SUBMISSION ON
TE PĀTUKUREA DRAFT SPATIAL PLAN

Feedback and Proposal of **Modified Growth Scenario F**
for Compact, Connected, and Distinctive Urban Growth

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Date: 20 April 2025

(AI Impression Images)

INTRODUCTION AND DISCLAIMER

I am Katerina Dvorakova, a Registered Architect (NZIA) with a Master's degree in Architecture and Urban Planning. I have extensive experience in residential, commercial, and mental healthcare design, as well as associated urban planning across New Zealand and Europe, in both small towns and cities, across all scales. My projects include culturally sensitive developments designed collaboratively with future users and cultural representatives.

Currently, I reside in Northland, working closely with a local project management firm in Kerikeri delivering building projects and master plans for a government agency.

My professional passion lies in recognising the potential of urban and natural environments, identifying and celebrating their existing opportunities and genius loci, and prioritising human wellbeing, long-term value and adaptability over short-term, lowest-cost solutions.

My creative work has been valued by clients for being able to transform constraints into assets.

This submission represents **independent professional feedback**. It was developed purely from a genuine interest in urban design and in utilizing and celebrating Kerikeri's natural heritage for residents' wellbeing and place identity.

I have no connection with, nor do I benefit from, Kiwi Fresh Orange Company Limited (Stephen Brownlie or Dennis Corbett) or any golf course management.

Kiwi Fresh's proposal from 2022 (Proposed-District-Plan-Submission-554-Kiwifresh-Orange-Company-Limited.pdf) to rezone 197ha from rural production to urban zoning was supported by technical reports and spatial planning diagrams. I reviewed these documents only after preparing most of this letter. Any similarities with my proposal are coincidental, suggesting that the site's potential has been independently recognised and should be studied further by FNDC.

While I agree with the objectives of the Kiwi Fresh proposal, the crucial unaddressed point is the need to retain the town's close connectivity to Kerikeri (beyond a single road) to avoid uncontrolled dispersal of population. The town centre from which growth should radiate must still be Kerikeri, not a new independent core. Radial growth allows for a more organic and community-integrated expansion that responds to demand as it arises.

If the opportunities outlined in this submission are not pursued now, they may be lost for the next 30 years—or permanently.

Note on population growth: Independent analysis (Urban Economics) shows that Kerikeri–Waipapa will exceed 10,000 people within the life of this Spatial Plan, qualifying it as an "urban environment" under the National Policy Statement on Urban Development (NPS-UD). Council should recognise this and adopt Tier 3 obligations, including Future Development Strategies and housing assessments.

1. OBJECTIVES

This feedback on Te Pātukurea Draft Spatial Plan issued 2/2025 is a call to revisit **Growth Scenario F in a modified form** to achieve:

- A compact town designed for – and encouraging – walking and cycling
- Neighbourhoods that retain their unique identities
- Celebration and recognition of Te Taiao and deep connection to it
- A distinctive, human-scale town to be proud of
- Avoidance of uncontrolled sprawl
- Futureproofing beyond the 30-year horizon

2. CRITIQUE OF THE HYBRID OPTION (D+E)

2.1 MISALIGNMENT WITH OBJECTIVES

The Spatial Plan objectives (pages 17–28 of the Te Pātukurea Draft Spatial Plan) include promoting compact growth, enhancing resilience, encouraging transport diversity, and celebrating Te Taiao. However, the D+E hybrid scenario fails to fully deliver on these objectives:

- **Compact and Walkable Urban Form:**
  D+E decentralises growth, separating Waipapa and Kerikeri and further increasing reliance on vehicles. It does not promote active transport options through continuous or protected infrastructure.
  Currently, neither town has long, continuous cycle paths or shared paths. Disconnected tracks and on-road lanes discourage use by vulnerable groups, including families with young children and older adults. Walking tracks along the Kerikeri River are limited in accessibility and usability for these groups, too.

- **Infrastructure Resilience:**
  Further development without alternative routes will place additional pressure on the already constrained Kerikeri Road corridor.

- **Celebration of Te Taiao:**
  D+E integrates only generic open spaces and blue-green networks. It lacks deeper recognition of whakapapa or cultural connection to place. Modified Scenario F presents the opportunity to establish a strong, respectful connection to the natural environment (particularly Kerikeri River and Puketotara Stream) —something D+E misses.
  Environmental analysis in D+E focuses solely on risk (e.g., flooding, protected land) and avoids treating these elements as assets for wellbeing and identity.

- **Risk of Generic Urban Sprawl:**
  The hybrid approach encourages low to medium-density subdivisions with profit-driven

layouts, fostering car dependency and risking the erosion of Kerikeri's unique character by replicating patterns of Auckland-style sprawl.

- **Loss of High-Value Soils:**
  Option D affects LUC Class 2 soils currently in productive use (orchards). F and Modified F impacts predominantly lower-quality LUC Class 3 soils and includes areas of under-utilised floodplains & pastoral land.

- **Overreliance of Environmental Analysis Solely on Constraints:**
  Classifying 1:100 AEP floodplains as 'no-go zones' ignores contemporary methods of flood-adaptive design. Flood risk can be mitigated—and water elements can enhance urban form, resilience, and wellbeing if well-managed (as evidenced in Kiwi Fresh's submission).

- **Waipapa Mono-Functionality:**
  D+E adds only a small number of households in Waipapa and reinforces its retail/industrial identity. This risks creating a dormant suburb with limited vibrancy or passive surveillance (CPTED) after hours.

- **Visual and Cognitive Bias in Scenario Presentation:**
  While pages 23–27 of the Te Pātukurea Draft Spatial Plan elaborate how the growth inside existing urban areas can look like, greenfield growth's simplistic graphics (shaded area of proposed land for development) skew preferences toward less ambitious options. D+E represent in a familiar, status-quo form. In contrast, more aspirational scenarios (like F) lack visual precedents and appear riskier despite their long-term benefits. This affects public and stakeholder perception.

- **Cultural Values**
  Risk of unknown wāhi tapu applies to all options. Scenario F areas are identified as having moderate archaeological sensitivity but no known wāhi tapu. Low scores in cultural assessments likely stem from perceived risks rather than true potential for cultural enhancement.
  Examples such as Rotorua Lakefront demonstrate how cultural values can be celebrated while integrated into urban design. By comparison, Option D+E offers limited benefits.

- **Cost of Infrastructural Upgrade:**

  The 2024 Growth Scenario Interim Report indicated that significant infrastructure upgrades / will be necessary regardless of the growth model. D and E actually present a higher cost than Scenario F. Stormwater costs for F can be addressed through private negotiation, such as a Public-Private Partnership (PPP), reducing pressure on ratepayers.

- **Failure to Future-Proof:**
  D+E does not plan beyond a 30-year horizon, setting the stage for continued sprawl.

- **Legal Challenges and Timeline:**

  D+E relies on fragmented private landownership, often involving operational orchards. This makes delivery uncertain and inconsistent. Scenario F benefits from cohesive ownership (less than 5 titles), allowing for staged development that is easier to manage and deliver.

2.2 MISSED OPPORTUNITIES THAT D+E CANNOT PROVIDE

Consistent Culturally responsive Urban Character

The sole ownership of approximately 197 hectares of strategic land under Kiwi Fresh presents a rare opportunity for cohesive and culturally responsive planning — an opportunity that Option D+E cannot leverage. The landowner acknowledges the need for affordable living, flood mitigation measures, and cultural recognition, including enhancing the town's appeal to tourists. This site offers the unique chance to create a new neighbourhood from the ground up, supported by a statutory document such as a Design Code or Design Guide. This ensures consistency of urban form and character, sets out controls for buildings, streets and open space, controls architectural and development quality, including front yard landscaping, achieving the desired 'look and feel' of the development.

Precedents of town planning under Design Code include Hobsonville Auckland, Queenstown CBD.

Refer also examples of **culturally responsive developments** in NZ (with connection to water).

Connection to Te Taiao

Kerikeri's unique topography, rivers, and waterfalls present an opportunity to shape a distinctive and place-responsive urban structure. While the Spatial Plan Draft acknowledges strong community support for protecting and enhancing Te Taiao, Option D+E fails to capitalise on this potential, instead following a path of least resistance.

"Sitting at the convergence of several awa (rivers), Kerikeri-Waipapa has a beautiful and diverse natural environment. For hapū, the rivers are taonga and maintaining knowledge of the awa, and exercising ahi ka and kaitiakitanga (guardianship and protection) are inextricably linked to mana whenua wellbeing."

(Source: FNDC_Te-Patukurea_Spatial-Plan_Foundation-Report_Sept-2024.pdf)

"The natural beauty of the area is a defining feature of Kerikeri-Waipapa, and community engagement has shown that ***residents deeply value the waterways and surrounding environment****. There is broad support for protecting and enhancing Te Taiao (the natural world) while also* ***improving public access to rivers, beaches, and green spaces*** *to ensure the environment remains central to the community's identity and future growth."*

(Source: Te Pātukurea Draft Spatial Plan , pg. 11)

Wellbeing can be enhanced not by isolating natural areas but by making them accessible in a respectful, well-managed way. Inspiration can be drawn from international examples of water-sensitive urban design (WSUD) in the Netherlands, Denmark, and Germany.
Refer: **Water-sensitive urban design (WSUD)**.

The hybrid D+E fails to fully utilise the potential of available land around Kerikeri & Waipapa.

3. PROPOSAL: MODIFIED OPTION F

3.1 OBJECTIVES OF MODIFIED OPTION F

This proposal aligns with the objectives set in Te Pātukurea Draft Spatial Plan and beyond:

- **Objective 1: Infrastructure Resilience**
  Prioritising compact, connected, walkable & cyclable neighbourhoods to reduce reliance on private vehicles and alleviate transport pressure.

- **Objective 2: Compact, Sustainable and Distinguished Urban Form**
  Focusing development around existing town centres and promoting intensification where appropriate enables compact urban expansion while avoiding the creation of a dormant suburb that the original Scenario F (and Kiwi Fresh) offered. Locating new development near Kerikeri supports growth while preserving local character.

  The objective stated on page 38 of the Te Pātukurea Draft Spatial Plan - *"The community strongly supported these centres growing independently and developing their own unique identities rather than merging into a single identity"* — is fully supported under this approach. Despite enhanced connectivity, both towns retain their distinct functions and identities:
- **Kerikeri** maintains its small-town character and cultural identity, with strong connections to the surrounding orchards, horticultural land to the south and west, and the eastern coastline.
- **Waipapa** continues to serve as a commercial and industrial hub, supported by recreational facilities.
- A **new, modern green neighbourhood** bridges the two towns, combining business and employment zones in the west with medium-density housing at its centre, and a natural core encouraging active lifestyles.

  This approach cultivates a vibrant, integrated urban space where living, shopping, working, and leisure coexist seamlessly.

- **Objective 3: Transport Variety and Accessibility**
  Encouraging active transport through a radial layout, with public transport anchored by a central spine road.

- **Objective 4: Te Taiao and Cultural Connection**
  Integrating rivers, green spaces, and floodplain into everyday life, not treated as constraints.

- **Objective 5: Future-Proofed Growth**
  Leveraging strategic land ownership and coordinated planning to ensure long-term development beyond the 30-year horizon.

- **Negotiation advantage due to land ownership**

The proposed development area is owned by fewer than five parties, making it easier to negotiate and coordinate a well-planned, cohesive neighbourhood that supports a mix of uses and broad community needs.

3.2 CORE STRATEGY COMPONENTS

For proposed land use, refer to **Appendix 1**.

Modified Option F comprises three core moves:

1. **Relocation of the Bay of Islands Golf Course**
   A critical enabler to unlock strategic land directly adjacent to the Kerikeri CBD, facilitating compact residential and mixed-use growth.

2. **Utilisation of Floodplain Areas and Natural Assets**
   Transforming constrained land into active public green spaces that integrate flood management with ecological and recreational functions.

3. **Creation of a Radial Urban Structure**

   Growth radiates from Kerikeri CBD, structured along a new central spine with green-blue corridors linking Kerikeri and Waipapa, enabling walkable catchments and vibrant neighbourhoods that reflect local identity.

3.3 KEY DEVELOPMENT OUTCOMES

- **Radial Compact Growth:**
  Urban expansion extends from the Kerikeri CBD to the area north of the Puketotara Stream, aligning with natural topography, centred on legibility and cohesion.

- **Mixed-Use, Human-scale Neighbourhoods:**
  A new neighbourhood positioned between Kerikeri and Waipapa integrates medium-density housing, small-scale retail, community facilities, and accessible public open spaces. These elements support social interaction and respond to flood-prone land through adaptive landscape design.

- **Floodplain Activation:**
  The 50-year flood extent is preserved for recreation. The 100-year floodplain (100 AEP) is selectively developed using flood-resilient techniques and integrated green infrastructure. **More in Section 4**.
  Floodplain-adjacent lands offer an opportunity to incorporate water as a defining feature of place. Rotorua Lakefront is a successful precedent, combining environmental sensitivity with cultural, recreational, and visual amenity.

- **Enhanced Mobility and Transport Choice:**
  New bridge connections, walkable routes, and shared paths improve connectivity and accessibility for all users, including whānau with prams and elderly residents.

- **Cultural Anchoring:**
  Development reinforces mana whenua values by integrating waterways into the town's identity, supporting kaitiakitanga, and making cultural landscapes visible and accessible.

This fosters a strong sense of place, belonging, and pride. Refer **recent New Zealand examples**.

- **Master-Planned Delivery through Design Code:**
  At a minimum, the central area of the new neighbourhood and the streets with the highest levels of public activity will be subject to a statutory Design Code to ensure consistency in built form, street design, materials, and landscape outcomes.

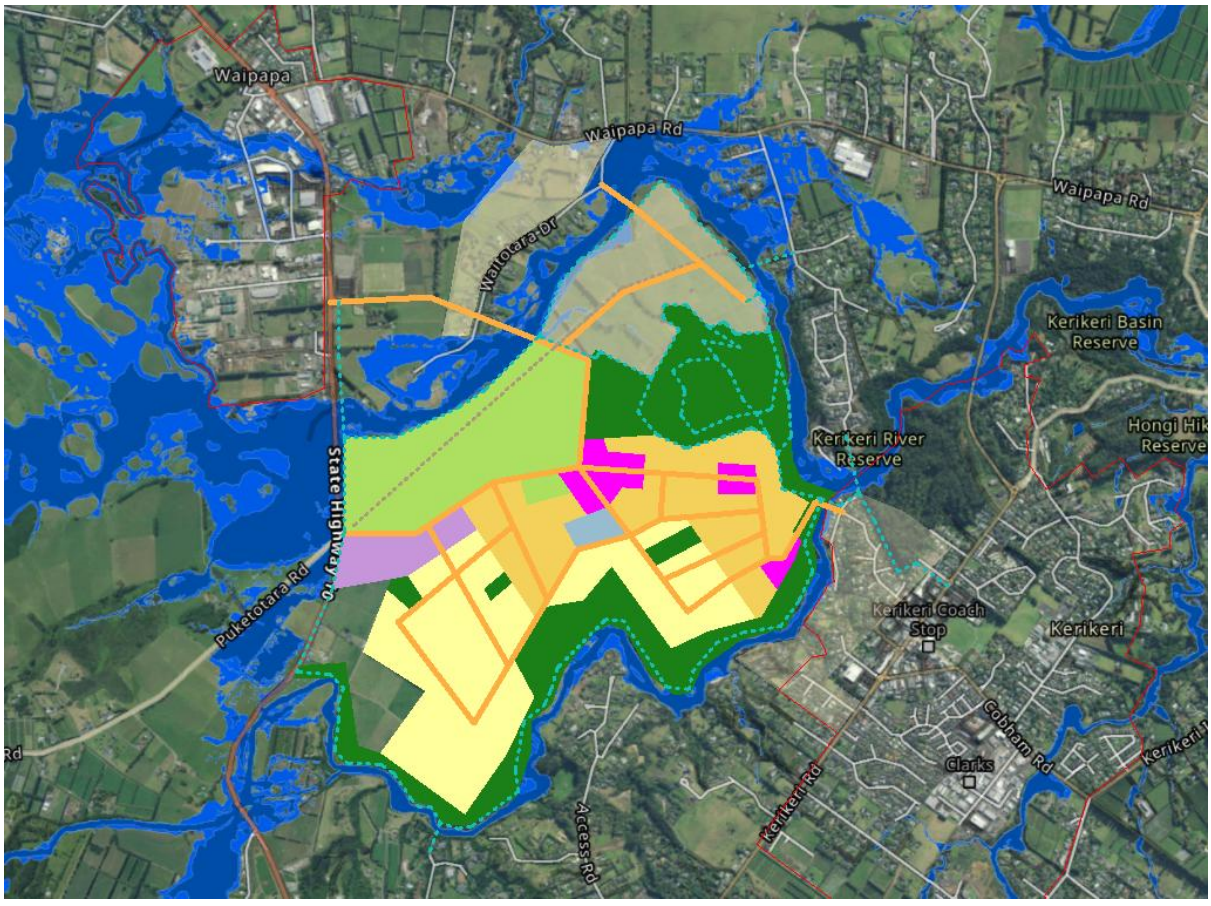
3.4 LAND USE AND CAPACITY BREAKDOWN

The **Modified F** proposal aligns closely with the projections, zoning distribution, and density assumptions outlined in Appendix A – Technical Report Spatial Plan Development (sec. 2.3) for the D+E hybrid scenario. It delivers:

- Medium-density residential (across typologies): 52 ha
- Low-density residential: 78 ha
- Mixed-use (commercial + residential): 9 ha
- Industrial and Retail: 14 ha

These areas are projected to accommodate approximately **3,510 dwellings**, with additional yield potential in mixed-use zones. This enables housing for a population of up to **25,000** by 2054.

The proposal provides a higher share of greenfield housing (approx. 80%) to serve as a contingency if the 40% infill assumption in the Technical Report Spatial Plan Development proves too optimistic or if population growth exceeds projections within the lifespan of the spatial plan (30 years).



3.5 IMPLEMENTATION STEPS AND STAGING

Stage 0: Planning (main points covered only)

- Develop floodplain strategies addressing flood mitigation, stormwater and wastewater management, and potential reuse for irrigation. New buildings should avoid the 50-year flood hazard zones (unlike the 100-year zones identified as "no-go" in other scenarios). See **Section 4** for further detail.
- Initiate negotiations with Bay of Islands Golf Club.
- Establish a Design Code and statutory development guidelines to support master planning, initially focused on Stage 1 and Stage 2 areas.
- Design resilient infrastructure early. Explore private funding options (e.g., PPP models) where public capital is limited.
- Incorporate elements from Stephen Brownlie's proposal under a unified Design Code. Cross-party collaboration will be critical to success.

Stage 1: Golf Course Relocation and Town Linkage

- Rezone and reconfigure 50 ha of golf course land for development in a strategically located and highly suitable area. Retain and incorporate existing trees into new urban fabric.
- Relocate Bay of Islands Golf Club northwest toward SH10 on flat floodplain terrain. Strategy detailed in **Section 5**.
- Implement a new road connection between Kerikeri and SH10 to reduce pressure on Kerikeri Road.
- Upgrade a bridge link (via Golf View Road or an alternative alignment—or both) to connect the released land with Kerikeri's urban network. This upgrade is already accounted for in Scenario F, per Appendix I - Transport Assessment.
- Open "Mistbow Falls" (name used for this document) and other natural features on Kiwi Fresh land to public access, with appropriate ecological safeguards.
- Activate Puketotara Stream and Kerikeri River through controlled public access strategies, ranging from bush tracks to structured waterfront promenade with stepped concrete seating and pedestrian bridges.
- New Rainbow Falls western viewpoint
- Integrate a mix of grid-based layout on flatter land and organic alignment along natural contours and steeper sections.
- Identify a potential site for a new wastewater treatment plant.

Stage 2: New Neighbourhood and Public Realm Framework

- Establish a new mixed-use centre integrating housing, local retail, educational and cultural facilities.
- Deliver public squares and shared open spaces, connecting them to existing reserves via new walkways.
- Introduce amenities such as a new school, aquatic and leisure centre, supermarket, and cultural venues at a central location.
- Extend retail and light industrial uses along the new road linking to SH10.
- Complete the riverside shared path loop initiated in Stage 1.
- Restore historic connections such as the Kauri Timber Railway Route through symbolic landscaping and interpretive signage.
- Introduce a café or restaurant at Rainbow Falls western viewpoint (precedent: Plough & Feather by the Stone Store), potentially referencing historic architecture from the Kauri Timber Railway era.

Stage 3: Expansion and Long-Term Integration

- Continue residential infill and westward expansion from Kerikeri, replacing rural production land east of SH10.
- Extend green-blue infrastructure and integrate with completed walkway networks.
- Develop further amenities as population needs arise.
- Indicate long-term growth areas beyond the 30-year horizon to support future capacity.
- Increase density near Waitotara Drive and allocate more industrial land as per Scenario E recommendations.
- Introduce public transport links between Waipapa, Kerikeri, and new neighbourhoods.
- Preserve the land southwest of Kerikeri (Scenario D area) in its current state for now, due to existing orchards on highly productive LUC Class 2 soil.

3.6 SCALABILITY, ADAPTABILITY AND RISK CONSIDERATION

While the relocation of the golf course is central to unlocking the full benefits of this scenario, the proposal remains scalable. If full golf relocation proves unviable, partial reconfiguration would still enable compact development and river corridor access.

For example, if holes 12–17 were repurposed, the golf club could continue operating in its current location and potentially expand westward. In this case, Scenario F remains viable through implementation of the Kiwi Fresh proposal, provided a well-planned residential precinct is delivered along the new connector road from Kerikeri via Golf View Road.

(Source: Course Layout - Bay of Islands Golf Club Kerikeri, amended)

The underlying spatial pattern—centred on walkability, resilience, and connection to the Kerikeri CBD and river systems—should be preserved regardless of the final arrangement of the golf course.

The area bounded by the rivers, SH10, Waipapa, and Kerikeri offers sufficient developable land to support growth for 50+ years. This provides a valuable buffer if other constraints arise elsewhere.

4. STRATEGY FOR FLOODPLAIN DEVELOPMENT

4.1 CONSIDERATION FOR INCLUSION

Development within floodplains typically introduces significant additional costs—engineered fill, preloading, elevated floor levels, stormwater detention, erosion protection, increased insurance premiums, and longer consenting timeframes—all of which can delay construction.

However, floodplains can be transformed into valuable assets. When integrated as public recreation space, they deliver high urban amenity at a fraction of the cost of full development.

Water can become a defining element of place—shaping the town, enhancing identity, and supporting wellbeing. This also aligns with the legacy of the area's earliest settlements, including the Kerikeri Mission House, Stone Store, and Hongi Hika's Kororipo Pā, all of which were located along waterways.

It is important to note that the cost of mitigation and preparation is expected to be borne by developers—not taxpayers.

4.2 PRINCIPLES

- **Avoid development within 50-year flood extents.**
  Use these zones exclusively for recreation and ecological enhancement.
- **Selective development within 100-year flood extents,**
  subject to rigorous mitigation verified through hydrological modelling.
- Secure legal stormwater infrastructure solutions in advance, and ensure construction is completed prior to any development activity.

4.3 TECHNICAL APPROACHES

The following methods can be explored:

- **Stormwater Management:**
  - Detention ponds within the relocated golf course
  - Bioswales
  - Designated floodway corridor (e.g., Kiwi Fres proposal)
  - Permeable surfaces
  - Water plazas integrated into public spaces
- **Flood Risk Mitigation and Ground Preparation for Buildings:**
  - Raised floor levels on engineered fill and piled foundation into stable layers
  - Site preloading using vertical drains and surcharging to accelerate soil consolidation

- Stone columns (aggregate piers) to increase bearing capacity
- Deep soil mixing to stabilise saturated soils
- Lightweight fill with geotextiles & geogrid reinforcement to reduce load on weak soils

Outside floodplains, foundation systems must account for expansive soils, organic layers, and shallow groundwater, all of which are prevalent in the area.

- **Sustainability Initiatives:**
  - Stormwater reuse for irrigation (ideal for golf courses)
  - Greywater recycling systems (particularly suited for aquatic facilities)
  - On-site water treatment plants
  - Other innovative technologies to protect water quality and support kaitiakitanga. This presents an opportunity for Kerikeri to lead by example in the New Zealand context.

4.3 PRECEDENT PROJECTS – WATER IN URBAN AREAS

Examples within New Zealand where water proximity enhances urban design:

- Christchurch Avon River Regeneration, under construction
- Whangārei Waterfront activation, 2022
- Rotorua Lakefront Revitalisation, 2022
- Tauranga Moana Waterfront, under construction
- Wynyard Quarter, Auckland - Wynyard Quarter - Urban Design Framework.indb, Case Study: Wynyard Quarter Innovation Precinct | Precinct; widely cited urban design case study

5. STRATEGY FOR GOLF COURSE RELOCATION

5.1 RACIONALE

The current golf course occupies land that is highly developable and strategically located near the Kerikeri CBD. Its rezoning—and subsequent relocation—is justified by long-term urban demand outweighing recreational land value. Refer to **site photos illustrating the area's development potential**.

Relocation is feasible, provided financial and legal agreements are reached, and technical challenges are resolved. A golf course can be successfully rebuilt on floodplain terrain with appropriate design.

5.2 CURRENT FEATURES OF BAY OF ISLANDS GOLF CLUB

A site visit and staff discussions revealed that the existing golf club is valued for:

- Free-draining volcanic soil, allowing playability shortly after heavy rainfall
- Distinct character due to sloping terrain, providing both visual interest and challenging play
- Variety of features such as “signature drop hole”, water hazards, sharp doglegs, narrow passages and tree-lined fairways
- Easy accessibility, due to proximity to town centre and Bay of Islands Airport

5.3 RELOCATION OPPORTUNITIES

While some of the existing qualities may be compromised, relocation offers new opportunities:

- **Environmental Enhancement:**
    - A flood-resilient layout with raised greens and tees re-using compacted, excavated fill
    - Incorporation of water hazards, detention ponds, wetlands, creeks, and bridges
    - Native riparian planting
    - Utilisation of existing paddock mature tree lines to define new fairways
- **Cultural Acknowledgment:**
    - Symbolic references to the Kauri Timber Railway Route in layout or landscaping
- **Hydrological Benefits:**
    - On-site stormwater capture and storage for irrigation
    - Design for climate change resilience
- **Improved accessibility:**
    - Proximity to SH10 and airport
    - Integrated access for players and spectators

5.4 TECHNICAL APPROACHES

- Accept and integrate wet zones into the course design as outlined above
- Elevate greens and tees approximately 1 metre using sand-based root zones to ensure rapid drainage
- Align fairways north–south, oriented toward the river
- Incorporate broad, shallow swales alongside fairways to redirect surface runoff
- Reuse existing trenches across paddocks where suitable
- Design flexible course layouts with alternate tees to allow play after extreme weather
- Install subsurface drainage in greens and high-traffic areas

5.5 PRECEDENT PROJECTS

Refer to the following resource for best practices:

- *An Environmental Approach to Golf Course Development*, American Society of Golf Course Architects (ASGCA): https://asgca.org/wp-content/uploads/2016/07/environmental-course-development.pdf)

  Notable case studies (pages 31–38) cover:

  - Storm Water Management and Erosion Control
  - Integrating Golf and the Environment
  - Water Conservation and Habitat Enhancement
  - Addressing Environmental Issues
  - Floodplain Development and Rehabilitation

6. LIMITATIONS

The proposed spatial plan does not account for current property boundaries or legal ownership structures within the suggested development area.

Higher upfront costs associated with delivering extensive public space are acknowledged. However, experience shows that well-designed public realm increases demand and value. These costs could be offset if selected streets are developed to 4–5 storeys, allowing greater yield and financial return.

This spatial strategy aligns closely with the principles and supporting documentation submitted by Kiwi Fresh. Their material may provide a valuable base for further development of the ideas proposed here.

This report has been prepared solely for the Far North District Council as feedback on the Te Pātukurea Draft Spatial Plan. All conclusions and recommendations are based on publicly available information from FNDC, Kiwi Fresh, and referenced sources at the time of writing. No responsibility is accepted by the author for use of this document by third parties or for purposes beyond its stated scope. Reliance on this report without prior review and written agreement is at the user's own risk. Where assumptions have been made, actual conditions may vary, and any design responses must address deviations as they arise.

Further consultation can be provided if specifically engaged.

Yours sincerely,

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Retention pond included in golf course
(Source: What Are Stormwater Retention Ponds?)

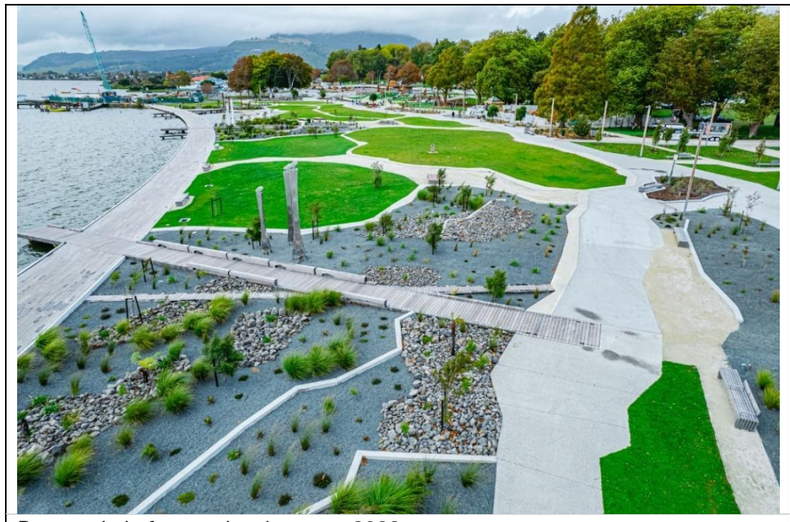
Bioswale in city
(Source: Effective Stormwater Management: Installing Bioswales - The Edge from the National Association of Landscape Professionals)

Bioswale
(Source: Bioswales: A Natural Tool in the War Against Urban Pollutants - Waterborne Environmental)

Green-blue grid – wetland in medium density residential development
(Source: Boszoom – Pijnacker-Nootdorp | Urban Green-blue Grids)

Green-blue grid – wetland in medium density residential development
(Source: Professor Schoemaker Plantation | Urban Green-blue Grids)

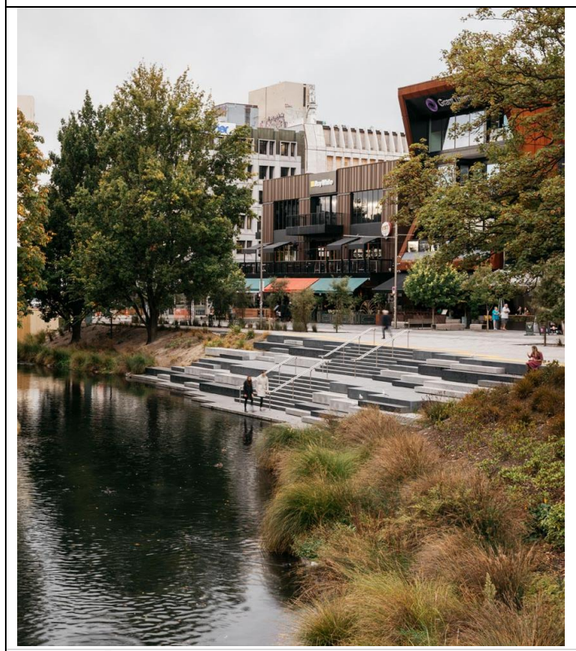
Urban planning with access to river – Promenade
(Source: A solution for urban storm flooding | MIT News | Massachusetts Institute of Technology)

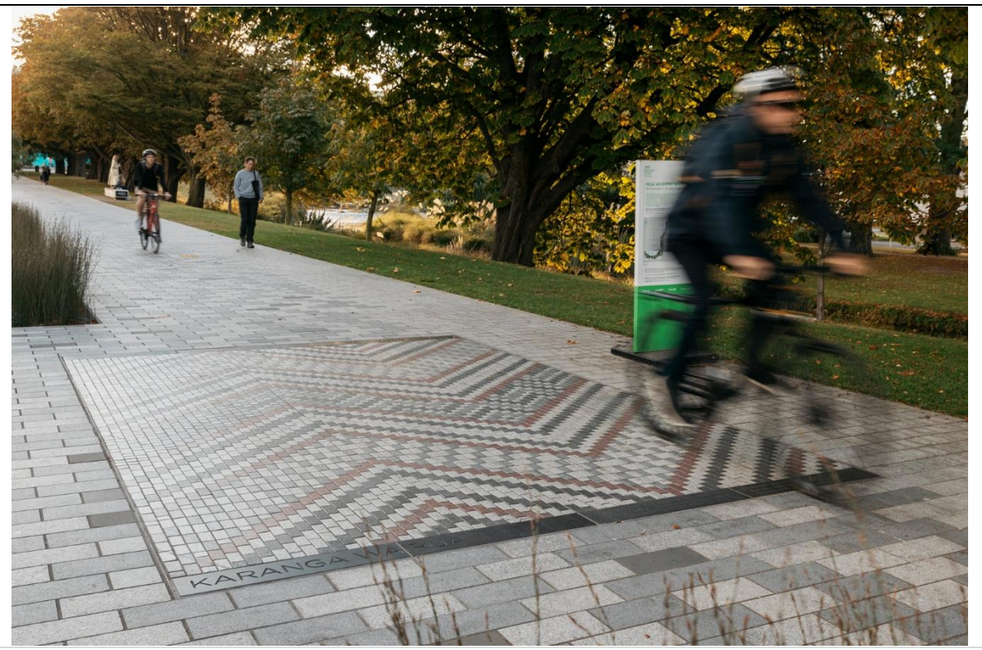


Rotorua Lakefront redevelopment 2022
(Source: rotorua-lakefront-redevelopment5.jpg (1621×1080))

Inclusion of local cultural materials, colours and patterns – Rotorua
(Source: Cultural designs integrated in new lakefront elements - Rotorua Lakes Council)

Cultural footprint in landscape design – lighting, Rotorua
(Source: Latest addition to Rotorua lakefront commemorated at dawn ceremony - NZ Herald)





Te Papa Ōtākaro - Avon River Park, Christchurch 2014
(Source: Te Papa Ōtākaro – Avon River Park and Terraces | Boffa Miskell)

Kopupaka Reserve, West Auckland 2016

EXISTING GOLF COURSE LAND PROPOSED FOR DEVELOPMENT

View from Golf View Rd, Bridge proposed for upgrade to serve as main access to new development

View from Amokura Drive across Puketotara Stream towards golf course floodplain and hills

Pedestrian bridge on golf course, close to confluent of Kerikeri River & Puketotara Stream, proposed for Promenade

Look up the hill from south-east end of golf course. Retain existing trees where achievable

View towards North from access driveway at southern section of golf course

View from golf club down the hill towards south-east and Kerikeri

Flat land from golf club towards north, proposed for development

INTERIM REPORT (10/2024) – COST OF INFRASTRUCTURE, COMPARISON OF D, E AND F SCENARIOS:

D

Infrastructure necessary to provide for growth:

Infrastructure	Description of upgrade	Indicative costs / constraints
	• Kerikeri collector road upgrade • Three new/improved intersections • Pedestrian crossings and Kerikeri Road shared path.	$$ $47M- $64M
	• Topography in the southern areas is generally higher in elevation, which may limit suitable outlet/discharge locations to existing water courses • Investment into upgrading existing pipe networks will be required to manage growth • Surface water protection zones to the Kerikeri River network may make water quality criteria more rigorous for developers.	Moderate constraints
	• Kerikeri water treatment plant upgrades • A new water source or increased take from existing sources • 3.2km of water pipe upgrades • Additional reservoir storage • Booster pump upgrades at Kerikeri and Waipapa reservoirs.	$$ $38M-$80M
	• Kerikeri wastewater treatment plant upgrades • A small scale wastewater treatment plan for Waipapa • 3.3km of new or upgraded wastewater pipes • Pump upgrades (x4) • New pump stations (x2).	$$ $30M-$63M

E

Infrastructure necessary to provide for growth:

Infrastructure	Description of upgrade	Indicative costs / constraints
	• Waipapa collector road upgrade • Four new/improved intersections • Bus stops and public transport service (uncosted) • Pedestrian crossings.	$$$ $72M-$93M
	• Existing stormwater infrastructure east of Waipapa is very limited, and significant investment into capturing, managing, and treating stormwater will be required.	Moderate constraints
	• Kerikeri water treatment plant upgrades • A new water source or increased take from existing sources • 7.2km of water pipe upgrades • Additional reservoir storage • Booster pump upgrades at Kerikeri and Waipapa reservoirs.	$$$ $44M- $92M
	• Kerikeri wastewater treatment plant upgrades[4] • 8.7km of new or upgraded wastewater pipes • Pump upgrades (x6) • New pump stations (x6).	$$$ $42M-$89M

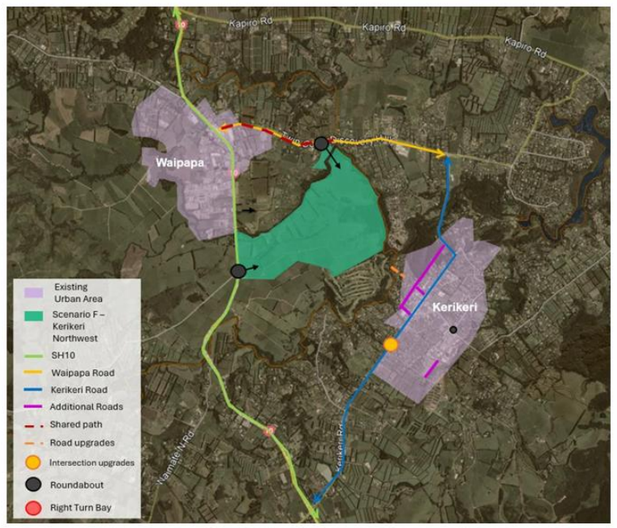
4 Assuming all growth will be serviced by the Kerikeri Wastewater Treatment Plant

F

Infrastructure necessary to provide for growth:

Infrastructure	Description of upgrade	Indicative costs / constraints
	• Three new/improved intersections • Potential upgrade to Golf View Road • Potential upgrade to Aranga Road / Kerikeri Road • Bus stops and public transport service (uncosted).	$$ $56M- $74M
	• Existing stormwater infrastructure in Scenario F is very limited. Significant new infrastructure will be required for large-scale development, and flood mapping shows extensive flood-prone areas, reducing the available land for development.	Significant constraints
	• Kerikeri Water treatment plant upgrades • A new water source or increased take from existingsources • 3.1km of water pipe upgrades • Additional reservoir storage • Booster pump upgrades at Kerikeri and Waipapa reservoirs.	$$$ $38M- $79M
	• Kerikeri wastewater treatment plant upgrades • A small scale wastewater treatment plant for Waipapa • 6.8km of new or upgraded wastewater pipes • Pump upgrades (x3) • New pump stations (x4).	$$ $38M- $81M

Scenario F – Kerikeri Northwest Expansion



Major Transport Upgrades
1. New intersections as shown
2. Potential upgrade to Golf View Road
3. Potential upgrade to Aranga Road / Kerikeri Road
4. Public transport service
5. Bus stops

Cost order of magnitude: $24M - $31M + Do Min

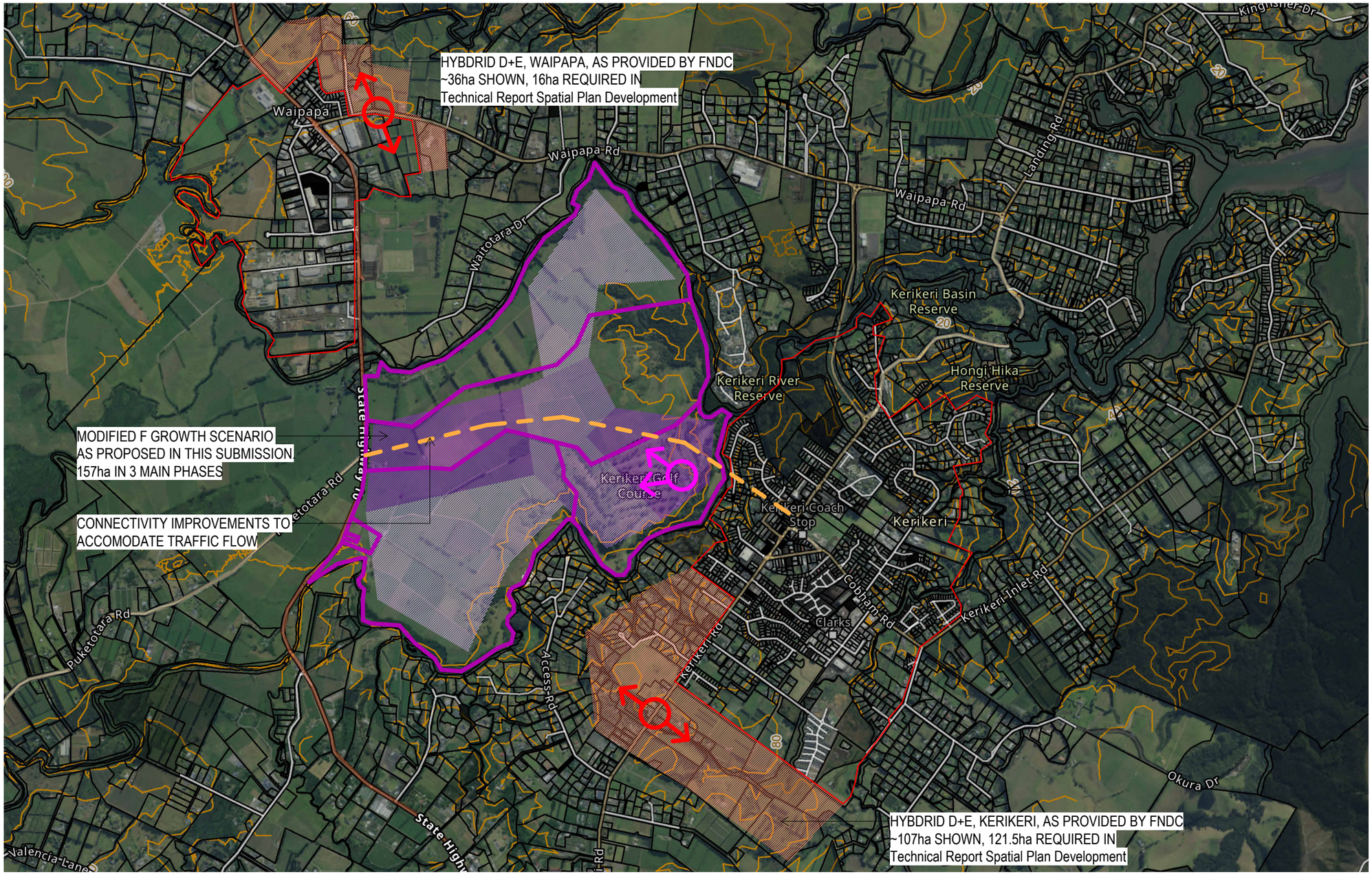
Risks – existing Golf View Rd bridge will need upgrading and 2 x new bridges (assumed to be developer funded, if not costs will be higher)

COMPARISON OF SCENARIO D, E & F AS OUTLINED IN CULTURAL IMPACT ADDENDUM SCENARIO ASSESSMENT 2024:

	Scenario D - Kerikeri South Expansion	**Scenario E** - Waipapa Focused Expansion	**Scenario F** - Kerikeri Northwest Expansion	**Commentary to support Modified F**
Cost & affordable homes potential	Low-cost benefit	Potential for homes to be more affordable for our people	Significant infrastructure costs may impact ability to deliver truly affordable housing for tangata whenua	Infrastructure of option F does not sit significantly higher than D or E – refer comparison. Infrastructure is assumed to be funded by developer or via shared models (PPP). Areas "F" provide a variety of homes including multi-level apartments with shared outdoor facilities to deliver more economic solutions. Affordable living can be also achieved via intensification within Kerikeri.
Traffic & connectivity	Opportunity to improve connectivity in Kerikeri, enhancing manaakitanga	Connectivity to industry for work	Additional roading options could improve connectivity between Kerikeri and Waipapa, supporting manaakitanga through better community connection	No further pressure on existing roads
	Impact on accessibility through more pressure on Kerikeri Road		Proximity to airport could support economic development opportunities for hapū	
			Potential to create workforce housing near employment areas, supporting social equity goals	
Technical infrastructure		Opportunity to implement comprehensive stormwater management, supporting kaitiakitanga	Infrastructure requirements (bridges, wastewater systems) in flood-prone areas can create long-term liability issues that could impact future generations	No. Resolved by flood management strategies described in this proposal.
		High flood area	Substantial river boundaries increase risk to both infrastructure and taiao during extreme weather events	Resolved by flood management strategies described in this proposal.
Urban integration		Risk of creating disconnected development if not well-integrated with Kerikeri		Well integrated if Golf Club land is added
Te Taiao (naturel environment) connection		Access to recreational areas and connectivity potential for people to te taiao	Could incorporate significant green spaces and cultural elements in master planning	
Protection of undeveloped land, natural resources & species	Focuses development closer to existing urban area, potentially reducing impact on undeveloped land and wāhi tapu	May put pressure on existing rural and natural areas around Waipapa, affecting whakapapa connections	Development of highly productive lands conflicts with principles of kaitiakitanga and responsible guardianship of valuable soil resources	Areas of Scenario F and Modified F is of a lower quality thank ULC 2 that Scenario D proposes for development.
	Could allow for intensification of existing areas, potentially preserving more whenua	Could impact habitats of taonga species in currently undeveloped areas		All options should allow for intensification. Spatial Plan technical report assumes 60% to be on brownfield. A new development on greenfield should offer a different type of buildings such as larger complexes or 3+ levels that would be harder to achieve within the existing urban area.
	Could impact high-quality soils			
Protection of water & stormwater management	Development in southern areas may impact water quality in Te Awa o Ngā Rangatira	Potential to affect water quality in streams flowing to Te Awa o Ngā Rangatira	High flood risk areas pose significant concerns for kaitiakitanga responsibilities, particularly regarding climate change adaptation	Resolved by flood management strategies described in this proposal.

	Topography may limit stormwater management options, potentially affecting Wai		Increased urban footprint and development intensity poses risks to water quality in Te Awa o Ngā Rangatira and associated mahinga kai locations through increased sedimentation and urban runoff	River setback and water treatment measures to be set from the outset. Significant area around rivers is for recreation only, lowering the risk of contamination.
Cultural Consideration	May put pressure on unknown wāhi tapu and archaeological sites in and around Kerikeri	Opportunity to develop Waipapa with strong cultural considerations from the outset	Potential for establishment of an urban marae/cultural centre, significantly enhancing opportunities for manaakitanga and cultural expression within the urban environment	
	Risk of affecting the cultural landscape around Kororipo Pā	May impact traditional food gathering areas and access to cultural materials	Potential to create new well-planned neighbourhoods incorporating cultural values from the start	Planning to create new well-planned neighbourhoods incorporating cultural values from the start
		Significant investment required in new infrastructure, potentially impacting whenua, natural flow paths and repo affecting Atuatanga relationships	Risk of affecting unknown wāhi tapu and archaeological sites in previously undeveloped areas	As per Kiwi Fresh Submission, " the assessment does not make any notes of potential sites of mana whenua significance. Consultation with Ngāti Rēhia is ongoing but to date no issues of concern have been raised."
			Large-scale earthworks and development could impact the mauri of the land and its whakapapa connections	This relates to all proposals. Mauri of the land is protected by extensive open green areas being retained for recreation.
Community engagement	Could allow for significant hapū involvement in planning, supporting rangatiratanga	Could allow for significant hapū involvement in planning, supporting rangatiratanga	Opportunity for hapū involvement in greenfield development planning, supporting rangatiratanga	
		Potential to restore and protect kahikatea stands, acknowledging the area's original name Kahikatearoa		
Universal design incorporation	New development areas could incorporate universal design principles, te reo and cultural narrative for tangata whenua	New development areas could incorporate universal design principles, te reo and cultural narrative for tangata whenua	Creates opportunity for new housing development that could incorporate universal design principles, te reo and cultural narratives from the outset	New neighbourhood, new character, endless opportunities to embrace it.

APPENDIX 1 - SPATIAL PLANNING DIAGRAMS



GROWTH SCENARIO LEGEND

- EXSITNG URBAN AREA
- MAIN DIRECTION OF PROPOSED TRAFFIC FLOW
- LEGAL BOUNDARIES OF AFFECTED PROPERTIES
- ORIGINAL GROWTH SCENARIO D+E
- AREAS OF PROPOSED GROWTH SCENARIO - MODIFIED F
- CENTRE AND DIRECTION OF EXPANSION - CURRENT PROPOSAL
- CENTRE AND DIRECTION OF EXPANSION - MODIFIED F PROPOSAL

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Kerikeri & Waipapa

AMENDMENTS

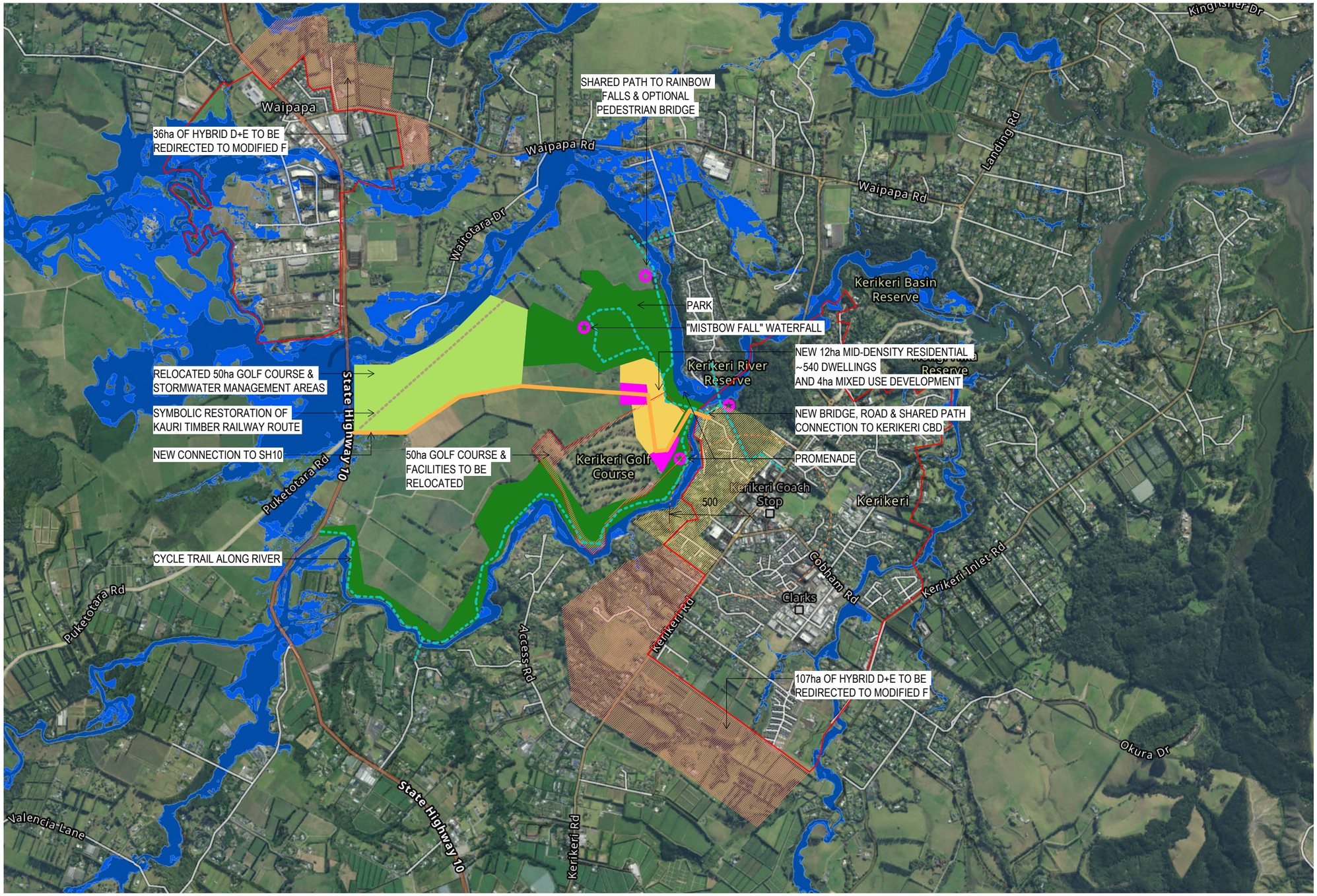
REV	DESCRIPTION	DATE
1	Feedback	20.04.2025

PROJECT
Te Pātukurea -
Draft Spatial Plan for Kerikeri-Waipapa
GROWTH SCENARIO - MODIFIED F

TITLE
EXPANSION DIAGRAM

WIND ZONE: HIGH
EXPOSURE ZONE: C
PURPOSE OF ISSUE:

PROJECT #	SCALE (@ A3)	DRAWING #	REV
24066	1 : 25000	A020	1



GROWTH PLAN LEGEND

- EXSITNG URBAN AREA
- ROADING CONNECTIONS
- WALKING & CYCLING SHARED PATH
- RESIDENTIAL MEDIUM DENSITY
- RESIDENTIAL LOW DENSITY & RURAL
- COMMERCIAL MIXED USE
- INDUSTRY, RETAIL & OTHER
- SCHOOL
- NATURAL OPEN SPACE
- ACTIVE RECREATION
- ORIGINAL GOLF COURSE
- ORIGINAL GROWTH SCENARIO D+E
- AMENITY HIGHLIGHT

NOTE:
- FUNCTIONAL ZONING DOES NOT CONSIDER EXISTING LEGAL BOUNDARIES
- DOES NOT SHOW ALL GREEN OPEN SPACE WITHIN RESIDENTIAL & INDUSTRIAL AREAS
- ROADING CONNECTION TO KERIKERI CBD TO BE UPSIZED TO ACCOMMODATE TRAFFIC FLOW

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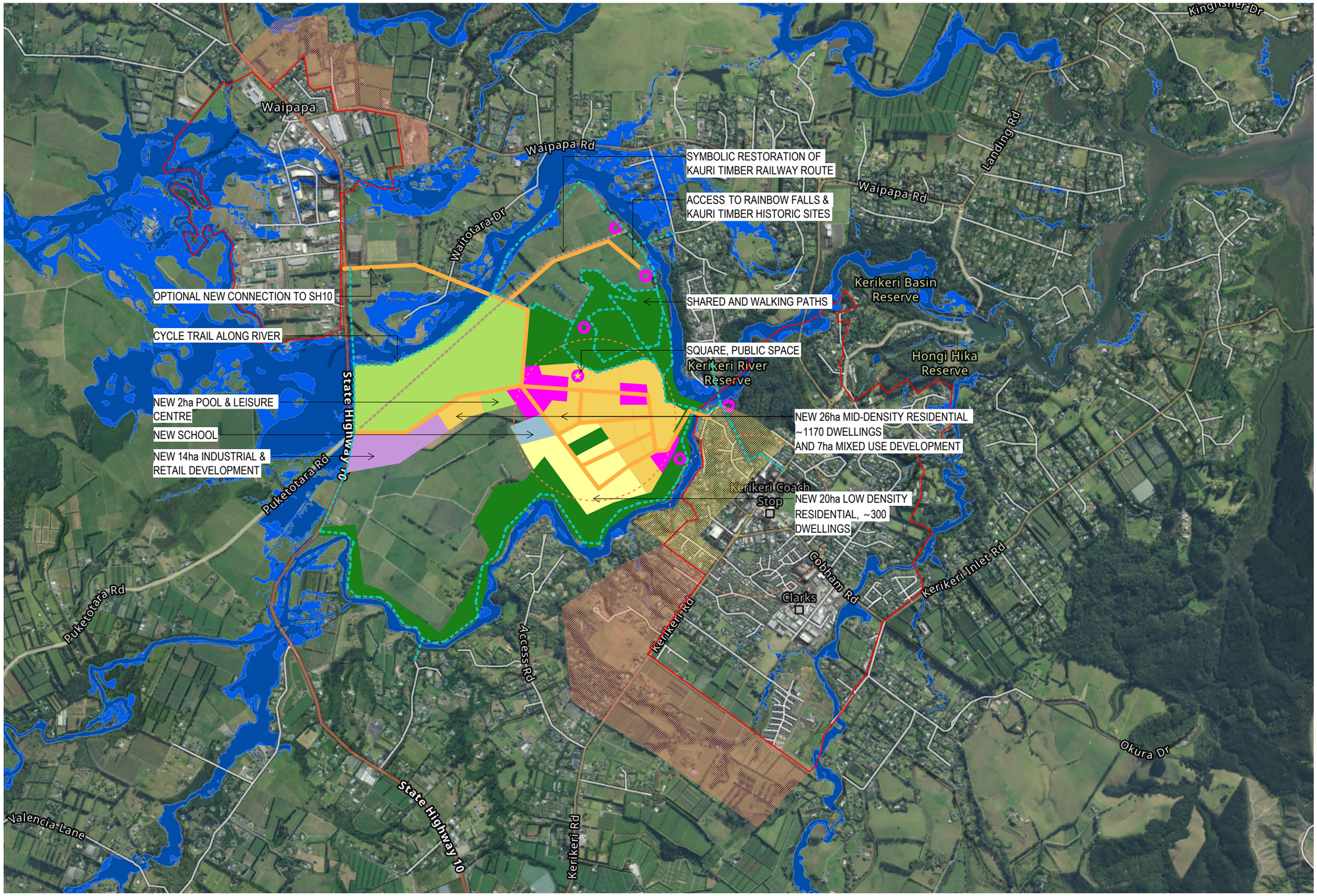
1	Feedback	20.04.2025

PROJECT
Te Pātukurea -
Draft Spatial Plan for Kerikeri-Waipapa
GROWTH SCENARIO - MODIFIED F

TITLE
STAGE 1 - 5-10 YEAR HORIZON

WIND ZONE: HIGH
EXPOSURE ZONE: C
PURPOSE OF ISSUE:

PROJECT #	SCALE (@ A3)	DRAWING #	REV
24066	1 : 25000	A021	1



GROWTH PLAN LEGEND

- EXSITNG URBAN AREA
- ROADING CONNECTIONS
- WALKING & CYCLING SHARED PATH
- RESIDENTIAL MEDIUM DENSITY
- RESIDENTIAL LOW DENSITY & RURAL
- COMMERCIAL MIXED USE
- INDUSTRY, RETAIL & OTHER
- SCHOOL
- NATURAL OPEN SPACE
- ACTIVE RECREATION
- ORIGINAL GOLF COURSE
- ORIGINAL GROWTH SCENARIO D+E
- AMENITY HIGHLIGHT

NOTE:
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- DOES NOT SHOW ALL GREEN OPEN SPACE WITHIN RESIDENTIAL & INDUSTRIAL AREAS
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REV	DESCRIPTION	DATE
1	Feedback	20.04.2025

PROJECT
Te Pātukurea -
Draft Spatial Plan for Kerikeri-Waipapa
GROWTH SCENARIO - MODIFIED F

TITLE
STAGE 2 - 10-20 YEAR HORIZON

WIND ZONE: HIGH
EXPOSURE ZONE: C
PURPOSE OF ISSUE:

PROJECT #	SCALE (@ A3)	DRAWING #	REV
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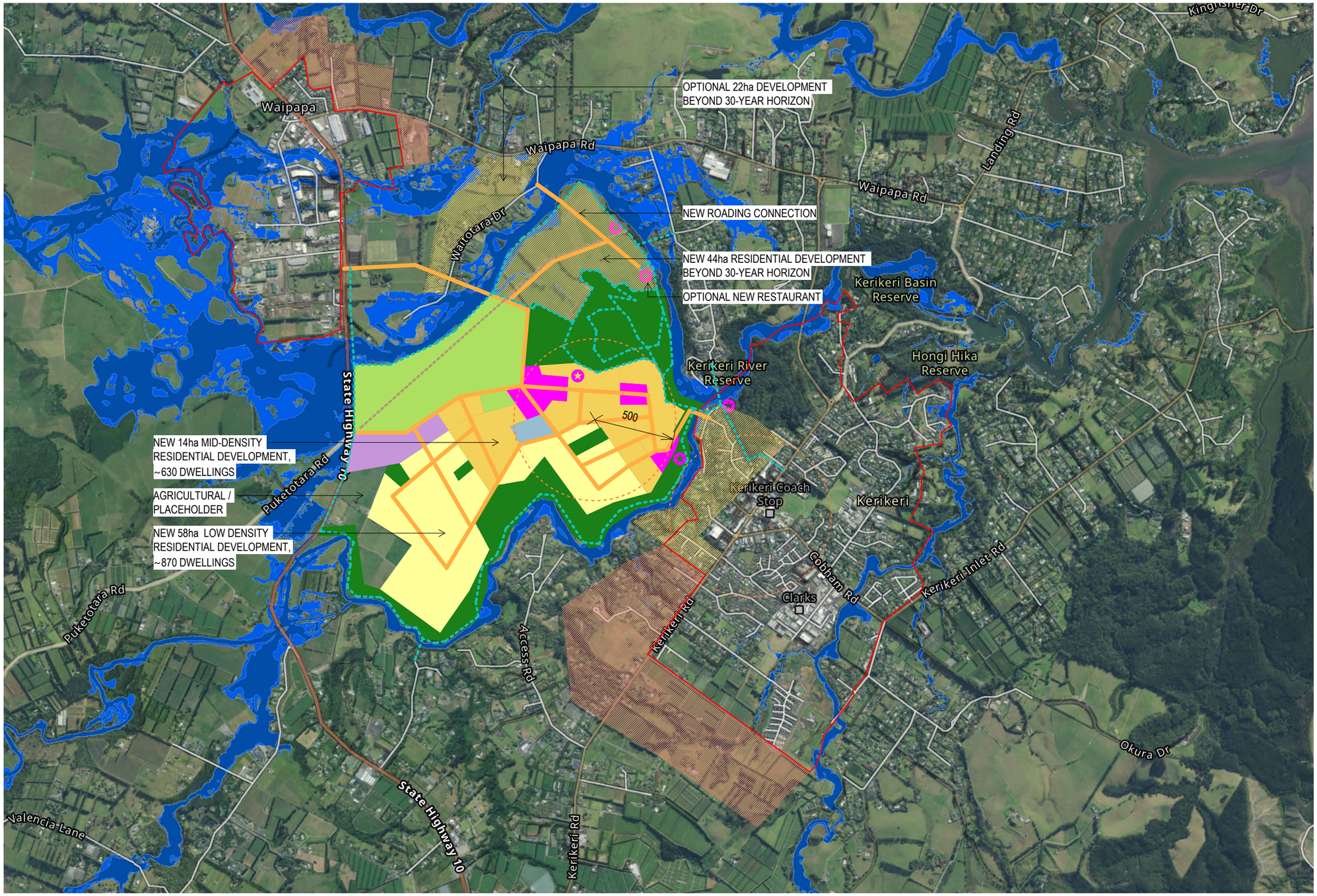

GROWTH PLAN LEGEND

- EXSITNG URBAN AREA
- ROADING CONNECTIONS
- WALKING & CYCLING SHARED PATH
- RESIDENTIAL MEDIUM DENSITY
- RESIDENTIAL LOW DENSITY & RURAL
- COMMERCIAL MIXED USE
- INDUSTRY, RETAIL & OTHER
- SCHOOL
- NATURAL OPEN SPACE
- ACTIVE RECREATION
- ORIGINAL GOLF COURSE
- ORIGINAL GROWTH SCENARIO D+E
- AMENITY HIGHLIGHT

NOTE:
- FUNCTIONAL ZONING DOES NOT CONSIDER EXISTING LEGAL BOUNDARIES
- DOES NOT SHOW ALL GREEN OPEN SPACE WITHIN RESIDENTIAL & INDUSTRIAL AREAS
- ROADING CONNECTION TO KERIKERI CBD TO BE UPSIZED TO ACCOMMODATE TRAFFIC FLOW

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AMENDMENTS

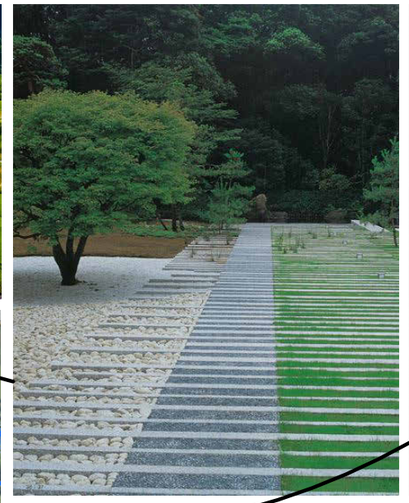
REV	DESCRIPTION	DATE
1	Feedback	20.04.2025

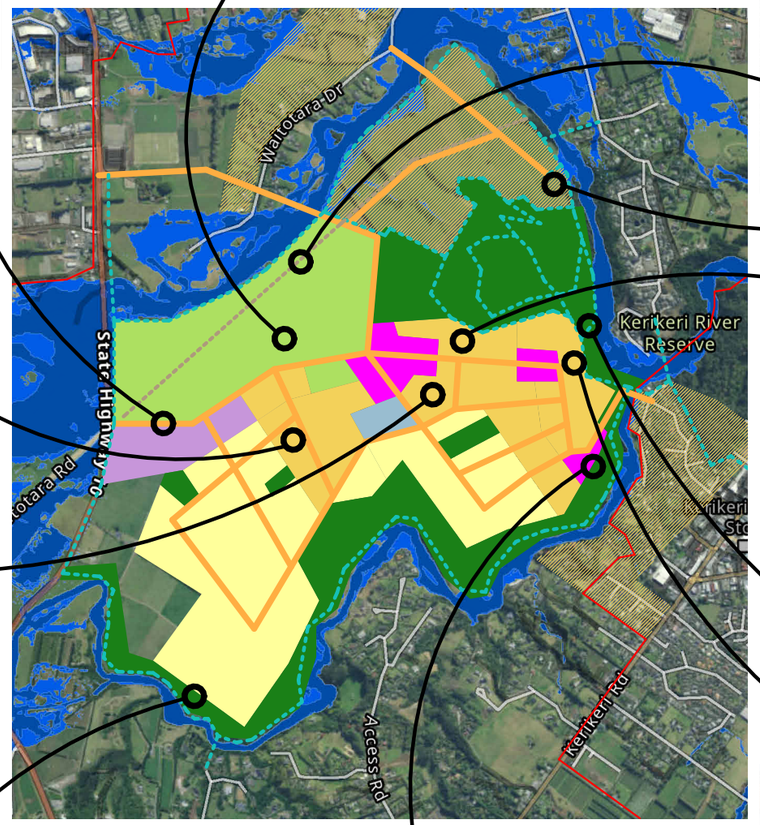
PROJECT
Te Pātukurea -
Draft Spatial Plan for Kerikeri-Waipapa
GROWTH SCENARIO - MODIFIED F

TITLE
STAGE 3 - 20-30 YEAR HORIZON

WIND ZONE: HIGH
EXPOSURE ZONE: C
PURPOSE OF ISSUE:

PROJECT #	SCALE (@ A3)	DRAWING #	REV
24066	1 : 25000	A023	1





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AMENDMENTS

REV	DESCRIPTION	DATE
1	Feedback	20.04.2025

PROJECT
Te Pātukurea -
Draft Spatial Plan for Kerikeri-Waipapa
GROWTH SCENARIO - MODIFIED F

TITLE
STAGE 3 - ARTIST IMPRESSIONS

WIND ZONE: HIGH
EXPOSURE ZONE: C
PURPOSE OF ISSUE:

PROJECT #	SCALE (@ A3)	DRAWING #	REV
24066	1 : 25000	A024	1