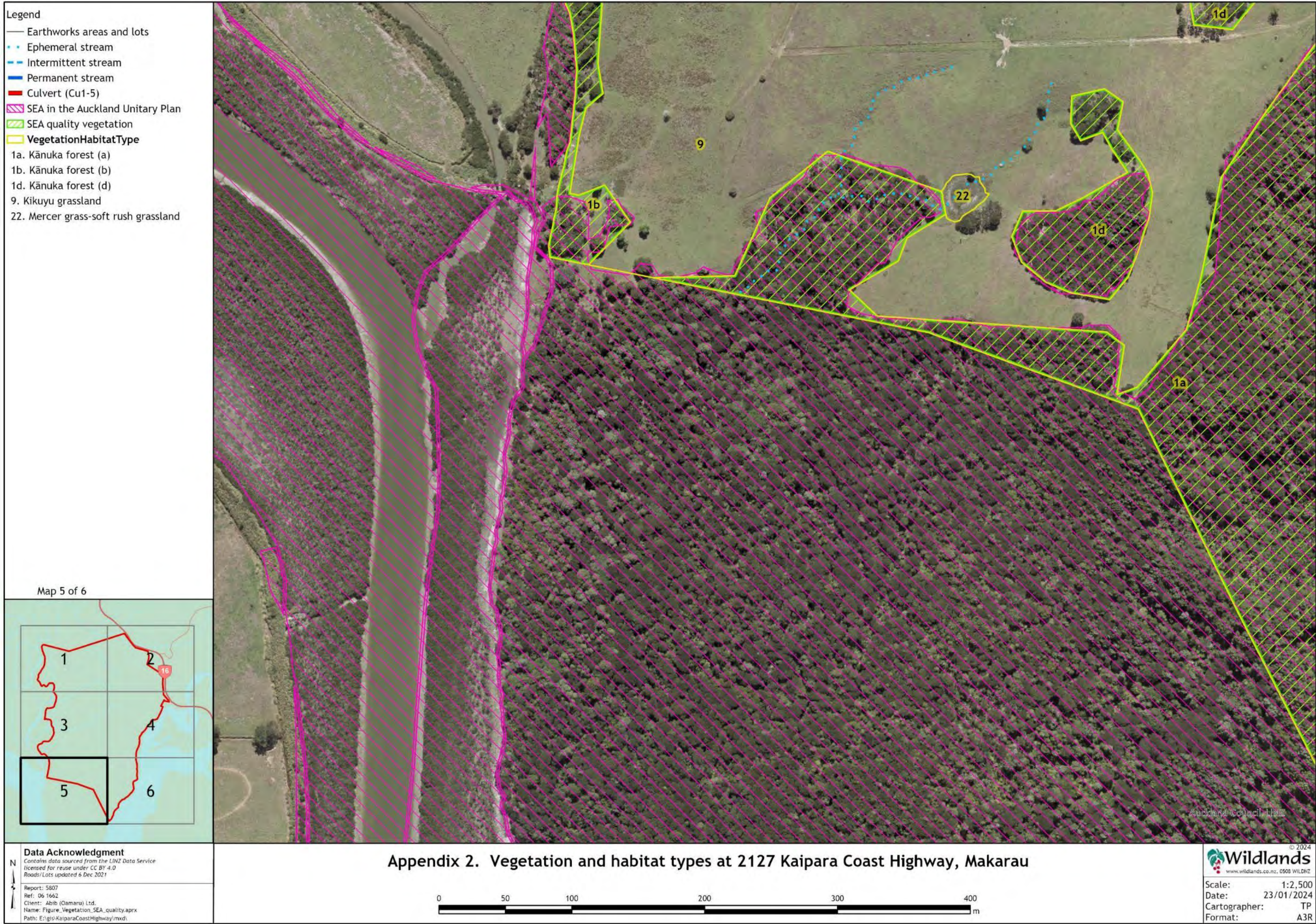
SEA and SEA quality vegetation map













Legend

- Earthworks areas and lots
- Ephemeral stream
- Intermittent stream
- Permanent stream
- Culvert (Cu1-5)
- SEA in the Auckland Unitary Plan
- SEA quality vegetation
- VegetationHabitatType**

1a. Kānuka forest (a)
3. Kahikatea-kānuka treeland over exotic grasses
9. Kikuyu grassland

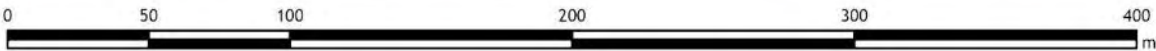
Map 6 of 6

Data Acknowledgment
Contains data sourced from the LINZ Data Service
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Roads/Lots updated 6 Dec 2021

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Appendix 2. Vegetation and habitat types at 2127 Kaipara Coast Highway, Makarau



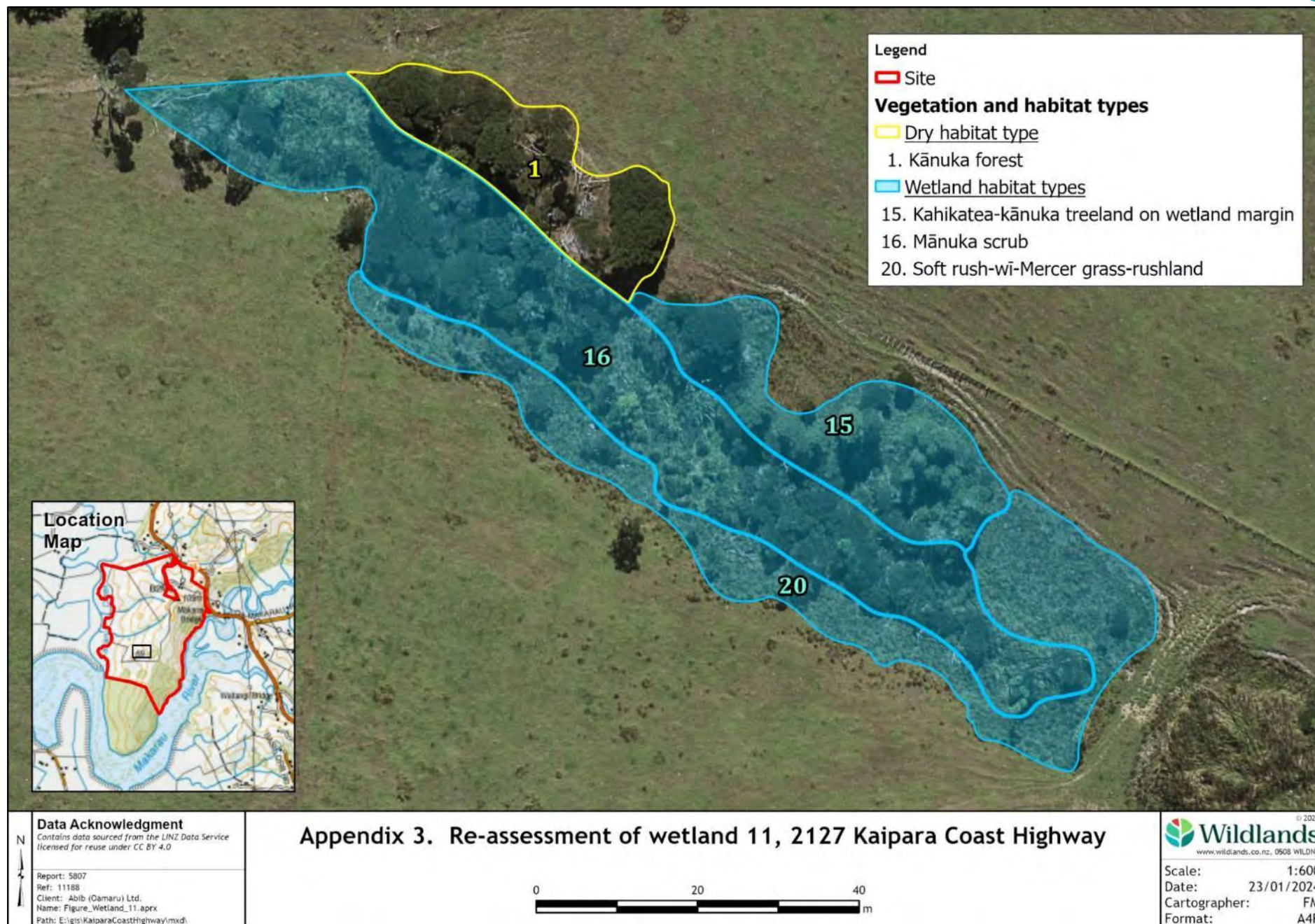
Wildlands
www.wildlands.co.nz, 0508 WILDNZ

Scale: 1:2,500
Date: 23/01/2024
Cartographer: TP
Format: A3R



Appendix 3

Revised map of Wetland 11



Call Free 0508 WILDNZ
Ph +64 7 343 9017
Fax +64 7 349018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042, New Zealand

Regional Offices located in Auckland; Christchurch;
Dunedin; Hamilton; Invercargill; Queenstown; Tauranga;
Wānaka; Wellington; Whakatāne; Whangārei.