



Appendix K

Assessment of Landscape Effects

Wairakei South Development

Assessment of Landscape Effects
Prepared for Bell Road Limited Partnership

8 May 2026





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Executive Summary

The Wairakei South Development proposes a transformative 350-hectare development within Tauranga's high-growth Eastern Corridor, strategically positioned between Pāpāmoa, Te Tumu, and Te Puke Urban Growth Areas. Over the next 10–20 years, Wairakei South will deliver approximately 2,750 new homes within 128 hectares, alongside 50 hectares of industrial, 4 hectares of commercial centres, a 4 hectare primary school, and a substantial network of integrated stormwater swales, reserves, and treatment wetlands.

This Landscape Effects Assessment evaluates the landscape, natural character, and visual amenity effects arising from the change from a highly modified rural pastoral landscape to urban development, in accordance with *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*.

The site currently comprises flat, heavily modified alluvial plains with drained peat soils, rectilinear paddock patterns, channelised drainage networks and limited native vegetation. Its current natural character condition is assessed as **very low**, reflecting extensive agricultural modification. Culturally, the site is located within the rohe of Waitaha, Tapuika and Ngā Pōtiki and forms part of a wider cultural landscape connected to Te Rae o Pāpāmoa, historic wetlands, and the Kaituna River system.

The assessment identifies that **natural character effects** of the development will be **very low to benign**, with positive enhancement in the southern portion through the introduction of extensive native wetland and lowland forest planting. The proposed stormwater treatment wetland reconstructs elements of the historic hydrological pattern, improving ecological condition and reintroducing indigenous vegetation structure.

Landscape character changes vary across the site, with Part A (north of Bell Road) experiencing a low–moderate degree of change as it forms a logical extension of the existing Wairakei / Pāpāmoa urban area and aligns with established transport infrastructure. In contrast, Part B (south of Bell Road) introduces a moderate–high degree of landscape change by extending urban form into a dominant pastoral plains landscape. However, the inclusion of a southern wetland and extensive green infrastructure helps to visually and environmentally integrate this area with both the wider rural landscape and the site's historical natural patterns.

The proposed urban development into the rural landscape comprises a moderate to high degree of change to the current landscape character. **The landscape character will have potential adverse effects as a result of the proposed development at a low-moderate degree for Part A and a moderate to high degree for Part B.** Overall, Part A provides a logical transition of urban form when considering the landscape context. Part B grades in its ability to integrate and introduces a greater degree of effect the further south it extends. The adverse effects are considered at a localised and wider scale, considering urban form, cohesion of landscape areas and their distinctive characteristics which form the unique character

Visual effects also vary by viewing audience and through the application of staging of the proposed development. Visual amenity effects, comprise the appreciation, in this instance, of the change in landscape from a dominant rural pastoral plains landscape to an urban edge. Design measures provide opportunity to visually integrate the proposal to reduce the dominance of built form, with design controls and landscape mitigation planting measures. The inclusion of the stormwater treatment wetland area to the south of Part B, provides a new measure of visually representing the historical landscape patterns and introducing a new rural and urban character to the landscape. The visual effects vary across the viewing audience assessed with the range of effects comprises Low Adverse to Moderate-High adverse effects.

A comprehensive mitigation framework is embedded within the masterplan. Key measures include substantial setbacks along rural edges, successional native and exotic canopy planting to achieve 75% visual screening, integration of the stormwater network as a continuous green frame, design controls for large-scale commercial buildings, and early establishment of the Part B stormwater wetland (Stage 4) to ensure advance mitigation ahead of later stages.

In relation to statutory provisions, the proposal aligns with key objectives and policies of the Western Bay of Plenty District Plan and the RMA related to natural character, ecological enhancement, cultural values, and integrated growth planning. While the development does not maintain rural character per Objective 18.2.1.5, it responds to the need for future urban growth and enhances ecological and cultural landscape components

Overall, the proposed development, with recommended mitigation measures and timing of implementation, will introduce a moderate adverse effect on the rural landscape and with the application of substantive mitigation measures the integration of the development can be achieved whilst maintaining the wider rural character values. Visual effects cannot be avoided however can be minimised through the application of mitigation measures in a staged approach. The visual change will be apparent for the immediate viewing catchment and mitigation of visual effects is considered essential for minimising effects on surrounding properties and the wider landscape character.

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Annexure 3: Landscape Mitigation Plan *Extracted from Appendix C of AEE*

1.0 Introduction

1.1 Scope of the Report

Boffa Miskell Limited has been engaged by Bell Road Partnerships in June 2025 to undertake a Landscape Effects Assessment (**LEA**) for a land use and subdivision consent application to Fast Track for a proposed mixed use development providing 2,750 new dwellings, 50 hectares of industrial, 4 hectares of commercial and a 4 hectare primary school at Bell Road, Papamoa. Known as Wairakei South (otherwise referred to as The Site in this report) the Site is zoned Rural within the Western Bay District Plan and is some 350ha in size.

The following Landscape Assessment assesses the landscape effects, including visual amenity effects, of the proposed urban land use on the immediate and surrounding environment and its landscape character. The assessment also, alongside the Urban Design Assessment¹, also addresses internal development effects matters addressing the statutory framework for subdivision.

This assessment accompanies a land use and subdivision consent for a substantive Fast Track Application and accompanies other technical assessment.

1.2 Project Background

The project has developed through an iterative analysis and design process whereby preliminary assessment and advice has guided the final scheme design and subdivision design, prepared by Boffa Miskell Ltd and Maven Ltd. As part of this process a preliminary landscape assessment opinion was provided to assist in understanding key landscape planning and effects matters. Engagement was undertaken with Western Bay of Plenty District Council inhouse and consultant experts and the project team. Engagement with mana whenua was undertaken directly by the applicant.

Design development has been cognisant of the land use change within the rural landscape and the design response to the surrounding landscape character.

1.3 Other Technical Relevant Reports

Various reports have been reviewed in the preparation of this assessment including:

- *Urban Design Assessment Report, Boffa Miskell Ltd, October 2025; (Wairakei South FTAA, Appendix J)*
- *“The Visual Landscape, District Landscape Study for Western Bay of Plenty District Council, Boffa Miskell, 1993;*
- *The Masterplan, Wairakei South Urban Development, Boffa Miskell Ltd, October 2025; (Wairakei South FTAA, Appendix C)*
- *Ecological Assessment of Wetland, EcoLogical Solutions Ltd, 2025 (Wairakei South FTAA, Appendix L)*
- *Cultural Impact Assessment, Te Kapu ō Waitaha, March 2026, (Wairakei South FTAA, Appendix V)*
- *Archaeological Assessment, Archaeology B.O.P, Ken Phillips, July 2025 (Wairakei South FTAA, Appendix X)*

¹ Refer to Wairakei South FTAA, Appendix J - Urban Design Assessment, Boffa Miskell

1.4 Proposal Description

Sited at Bell Road, Papamoa, the Wairakei South Development is an urban development project focused on providing a critical role in addressing the Western Bay of Plenty sub-region's growing housing and business land shortfalls. Encompassing approximately 350 hectares within the Eastern Corridor between Pāpāmoa, Te Tumu, and Te Puke, Wairakei South is proposed to deliver approximately 2,750 residential lots and 50 hectares industrial, 4 hectares commercial and 4 hectare primary school over the next 10–20 years. Integrating this land use change is the inclusion of 143 hectares of Stormwater Swales, reserves and treatment wetlands, comprising a 41% to 59% balance of open space to built form.



Figure 1 – Site Location

The Design Masterplan Document² and Subdivision Consent Package³ accompanying the application details the key features and benefits sought in the proposal with a response to landscape through recognising placement alongside the Tauranga Eastern Link ('TEL') corridor (State Highway 2), providing a development that is responsive to mana whenua connection to their whenua and wai and providing an ecologically connected and enhanced response to the natural environment.

Sited to the south of the TEL the Wairakei South urban development provides a connected urban growth area with the key transportation network of Tauranga City and the Western Bay of Plenty District. Like much of Papamoa the site is also subject to natural hazard risks, including tsunami exposure due to its coastal proximity, and areas of moderate to high liquefaction potential. These risks have informed the spatial layout of the masterplan, with more sensitive land uses such as residential development located away from high-risk zones, and infrastructure designed to accommodate potential ground movement and inundation.

² Refer to AEE, Appendix C Design Masterplan Document – Prepared by Boffa Miskell Ltd, December 2025

³ Refer to AEE, Appendix E Subdivision Consent Landscape Package – Prepared by Boffa Miskell Ltd, December 2025



Figure 2 – Siting of proposal in wider context

The inclusion of elevated building platforms, permeable surfaces, stormwater and treatment wetlands, and resilient street design reflects a proactive approach to hazard mitigation and climate adaptation, consistent with the NPS-UD’s emphasis on long-term environmental resilience.

The proposal includes a large area of open space incorporating a stormwater treatment pond and wetland system, which is designed to accept SW from the portion of the development south of Bell Road before connecting into the Kopuaroa Canal and eventually the Kaituna River. Surrounding the development area are proposed treatment swales and reserves which will provide a green frame to the proposed future urban area. These provide a series of swale networks connecting throughout the proposed urban development area.

Culturally, the site holds significance for mana whenua, including Waitaha, Tapuika and Nga Potiki iwi, whose ancestral connections to the land and waterways are acknowledged and are embedded in the design through the narratives of “Mountains to Sea” and “Te Whai Ora o Wairakei.” These narratives inform the orientation of streets and open spaces, the naming of reserves, and the integration of cultural markers such as pou and interpretive signage. The landscape is consequently not only a physical setting but also a canvas for cultural expression and identity, and supporting the goals of the Kaituna River Document

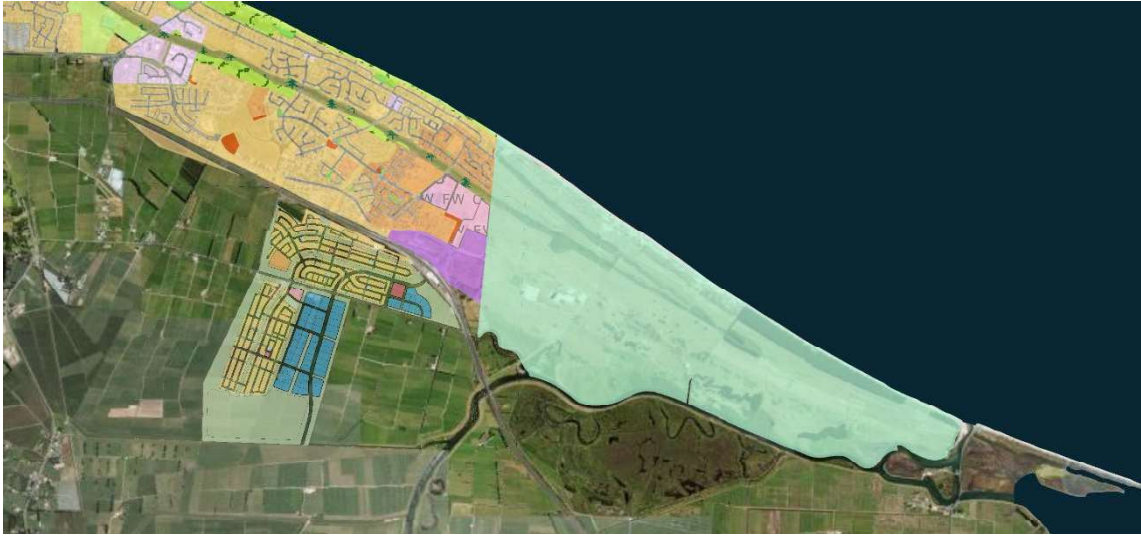


Figure 3 – Stages 1 and 2 overlain Tauranga City Planning Maps

The Concept Framework shows the development in two key parts, Part A – north of Bell Road, set between the TEL corridor and Bell Road and Part B, south of Bell Road, extending down to the Kopuaroa Canal. The adjacent zoning is provided for within the development and includes a large framework of stormwater surrounding the site and connecting to the historical, now modified, hydrological system.

The proposed development is planned for implementation over an estimated 20-year period in two main stages:

- **Part A – Northern Portion-** between TEL to Bell Road, estimated 0 to 10 years
- **Part B – Southern Portion** – between Bell Road extending south, estimated to 10 to 18 years,

The above timeframes are estimated and subject to market and other external factors and could vary.

5.5 CONCEPT FRAMEWORK PLAN

- KEY**
1. New Connection to Papamoa East 2 Interchange
 2. Bell Road (Existing)
 3. Main Central Boulevard
 4. Stormwater Reserve / Conveyance Swale
 5. Major Neighbourhood Reserve
 6. Stormwater Treatment Wetland Area
 7. Landscape Buffer Strip / Development Extent
 8. Existing Power Sub-Station
 9. Existing Pathway Access Under TEL (via Large Box Culvert)
 10. Stormwater Wetland Outlet to Kopuarua Canal

- LEGEND**
- SITE BOUNDARY
 - RESIDENTIAL (VORZI ZONE)
 - EMPLOYMENT (INDUSTRIAL / COMMERCIAL)
 - SERVICE CENTRE
 - NEIGHBOURHOOD CENTRE
 - LOCAL CENTRE
 - PRIMARY SOCI
 - STORMWATER RESERVE
 - NEIGHBOURHOOD RESERVE
 - GREEN LINKS / PODDLE PARKS / SERVICES CORRIDORS / STORMWATER CONNECTIONS
 - ||||| BUFFER RESERVE STRIP
 - ||||| SECONDARY CENTRAL ROAD
 - POTENTIAL FUTURE ROAD CONNECTION TO (E PURE) VIA SEASONAL BRIDGE (I)
 - KEY NETWORK ANALYZED INTERSECTION
 - KEY NETWORK ROUNDABOUT
 - ⊙ INDICATIVE CELL TOWER LOCATIONS



Figure 4 – Proposed Concept Framework Plan- Refer Appendix C of AEE Report

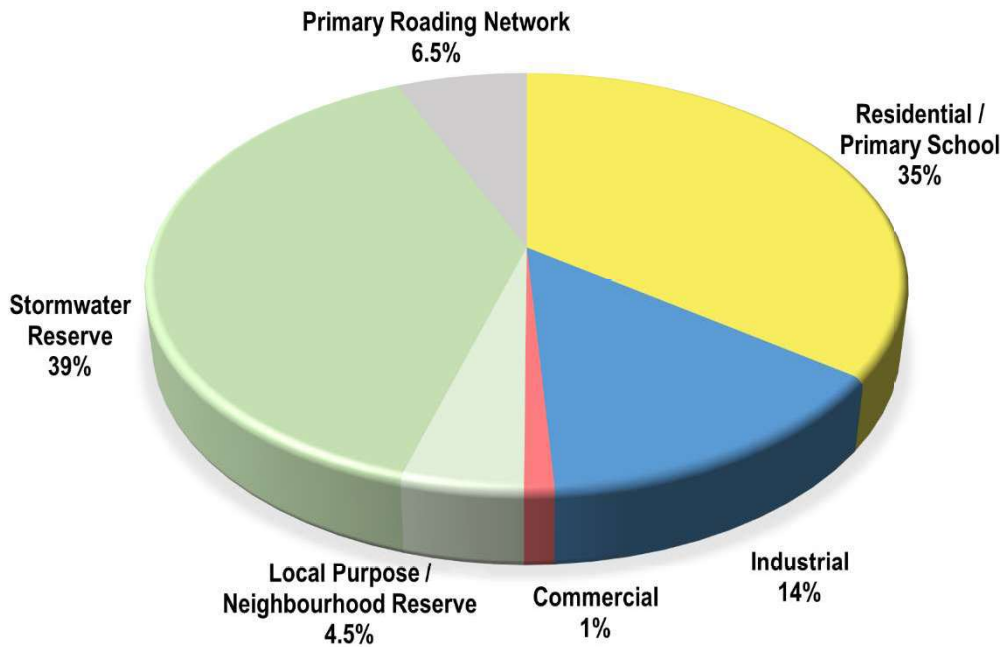


Figure 5 – Development Land Use Allocation Summary- Refer Appendix C of AEE Report



Figure 6 – Proposed Staging Plan

1.5 Assessment Process

This assessment follows the concepts and principles outlined in *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*⁴. A full method is outlined in Annexure 1 of this report. As detailed earlier the assessment has formed part of a two-stage process of preliminary landscape assessment, followed by an iterative design process.

A site visit was undertaken on the 15th of May 2025 reviewing the site, its surrounds and the wider viewing catchment, including Te Rae o Papamoa Regional Park. Photography of the field assessment is included in Annexure 2 of this report.

Preliminary landscape assessment analysis was undertaken taking into account a characterisation analysis to inform an understanding of the existing landscape character. The advice guided and assisted the project team in forming a wider understanding of the nature of landscape change resulting from a land use change from rural to urban.

⁴ *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*, Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

Direct engagement with mana whenua has been undertaken by the applicant, with information provided to the project team, in addition draws on the archaeological and iwi management plans for the area.

The assessment of landscape, natural character and visual amenity effects applies the seven point scale recommended in *Te Tangi a Te Manu Aotearoa New Zealand Landscape Assessment Guidelines*. (Refer Annexure 1)



Figure 7 – Scaling of Landscape Effects Assessment

Characterising the degrees of effect in the context of the receiving environment, including the District Plan enabled existing environment, is important. In undertaking this assessment, it is the scale of the change is considered within the local and wider context and the duration of change, including whether the change is reversible. In some situations, the loss /change or enhancement to existing landscape elements such as vegetation or earthworks has also be quantified.

| Higher | Lower |
|---|---|
| The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change resulting from the proposed development. | The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character. |
| The landscape includes important biophysical, sensory and shared and recognised attributes. The landscape requires protection as a matter of national importance (ONF/L). | The landscape lacks any important biophysical, sensory or shared and recognised attributes. The landscape is of low or local importance. |
| Total loss or addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements. | The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent. |
| Wider landscape scale. | Site scale, immediate setting. |
| Permanent. Long term (over 10 years). | Reversible. Short Term (0-5 years). |

Table 1 – Characterisation of Scaling of Landscape Effects

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the sensory values appreciated by the viewing audience and the context of the viewing audience, which may distinguish between temporary (often associated with construction) and permanent effects where relevant. It is noted that visibility in itself is not an immediate effect.

| Higher | Lower | Examples |
|---|--|--|
| Views from dwellings and recreation areas where attention is typically focussed on the landscape. | Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors. | Dwellings, places of work, transport corridors, public tracks |
| Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers. | Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers. | Acknowledged viewshafts, Lookouts |
| Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development. | Most key features of views retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Glimpse / no view of the proposed development. | - Higher contrast/ Lower contrast. - Open views, Partial views, Glimpse views (or filtered); No views (or obscured) |
| Front on views. Near distance views; Change visible across a wide area. | Oblique views. Long distance views. Small portion of change visible. | - Front or Oblique views. - Near distant, Middle distant and Long distant views |

Table 2 – Characterisation of Scaling of Visual Amenity Effects

2.0 Landscape Context

2.1 Landscape Character

Zoned Rural under the Western Bay of Plenty District Plan, the site comprises a patchwork of pastoral grazing paddocks reflective of patchwork pastoral landscape, with highly modified ecological and hydrological patterns. Historically the plains formed part of a coastal wetland and dune system set at the foot of the Papamoa Hills.

European settlement maximised the plains landscape into productive pastoral farming blocks, setting a patchwork of landholdings, paddocks and drainage patterns. This modification along with the channelisation of the Kaituna River and the installation of stop banks, significantly modified the natural patterns of this landscape into a large patchwork pastoral landscape, reflective of landscapes found elsewhere on alluvial plains landscapes of the region (Rangitaiki Plains) and Aotearoa New Zealand.



Figure 8 – Site Location

Land type mapping⁵ shows the distinctive land type as BP 3 Pongakawa which is reflective of an alluvial plains landscape similar to that found in the Waikato Plains and Rangitaiki Plains. Land cover reflected the natural land formations and provided an abundant source of seasonal food for Māori. This is supported by cultural patterning of historical pa sites set amongst the plains and hills features, including Te Rae o Pāpāmoa to the east of the Site.

⁵ Refer to Land Typing GIS Mapping - <https://experience.arcgis.com/experience/1e079ea8d4f44801870b06eed84a9a1c/>

The significant cultural feature of Te Rae o Pāpāmoa overlooks the rural and urban landscape of Tauranga, Mt Maunganui, Arataki, Pāpāmoa, Te Puke and Matata. The plains landscape residing between the urban settlements of Tauranga City, inclusive of Pāpāmoa, provides a distinctive separation between the City and the rural township of Te Puke.

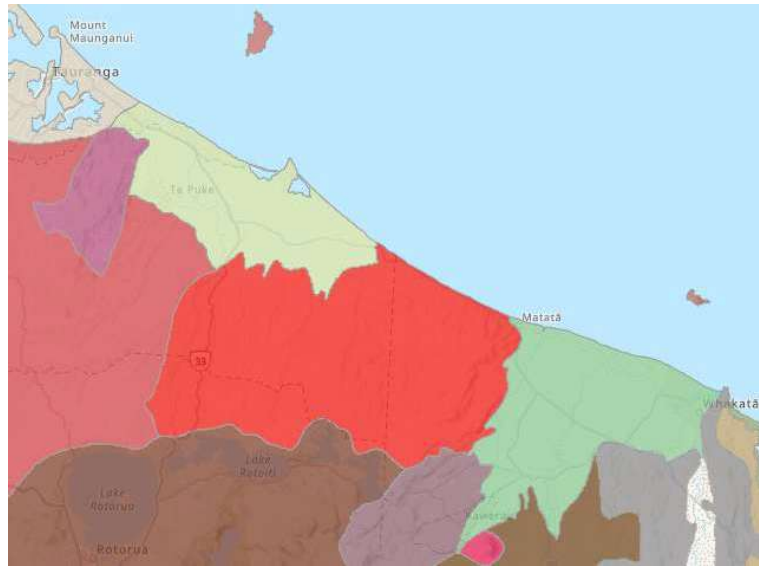


Figure 9– Land Typing Mapping⁶

Defining natural and cultural features in the landscape, the Kaituna River and TEL Road corridor provide boundaries between urban and rural landscapes. Urban land use has followed patterns of land type by settling at the base of the foothills for Te Puke, at the headland for Maketu and along the coastal dunes for Pāpāmoa toward Mt Maunganui. Urban settlements have to date avoided the foothills of Te Rae o Pāpāmoa and Mangatawa. The Tauranga City Plan, Section 6, provides for a view corridor to Otawa from the Wairakei Urban Growth Area (UG9) across the Site. This view corridor has informed the urban development patterns, particularly the alignment of road corridors in Wairakei.

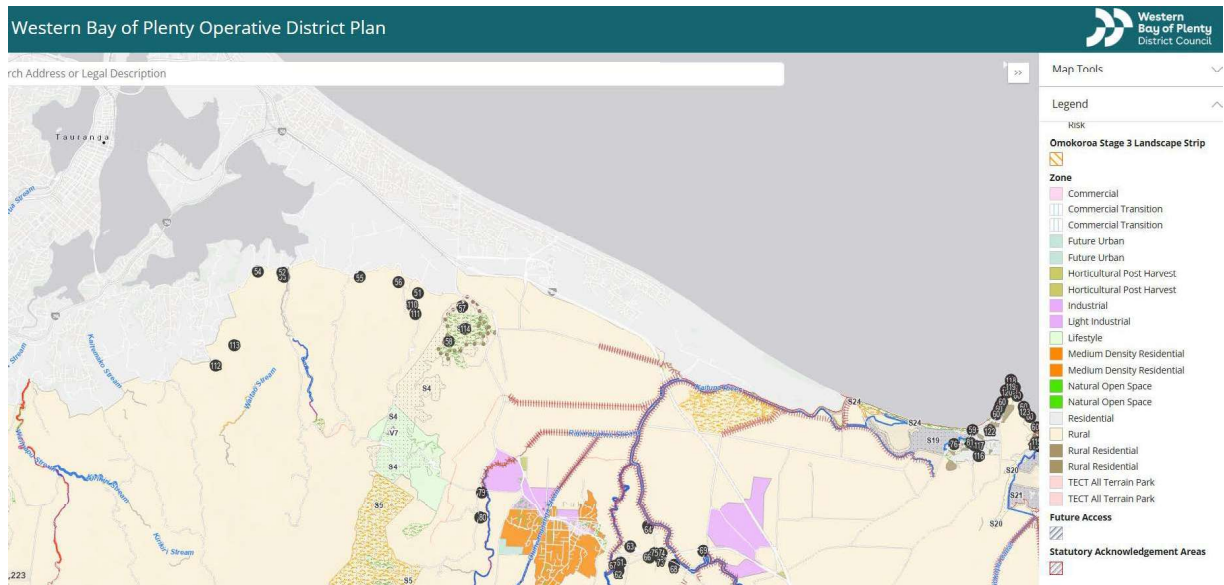


Figure 10 – Surrounding Land Use Zoning

⁶ <https://landtyping.nz/>

The Site forms part of a landscape characterised as being part of the Kaituna Coastal Plains Landscape Unit CP.1 in the Western Bay of Plenty Landscape Assessment “The Visual Landscape” (Boffa Miskell, 1993). The assessment notes:

“Flat extensively drained wetland with grid pattern of canals. Generally, is dairy farming with some cropping and roadside stalls along State Highway. Contains Kaituna River and Maketu Estuary. Little mature vegetation apart from some shelter belts, remnant native trees and wetland willows and shrubland.”

The visual quality rating is low due to the lack of coherence and intactness. The coastal edge area has a higher visual quality. Enhancers include the river mouth, estuary, remnant vegetation and visual openness. Detractors include the pattern and drainage and scrubby vegetation.

The unit has a moderate to high visibility due to the State Highway, openness and views from Maketu. Its ability to absorb change is low to moderate. Its overall visual sensitivity is moderate.”



Figure 11 - Retrolens – 1939 Aerial Photography

The rural patterns of this landscape comprise a typical contrast to that of the urban land use to the north of the TEL. Largely void of dwellings or other infrastructure, the Site and its surrounds comprise that of a productive rural lowlands landscape reflecting a heavily drained plains environment, now reflective more of its agricultural grazing and dairy farming land use activities.

Historical photography from 1939 (Retrolens), shows a landscape in transition from wetlands to progressive draining and pastoral farming. The coastal dunes system is evident to the north of the site, extending up to the TEL and the Site’s northern boundary, with the Site comprising wetlands being progressively converted to grazing paddocks. A small stream remains evident in the photograph from 1939, meandering through the southern end of the Site.

Further mapping set out in Annexure 2, details the characterisation mapping of the Site and its surrounding historic and natural landscape elements, which are highly reflective of the underlying pedological, hydrological and geomorphological features of the landscape. Historical occupation also followed the patterns of the natural environment avoiding the peatland areas with occupation residing on the foothills and hills and coastal dunes.

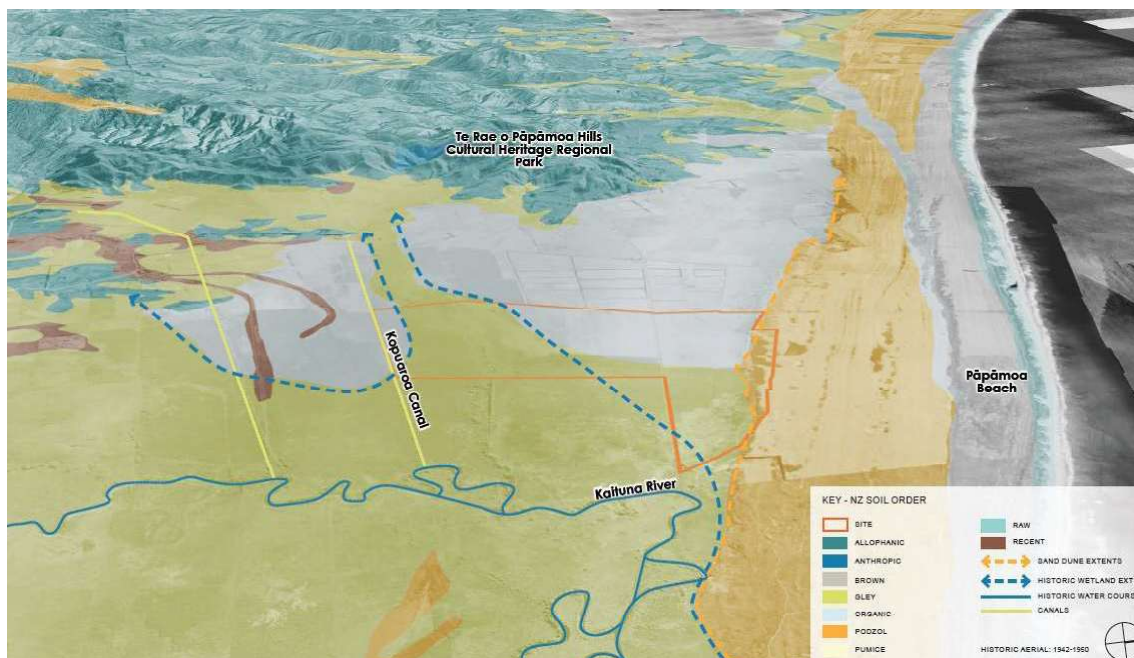


Figure 12 – Landscape Character Mapping

2.2 The Cultural Landscape

Te Rae O Pāpāmoa is recognised as a significant pā complex in the Bay of Plenty Region, now operating as a Regional Park, the remnant features of the Pa sites across the hill range speak to the large areas of occupation held in the area. The archaeological sites and mapping of occupation show that the hill ranges and coastal dunes were heavily occupied whilst the plains wetlands and peat soils were largely devoid of occupation, providing a rich food source for early Māori settlement.

Sited in the rohe of Waitaha, the landscape forms a connection between Puwhenua, Otainewainuku, Te Rae o Papamoa to Wairakei and Papamoa Beach.

The Waitaha Iwi Management Plan⁷ (Waitaha, 2014) addresses the methods for engagement, settlement outcomes and organisational structure along with environmental outcomes through Whakapapa, Mātauranga, Mauri, Whakaritenga, Mana and Kaitiaki. The plan also speaks to social and economic aspirations and goes on to identify a process to reaching desired outcomes.

The Waitaha Cultural Impact Assessment (**WCIA**), prepared by Te Kapu ō Waitaha (Te Kapu ō Waitaha, 2026) further addresses the intrinsic relationship between Waitaha and its rohe. Waitaha maintain an enduring whakapapa, historical, and cultural connections to this rohe. These relationships establish their role as kaitiaki and carry intergenerational responsibilities to uphold and protect the mauri of land, water, and culturally significant landscapes. The WCIA is grounded in the mātauranga, values, and lived experience of Waitaha, and is provided under the mandate of our iwi and hapū to speak for our ancestral lands and waters.

It is understood that there is ability for other mana whenua to join the WCIA by providing further input into this report. Cultural integration is an important element for the masterplan, guided by the values and aspirations of Waitaha, Tapuika and Nga Potiki, as mana whenua. The design process has involved active collaboration with mana whenua, ensuring that cultural narratives such as “Mountains to Sea” and “Te Whai Ora o Wairakei” are authentically represented.

⁷ <https://waitaha-iwi.org.nz/wp-content/uploads/2024/11/Waitaha-Iwi-Management-Plan-2014.pdf>

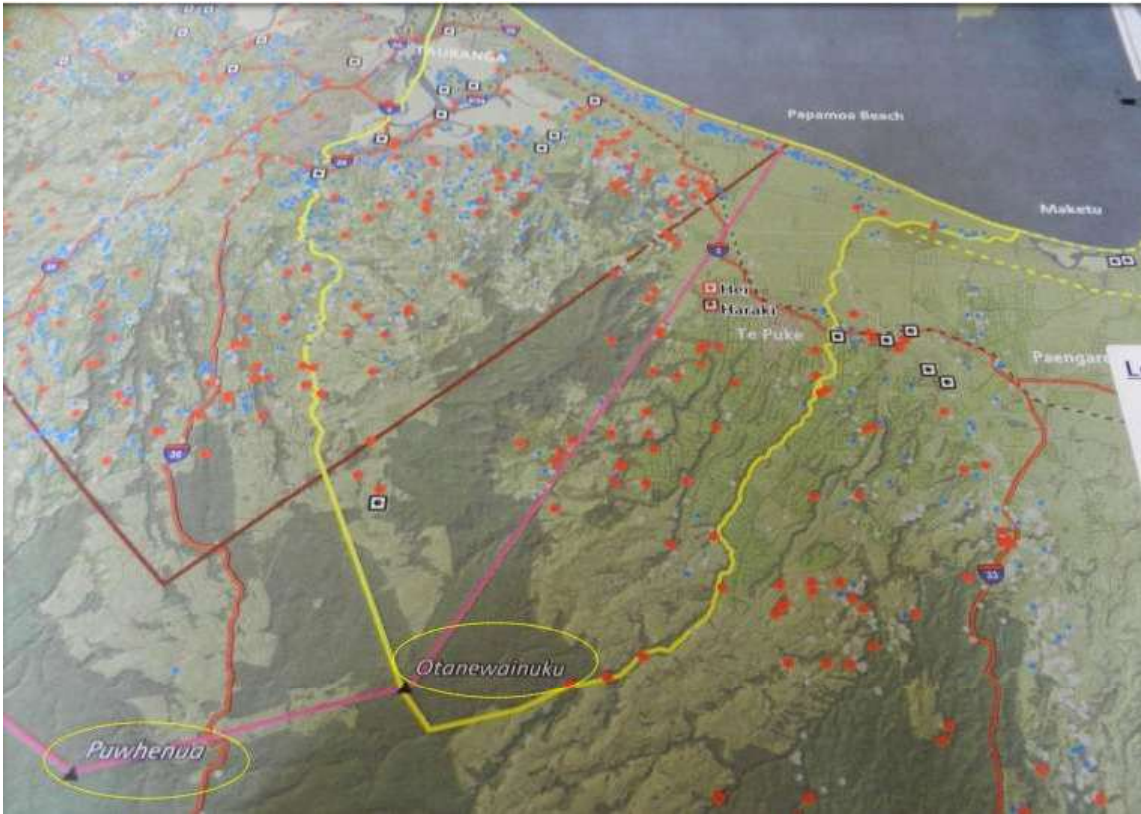


Figure 13 – Waitaha Rohe (source- Waitaha Iwi Management Plan)

The WCIA adopts a forward-looking approach which seeks to include opportunities for the protection of natural including ecological restoration, waterway enhancement, indigenous ecosystems and the strengthening of kaitiakitanga practices through active iwi involvement. The WCIA recognises that the Site is not an isolated development site but part of a wider system, much in the way landscape is considered in landscape assessment and planning. This is referred to as a cultural landscape perspective in the WCIA and addresses Ahi Ka and the contemporary context for Waitaha. The analysis of this brings forward Papatūānuku, Wai, Mauri, geothermal systems as taonga, wāhi tapu and cultural memory, mahinga kai and cultural practices, whanaunga and cultural landscape and intergenerational continuity. The analysis on effects on these culminate in a consideration of the cumulative effects the development may have on the integrity of the Waitaha cultural landscape. The WCIA addresses design responses, monitoring and management responses to recognise these values into the proposal.

Within Te Takapū o Tapuika (Tapuika, 2014), there are 20 rivers (including tributaries) of which 75% have Statutory Acknowledgments or Deeds of Recognition. Many of these rivers are significant habitats for fish such as eel, inanga and kōkopu. The coastal environment includes Ōngātoro/ Maketū Estuary, the Maketū Wildlife Management Reserve and Kaituna Sand Spit and Recreation Reserve. These are significant habitats for shellfish, fish and birds.

The Tapuika Environmental Management Plan states that:

“The Tapuika environmental world view is based on the principle of total interconnectedness within, and between, the natural environment and ourselves. We are part of our environment and dependent on its resources for sustenance. We do not separate the tangible or physical aspects from the intangible or metaphysical. We are

connected to all things – including nature, our ancestors, our gods - as well as to the past, present and the future.”⁸

Topics of significance for Tapuika includes Water / Wai Ora, Coast / Te Taiao Moana, Land / Te Whenua, Air / Tawhirimatea and People / Mana Tangata.

The Archaeological Assessment report (Archaeology BOP, 2025) identifies one NZAA Archsite on the property being U14/2850 however no evidence of the site was found during the archaeological site investigations. The Archaeological Assessment report also includes mapping of the Te Parapara Swamp showing the site being part of an historical wetland environment.



Figure 14 – Extract of Figure 3 from Archaeological Assessment Report (Archaeology BOP, 2025).

2.3 Natural Character Condition

Adjacent to the Kopuaroa Canal, the site is highly modified, with little to no native vegetation cover, linear channelised drainage canals and a patchwork patterning of productive grazing and cropping paddocks. The abiotic attributes of the site are modified with drained peat soils and hydrology reflecting very little of the historic natural condition of this area. Similarly, vegetation patterns are focused to introduced exotic cropping species and amenity planting around dwellings. The experiential attributes of the natural character condition relate more to the remoteness and isolation from urban development however the TEL and Bell Road provide a clear disruption to these qualities. The experiential attributes of this site and surrounds is moreso associated with the modified landscape character than that of natural character.

The Ecological Wetland Assessment (Ecological Solutions, 2025) identified:

The site is located within the Tauranga Ecological District (McEwen 1987), which is situated in the Western Bay of Plenty Ecological Region. The ecological district is largely within the coastal bioclimatic zone, as only small portions of the district extend beyond c. 1 km from the coastal environment. Beyond the coastal zone, the rest of the ecological district (including the site) is in the semi-coastal bioclimatic zone.

⁸ Refer Page 17 of the Tapuika Environmental Management Plan, 2014

The site contained largely low-lying flat topography within the historic Kaituna River floodplain bounded by rear dune sequence on the northern boundary. Vegetation was almost entirely exotic and comprised pasture, shelterbelts and paddock trees. The only indigenous vegetation was occasional cabbage trees (*Cordyline australis*) along the margins of farm drains and as paddock trees and sparse riparian planting of manuka (*Leptospermum scoparium*) and giant umbrella sedge (*Cyperus ustulatus*) along one drain.

The maize block (314 Bell Road) was largely devoid of vegetation due to recent harvesting and no sowing having yet occurred. This block had areas of rank grass along drains and shelterbelts along with occasional cabbage trees.

The margins of the water courses are heavily managed and do not reflect the ecological sequencing typically found along waterways. The historic wetlands, once occupying this area have long since been drained to accommodate productive agricultural land use. The Ecological Assessment concludes that the *Putative and potential wetland areas within the site do not meet the wetland definition under the RMA*. Overall, the current natural character condition of the site is of a very low degree.

2.4 Site Description



Figure 15 – Site Location

Sited at eastern end of Bell Road, 252, 285, 314 to 339 Bell Road, the Site comprises a flat pastoral grazing block of approx. 350 hectares in size. An 'L' shaped site the property is divided by Bell Road, running through the site in an east west direction. The Kopuaroa Canal, a linear drainage canal forms the southern boundary across the site and neighbouring properties extending from the west, eastward before connecting into the Kaituna River.

Operating primarily in rural productive activities, including dairy farming and maize cropping paddocks, the site comprises a series of paddocks, divided into rectangular blocks with a lineal drainage network connecting to the Bell Road and Kopuaroa Canal drainage network. A highly modified and drained wetland environment the Site contains seven dwellings set across the various parcels of land, addressed above. Buildings comprise farm buildings, including dairy

sheds, farm utility buildings, feed lots, effluent retention tanks. A commercial trailer manufacturing business, Tuff Trailers, is sited on the northern boundary of the site against the TEL corridor. Canopy vegetation cover is isolated to around the dwellings on the respective lots.



Figure 16 – Oblique Aerial Photography looking south (Source: Bluehaven Group, 2021).



Figure 17 – Oblique Aerial Photography looking north (Source: Bluehaven Group, 2021).

2.5 Visual Catchment

Sited to the north of Te Rae o Pāpāmoa Regional Park and to the south of the TEL Road corridor the site is subject to a wide range of viewpoints and viewing audience locations. In order to assist in identifying the potential visual catchment, a Zone of Theoretical Visibility (ZTV) mapping has been prepared to identify the extent of the viewing catchment.

Based in plains type landscape the ZTV mapping, based on ground LiDAR, shows a wide-ranging visual catchment, however this does not take into account intermediary buildings and vegetation cover, which obscure views toward the site.

Based on field assessment the potential visual catchment has been identified to the following areas:

- Transient Viewing Audience – Views from Roads
 - TEL (State Highway 2)
 - Bell Road
 - Te Puke Highway / Pacific Coast Highway
- Public Viewpoints
 - Te Rae O Papamoā Cultural Heritage Regional Park
 - Kaituna Wetlands
- Private Viewing Audience- Owners and Occupiers of:
 - 546 Pah Road
 - 143 Bell Road
 - 168 Bell Road
 - 176 Bell Road
 - 228 Bell Road
 - 362 Bell Road
 - 424 Bell Road
 - 462 Bell Road
 - 48 Seddon Street
 - 23B Collins Lane
 - 501 Te Puke Highway / Pacific Coast Highway
 - 503A Te Puke Highway / Pacific Coast Highway
 - 507B Te Puke Highway / Pacific Coast Highway
 - 529B Te Puke Highway / Pacific Coast Highway
 - Properties on the boundary of the TEL of Pasture Way, Arrow CI, Union Drive and Te Okuroa Drive.

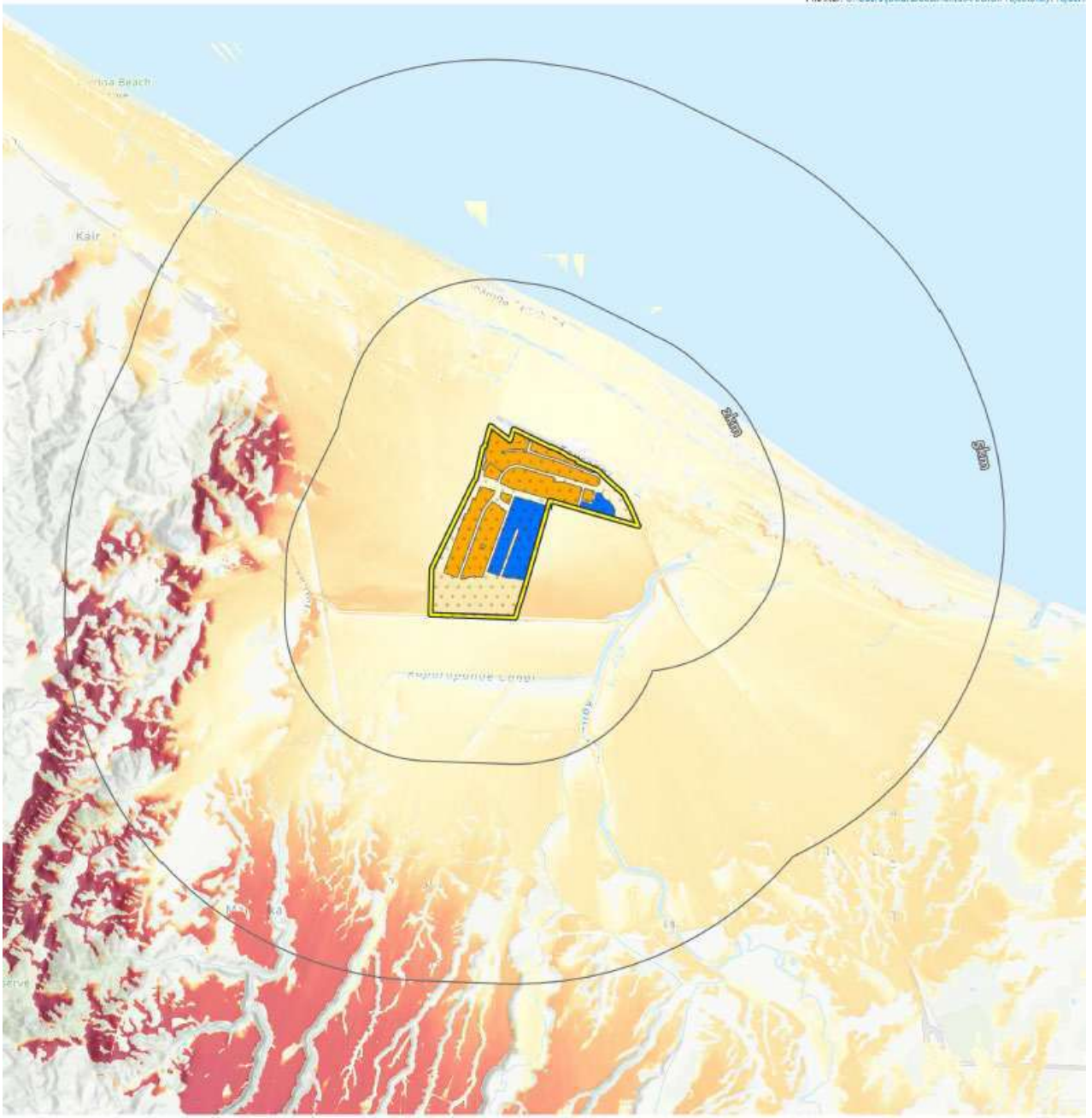
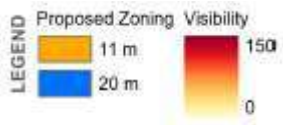


Figure 18 – Zone of Theoretical Visibility Mapping



3.0 Relevant Statutory Provisions

As part of this assessment, there are several planning provisions which are relevant to consideration in the assessment of this project. These are further detailed in the Assessment of Environmental Effects⁹.

- Fast-Track Approvals Act 2024 (FTAA)
 - o Schedule 5 – Approvals relating to Resource Management Act 1991
 - Section 5.1.g -an assessment of the activity against sections 5, 6, and 7 of the Resource Management Act 1991;
 - Section 7b-any physical effect on the locality, including landscape and visual effects,
 - Section 7d – any effect on on natural and physical resources that have an aesthetic, recreational, scientific, historical, spiritual, or cultural value or other special value, for present or future generations.
- The Resource Management Act – including Section 6 matters (natural character)
 - o Section 6a - the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
 - o Section 7c -the maintenance and enhancement of amenity values,
- Bay of Plenty Regional Plan
- Western Bay of Plenty District Plan

Of primary focus is the land use change from rural productive land use to urban development and consideration of natural character for river and wetlands. The waterways shown within and adjacent to the site are covered by a Flood Protection and Drainage Bylaw by the Bay of Plenty Regional Natural Resources Plan.

It is noted that the Site is outside of the Coastal Environment as mapped within the Bay of Plenty Regional Policy Statement and within the adjoining district, being within the Tauranga City Plan.

The Site does not contain or immediately adjoin a wetland, Outstanding Natural Feature or Landscape (Landscape Policy Area¹⁰) or identified High, Very High or Outstanding Natural Character Area. However, all degrees of natural character value of the water courses adjoining the Site are addressed.

3.1 Bay of Plenty Regional Policy Statement

The Bay of Plenty Regional Policy Statement seeks to address matters of national importance of which are not present on the Site with regard to Outstanding Natural Features and Landscapes. Section 2.8.1.5 recognises the issue regarding effects of urban and rural subdivision patterns place on natural features and landscapes. Beyond these matters the provisions of the Western Bay of Plenty District Plan addresses the consideration of effects on rural character, amenity and on those identified Outstanding Natural Features and Landscapes, and natural character.

⁹ Refer to Application for Resource Consents Under the Fast Track Approval Act 2024 Assessment of Environmental Effects, Collier Consultants Ltd, March 2026.

3.2 Bay of Plenty Regional Natural Resources Plan

The Bay of Plenty Regional Natural Resources Plan (RNRP) sets out the purpose of the plan with regard to landscape is to:

(g) Maintain or enhance the ecological, Māori cultural, recreational, natural character and landscape values of air, land, water and geothermal resources

Land management issues address consideration under LM i1 (Issue 10) to address adverse effects on natural character and landscapes. The plan identifies methods to enhancing natural character of rivers, streams, lakes and wetlands at LM 12 (Issue 3).

Much of this plan addresses water take management of which this proposal does not undertake.

On the whole the matters of addressing natural character effects on rivers and streams is addressed through this assessment and in response to the local authority's, Western Bay of Plenty, District Plan provisions.

3.3 Western Bay of Plenty District Plan

The Operative Western Bay of Plenty District Plan identifies the following provisions, relevant to this development and this landscape assessment (*Refer to AEE*)

- *18.1.3 Significant Issues: The character and associated amenity of the rural environment are what makes the District a sought after place in which to live.*
- *18.1.3 Significant Issues: The cumulative effect of the fragmented pattern of rural subdivision and the establishment of additional dwellings for non rural production purposes has led to inefficient use of physical resources and a gradual loss of rural character and degradation in rural amenity values.....*
- *18.1.11 Significant Issues: The rural land resource can be sought to establish industrial or commercial activities because it is generally less expensive to obtain than land within Industrial and Commercial Zones.*

Objectives

- *18.2.1.5 Maintain the rural character and amenity values associated with low density rural environment.*
- *18.2.1.6 Protection and enhancement of ecological, landscape, cultural, heritage and other features located in the rural environment which are of value to the wider community.*
- *18.2.1.11 Preservation of the options for the future use of land identified in the Bay of Plenty Regional Policy Statement as being required for future urban development.*

Policies

- *18.2.9 Provision should be made for the limited subdivision of land (including the transfer of title rights to identified areas) in conjunction with the sustainable protection or restoration of ecological, cultural, heritage, landscape or other features of value to the wider community.*
- *18.2.18 Subdivision, use and development of rural land identified in the Bay of Plenty Regional Policy Statement as being required for future urban development in a manner which limits the options for the future use of such land for urban purposes should be avoided or minimised. Particular forms of development which should be avoided include:*
 - *A fragmentation of rural land through subdivision unrelated to primary productive use.*

- 5.2.2.9 Policy- *The adverse effects of inappropriate subdivision, use and development on the natural character of the coastal environment, wetlands, rivers, lakes, and their margins should be avoided. Where avoidance is not practicable, such effects should be appropriately remedied or mitigated.*
 - 5.2.2.10 Policy - *To protect and maintain wetlands and riparian areas and enhance and restore wetlands and riparian areas in appropriate locations.*
- 6.6.2 Discretionary and Non-Complying Activities – Matters of Discretion and Assessment Criteria
 - a. *All the assessment criteria included in 6.6.1.3.*
- 12. Subdivision- Objectives
 - 12.2.1.1 *Subdivision and development that provides for and reinforces the existing built form and local character of an area.*

3.4 Non-statutory material

Informing the Western Bay of Plenty District Plan and Bay of Plenty Regional Plan are underlying Technical Assessments including:

- *“The Visual Landscape, District Landscape Study for Western Bay of Plenty District Council, Boffa Miskell, 1993;*
- *Tauranga City Landscape Study, Boffa Miskell, 2008; and,*
- *Outstanding natural features and landscapes review, Bay of Plenty Region, Assessment Report, Boffa Miskell, 2007.*

Given the site resides outside of the coastal environment the Bay of Plenty Region Landscape Assessment of the Coastal Environment and the Natural Character Assessment of the Bay of Plenty Coastal Environment are not considered in this assessment.

The Waitaha Iwi Management Plan, 2014¹¹ also provides an understanding of the key issues and opportunities for addressing in the rohe of Waitaha, recognising in the plan that *“the plan is also for anyone else conducting any activities that could affect our people, culture or resources”*.

The Tapuika Environmental Management Plan 2014 – 2024 provides an understanding of key environmental issues and opportunities for the rohe of Tapuika.

The Ngā Pōtiki Environmental Plan 2019 – 2029 also provides an understanding of key environmental issues, strategic direction and principles for development and opportunities for the rohe of Ngā Pōtiki.

The Kaituna River Document developed by the Te Maru o Kaituna River Authority is a co-governance body comprising local iwi and local government representatives and outlines a collective vision and strategic direction for the restoration, protection and enhancement of the Kaituna River and its tributaries.

¹¹ <https://waitaha-iwi.org.nz/wp-content/uploads/2024/11/Waitaha-Iwi-Management-Plan-2014.pdf>

4.0 Assessment of Effects

Landscape and visual impacts result from natural or induced change in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All these impacts are assessed to determine their effects on character and quality, amenity as well as on public and private views.

In this study, the assessment of potential effects is based on a combination of the landscape's sensitivity and visibility together with the nature and scale of the development proposal.

Particular effects considered relate to the following:

- Natural Character effects
- Landscape / rural character effects
- Visual amenity effects from public and private locations
- Potential cumulative effects
- Effects in relation to statutory provisions

The principal elements of the proposal that will give rise to landscape effects, be those benign, positive or negative, are:

External Effects

- Change in land use from primarily rural productive grazing and cropping to urban residential and industrial built development
- Modification to current drainage patterns
- Loss of rural amenity values
- Change in urban land use patterning

Internal Effects

When considering the subdivision consent application, the consideration of internal effects generated through subdivision design, recognising compliance with the WBOPDC urban zoning rules will be applied, are focused in this application to:

- Interface between industrial and residential land uses
- Areas where non-compliance with the associated zone rules occurs, i.e. setbacks, building heights and density and building colour

Regarding urban form the landscape assessment addresses the internal effects at an interface and visual effects level with the Urban Design Assessment (Boffa Miskell Ltd) addressing more detail regarding street frontage, building design controls and the like.

4.1 Natural Character Effects

In terms of natural character, the highest degree of naturalness occurs where there is the least amount of human induced modification. Human productive land use, structures, buildings and infrastructure can adversely change and alter the natural character of an area. The significance of this effect is dictated by the size, location and sensitivity of the receiving environment.

The proposed land use change moves from a heavily modified productive landscape to that of a modified urban landscape with stormwater treatment wetlands and swale systems throughout. The introduction of these systems focuses on improving the condition of water re entering the Kopuaroa Canal and Bell Road Drain prior to entering the Kaituna River. Couple with significant areas of native wetland planting the southern part of the site will be naturalised, providing vegetation that is remnant of the indigenous condition of the Site.

Currently no native vegetation resides along the drainage system within the site, and the proposed southern stormwater and treatment wetland will provide substantial enhancement to the biotic condition of the site. Across the site the proposed stormwater management areas comprise 134ha of area, approx. 38.4% of the site area, providing substantial opportunity for enhancement of biotic attributes through native vegetation cover.

Built modification will be substantive across the site with building heights varying from 8m to 20m. The modification will include changes to the abiotic composition of the ground structure and landform with the inclusion of fill material to develop the buildings upon.

Experientially the experience of the natural patterns of the site and the wider environment will diminish as built development establishes across the site. The transition from a highly modified and productive rural area to an urban area results in some minor changes to the natural character however overall, the natural character condition of much of the site will remain very low. At the southern end however the natural character will be enhanced through the substantive inclusion of native vegetation and wetland areas.



Figure 19 – Refer to AEE Appendix C - Masterplan

4.1.1 Summary of Natural Character Effects

The potential adverse natural character effects on the existing very low condition of the site are considered to be very low to benign overall. Some enhancement of the southern portion of the site will occur however this is considered in the overall effect rating.

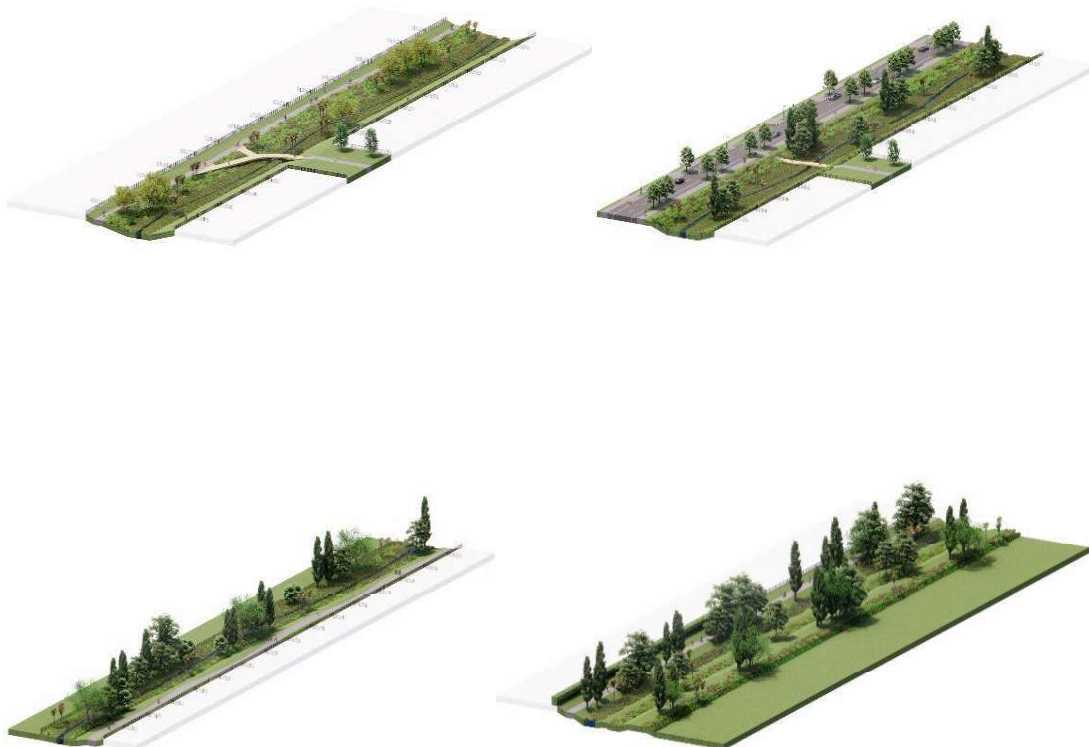
| Area | Natural Character Effect |
|---------------------|----------------------------|
| Part A | Very Low Adverse |
| Part B | Very Low Adverse to Benign |
| Overall Development | Very Low Adverse to Benign |

4.2 Landscape Effects

4.2.1 Direct Landscape Effects

Disregarding the proposed built form, the proposed subdivision seeks to raise the ground level from RL 1.1m to RL3.8m resulting in a modified landform that will sit 2.6m above the surrounding productive rural landform. The landform change is set to the middle and northern portions of the site where built development is proposed. The proposed landform seeks to establish a non-floodable building platform for the development integrated with stormwater swale networks and road corridors.

At the boundaries of the site the interface with the adjoining landform is demonstrated in Figures 20 and 21 below. The surrounding landform drops into drainage swales extending along the site boundaries before rising to the proposed subdivision landform within the Site.



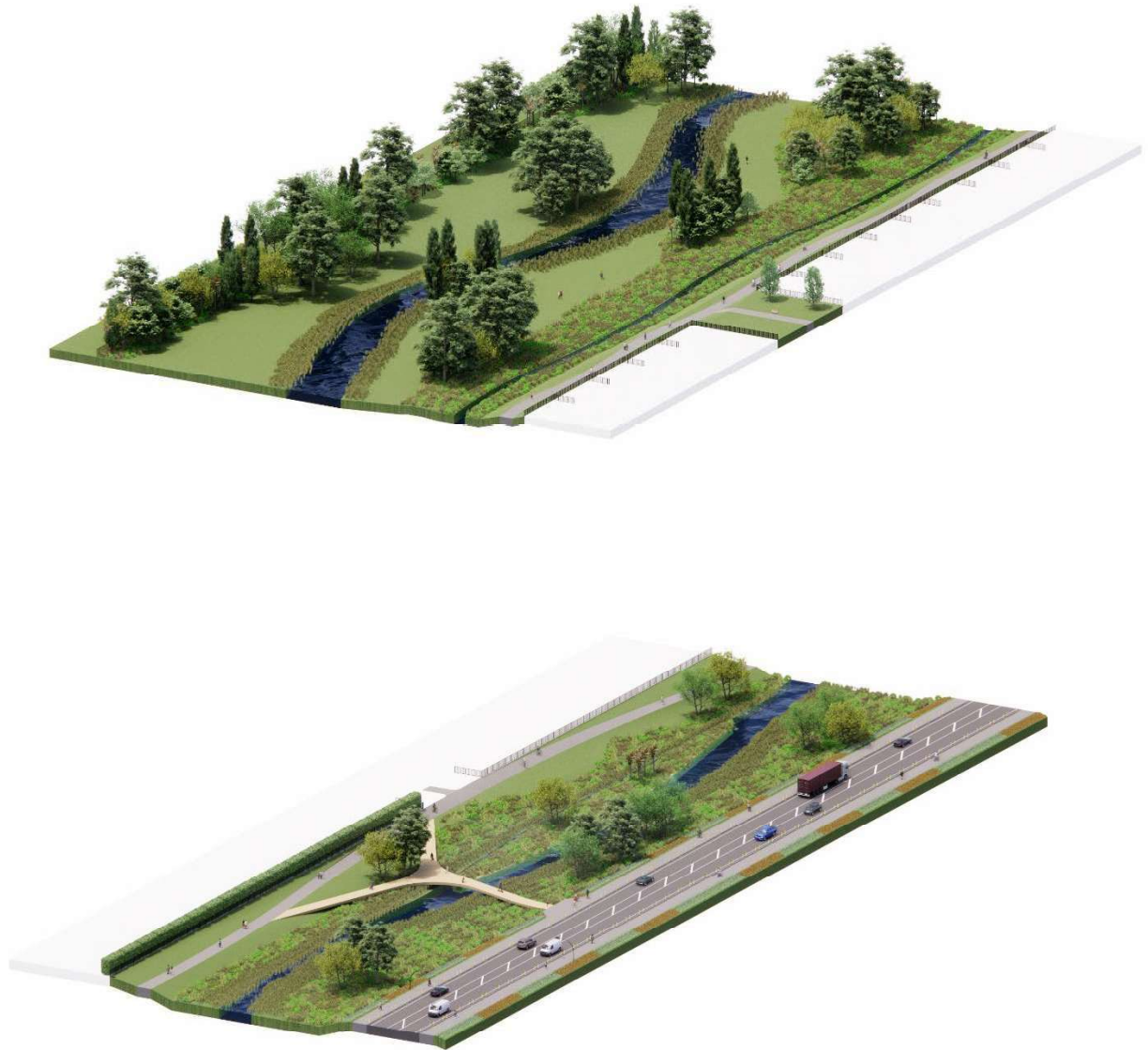


Figure 20 – Swale Treatments – Refer to AEE Appendix E - Subdivision Consent Landscape Package

The hydrology of the site will remain a modified pattern of drainage networks, albeit the proposed development provides for open vegetated swales with enhanced native vegetation management throughout. At the southern end of Part B the stormwater treatment wetland introduces water back into the site, reflecting the historic wetland that occupied this area of the site, prior to productive land use modification.

From a landform and biotic cover element perspective the direct landscape effect results in a similar but raised landform profile (Flat) to that of the existing site, notwithstanding the introduction of a stormwater treatment wetland area. The changes to the ground hydrology are proposed and whilst modified are a continuation on the modification of the natural ground and surface water patterns found in the area, when compared to the natural condition, prior to modification for productive land use.

Overall, the direct landscape effects are considered to be of a low-moderate degree when taking into account the surrounding landscape landform, hydrology and biotic cover.

| Area | Direct Landscape Effect |
|---------------------|-------------------------|
| Part A | Low-moderate adverse |
| Part B | Low-moderate adverse |
| Overall Development | Low-moderate adverse |

4.2.2 Landscape Character Effects

Landscape character is derived from the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and features of human settlement. It creates the unique sense of place defining different areas of the landscape.

The proposed development extends into a pastoral productive landscape with a dominant rural pastoral plains character currently demarcated by the TEL Road corridor. The rural plains and the productive cropping and grazing land use patterns across it form a distinctive arcadian landscape character found in three other locations across the Bay of Plenty, being Maketu and the Rangitāiki plains, near Whakatāne. Historically these landscapes formed large wetlands supporting wetlands and lowland podocarp forests.

The proposed development follows land ownership parcels and marries into modified infrastructure patterns of the TEL, Bell Road and the Kopuaroa Canal. The land use surrounding the proposed development remains in rural productive land use.

Urban development to date, has been confined to the northern boundary of the TEL, extending along the historical dune formations from Mount Maunganui toward Te Tumu. Urban growth is planned as an Urban Growth Area in the Tauranga City Plan toward the Te Tumu (eastern end) of these coastal dunes.



Figure 21 – Overall Proposed Development – Aerial Oblique looking southwest.

Part A – North of Bell Road

The introduction of Part A¹² of the proposed development, bounded by the TEL and Bell Road to the south, moves the pattern of urban development to the south of the TEL, following the pattern of development in a north south linear patterning. Directly north, across the TEL, comprises the residential development of Wairakei, creating a balancing of urban development to this dominant infrastructure pattern.

Urban development within the Part A comprises both medium density residential development of 11m and an employment zone of up to 20m. This patterning balances the depth and varying composition of building heights found to the north of the TEL where the Papamoa East Employment Zone is sited. Large areas for stormwater management and open space are provided for around the periphery of Part A, providing a connection to both the modified drainage patterns and the natural historic patterning of the lost wetlands, once prevalent in the area. The proposed placement of the Employment Zone is separated sufficiently from the Kaituna River and its margins ensuring that the scale of this development is not visually dominant on the river itself.

The dominant linear patterning of Bell Road forms a logical boundary for Part A, and follows a similar patterning of road corridors found to the north of the TEL.

The landscape patterns are interrupted with the formation of the TEL and Bell Road. The sensitivity of this portion of the site and the adjoining blocks to the east and west, have a reduced degree of landscape sensitivity as a result. Large productive blocks are divided and form a smaller patchwork across the site, than that of Part B.

At a localised scale the proposed introduction of Part A, forms a balanced pattern of urban development using Bell Road as a dominant transition boundary between urban development and rural productive land use.

At a wider scale the Part A, forms a widening of the urban patterning of Tauranga City. Whilst set in the Western Bay of Plenty District, the proposed urban area will form a logical connection to the Wairakei urban development and in turn Tauranga City



Figure 22 – Tauranga City Council Online City Plan Map

¹² Estimated Timeframe – remains subject to market and external factors and could vary.



Figure 23 – Part A overlain Tauranga City Planning Maps

Overall, Part A will introduce a moderate degree of landscape change to the rural landscape character of the immediate and localised area. At a broader scale Part A generates a low-moderate degree of change to the wider rural character with the remaining rural landscape patterns remaining dominant and distinctive as a landscape unit.

The potential adverse landscape character effects are considered to be of a low-moderate degree for the localised and wider rural landscape character, retaining cohesion with the roading infrastructure, drainage patterns and urban land use patterns. The overall cohesion of the urban form and rural character remain intact, with the urban city extent broadening in depth in this area.

Part B – South of Bell Road

Proposed for implementation in an estimated¹³ timeframe of Years 10 to 20, Part B extends southward utilising a applying of development which reflects the land parcels and drainage patterns. At a wider scale the rural plains landscape unit extends through to the foothills of Te Puke, across the Kaituna River plains through to Maketu. The northern area of this landscape character area begins to fragment at the Domain Road interchange with the TEL.

Part B extends down as a land parcel to the Kopuaroa Canal, with the urban development portion of the site terminating two thirds of the length, into the parcel of land comprising Part B. The proposed urban development's southern extent aligns with the historical natural stream alignment as evident in Figure 8, of this report. The pattern of housing follows the human modified land use patterns and land parcels, whilst integrating with the historical natural patterns of the stream and wetland extents at the southern portion of the site.

At a localised scale Part B introduces a moderate to high degree of change to the rural character of the area. The extension of the Part B southward toward the Kopuaroa Canal dividing the northern portion of the pastoral rural plains landscape unit from the remainder of the area.

¹³ *Estimated Timeframe – remains subject to market and external factors and could vary.*

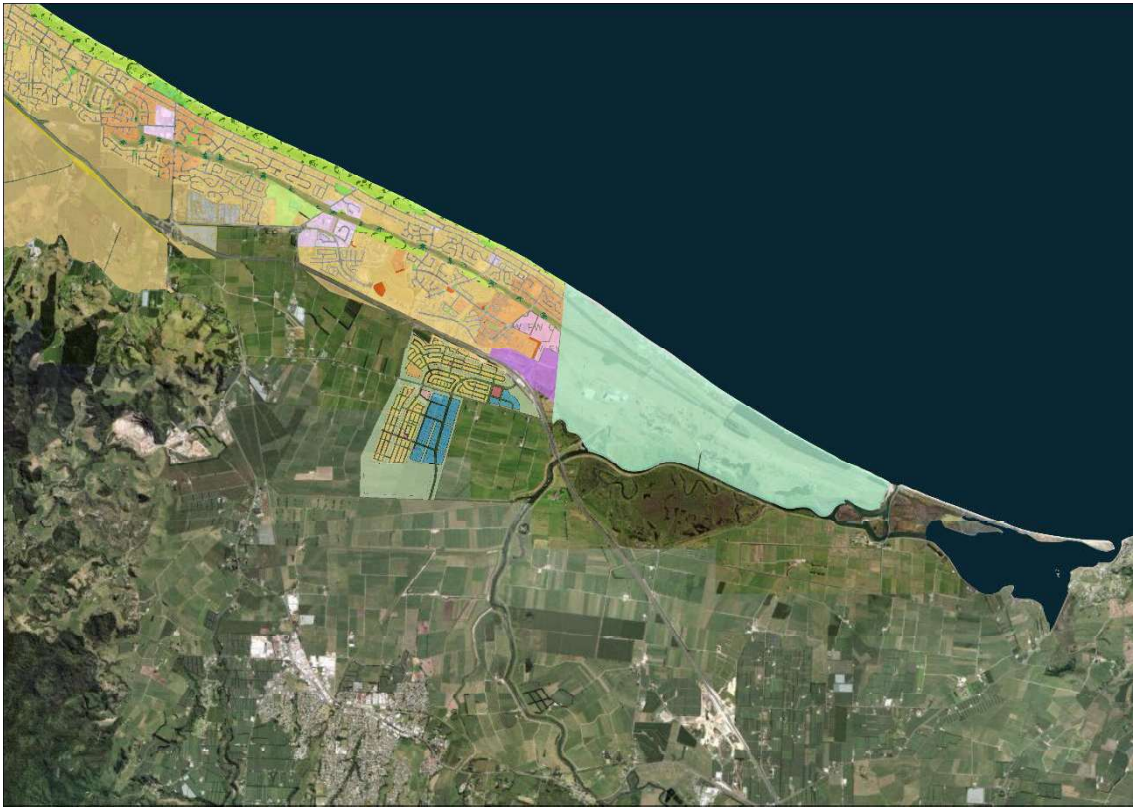


Figure 24 – Parts A and B overlain Tauranga City Planning Maps

As shown in the character mapping the proposed Part B, whilst a moderate to high degree of change to the wider rural character, follows patterning of the underlying historical stream that meandered through the site. In doing so the change in character will more so reflect the natural patterns along the southern portion of the Site.

The rural character of the area will remain as smaller units, with the proposed Part B forming a boundary between the northern area and southern Te Puke rural plains unit. From an urban patterning and interface with the foothills the proposed urban growth area responds more to the urban interface with the foothills found further north along Pāpāmoa.

Part B will introduce a moderate to high degree of adverse effect on the rural character of the immediate and localised area. At a wider scale the rural character of the pastoral plains will be modified to a moderate degree.

Integrating urban form into a rural landscape often is responsive to surrounding land use, fragmentation and landscape patterns. In a highly modified productive landscape like this the natural system and patterns are often lost. The proposed Part B subdivision does provide opportunity to reaffirm the historic natural patterns of the wetlands and provide a strong terminus to the urban development.

At the eastern and western boundaries of Part B the interface with the adjacent rural land use has potential to form an incongruous interface between productive land use and urban built form. The proposed Part B divides the rural plains fragmenting the wider open plains patterning. Whilst not an outstanding landscape or holding high natural character the rural plains form part of the composition between the significant cultural features and the coastal urban development. It is considered there will be moderate to high adverse effects on the rural character of the localised area.

The proposed landscape character change introduced in Part B, whilst resulting in adverse effects also provides opportunity to integrate the stormwater reserve network along the boundaries of Part A and B to provide both spatial separation and a vegetated green network that is reflective of both the historical natural patterns and modified patterns of the surrounding rural landscape. Integration with the historical landscape hydrology and biotic patterns and the existing surrounding rural landscape are critical integrating the proposal into a changing

landscape and returning parts of the landscape into its historical natural state. This provides for a changing character which focuses on enhancement of the biophysical attributes of the landscape. This landscape has undergone substantive change from human land use, whether that be productive or residential or industrial land use.

Integrating change that is reflective of the natural environment and enhancing these, connecting to the surrounding landscape features, being Te Rae o Papamoā, and reintegrating the natural hydrological patterns are key moves in the design approach. This also provides a strong southern terminus for the urban development whilst integrating to the current productive rural landscape patterns to the east and west of the Site.

4.2.3 Summary of Landscape Character Effects

The proposed urban development into the rural landscape comprises a moderate to high degree of change to the current landscape character. The landscape character will have potential adverse effects as a result of the proposed development at a low-moderate degree for Part A and a moderate to high degree for Part B. Overall, Part A provides a logical transition of urban form when considering the landscape context. Part B grades in its ability to integrate and introduces a greater degree of effect the further south it extends. The adverse effects are considered at a localised and wider scale, considering urban form, cohesion of landscape areas and their distinctive characteristics which form the unique character.

| Area | Landscape Character Effect |
|---------------------|---------------------------------|
| Part A | Low-moderate adverse effects |
| Part B | Moderate – High adverse effects |
| Overall Development | Moderate adverse effects. |

Effects Summary Table 1

4.3 Visual Effects

Visual amenity effects are influenced by a number of factors including the nature of the proposal, the landscape absorption capability and the character of the site and the surrounding area. Visual amenity effects are also dependent on distance between the viewer and the proposal, the complexity of the intervening landscape and the nature of the view. The zone of theoretical mapping identifies a broad visual catchment, particular from surrounding low-lying properties, elevated properties and Te Rae O Papamoā. Visibility itself is not an effect nor is change in a visual outlook an 'effect'.

Zone of Theoretical Visibility (*refer to Annexure B*) mapping has been prepared to consider the extent of the visual catchment for the visual effects assessment. Sited at the lower point of the visual catchment, within the lowland plains, the site is exposed to a number of elevated viewpoints in the wider catchment.

The visual effects assessment considers the visual effects, as they relate to visual amenity, forming part of the overall landscape effects assessment. Representative public viewpoints are interpreted and applied, where similar, to private vantage points. At this point in time views from private vantage points have not been photographed.

4.3.1 Effects from localised viewpoints.

Views from public vantage points are separated into two groupings, being localised and wider vantage points. Views from the localised vantage points are based off Bell Road and the TEL (SH2).

Consideration of visual effects comprises the proposed land use change and consideration of the proposed subdivision design composition, building heights of the employment and residential land use areas, coupled with open space and other facilities. The assessment considers the visual effects in two stages, being Part A and Part B, noting that within each of these primary stages are further sub-staging for the development over the anticipated 10year timeframe for the primary stages.

4.3.1.1 Views from Bell Road

Refer Annexure 2 – Graphic Supplement – Viewpoints 1 – 7, 3D Viewpoints 1– 5

Representative viewpoints taken from public vantage points are selected to represent the nature of the visual change and outlook for public and nearby private viewpoint locations.

Views looking East along Bell Road - Viewpoints 1 – 5, 3D Viewpoints 1 –3

Private dwelling viewpoints represented in the photography include 118 Bell Road, 143 Bell Road, 144 Bell Road, 168 Bell Road, 176 Bell Road and 228 Bell Road. These properties and the road corridor experience the rural pastoral landscape, with glimpses of the nearby Wairakei and Papamoa urban residential area to the north, over top of the TEL Road corridor bunds.

The visual sensitivity of the viewing audience is dependent on the proximity to site and the nature of the outlook. The visual sensitivity of this visual catchment is of a moderate to high degree with unimpeded views across the rural plains eastward toward the Kaituna River. Many of the dwellings along Bell Road comprise open views across the pastoral plains looking eastward toward the distant hills of Maketu headland and southeast toward Te Puke.

Part A develops to the north of Bell Road and will visually anchor against the existing urban growth of Papamoa East and Wairakei and the TEL Road corridor. The visual change will be attributed to the interface at the rural edge of the site and Bell Road.

The immediate interface of Part A on its western boundary, when viewed from the east along Bell Road, will be of a residential built form of up to 11m+1m (for roof pitch) of medium density residential development, education area (school) and an education / employment area.

Most dwellings and vehicles will appreciate the entire extent of the western edge of the site and the southern edge of Part A as it interfaces with Bell Road. Viewed in at a localised scale for this viewing audience will observe a moderate to high degree of visual change to the rural outlook, with a loss of the longer hinterland views toward the Maketu headland and longer views. Anchored to the TEL and coupled with the nearby residential area of Papamoa and Wairakei, the change will be viewed in this context.

The visual change attributed to urban development in this landscape will be a change in the visual coherence of the open and flat rural landscape. Built form, will be visually dominant but anchored against road infrastructure urban development to the north.

The degree of visual change will be of a moderate degree for Part A with the sensitivity of the viewing audience of a moderate degree, when considering the wider viewing context of the rural plains remaining available further southward.

The potential adverse visual amenity effects attributed to the urban development for Part A will be of a moderate adverse degree. Mitigation measures are recommended to further integrate and minimise the adverse visual effects, these are set out in Section 5.0 of this report

Part B develops to the south of Bell Road and will comprise the larger scaled development than Part A, extending to the Kopuaroa Canal, built development will form a 11m + 1m high residential interface of 1.33km long with a backdrop of 20m Commercial / Industrial buildings. Stormwater reserve and wetland areas at the southern end of the stage extends some 590m to

meet the Kopuaroa Canal, bringing a new, but historical, vegetated character to the landscape's aesthetic.

The residential development along the western boundary of the Site is set back some 70m – 110m from the western boundary providing for a corridor of stormwater treatment and landscape treatments. Views eastward toward the distance hills and wider Te Puke plains landscape will be obstructed by the proposed urban development by both the residential housing and proposed 20m commercial / industrial development area.

The aesthetic coherence of the patchwork of paddocks and the largely unimpeded views across, will result in a loss of perception of scale and the wider landscape patterns. With the proposed urban land use change the rural composition of open plains will be change to a shortened view of the immediate rural land use meeting the urban edge.

The backdrop of commercial and industrial buildings of up to 20m in height includes the consideration of building form and colour, and the resulting visual dominance of built form of this scale in the landscape. The visual change will be of a high degree for this viewing audience with a loss in the 'vast' view toward the wider rural plains landscape unit. Built form will become a dominant edge and the interface along the Site's western edge holds opportunity for integration of substantive vegetation cover to balance the urban form in this landscape.

The change in composition of land use in the area will see a loss of the visual amenity provided by the wider pastoral plains in the current setting. However productive land use in the wider landscape also includes horticultural land use which includes 9-12m shelterbelts extending along property boundaries, obscuring wider views.

Based on the existing environment, including permissible development within the current site, the proposed urban land use change of Part B will introduce a moderate to high degree of adverse visual effects. It is considered that the land use change can be accommodated in the landscape subject to careful and purposeful landscape integration and mitigation measures.

| Localised Bell Road Viewing Audience – Looking East | Visual Amenity Effects |
|---|-------------------------------|
| Part A- north of Bell Road | Moderate adverse effects |
| Part B- south of Bell Road | Moderate-High adverse effects |

Effects Summary Table 2

Views looking West along Bell Road Viewpoints 6 -7, 3D Viewpoints 4 - 5

Private dwelling viewpoints represented in the photography include 362 Bell Road and 462 Bell Road. The visual sensitivity of the viewing audience is dependent on the proximity to site and the nature of the outlook. The visual sensitivity of this visual catchment is of a moderate to high degree with unimpeded views across the rural plains westward toward Mauao and Papamoa Hills.

Part A develops to the north of Bell Road and will visually anchor against the existing urban growth of Papamoa East and Wairakei and the TEL Road corridor. The visual change will be attributed to the interface at the rural edge of the site and Bell Road. This is further reinforced with the continuation of urban residential northward along the Papamoa coastline.

The immediate interface of Part A on its eastern boundary, when viewed from the west along Bell Road, will be of a residential built form of up to 20m high being industrial / employment area at the eastern end, interfacing with the proposed interchange crossing the TEL.

Most dwellings and vehicles will appreciate the entire extent of the southern Bell Road edge of Part A, as it extends and interfaces with dwellings and the road corridor. The eastern edge of the site interfaces with the proposed interchange to the TEL. Viewed at a localised scale, this viewing audience will observe a moderate degree of visual change to the rural outlook, with a loss of the immediate pastoral rural outlook toward the TEL. This viewing audience will see the

Part A area as being part of the urban development along the TEL and whilst a change comprises large areas of open space and green corridor edging.

The visual change attributed to urban development in this landscape will be a change in the visual coherence from the open and flat rural landscape to the urban built form including large scale commercial / industrial buildings. Built form, will be visually dominant but anchored against road infrastructure urban development to the north.

The degree of visual change will be of a moderate degree for Part A with the sensitivity of the viewing audience of a low-moderate degree, when considering the wider viewing context of the urban backdrop of Papamoa and Wairakei within the view corridor.

The potential adverse visual amenity effects attributed to the urban development for Part A will be of a low-moderate adverse degree. Mitigation measures are recommended to further integrate and minimise the adverse visual effects, these are set out in Section 5.0 of this report

Part B develops to the south of Bell Road and will comprise the larger scaled development than Part A, extending to the Kopuaroa Canal, built development will form a commercial interface of 1.1km long with a backdrop of 20m Commercial / Industrial buildings. Stormwater reserve and wetland areas at the southern end of the stage extends some 620m to meet the Kopuaroa Canal, connecting to a naturalised wetland area which reintroduces the dominant wetland vegetated character to the landscape’s aesthetic.

The residential development along the western boundary of the Site is set back some 70m – 110m from the western boundary providing for a corridor of stormwater treatment and landscape treatments. Views westward toward Papamoa Hills will be obstructed by the proposed urban development by the proposed 20m commercial / industrial development area.

The aesthetic coherence of the patchwork of paddocks and the largely unimpeded views across, will result in a loss of perception of scale and the wider landscape patterns as they extend to meet the foothills. With the proposed urban land use change, the rural composition of open plains will be change to a shortened view of the immediate rural land use meeting the urban edge.

The commercial and industrial buildings of up to 20m in height includes the consideration of building form and colour, and the resulting visual dominance of built form of this scale in the landscape. The visual change will be of a high degree for this viewing audience with a loss in the ‘vast’ view toward the wider rural plains landscape unit and Papamoa Hills. Built form will become a dominant edge and the interface along the Site’s easter edge holds opportunity for integration of substantive vegetation cover to balance the urban form in this landscape.

Based on the existing environment, including permissible development within the current site, the proposed urban land use change of Part B will introduce a moderate to high degree of adverse visual effects. It is considered that the land use change can be accommodated in the landscape subject to careful and purposeful landscape integration and mitigation measures.

| Localised Bell Road Viewing Audience – Looking West | Visual Amenity Effects |
|---|-------------------------------|
| Part A- north of Bell Road | Moderate adverse effects |
| Part B- south of Bell Road | Moderate-High adverse effects |

Effects Summary Table 3

4.3.1.2 Views from Wairakei Residential – north of TEL

Refer to Annexure 2 – Viewpoint 18 and Viewpoint 19

Views from the Wairakei residential area comprises a view across the TEL southward towards Te Puke, across the rural plains. The proposed viewing audience has differing views in this area with close boarded fencing obscuring some views, and mitigation planting extending along the road corridor.

The viewing audience whilst appreciating some views toward Te Puke, have developed much of the housing northward with the aspect facing away from the southern views. The visual sensitivity of this viewing audience is considered to be of a low degree due to the degree of visual separation, placement of State Highway mitigation planting and the inclusion of closed fencing.

The inclusion of residential development interfacing on the Site's northern boundary with the TEL provides a balanced and mirroring approach to the character of the visual outlook experienced by this viewing audience. The spatial separation, visual aspect and inclusion of fencing and planting within the road corridor will see a visual change which is of a low-moderate degree. Whilst the rural outlook will change to an urban one, the experience of the scale of the development will be isolated to the TEL interface, being Part A.

The inclusion of 20m Commercial / Industrial buildings in Part B will largely be set back with intermediary residential built form and vegetation within Part A obscuring views toward this area. It is considered that the land use change can be accommodated in the landscape subject to careful and purposeful landscape integration and mitigation measures. Mitigation measures can be focused to the interface with the TEL to provide some balancing of urban form with vegetation screening.

| Localised Wairakei Residential Viewing Audience – Looking South | |
|--|------------------------------|
| Part A- north of Bell Road | Low-moderate adverse effects |
| Part B- south of Bell Road | Low adverse effects |

Effects Summary Table 4

4.3.1.3 Views from State Highway 2 – TEL

Refer to Annexure 2 – Viewpoint 5, 15, 18 and 19

Views from the TEL Road corridor residential area comprise a mix of views which are open toward the site and obscured by existing road corridor mitigation planting. The proposed viewing audience has differing views in this area with close boarded fencing obscuring some views, and mitigation planting extending along the road corridor. The development of the interchange has also heavily urbanised this area of the TEL with bunds and existing visual mitigation planting atop of the bund, screening views into the site.

The inclusion of residential development at the interface and larger commercial buildings, near to the interchange (at the eastern end of Part A), will be largely obscured by existing road corridor planting within the TEL (Refer Viewpoint 19).

Approaching views, travelling east along the TEL, crossing the Kaituna River, provide slightly elevated views toward the site, along Bell Road. This will be the most visible change to the rural landscape experienced on this road corridor. This will be where Part B will be most visually appreciable in its scale as it extends southward toward the Kopuaroa Canal. Forming a more distant view of the larger scaled building the hill range of Papamoa Hills will remain visible with the urban form creating a foreground and 'urban edge' to the entry into Tauranga City.

Part A will include wetland and mitigation planting at the eastern end which will visually integrate the commercial / industrial buildings and the service centre area. Sited behind the interchange

and road corridor mitigation planting the larger scaled commercial / industrial buildings will be set back and visually integrated for a short period of time for the easterly travelling vehicles.

As a transient (moving) viewing audience the change in rural outlook will be seen in the context of the urban development of Papamoa and Wairakei to the north. The sensitivity of this viewing audience is of a low degree when considering the context of the view, timing of view and the retention of the distant views towards Papamoa Hills.

The degree of visual change comprises a moderate degree of visual change and coupled with the low degree of visual sensitivity, existing screen planting and the distance from the road corridor, it is considered the potential adverse visual amenity effects will be of a low-moderate degree. Mitigation measures are further recommended for the TEL interface to further visually integrate the development with larger scaled tree planting.

| Localised TEL Viewing Audience | Visual Amenity Effects |
|--------------------------------|-------------------------------|
| Part A- north of Bell Road | Low adverse effects |
| Part B- south of Bell Road | Low -moderate adverse effects |

Effects Summary Table 5

4.3.2 Effects from Middle distant viewpoints.

4.3.2.1 Views from Te Puke – Pacific Coast Highway

Refer to Annexure 2 – Viewpoint 8, 9 and 20

Views from the Te Puke – Pacific Coast Highway, comprise views across the pastoral plains landscape toward the coast, in a north east and south east direction. Viewpoints 8 and 9 are representative of dwellings sited at 48 Seddon Street, 23B Collins Lane, 501, 503A, 507B, and 529B Te Puke Highway / Pacific Coast Highway

These views comprise northerly orientated views across a pastoral plains area largely defined as being between the Kopuaroa Canal and the TEL.

For 23B Collins Lane and 48 Seddon Street this will take into account direct northerly views toward the Site’s southern boundary. The sensitivity of this viewing audience is in the context of its current visual outlook of pastoral rural landscape with a distant (some 2.8km away) view of the urban residential area of Papamoa and Wairakei. The sensitivity of this viewing audience is considered to be of a moderate degree with the southern edge of the site approx. 500m away from the dwelling. The visual change will comprise a central portion of the middle distant outlook, dividing the rural landscape into two landscape units, with the proposed development centred in the view.

Part A will be distanced from 23B Collins Lane and 48 Seddon Street to a degree that the visual change will be of a low-moderate degree with a low adverse visual effect. Part B will be closer with the urban built form being approx. 1km away, however the integration of the large stormwater treatment wetland along the southern extent of the site will significantly screen and visually integrate the development into the immediate viewing context. It is considered the potential adverse visual amenity effects on this viewing audience to the south of Part B will be of a moderate adverse degree. There remains potential to further integrate through mitigation measures set out in Section 5.0 of this report.

For 501, 503A, 507B, and 529B Te Puke Highway / Pacific Coast Highway properties, Part A will be developed in the first stages will be distanced some 3.0km away with Part B being a total of 1.6km from the built residential edge, at its southern most point. As with above, Part A is sufficiently distanced and visually integrated with an urban backdrop that it will introduce a low-moderate degree of visual change. This grouping of viewing audience is considered to be of a low-moderate degree of visual sensitivity, including views from the road corridor, due to the

private views comprising their confined views and garden planting and a foreground of the rail corridor extending through their northerly view.

For Viewpoint 9, this represents a wider view with the proposed development sited to the far right within the viewing catchment. For vehicles travelling north, the appreciable views of the Site will be oblique with minimal visual recognition of Part A, due to distance and intermediary vegetation. Part B will be more visually apparent due to proximity. This viewing audience for users of the Te Puke / Pacific Coast Highway comprise a low -moderate degree of sensitivity with the orientation of view away from the Site due to the direction of travel. Being an oblique view the magnitude of visual change will be of a low degree of Part A and a low-moderate degree for Part B. Void of mitigation measures, set out in Section 5.0 the potential adverse visual amenity effects will be of a low degree for Part A and a moderate degree for Part B.

| Localised Te Puke Highway / Pacific Coast Highway | Visual Amenity Effects |
|---|---|
| Part A- north of Bell Road | Low adverse effects |
| Part B- south of Bell Road | Low -moderate to moderate adverse effects |

Effects Summary Table 6

4.3.2.2 Te Rae O Papamoa Regional Park

Refer to Viewpoints 10, 11, 12 and 13

Developed as a popular regional park, Te Rae O Papamoa provides walking tracks to the summit of what was once a heavily occupied pa complex overlooking the Papamoa coastal plains landscape. The view comprises a panoramic view across Tauranga City down toward the Maketu headland and beyond. In clear weather views toward Mount Tauhara (Taupō) can be seen. These views gain the appreciation of the rural plains patchwork of paddocks and drainage canals, heavily modified from its original state.

Part A, to the north of Bell Road will be viewed in the context of a lineal widening of the existing urban development of Wairakei, and whilst widening comprises a composition of urban growth that provides a clear and logical pattering in the wider landscape. The viewing audience, including elevated residential dwellings overlooking the plains will have a low-moderate degree of visual sensitivity. The potential adverse visual amenity effects from Part B will be of a low-moderate degree.

Part B comprises a widening of the urban pattern dividing the rural plains area in half creating smaller pockets of rural productive plains landscape. The southern stormwater treatment wetland of Part B brings back the historical wetland pattering and follows an historical alignment of a stream and wetland areas which once occupied the area. These measures whilst integrating urban development are positive measures toward a change in rural patterns which are reflective of the historical wetlands.

Part B introduces a moderate degree of change to the visual outlook of the pastoral rural plains landscape. The southern wetland area of the site, coupled with substantial set backs provides ability for Part B to visually integrate, and at this elevated viewpoint the scale of built form will be largely indiscernible, with the form and shape of the overall development driving the appreciation of the aesthetic coherence of the landscape. The potential adverse visual amenity effects when viewed from Te Rae O Papamoa are considered to be low for Part A and moderate for Part B. Mitigation measures will assist in visually integrating Part B into the wider landscape and its historical vegetative patterns.

| Localised Te Rae o Papamoa | Visual Amenity Effects |
|----------------------------|--------------------------|
| Part A- north of Bell Road | Low adverse effects |
| Part B- south of Bell Road | Moderate adverse effects |

Effects Summary Table 7

4.3.3 Summary of Visual Effects

Visual amenity effects, comprise the appreciation, in this instance, of the change in landscape from a dominant rural pastoral plains landscape to an urban edge. Design measures provide opportunity to visually integrate the proposal to reduce the dominance of built form, with design controls and landscape mitigation planting measures. The inclusion of the stormwater treatment wetland area to the south of Part B, provides a new measure of visually representing the historical landscape patterns and introducing a new rural and urban character to the landscape.

A summary of the visual effects is set out below however the range of effects comprises Low Adverse to Moderate-High adverse effects. Mitigation measures set out in Section 5.0 provide methods for lowering of the identified adverse effects.

| Visual Amenity Effects | Part A | Part B |
|---------------------------------------|------------------------------|---------------------------------|
| Bell Road – Easterly Views | Moderate adverse effects | Moderate-High adverse effects |
| Bell Road – Westerly Views | Moderate adverse effects | Moderate-High adverse effects |
| Wairakei Urban Area | Low-moderate adverse effects | Low adverse effects |
| TEL | Low adverse effects | Low -moderate adverse effects |
| Collins Lane and Seddon Street | Low adverse effects | Moderate adverse effects |
| Pacific Coast Highway | Low adverse effects | Moderate adverse effects |
| Te Rae o Papamoa Regional Park | Low adverse effects | Moderate adverse effects |
| OVERALL VISUAL EFFECT | Low-Moderate Effects | Moderate Adverse Effects |

Effects Summary Table 8

4.4 Internalised Landscape Effects

Creating sound urban development which functions to appropriately place and integrate different land use activities with one another is a key part of forming high quality and well-functioning environments. The proposed land use change will apply the appropriate provisions of the Western Bay of Plenty District Plan, coupled with design controls applied to individual lots across the subdivision stages. The urban design assessment focuses to these matters and is relied upon to manage internalised landscape effects through the design controls and master planning outcomes provided for.

4.5 Effects in relation to Statutory Provisions

Section 3.1 identifies objectives and policies of the Operative Western Bay of Plenty District Plan, addressing management of the Western Bay of Plenty District's rural character and natural character while managing growth in a sustainable way. They highlight the importance of maintaining rural amenity values, preventing inefficient subdivision and land fragmentation, and safeguarding ecological, cultural, landscape, and heritage features for the wider community.

In the natural environment, the focus is on preserving and managing the character of coastal areas, rivers, lakes, wetlands, and riparian margins by avoiding inappropriate development and enhancing ecological systems where possible. Overall, the intent is to balance environmental protection, rural identity, and community wellbeing with carefully managed subdivision and development that respects both local character and future growth needs.

The proposed development aligns with a number of relevant planning objectives and policies, particularly those relating to ecological, cultural, and natural character enhancement. While it does not meet Objective 18.2.1.5, given the shift from a low-density rural environment to urban development, it does integrate sensitively with the surrounding productive rural landscape through application of landscape buffer and wetland treatments. The proposal meets Objective 18.2.1.6 by incorporating cultural connections and ecological restoration that reflect and draw attention to the historical natural patterns.

It is also consistent with Policy 18.2.9, as the subdivision responds to landscape values and re-establishes natural biophysical features which are also culturally referenced, despite the significant land use change. Similarly, the proposal meets Objective 5.2.1.3 and Policies 5.2.2.9 and 5.2.2.10 through the reintroduction of natural elements, including extensive wetland area and riparian vegetation that enhances natural character and provides for stormwater management. Although the development represents a substantial change to the current site character and immediate surrounds, it satisfies Objective 12.2.1.1 by responding to underlying historical natural and cultural patterns and integrating with both adjoining urban areas and the surrounding rural landscape.

4.5.1 Summary of Effects on Statutory Provisions

The proposed subdivision, while introducing urban growth rather than rural low-density development, is designed to integrate with the surrounding productive rural landscape and maintain amenity values at its interface. It responds to cultural and ecological objectives by re-establishing historical natural patterns, enhancing riparian areas, and creating wetlands that restore ecological functions and improve water quality. Cultural landscape referencing through reinforcement of the natural waterways and wetland patterns provides a foundation for both physical and associative values to be integrated.

These measures align with policies seeking to protect and enhance landscape, cultural, and heritage features, avoid adverse effects on natural character, and restore wetlands and riparian margins. The development reinforces local character through transitional landscape treatments and green infrastructure, ensuring that despite a marked change in land use, the design reflects underlying historical and cultural patterns and contributes positively to ecological and landscape values.

5.0 Recommendations

The proposed change in land use within a rural landscape, with no adjoining urban land use, relies on integrative design measures. The following design measures are integrated into the proposed masterplan, the outcomes of which are relied upon in the evaluation of potential landscape, including visual amenity effects.

The development is proposed over multiple stages (Refer Figure 6) with Part A, north of Bell Road, anticipated to be implemented over approximately a 10-year period. Part B built development areas will be developed over a 7 – 8 year period, following development of Part A. In order to achieve this, a sub stage, marked currently as Stage 4, requires the development of the stormwater and treatment wetland area within the Part B land area, south of Bell Road. This provides a framework for the integration and advanced establishment of mitigation measures, which will mitigate the future development of Part B in stages, further lowering the earlier identified adverse rural character and visual amenity effects.

Recognising the development stages could be subject to change, it is recommended that the mitigation planting for Part B, is undertaken within the Stage 4 area a minimum of 3 years prior to the development of built residential and employment areas of Part B.

The following diagram demonstrates the changing effect over the anticipated period of implementation and then the application of mitigation planting at the implementation of Stage 4 across Part B, ahead of the built development within this site.

| | | | | | | |
|----------|-----|--------------|----------|---------------|------|-----------|
| Very Low | Low | Low-Moderate | Moderate | Moderate-High | High | Very High |
|----------|-----|--------------|----------|---------------|------|-----------|

| Part | Part A – Noting Stage 4 occurs across Part B | | | | | | | | Part B – Noting Stage 4 (Stormwater) occurs in Years 9 - 18 | | | | | | | | | |
|-----------------------------|---|----------|--------------|--------------|--------------|--------------|----------|----------|--|----------|---------------|---------------|---------------|---------------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Landscape and Visual Effect | Very Low | Low | Low-Moderate | Low-Moderate | Low-Moderate | Low-Moderate | Moderate | Moderate | Moderate | Moderate | Moderate-High | Moderate-High | Moderate-High | Moderate-High | High | High | High | High |
| Mitigation Measures Applied | Very Low | Very Low | Very Low | Very Low | Very Low | Low | Low | Low | Low | Low | Low-Moderate | Low-Moderate | Low-Moderate | Low-Moderate | Moderate | Moderate | Moderate | Moderate |

Effects Rating Summary Table 9

Outcomes Sought through these identified mitigation measures comprise:

- Achievement of large rural canopy trees, a mixture of fast-growing exotic and native species to provide scale and character to the development that visually integrates it into the surrounding rural landscape. The purpose is to progressively stage the mitigation planting with the development stages, providing an overall outcome of visual screening at the boundary interface of 75% upon vegetation maturity whilst providing angled views outward, from the development, toward Te Rae O Papamoa and the Te Puke Foothills.
- Vegetation cover in the southern stormwater treatment wetland that provides large groupings of canopy native lowland forest, remnant of the wetland and podocarp forest that dominated this landscape. The purpose is to reconnect the site to its indigenous historical state and provide a strong vegetated framework of canopy vegetation that connects to the 'mountains to sea' connection of vegetation cover. This is critical to the enhancement of landscape values to the underlying abiotic and biotic attributes within the landscape.
- Built form that avoids visual dominance in the landscape by way of colour, building branding methods, signage and spot lighting (illuminated signage) at the boundary interfaces.

- Building setbacks and height controls at boundary interface.
- The use of stormwater reserves for the provision of large canopy vegetation and building distancing from the boundary
- A subdivision form that provides a large stormwater and wetland area at the southern end reflecting the historical stream alignment and wetland patterning of these landscapes historical indigenous condition.
- A landscape mitigation plan (Refer to Annexure 3) forms part of the Subdivision Consent Landscape package and directly identifies landscape measures relied upon for mitigation.

The following Mitigation Measures are relied upon for the achievement of mitigation of identified potential adverse landscape and visual effects:

- Provide for building setbacks along the western boundary of 20m for Part A and 70-100m for Part B to ensure residential subdivision lot boundaries and resulting built form is set back and sufficient area is provided for Landscape Mitigation Planting, in accordance with the Landscape Mitigation Plan (*Refer to Appendix C of the AEE – Subdivision Landscape Package*), detailed in extracted Figures 25 and 26 below.



Figure 25 – Extract from 2.3 of Subdivision Consent Landscape Package – Refer Appendix E of AEE

2.5.2 SOUTHERN STORMWATER MANAGEMENT AREA



Figure 26 – Extract from 2.5.2 of Subdivision Consent Landscape Package – Refer Appendix E of AEE

- Architectural Design Controls shall be applied as follows:
 - Building ‘branding’ of bright colours or large format patterning distinctive of a ‘business brand’ shall not be applied to the employment zone interface at the southern and eastern boundaries of Part A and B.
 - Signage shall be avoided on the eastern and southern boundaries of Part B employment commercial / industrial buildings.
 - **Industrial buildings** - for external facades and vertical building elements, only materials with a Light Reflectivity Value (LRV) of 60 or less are permitted on all walls, and LVR of 75 or less are permitted on roofs and joinery. Where industrial buildings front the Site’s eastern boundary this shall comprise no more than 70% RV for roofs and 55% RV for walls, downpipes and joinery, where there is an external boundary with rural zoned land on the eastern and southern boundaries.
- Preparation of a Landscape and Ecological Management Plan which is prepared in general accordance with the Landscape Mitigation Plan. The LEMP must address the following:
 - Detailed landscape mitigation and ecological enhancement planting along the stormwater reserves at the eastern, western and southern boundaries. Planting must provide for a minimum of:
 - 60% of canopy vegetation extending along the eastern (Part B only) and western (Part A and Part B only) where there is an external boundary with rural zoned land, position in clusters (with two clusters deep into the site) along the western boundary. The resulting outcome

must progressively achieve 75% screening upon vegetation maturity, of the residential development whilst providing for angled views outwards from the residential subdivision, upon completion of urban development. Refer to Landscape Mitigation Plan Diagrams in the AEE Appendix E – Subdivision Consent Landscape Package.

- A large, planted stormwater treatment wetland which is reflective of the wetland vegetation cover and includes clusters of canopy vegetation providing for visual screening and integration of the urban development into the surrounding landscape character.
- Staging of landscape mitigation planting to occur at the time of establishment of the stormwater reserve, in particular ensuring that Part B mitigation planting is established at the development of Stage 4 or a minimum of 3 years prior to the development of built form within Part B, providing for advance planting ahead of the implementation of Part B subdivision stages.
- Provision of a landscape planting programme which provides for successional planting to achieve landscape mitigation in 0-10 years and long-term mitigation. This includes the provision of large exotic canopy species for short term mitigation and integration with the rural pastoral character and native vegetation providing for the indigenous naturalness historically found in this landscape.
- Detailed specification for implementation and maintenance.
- Integration of cultural taonga species in collaboration with mana whenua.

6.0 Conclusions

Integrating urban growth into rural landscapes comprises challenges with the loss of open rural landscapes. Forming part of the rural landscape character, the appreciable visual amenity of the rural landscape will change. Part A provides a pattern of development that balances urban development to two sides of the TEL, with Bell Road providing a logical terminus for the area.

Part B comprises the most significant change in the landscape extending southward to connect to the Kopuaroa Canal. Within Part B there are extensive areas the enhancement of the natural values of the site, through reintegration of wetland areas, lowland native forest and exotic rural tree vegetation. The patterning of the historical wetland patterns into the southern end of the site juxtaposes with the urban form planned and the existing pastoral landscape, providing for an enhancement in the natural abiotic and biotic values of the Site.

The natural character effects are very low to benign with some resulting positive effects as the stormwater wetland of Part B establishes.

The landscape and visual effects resulting from the development of **Part A inclusive of mitigation measures will be of a Low-Moderate reducing to a Low degree over a 10 year** period as mitigation measures mature. This equates to a minor adverse effect.

The landscape and visual effects resulting from the development of **Part B inclusive of mitigation measures will be of a Moderate reducing to a Low-moderate degree over an 8 year** period as mitigation measures mature.

Overall, the proposed development will introduce a moderate adverse effect on the rural landscape and with the application of substantive mitigation measures the integration of the development can be achieved whilst maintaining the wider rural character values. Visual effects cannot be avoided however can be minimised through the application of mitigation measures in a staged approach. The visual change will be apparent for the immediate viewing catchment and mitigation of visual effects is considered essential for minimising effects on surrounding properties and the wider landscape character.

7.0 References

- Archaeology BOP. (2025). *Archaeological Assessment, Proposed Subdivision Development, Bell Road, Papamoa*. Tauranga : Archaeology BOP.
- Boffa Miskell Ltd. (1993). *The Visual Landscape, Western Bay of Plenty District Visual Landscape Evaluation* . Auckland : Boffa Miskell Ltd.
- Boffa Miskell Ltd. (2011). *Tauranga City Landscape Study, A review of the Landscape Study for the City of Tauranga* . Tauranga : Boffa Miskell Ltd.
- Ecological Solutions. (2025). *Bell Road Wetland Assessment Letter*. Auckland : Ecological Solutions.
- Tapuika. (2014). *Tapuika Environmental*. Tauranga: Tapuika. Retrieved from [https://www.tapuika.iwi.nz/site_files/18329/upload_files/Environmentalplan2014-2024\(1\)_compressed.pdf?dl=1](https://www.tapuika.iwi.nz/site_files/18329/upload_files/Environmentalplan2014-2024(1)_compressed.pdf?dl=1)
- Te Kapu ō Waitaha. (2026). *Cultural Impact Assessment of the Proposed Wairakei South Development*. Bay of Plenty: Te Kapu ō Waitaha.
- Tuia Pito Ora New Zealand Institute of Landscape Architects. (2022). *Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines*. Auckland : Tuia Pito Ora New Zealand Institute of Landscape Architects.
- Waitaha. (2014). *Waitaha Iwi Management Plan*. Tauranga: Waitaha. Retrieved from <https://waitaha-iwi.org.nz/wp-content/uploads/2024/11/Waitaha-Iwi-Management-Plan-2014.pdf>

Annexure 1: Method Statement

22 November 2023

This assessment method statement is consistent with the methodology (high-level system of concepts, principles, and approaches) of 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022. The assessment provides separate chapters to discuss landscape, visual and natural character effects where relevant, but is referred to throughout as a Landscape Effects Assessment in accordance with these Guidelines. Specifically, the assessment of effects has examined the following:

- The existing landscape;
- The nature of effect;
- The level of effect; and
- The significance of effect.

The Existing Landscape

The first step of assessment entails examining the existing landscape in which potential effects may occur. This aspect of the assessment describes and interprets the specific landscape character and values which may be impacted by the proposal alongside its natural character where relevant as set out further below. The existing landscape is assessed at a scale(s) commensurate with the potential nature of effects. It includes an understanding of the visual catchment and viewing audience relating to the proposal including key representative public views. This aspect of the assessment entails both desk-top review (including drawing upon area-based landscape assessments where available) and field work/site surveys to examine and describe the specific factors and interplay of relevant attributes or dimensions, as follows:

- **Physical** –relevant natural and human features and processes;
- **Perceptual** –direct human sensory experience and its broader interpretation; and
- **Associative** – intangible meanings and associations that influence how places are perceived.

Engagement with tāngata whenua

As part of the analysis of the existing landscape, the assessment should seek to identify relevant mana whenua (where possible) and describe the nature and extent of engagement, together with any relevant sources informing an understanding of the existing landscape from a Te Ao Māori perspective. The client has undertaken engagement directly with iwi and hapu.

Statutory and Non-Statutory Provisions

The relevant provisions facilitating change also influence the consequent nature and level of effects. Relevant provisions encompass objectives and policies drawn from a broader analysis of the statutory context and which may anticipate change and certain outcomes for identified landscape values.

The Nature of Effect

The nature of effect assesses the outcome of the proposal within the landscape. The nature of effect is considered in terms of whether effects are positive (beneficial) or negative (adverse) in the context within which they occur. Neutral effects may also occur where landscape or visual change is benign.

It should be emphasised that a change in a landscape (or view of a landscape) does not, of itself, necessarily constitute an adverse landscape effect. Landscapes are dynamic and are constantly changing in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important when assessing and managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate adverse effects. The aim is to maintain or enhance the environment through appropriate design outcomes, recognising that both the nature and level of effects may change over time.

The Level of Effect

Where the nature of effect is assessed as 'adverse', the assessment quantifies the level (degree or magnitude) of adverse effect. The level of effect has not been quantified where the nature of effect is neutral or beneficial. Assessing the level of effect entails professional judgement based on expertise and experience provided with explanations and reasons. The identified level of adverse natural character, landscape and visual effects adopts a universal seven-point scale from very low to very high consistent with Te Tangi a te Manu Guidelines and reproduced below.



Landscape Effects

A landscape effect relates to the change on a landscape's character and its inherent values and in the context of what change can be anticipated in that landscape in relation to relevant zoning and policy. The level of effect is influenced by the size or spatial scale, geographical extent, duration and reversibility of landscape change on the characteristics and values within the specific context in which they occur.

Visual Effects

Visual effects are a subset of landscape effects. They are consequence of changes to landscape values as experienced in views. To assess where visual effects of the proposal may occur requires an identification of the area from where the proposal may be visible from, and the specific viewing audience(s) affected. Visual effects are assessed with respect to landscape character and values. This can be influenced by several factors such as distance, orientation of the view, duration, extent of view occupied, screening and backdrop, as well as the potential change that could be anticipated in the view as a result of zone / policy provisions of relevant statutory plans.

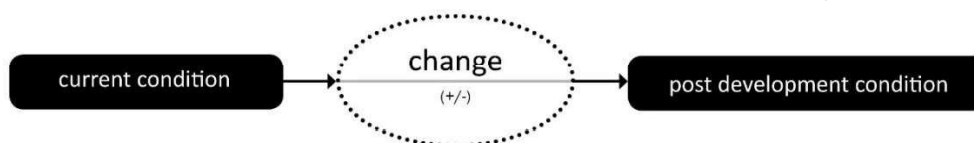
Natural Character Effects

Natural Character, under the RMA, specifically relates to 'the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development'. Therefore, the assessment of natural character effects only involves examining the proposed changes to natural elements, patterns and process which may occur in relevant landscape / seascape contexts.

As with assessing landscape effects, the first step when assessing natural character effects involves identifying the relevant physical and experiential characteristics and qualities which occur and may be affected by a proposal at a commensurate scale. This can be supported through the input of technical disciplines such as geomorphology, hydrology, marine, freshwater, and terrestrial ecology as well as input from tāngata whenua. An understanding of natural character considers the level of naturalness and essentially reflects the current condition of the environment assessed in relation to the seven-point scale. A higher level of natural character means the waterbody and/or margin is less modified and vice versa.

A natural character effect is a change to the current condition of parts of the environment where natural character occurs. Change can be negative or positive. The resultant natural character effect is influenced by the existing level of naturalness within which change is proposed; a greater level of effect will generally occur when the proposal reduces the naturalness of a less modified environment. In short, the process of assessing natural character effects can be summarised as follows:

- Identify the characteristics and qualities which contribute to natural character within a relevant context and defined spatial scale(s), including the existing level of naturalness;
- Describe the changes to identified characteristics and qualities and the consequent level of natural character anticipated (post proposal); and
- Determine the overall level of effect based on the consequence of change.



The Significance of Effects

Decision makers assessing resource consent applications must evaluate if the effect on individuals or the environment is less than minor¹⁴ or if an adverse effect on the environment is no more than minor¹⁵. For non-complying activities, consent can only be granted if the s104D 'gateway test' is satisfied, ensuring adverse effects are minor or align with planning objectives. In these situations, the assessment may be required to translate the level of effect in terms of RMA terminology.

This assessment has adopted the following scale applied to relevant RMA circumstances¹⁶ (refer to diagram below), acknowledging low and very low adverse effects generally equate to 'less than minor' and high / very high effects generally equate to significant¹⁷.



¹⁴ RMA, Section 95E

¹⁵ RMA, Section 95E

¹⁶ Seven-point level of effect scale. Source: Te tangi a te Manu, Pg. 151

¹⁷ The term 'significant adverse effects' applies to specific RMA situations, including the consideration of alternatives for Notices of Requirement and AEEs, as well as assessing natural character effects under the NZ Coastal Policy Statement.

Annexure 2: Graphic Supplement

WAIRAKEI SOUTH MASTERPLAN LVEA

GRAPHIC SUPPLEMENT

6 MAY 2026



Wairakei South Masterplan LEA

Contents



MAPS

FIGURE 1: Viewpoint Location Plan

FIGURE 2: Zone of Theoretical Visibility Plan

VIEWPOINT PHOTOGRAPHS

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VP 2: View Eastward within Site toward Wairakei and Te Tumu, near 314 Bell Road

VP 3: View Westward within Site toward Papamoa Hills, near 362 Bell Road

VP 4: View Eastward within Site toward Wairakei, near 362 Bell Road

VP 5: View Northward at Site's Eastern Extremity toward Wairakei, near 462 Bell Road

VP 6: View Eastward on Site's Western Boundary toward Wairakei, near 228 Bell Road

VP 7: View Southward on Site's Western Boundary toward Te Puke, opposite 250 Bell Road

VP 8: View Northward toward Papamoa Hills, near 501 Te Puke Highway

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VP 10: View Eastward toward Site, Papamoa Hills Regional Park Trail near Carpark

VP 11: View Eastward toward Site, Papamoa Hills Regional Park Summit

VP 12: View Southward toward Te Puke, Papamoa Hills Regional Park Summit

VP 13: View Eastward toward Site, Papamoa Hills Regional Park Northern Trail

VP 14: View Westward toward Site from Kaituna River-Tauranga Eastern Link Bridge

VP 15: View Southeastward toward Site and Te Puke from Poplar Lane-Te Puke Highway Intersection

VP 16: View Southeastward toward Site from 78 Te Okuroa Drive

VP 17: View Southward toward Site from Te Okuroa Drive-Monificola Drive Intersection

VP 18: View Southeastward toward Site from 148 Te Okuroa Drive

VP 19: View Southward toward Site from 148 Te Okuroa Drive

VP 20: View Southeastward toward Site from 236 Te Puke Highway

DESIGN HEIGHT MODEL VIEWPOINTS

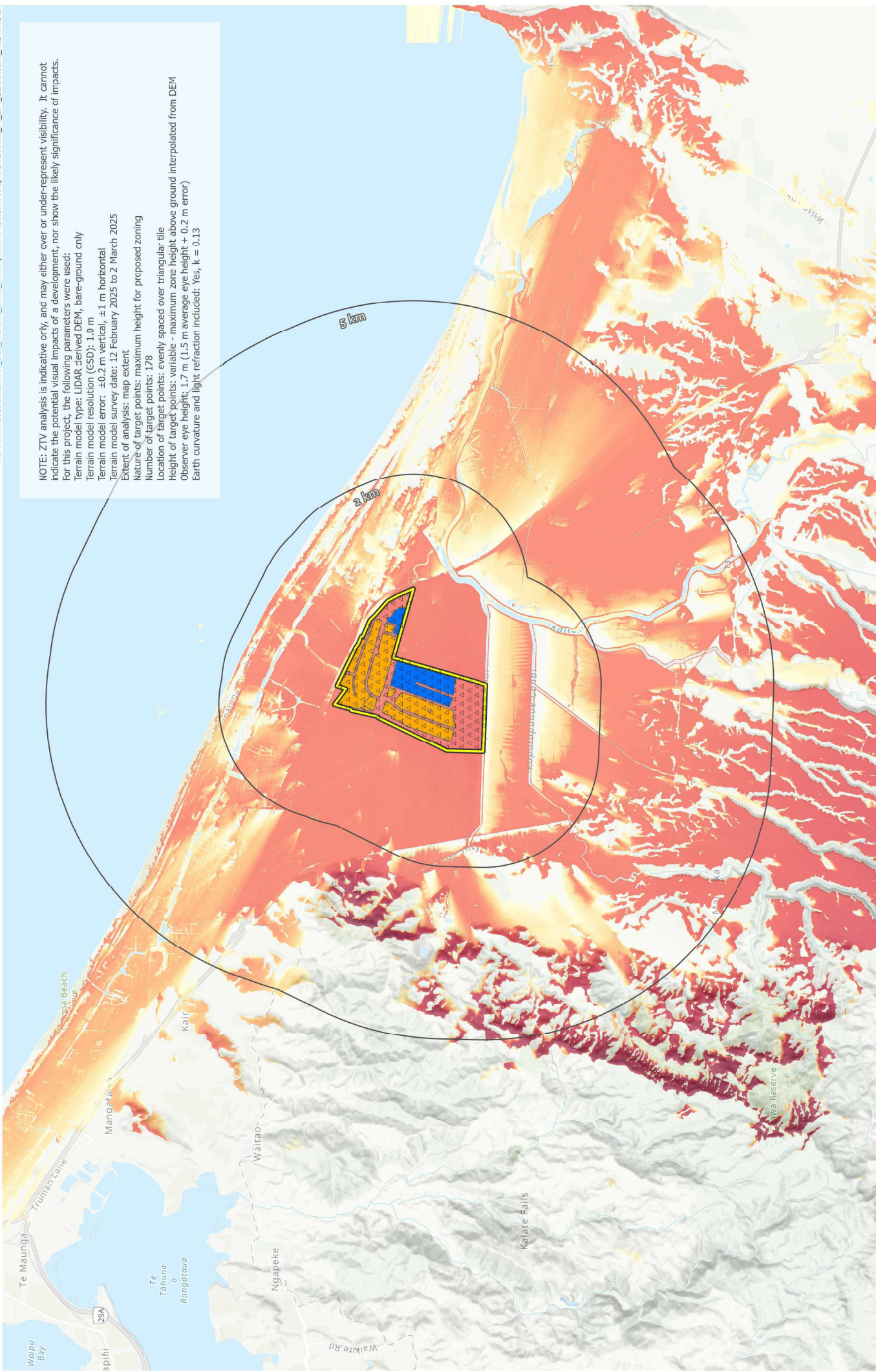
3DVP 1: Modelled View Northeastward toward Site from 362 Bell Road

3DVP 2: Modelled View Northwestward toward Site from 362 Bell Road

3DVP 3: Modelled View Southwestward toward Site from 362 Bell Road

3DVP 4: Modelled View Eastward toward Site from 144 Bell Road

3DVP 5: Modelled View Southward toward Site from 144 Bell Road



NOTE: ZTV analysis is indicative only, and may either over or under-represent visibility. It cannot indicate the potential visual impacts of a development, nor show the likely significance of impacts. For this project, the following parameters were used:

- Terrain model type: LIDAR derived DEM, bare-ground only
- Terrain model resolution (GSD): 1.0 m
- Terrain model error: ±0.2 m vertical, ±1.1 m horizontal
- Terrain model survey date: 12 February 2025 to 2 March 2025
- Extent of analysis: map extent
- Nature of target points: maximum height for proposed zoning
- Number of target points: 178
- Location of target points: evenly spaced over triangular tile
- Height of target points: variable – maximum zone height above ground interpolated from DEM
- Observer eye height: 1.7 m (1.5 m average eye height + 0.2 m error)
- Earth curvature and light refraction included: Yes, k = 0.13

This plan has been prepared by Boffa Miskell Limited on the instructions of our Client, in accordance with the application under the Fast-track Approvals Act 2024. It may be relied upon by the Applicant and relevant application. While Boffa Miskell Limited has exercised due care in preparing this plan, it does not accept liability for information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Boffa Miskell
www.boffamiskell.co.nz

0 1.500 m
1:60,000 @A3

▲ Observer Point
Proposed Zoning
11 m (residential, commercial)
20 m (industrial)

Data Sources: Eagle Technology, LINZ, StatsNZ, NIWA, Natural Earth, © OpenStreetMap contributors, Eagle Technology, LINZ
Projector: NZGD 2000 New Zealand Transverse Mercator

Visibility (observer point count)

165
0

FIGURE 2



This plan has been prepared by Boffa Miskell Limited on the basis of information provided to the Client. The Client is responsible for the accuracy of the information provided. Boffa Miskell Limited is not responsible for the accuracy of the information provided. The Client is responsible for the accuracy of the information provided. Boffa Miskell Limited is not responsible for the accuracy of the information provided.

Viewpoint Details
 NZTM Easting : 1 893 587 mE
 NZTM Northing : 5 818 212 mN
 Elevation/Eye Height : 2.2 m / 1.7 m
 Date of Photography : 15 May 2025 2:27 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Westward within Site toward Papamoa Hills, near 314 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] Drawn: JMa | Checked: BSA



Viewpoint Details

NZTM Easting : 1 893 587 mE
 NZTM Northing : 5 818 212 mN
 Elevation/Eye Height : 2.2 m / 1.7 m
 Date of Photography : 15 May 2025 2:27 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Eastward within Site toward Wairakei and Te Tumu, near 314 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



This plan has been prepared by Boffa Miskell Limited on the basis of information provided to the Client. The Client warrants that it is intended to support the Client's application under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 894 011 mE
 NZTM Northing : 5 818 092 mN
 Elevation/Eye Height : 1.8 m / 1.7 m
 Date of Photography : 15 May 2025 2:30 pm NZST

WAIRAKEI SOUTH MASTERPLAN

View Westward within Site toward Papamoa Hills, near 362 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSa



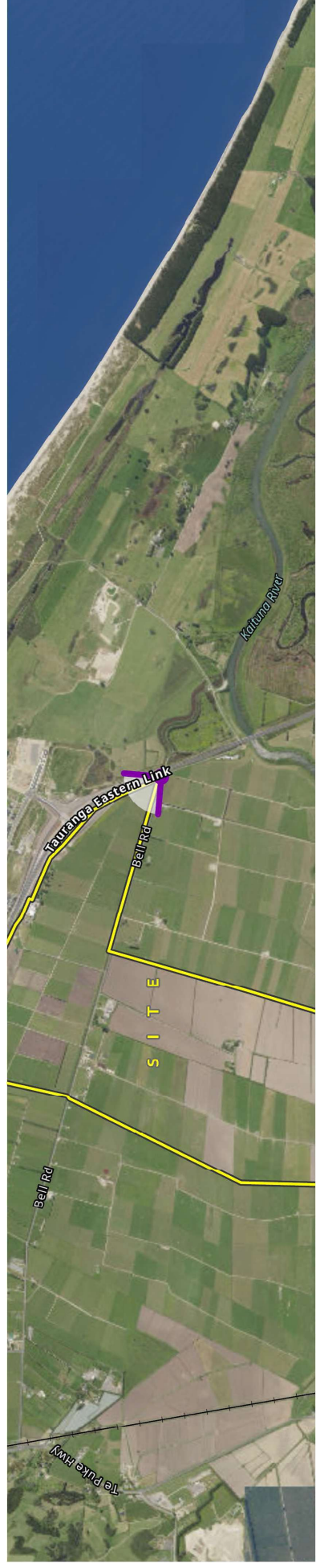
This plan has been prepared by Boffa Miskell Limited on the basis of information provided to the Client. The Client warrants that the information provided is true and correct. The Client is responsible for the application of this plan under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 894 011 mE
 NZTM Northing : 5 818 092 mN
 Elevation/Eye Height : 1.8 m / 1.7 m
 Date of Photography : 15 May 2025 2:30 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN
View Eastward within Site toward Wairakei, near 362 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



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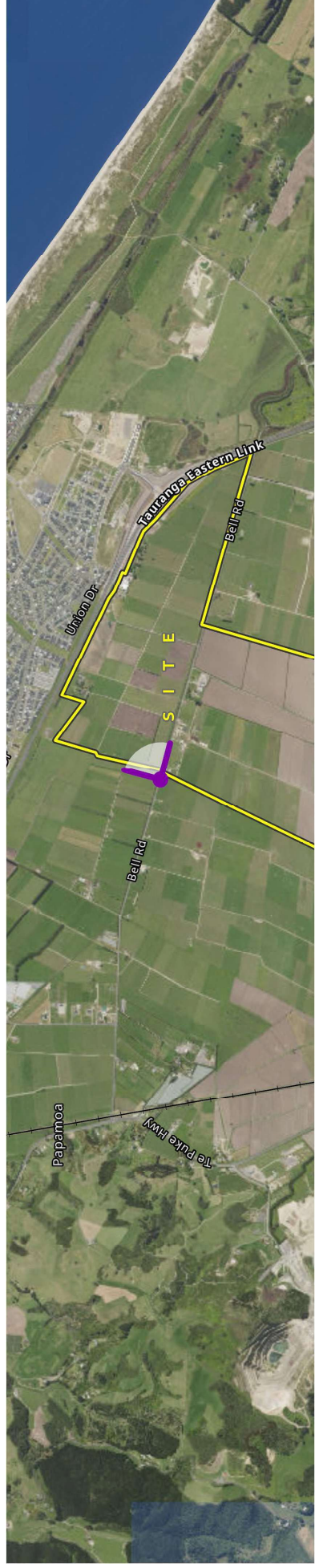
Viewpoint Details

NZTM Easting : 1 885 356 mE
 NZTM Northing : 5 817 700 mN
 Elevation/Eye Height : 2.2 m / 7.17 m
 Date of Photography : 15 May 2025 2:33 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Northwestward at Site's Eastern Extremity toward Wairakei, near 462 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: J.Wa | Checked: B.Sa



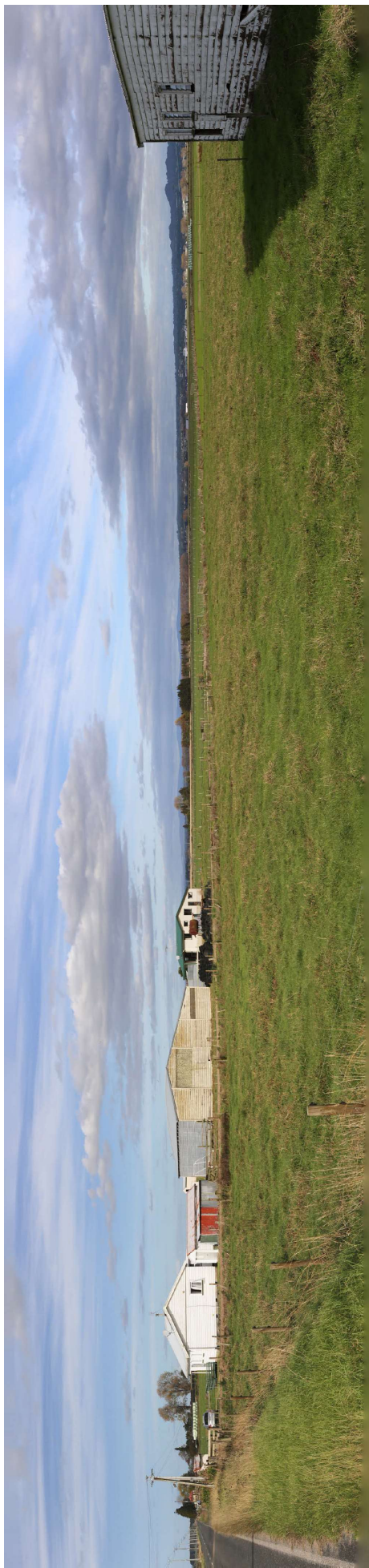
Viewpoint Details

NZTM Easting : 1 893 054 mE
 NZTM Northing : 5 818 356 mN
 Elevation/Eye Height : 2.4 m / 1.7 m
 Date of Photography : 15 May 2025 2:39 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Eastward on Site's Western Boundary toward Wairakei, near 228 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA

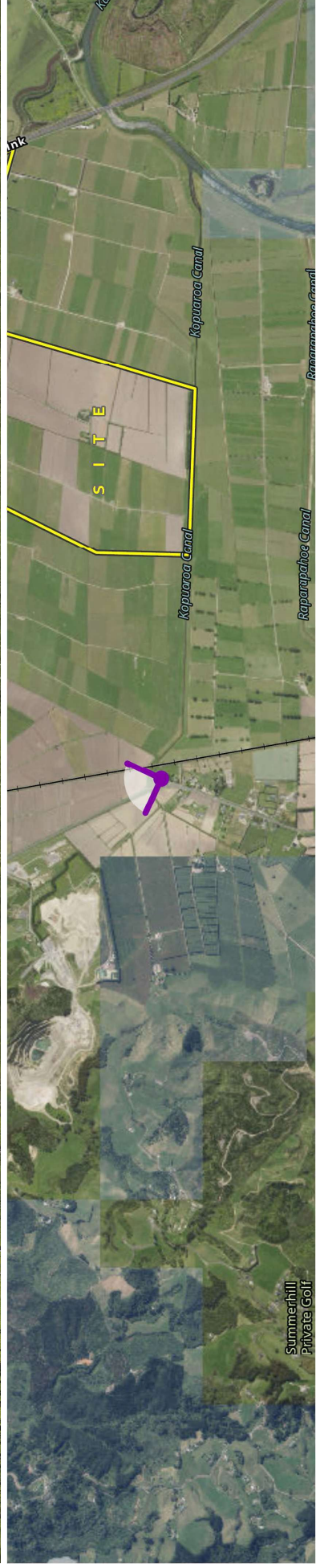


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Viewpoint Details
 NZTM Easting : 1 893 054 mE
 NZTM Northing : 5 818 956 mN
 Elevation/Eye Height : 2.4 m / 1.7 m
 Date of Photography : 15 May 2025 2:39 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN
View Southward on Site's Western Boundary toward Te Puke, opposite 250 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSa



Summerhill
Private Golf

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Viewpoint Details

NZTM Easting : 1 890 937 mE
 NZTM Northing : 5 816 690 mN
 Elevation/Eye Height : 5.3 m / 1.7 m
 Date of Photography : 15 May 2025 2:47 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Northward toward Papamoa Hills, near 501 Te Puke Highway

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



Summerhill
Private Golf

This plan has been prepared by Boffa Miskell Limited on the basis of information provided by the Client. The Client warrants that the information provided is true and correct. Boffa Miskell Limited is not responsible for any errors or omissions in this plan, or for any consequences arising from the use of this plan, if it does not accord liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details
 NZTM Easting : 1 890 937 mE
 NZTM Northing : 5 816 690 mN
 Elevation/Eye Height : 5.3 m / 1.7 m
 Date of Photography : 15 May 2025 2:51 p.m. NZST



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Viewpoint Details

NZTM Easting : 1 890 155 mE
 NZTM Northing : 5 817 700 mN
 Elevation/Eye Height : 36.3 m / 11.7 m
 Date of Photography : 15 May 2025 3:08 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN
 View Eastward toward Site, Papamoa Hills Regional Park Trail near Carpark

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



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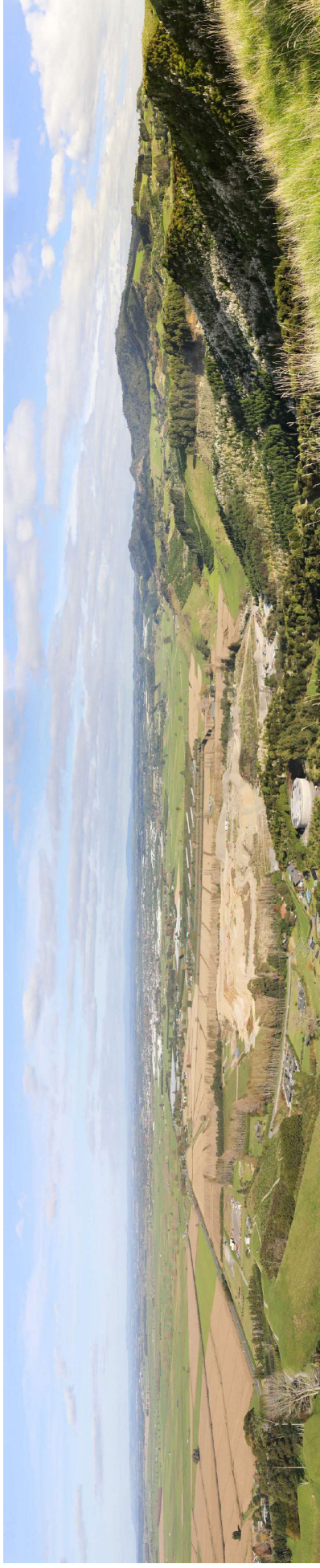
Waypoint Details

NZTM Easting : 1 889 620 mE
 NZTM Northing : 5 818 306 mN
 Elevation/Eye Height : 175.2 m / 1.7 m
 Date of Photography : 15 May 2025 3:25 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Eastward toward Site, Papamoa Hills Regional Park Summit

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: J.Wa | Checked: BSA



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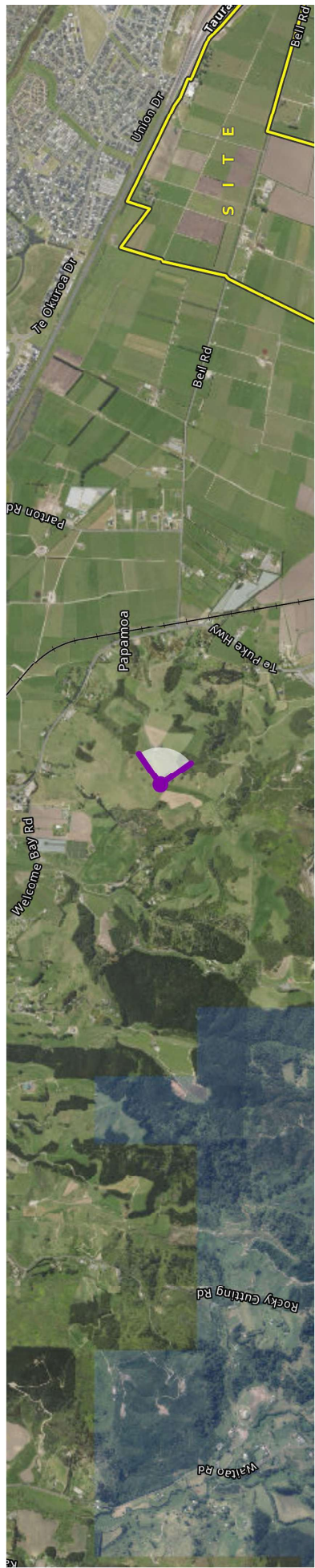
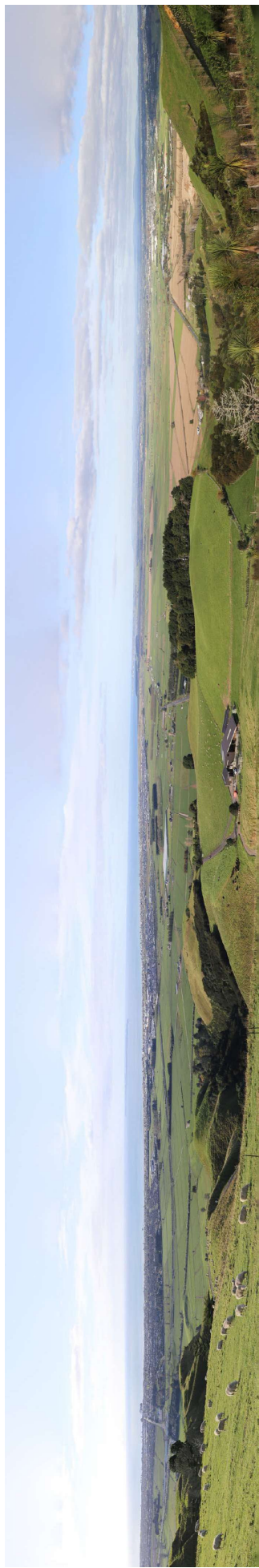
Viewpoint Details

NZTM Easting : 1 889 627 mE
 NZTM Northing : 5 818 309 mN
 Elevation/Eye Height : 174.1 m / 1.7 m
 Date of Photography : 15 May 2025 3:26 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Southward toward Te Puke, Papamoa Hills Regional Park Summit

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: J.Wa | Checked: BSA



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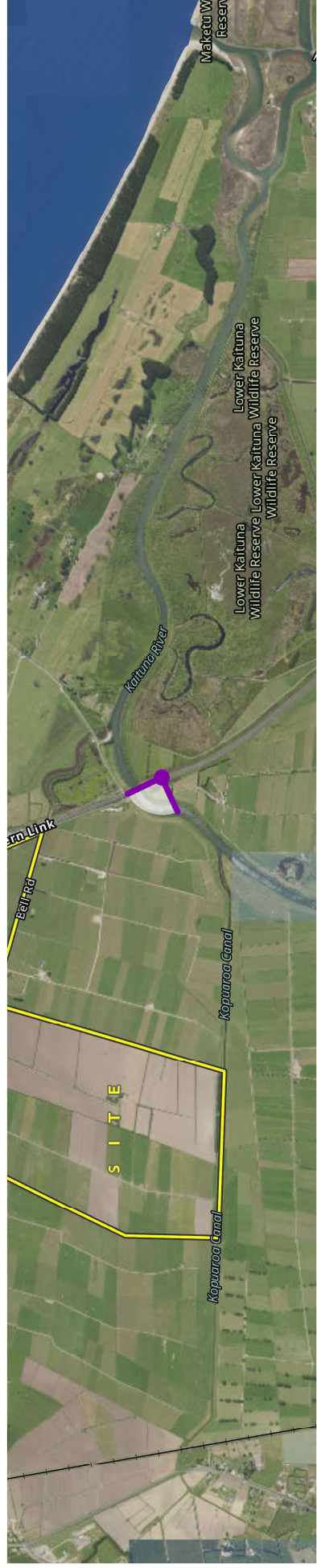
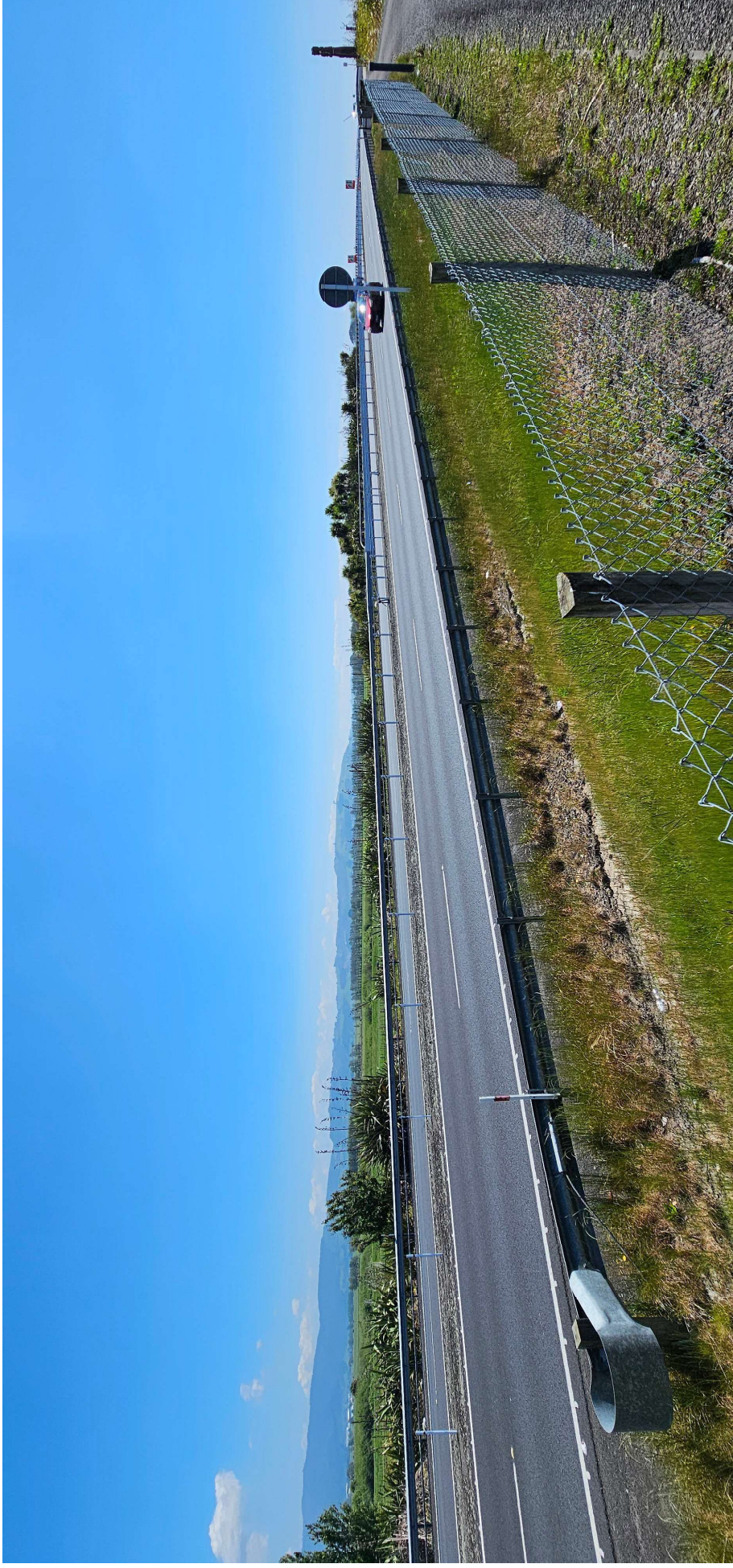
Viewpoint Details

NZTM Easting : 1 889 865 mE
 NZTM Northing : 5 818 615 mN
 Elevation/Eye Height : 200.1 m / 4.7 m
 Date of Photography : 15 May 2025 3:40 p.m. NZST

WAIRAKEI SOUTH MASTERPLAN

View Eastward toward Site, Papamoa Hills Regional Park Northern Trail

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



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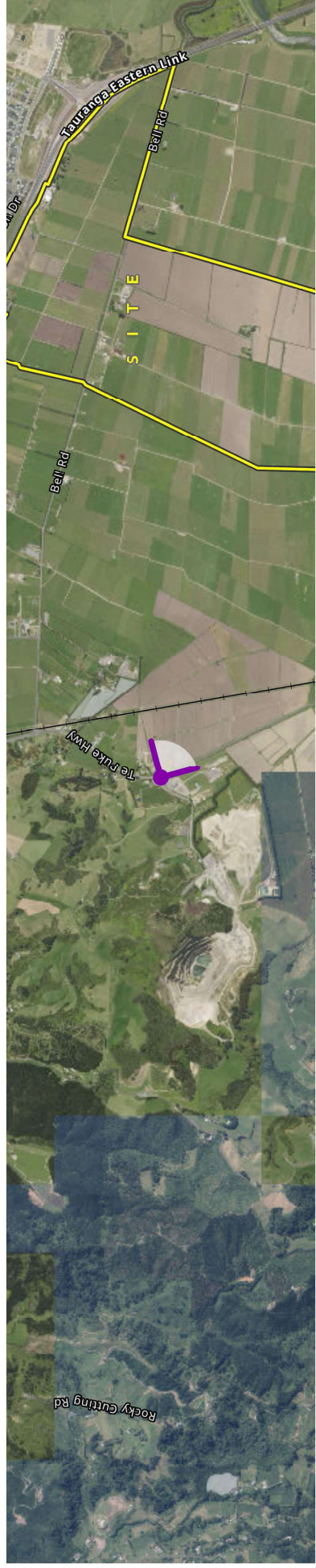
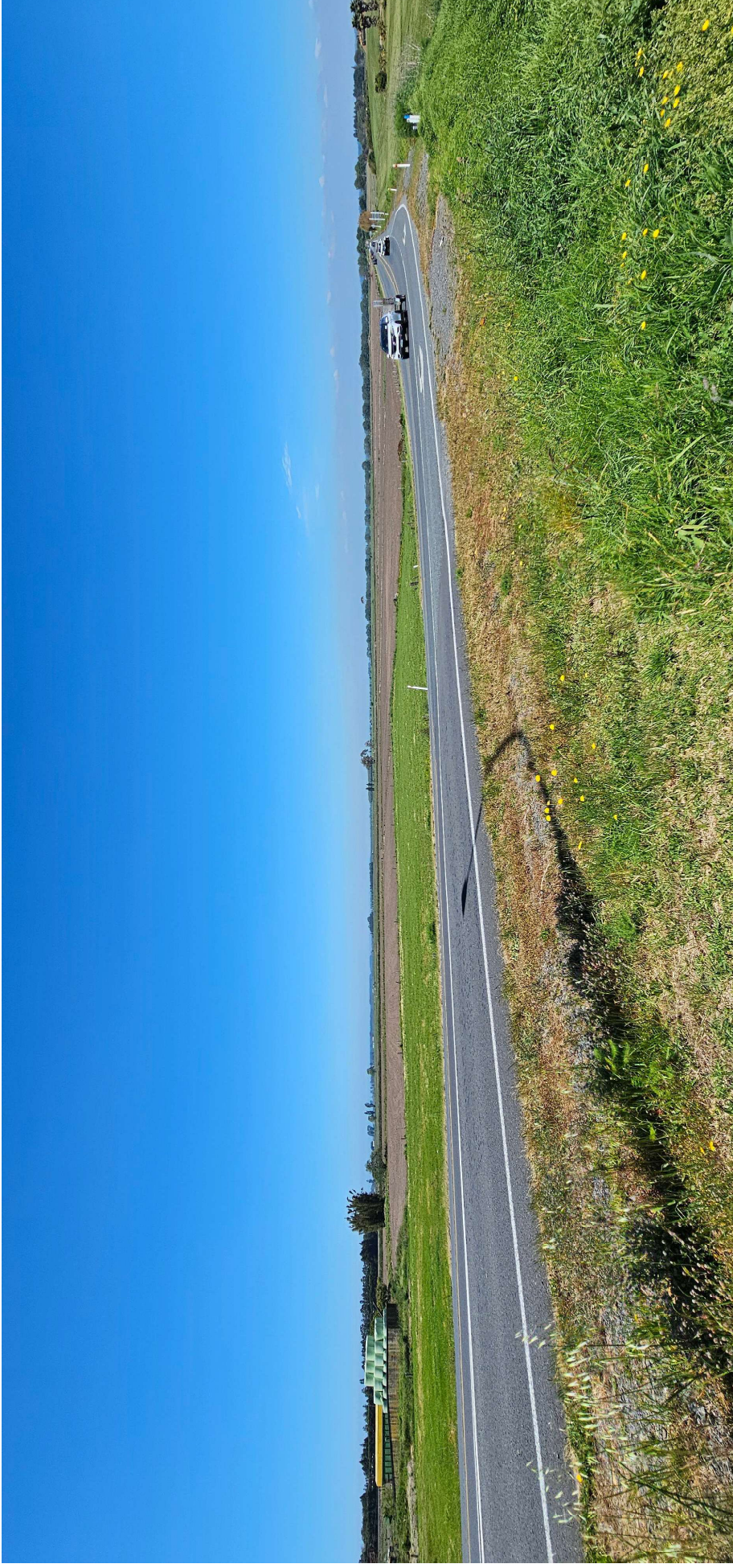
Viewpoint Details

NZTM Easting : 1 895 716 mE
 NZTM Northing : 5 816 890 mN
 Elevation/Eye Height : 7.9 m / 1.7 m
 Date of Photography : 6 Nov 2025 2:16 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN

View Westward toward Site from Kaituna River-Tauranga Eastern Link Bridge

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted]
 Drawn: JMa | Checked: BSA

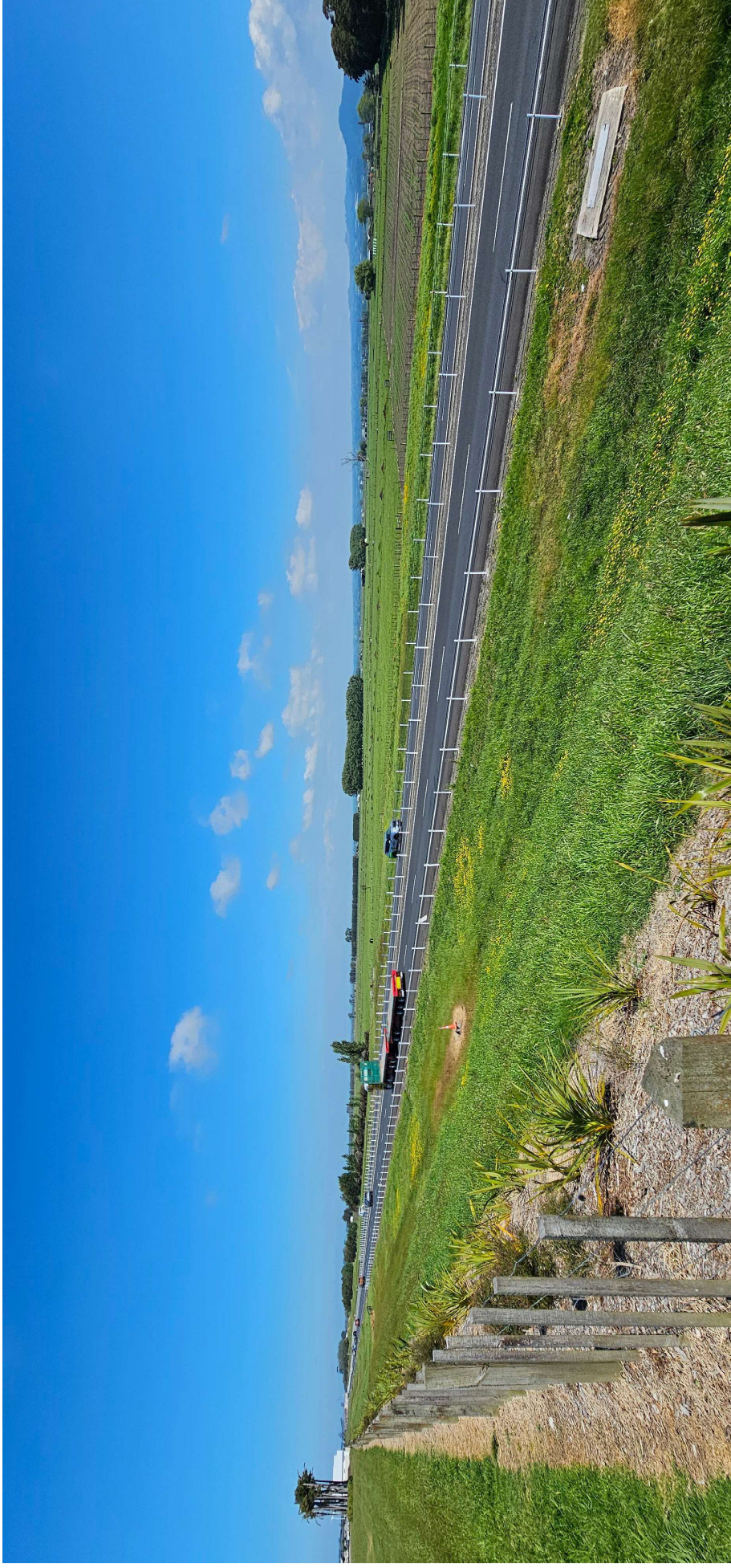


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Viewpoint Details
NZTM Easting : 1 890 360 mE
NZTM Northing : 5 817 817 mN
Elevation/Eye Height : 8.1 m / 1.7 m
Date of Photography : 6 Nov 2025 1:46 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN
View Southeastward toward Site and Te Puke from Poplar Lane-Te Puke Highway Intersection

Date: 30 October 2025 | Revision: 0
Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



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Viewpoint Details

NZTM Easting : 1 892 626 mE
 NZTM Northing : 5 819 640 mN
 Elevation/Eye Height : 7 m / 1.7 m
 Date of Photography : 6 Nov 2025 3:06 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN

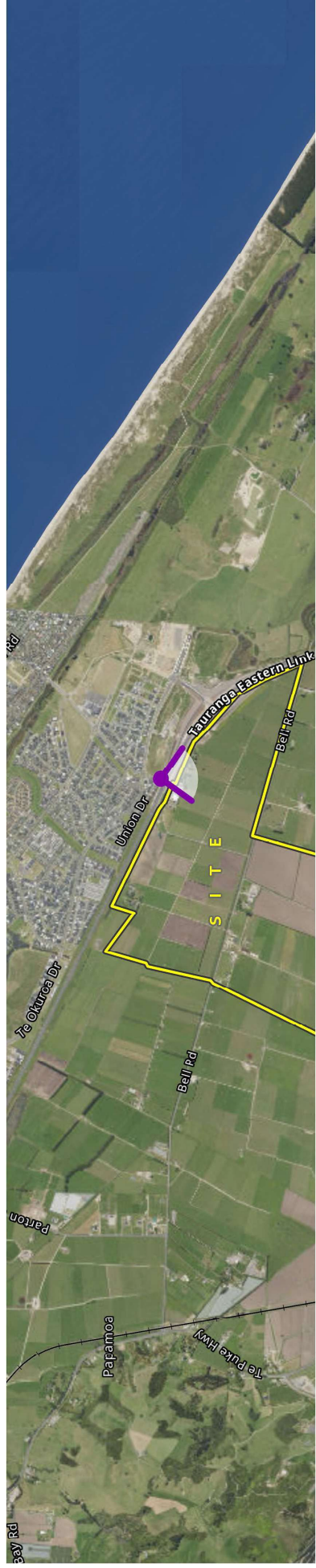
View Southeastward toward Site from 78 Te Okuroa Drive

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



Viewpoint Details
 NZTM Easting : 1 893 352 mE
 NZTM Northing : 5 819 436 mN
 Elevation/Eye Height : 5.6 m / 1.7 m
 Date of Photography : 6 Nov 2025 9:24 p.m. NZDT

This plan has been prepared by Boffa Miskell Limited on the basis of information supplied to the Client. It is intended to support the Client's application under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.



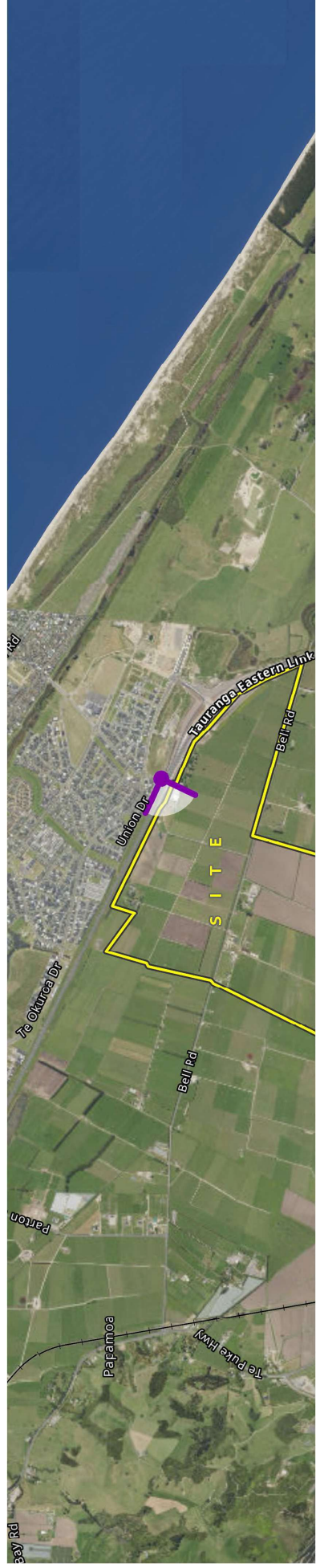
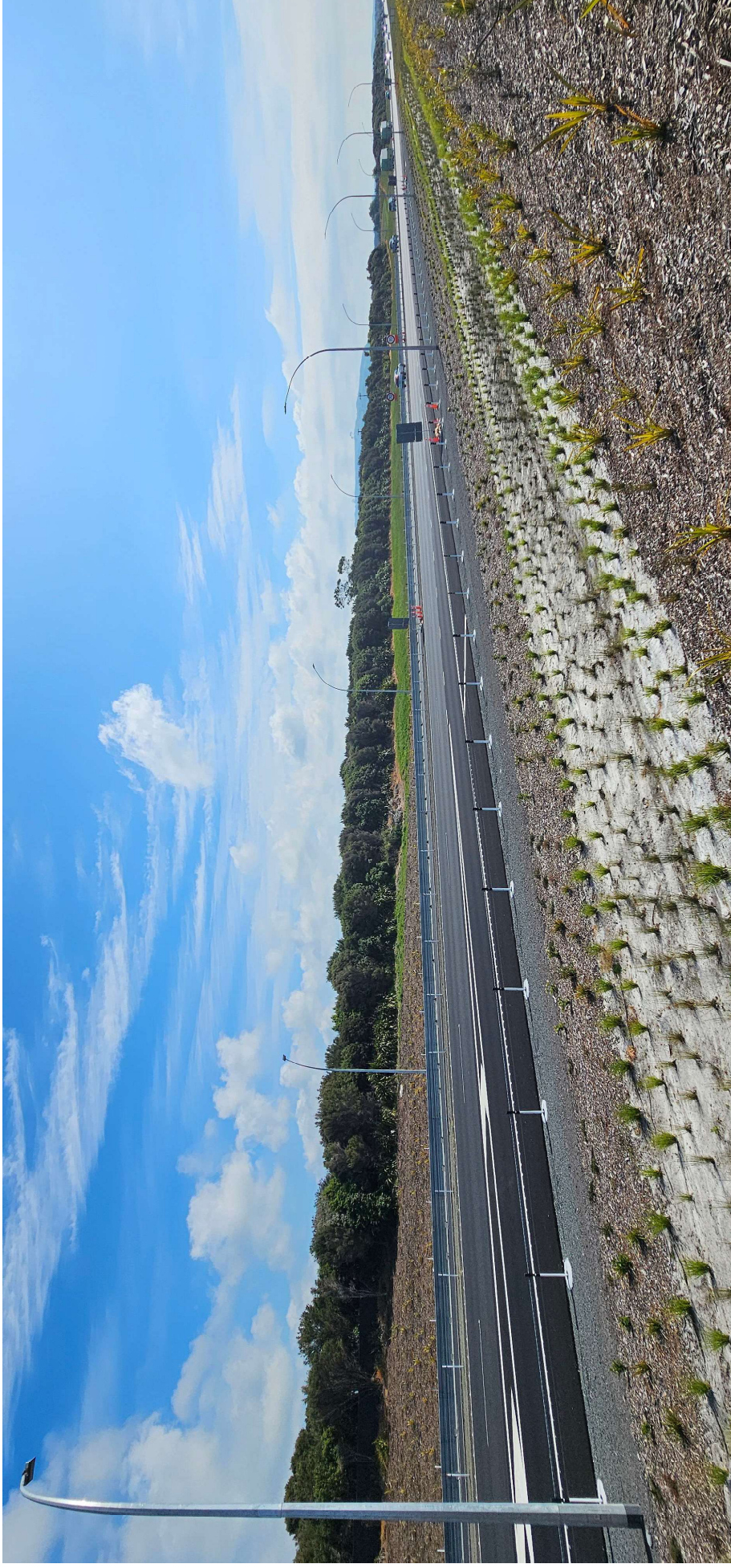
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Viewpoint Details
NZTM Easting : 1 884 534 mE
NZTM Northing : 5 818 705 mN
Elevation/Eye Height : 5 m / 1.7 m
Date of Photography : 6 Nov 2025 3:42 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN

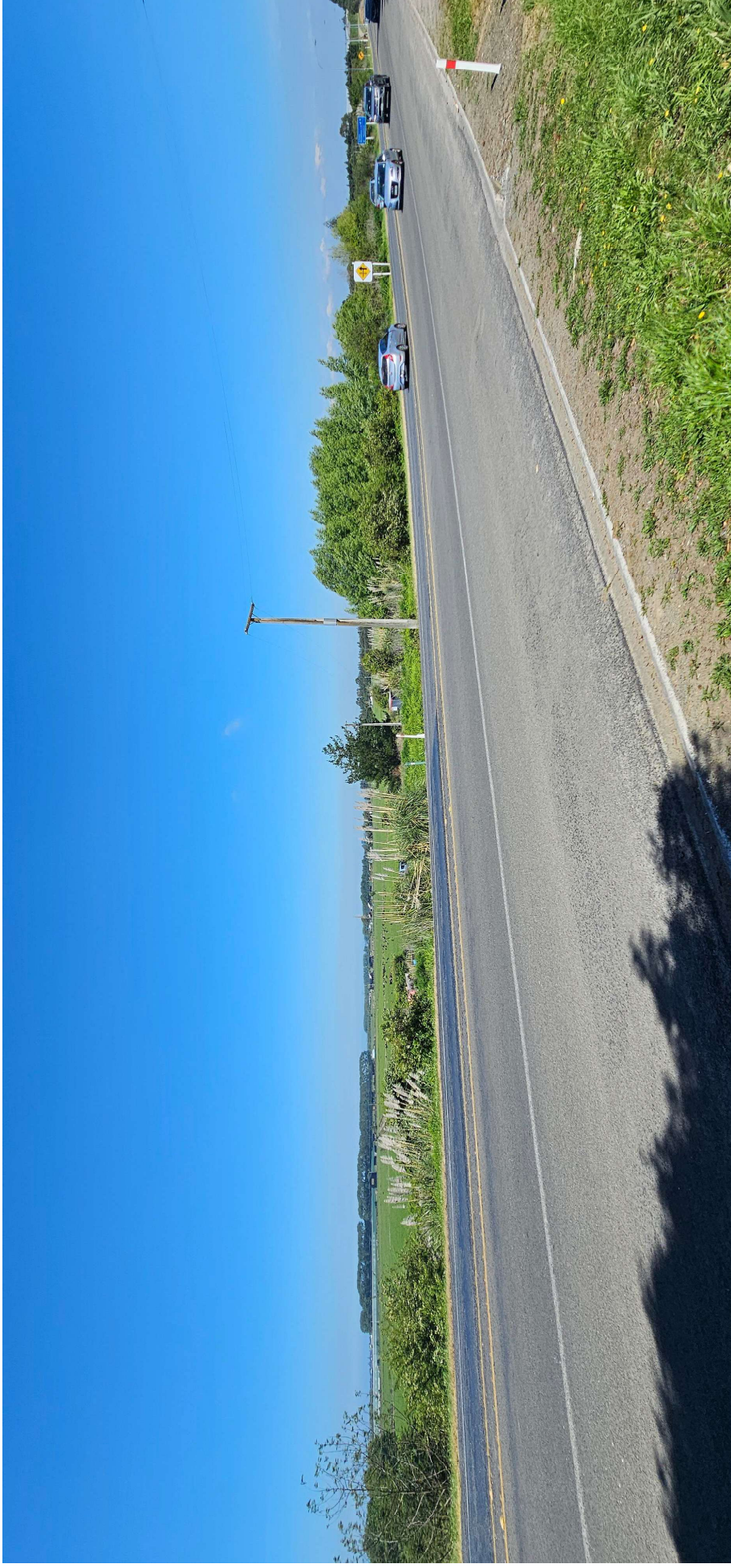
View Southeastward toward Site from 148 Te Okuroa Drive

Date: 30 October 2025 | Revision: 0
Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
Project Manager: [Redacted] | Drawn: J.Wa | Checked: BSA



Viewpoint Details
 NZTM Easting : 1 894 534 mE
 NZTM Northing : 5 818 705 mN
 Elevation/Eye Height : 5 m / 1.7 m
 Date of Photography : 6 Nov 2025 3:43 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN
View Southwestward toward Site from 148 Te Okuroa Drive
 Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



This plan has been prepared by Boffa Miskell Limited on the basis of information provided to it by the Client. It is intended to support the Client's application under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 890 574 mE
 NZTM Northing : 5 819 033 mN
 Elevation/Eye Height : 10.9 m / 1.7 m
 Date of Photography : 6 Nov 2025 2:39 p.m. NZDT

WAIRAKEI SOUTH MASTERPLAN

View Southeastward toward Site from 236 Te Puke Highway

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



This plan has been prepared by Boffa Miskell Limited on the basis of information provided to it by the Client. It is intended to support the Client's application under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 884 221 mE
 NZTM Northing : 5 817 869 mN
 Camera Height : 6.53 m above datum

Legend

- Proposed Zoning - Maximum Building Height Envelope
- 11 metres above ground (residential, commercial)
- 20 metres above ground (industrial)

WAIRAKEI SOUTH MASTERPLAN

Modelled Views Northeastward toward Site from 362 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSa



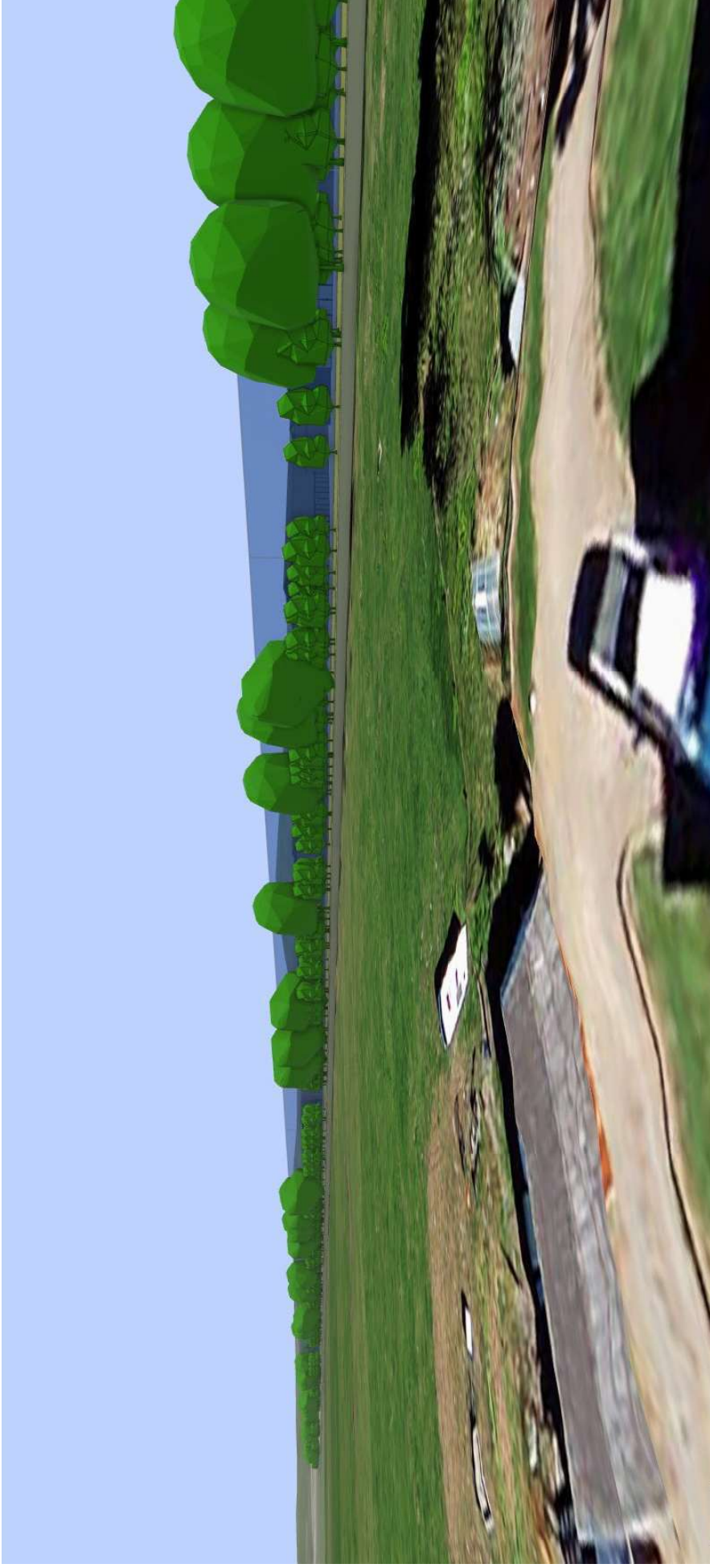
This plan has been prepared by Boffa Miskell Limited on the basis of information provided by the Client. Boffa Miskell Limited does not warrant the accuracy of the information provided by the Client. This plan is intended to support the Client's application under the Resource Management Act 1991 and it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application. Boffa Miskell Limited does not accept liability for any use of this plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 884 221 mE
 NZTM Northing : 5 817 869 mN
 Camera Height : 6.53 m above datum

Proposed Zoning - Maximum Building Height Envelope
 11 metres above ground (residential, commercial)
 20 metres above ground (industrial)

Legend



This plan has been prepared by Boffa Miskell Limited on the basis of information provided by the Client. Boffa Miskell Limited does not warrant the accuracy of the information provided by the Client. This plan is intended to be used for the purposes of assessing the application, and it does not constitute an offer of any services. Boffa Miskell Limited does not accept liability for any use of the plan beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 884 221 mE
 NZTM Northing : 5 817 869 mN
 Camera Height : 6.5 m above datum

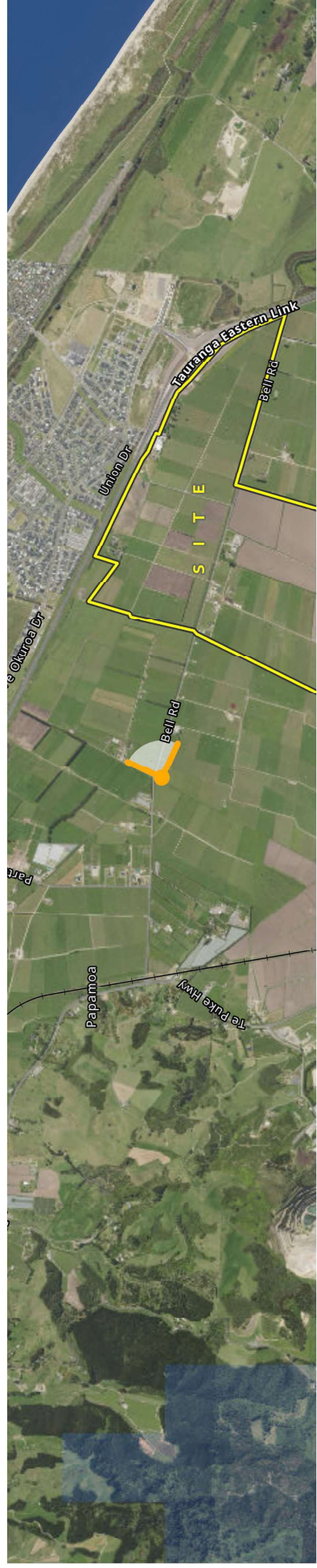
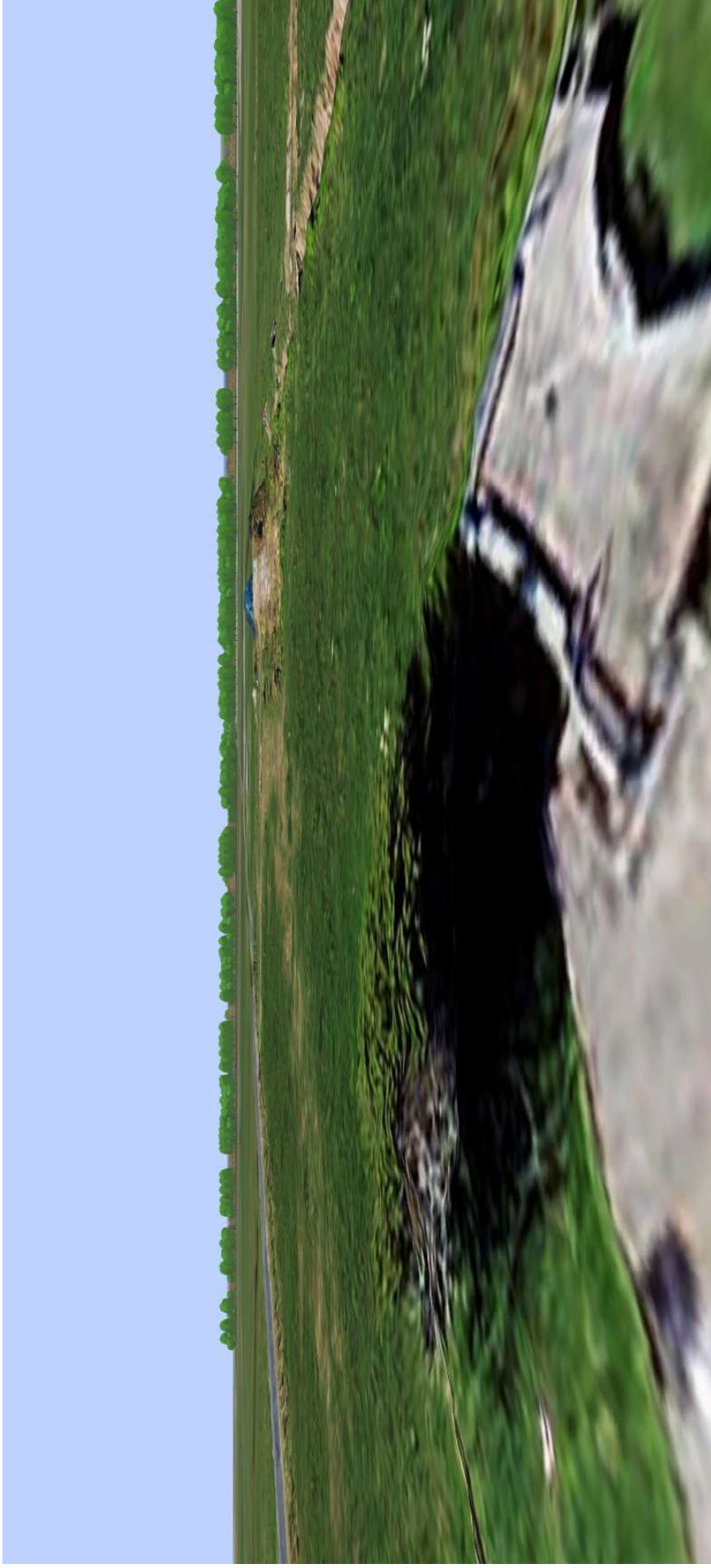
Legend

- Proposed Zoning - Maximum Building Height Envelope
- 11 metres above ground (residential, commercial)
- 20 metres above ground (industrial)

WAIRAKEI SOUTH MASTERPLAN

Modelled View Southwestward toward Site from 362 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA



This plan has been prepared by Boffa Miskell Limited on the basis of information provided by the Client. Boffa Miskell Limited does not accept liability for any use of the plan for any purpose other than that intended. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 892 101 mE
 NZTM Northing : 5 818 578 mN
 Camera Height : 6.0 m above datum

Legend

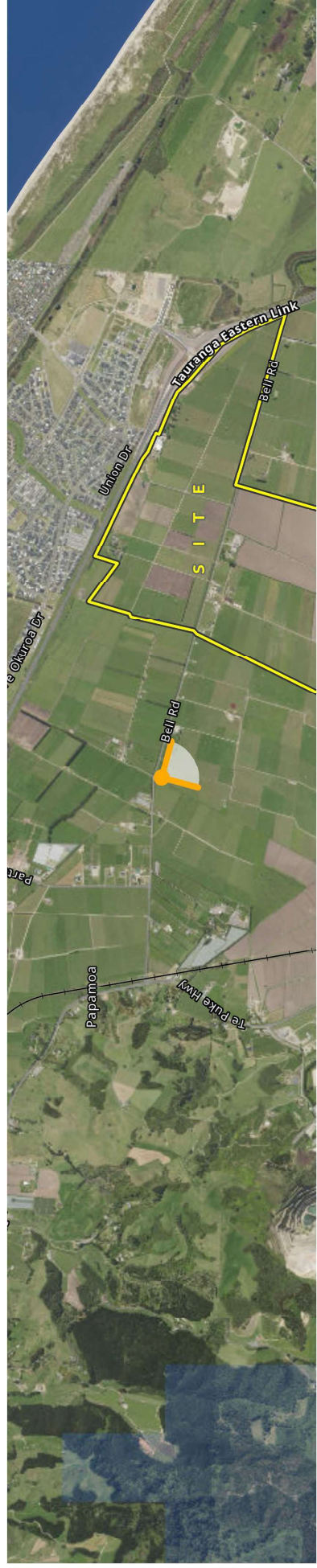
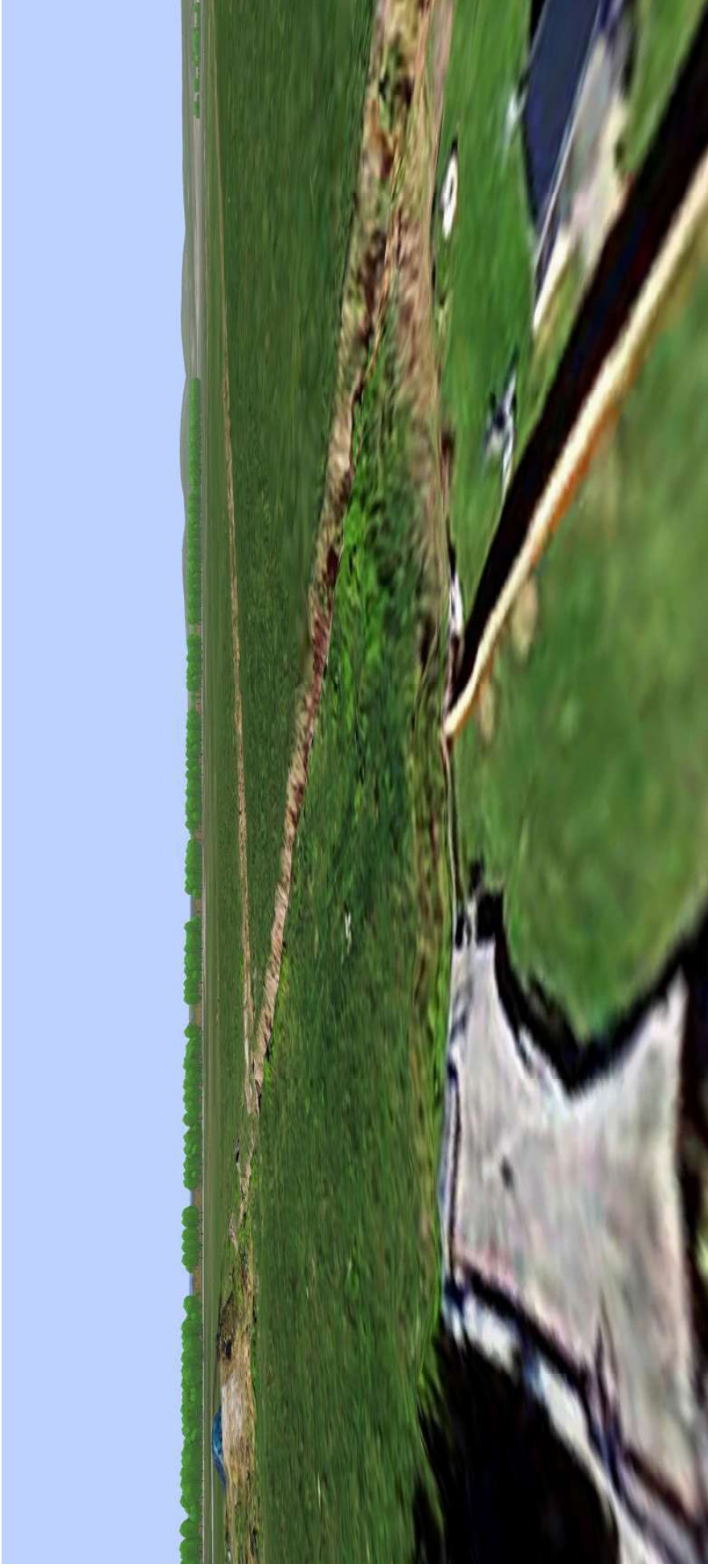
Proposed Zoning - Maximum Building Height Envelope

- 11 metres above ground (residential, commercial)
- 20 metres above ground (industrial)

WAIRAKEI SOUTH MASTERPLAN

Modelled View Eastward toward Site from 144 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: J.Wa | Checked: BSA



This plan has been prepared by Boffa Miskell Limited on the basis of information provided to the Client. The Client warrants that the information is true, correct and complete. Boffa Miskell Limited is not responsible for the use of this plan for any purpose other than that intended. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

Viewpoint Details

NZTM Easting : 1 892 101 mE
 NZTM Northing : 5 818 578 mN
 Camera Height : 6.0 m above datum

Legend

Proposed Zoning - Maximum Building Height Envelope

- 11 metres above ground (residential, commercial)
- 20 metres above ground (industrial)

WAIRAKEI SOUTH MASTERPLAN

Modelled View Southward toward Site from 144 Bell Road

Date: 30 October 2025 | Revision: 0
 Plan prepared for the Bell Road Partnership Limited by Boffa Miskell Limited
 Project Manager: [Redacted] | Drawn: JMa | Checked: BSA

Annexure 3: Landscape Mitigation Plan

Extracted from Appendix E of AEE

2.3 LANDSCAPE MITIGATION

This section outlines the mitigation measures identified in *Appendix K - Assessment of Landscape Effects* prepared by Boffa Miskell for the Wairakei South Development that relate specifically to the stormwater reserves and note the treatments required to manage visual effects and integrate the site within the wider landscape.












The three primary outcomes relating to vegetation within and scale of the reserves are noted as follows:

- 1. LARGE RURAL CANOPY CLUSTERS**
 Incorporation of clusters of large rural canopy trees, a mixture of fast-growing exotic and interplanted with pockets of native revegetation species to provide scale and character to the development that visually integrates it into the surrounding rural landscape. The purpose is to provide an overall visual screening interface of 75% whilst providing angled views outward, from the development, toward Te Rae O Papamoa and the Te Puke Foothills.
- 2. PHYSICAL DISTANCING**
 The use of stormwater reserves for the provision of large canopy vegetation and achieving physical separation from the boundary
- 3. RECONNECT THE SITE TO ITS HISTORICAL INDIGENOUS STATE**
 Establishing vegetation cover in the southern stormwater treatment wetland that provides large groupings of canopy native lowland forest, remnant of the wetland and podocarp forest that dominated this landscape. The purpose is to reconnect the site to its indigenous historical state and provide a strong vegetated framework of canopy vegetation that connects to the 'mountains to sea' connection of vegetation cover. This is critical to the enhancement of landscape values to the underlying abiotic and biotic attributes within the landscape.

- 4. VISUAL DOMINANCE**
 Ensuring built form avoids visual dominance in the landscape by way of colour, building branding methods, signage and spot lighting (illuminated signage) at the boundary interfaces.

Ensure building setbacks and height controls at boundary interface.

LEGEND

-  SITE BOUNDARY
-  RESIDENTIAL (MDR2) ZONE
-  EMPLOYMENT (INDUSTRIAL)
-  SERVICE CENTRE (COMMERCIAL)
-  NEIGHBOURHOOD & LOCAL CENTRES (COMMERCIAL)
-  PRIMARY SCHOOL
-  STORMWATER RESERVE
-  NEIGHBOURHOOD RESERVES / GREEN LINKS / STORMWATER CONNECTIONS
-  LANDSCAPE MITIGATION OUTCOMES 1 & 2 AREAS¹
-  LANDSCAPE MITIGATION OUTCOME 3 AREA¹
-  LANDSCAPE MITIGATION OUTCOME 4 AREA²

NOTES:

- Detail on how the above are measures are applied to the design response can be found in the following pages.
- Refer to Industrial Zone Design Guidelines for more information and visuals on these mitigation provisions



PLANTING STRATEGY

There are several swales running through Wairakei South Development, all of which will be serving multiple purposes within the development, including the conveyance and treating of stormwater, provide general open space and amenity, and support active mode transport with a network of shared pathways. These are true blue/green networks.

Generally, the swale bases will all be fully planted due to their close proximity to the water table, which will provide water treatment and ecological habitat. These will be planted with low growing wetland plants that support this environment and ensure open sightlines are retained. The slopes which are out of the regular floodable areas will mostly be grassed, providing open space for passive recreation opportunities.

Clusters and individual placement of specimen trees will be scattered throughout the swale corridors, on the swale floors, and slopes to provide shade, amenity, and attract birds into the area. Most trees are to be native species, with some larger stature, faster growing exotics proposed for the corridors on the edges of the development area.

Careful placement of trees and shrubs will ensure open sightlines are retained, shade is made available to residents and the overall amenity of the reserve network is of a high standard. Where possible all plant species are to be native and sourced from the local ecological district to ensure good establishment and extension of natural habitat.

Tree placement has also been coordinated with civil design to ensure there are no conflicts with underground services for those located within the swale network.

PLANTING PALETTES

The below is a list of proposed trees and groundcover plants that are suitable to be used in the streetscape (berms) within this street classification and are shown as a guide to. Final selections are to be confirmed at Engineering Approval stage and subject to further engagement with Iwi, and council review.

RIPARIAN



| |
|--|
| Aristotelia serrata / Makomako |
| Austroderia fulvida / Toetoe |
| Carex maorica / Maori Sedge |
| Carex secta / Purei |
| Carex testacea / Sepckled Sedge |
| Coprosma repens / Mirror Plant |
| Coprosma robusta / Karamu |
| Dianella nigra / Turutu |
| Dodonaea viscosa / Akeake |
| Kunzea robusta / Kanuka |
| Leptospermum scoparium / Manuka |
| Muehlenbeckia complexa / Small Leaved Pohuehue |
| Phormium tenax / Haraakeke |
| Veronica stricta / Koromiko |

TREES



| |
|--------------------------------------|
| Agathis australis / Kauri |
| Alectryon excelsus / Titoki |
| Coprosma lucida / Karamu |
| Cordyline australis / Tī Kōuka |
| Dacrycarpus dacrydioides / Kahikatea |
| Knightia excelsa / Rewarewa |
| Myoporum laetum / Ngaio |
| Myrsine australis / Mapou |
| Plagianthus regius / Ribbonwood |
| Podocarpus totara / Totara |
| Prumnopitys ferruginea / Miro |
| Prumnopitys taxifolia / Matai |
| Sophora microphylla / Kowhai |
| Syzygium maire / Maire Tawaki |
| Vitex lucens / Puriri |

SWALE TREATMENT



| |
|---|
| Apodasmia similis / Oioi |
| Astelia grandis |
| Austroderia fulvida / Toetoe |
| Austroderia toetoe / Toetoe |
| Carex Geminata / Rautahi |
| Carex Lessoniana / Cutty Grass |
| Carex Maorica / NZ Sedge |
| Carex virgata / Swamp Sedge |
| Coprosma propinqua / Mingimingi |
| Coprosma tenuicaulis / Hukihuki, Swamp Coprosma |
| Coprosma tenuifolia / Wavy-Leaved Coprosma |
| Cyperus ustulatus / Giant Umbrella Sedge |
| Eleocharis acuta / Sharp Spike Sedge |
| Elocharis sphacelata / Bammbuo Spike Sedge |
| Juncus australis / Leafless Rush |
| Juncus edgariae / Edgar's Rush |
| Juncus pallidus / Giant Rush |
| Machaerina articulata / Jointed Twig Rush |
| Machaerina juncea / Bare Twig-Rush |
| Machaerina tenax |
| Phormium tenax / Haraakeke |
| Veronica stricta / Koromiko |

TREES - MITIGATION SPECIES:



| |
|---------------------------------------|
| Agathis australis / Kauri |
| Alectryon excelsus / Titoki |
| Coprosma lucida / Karamu |
| Corynocarpus laevigatus / Karaka |
| Knightia excelsa / Rewarewa |
| Liquidambar styraciflua / Liquidambar |
| Populus nigra / Poplar |
| Quercus robur / English Oak |

2.4.4.2 STORMWATER SWALE PLANTING

3D VISUAL OF SWALE CORRIDOR (SWALE N3)

This profile illustrates how the swales function as an integrated asset for the development. Accommodating stormwater runoff, treatment, biodiversity, and amenity. Swale N3 is 25m wide.

KEY

- 1 RESIDENTIAL LOTS ¹
- 2 RESIDENTIAL ROAD CORRIDOR
- 3 SWALE BASE WITH LOWFLOW CHANNEL
- 4 SWALE / TREATMENT PLANTING
- 5 SHADE / AMENITY TREES ²
- 6 SHARED PATHWAYS (ON STREET)
- 7 MID BLOCK CROSSINGS
- 8 GRASSED AREAS (UPPER SWALE)
- 9 GREEN LINK CONNECTIONS



NOTES:

1. Refer to the Residential, Commercial and Industrial Design Guides for how the adjoining land interfaces with these swale corridors, particularly with regards to fencing controls, landscape treatments, CPTED considerations, etc.
2. Trees located within the swale floor are to have clear main stems for the bottom 0.5m at time of install and are to be of species that maintain a clear stem for the bottom 1m once mature to ensure stormwater can flow around them cleanly.

2.4.4 STORMWATER SWALE PLANTING

3D VISUAL OF SWALE CORRIDOR (SWALE N5)

This profile illustrates how the swales function as an integrated asset for the development. Accommodating stormwater runoff, treatment, biodiversity, amenity, open space and shared pathway network and includes a diversion corridor. Swale N5 width varies from 30-90m wide.

KEY

- 1 RESIDENTIAL LOTS¹
- 2 RURAL LAND
- 3 SWALE BASE WITH LOWFLOW CHANNEL
- 4 SWALE / TREATMENT PLANTING
- 5 SHADE / AMENITY TREES⁴
- 6 MITIGATION TREE GROUPINGS^{3,4}
- 7 SHARED PATHWAYS²
- 8 GRASSED AREAS (UPPER SWALE)



NOTES:

1. Refer to the Residential, Commercial and Industrial Design Guides for how the adjoining land interfaces with these swale corridors, particularly with regards to fencing controls, landscape treatments, CPTED considerations, etc.
2. Shared pathways are located above the 1:100 year event RL in most instances, with some sections dropping to accommodate mid block crossings and enable the inclusion of curves in the alignment, but will sit above 1:50 year event RL as a minimum performance standard (and align with Western Bay of Plenty District Council's Development Code)
3. Refer to Sheet 3.2 Landscape Mitigation, and Assessment of Landscape Effects Report for more detail on mitigation requirements
4. Trees located within the swale floor are to have clear main stems for the bottom 0.5m at time of install and are to be of species that maintain a clear stem for the bottom 1m once mature to ensure stormwater can flow around them cleanly.

2.4.6 STORMWATER SWALE PLANTING

3D VISUAL OF SWALE CORRIDOR (SWALE S1)

This profile illustrates how the swales function as an integrated asset for the development. Accommodating stormwater runoff, treatment, biodiversity, amenity, open space and shared pathway network and includes a diversion corridor. Swale S1 varies from 78-175m wide.

KEY

- 1 RESIDENTIAL LOTS ¹
- 2 RURAL LAND
- 3 STORMWATER DIVERSION CHANNEL
- 4 SWALE BASE WITH LOWFLOW CHANNEL
- 5 SWALE / TREATMENT PLANTING
- 6 SHADE / AMENITY TREES ³
- 7 MITIGATION TREE & SHRUB GROUPINGS ^{3,4}
- 8 SHARED PATHWAYS ²
- 9 GRASSED AREAS (UPPER SWALE)
- 10 GREEN LINKS



NOTES:

1. Refer to the Residential, Commercial and Industrial Design Guides for how the adjoining land interfaces with these swale corridors, particularly with regards to fencing controls, landscape treatments, CPTED considerations, etc.
2. Shared pathways are located above the 1:100 year event RL in most instances, with some sections dropping to accommodate mid block crossings and enable the inclusion of curves in the alignment, but will sit above 1:50 year event RL as a minimum performance standard (and align with Western Bay of Plenty District Council's Development Code)
3. Refer to Sheet 2.3 Landscape Mitigation, and Assessment of Landscape Effects Report for more detail on mitigation outcomes.
4. Trees located within the swale floor are to have clear main stems for the bottom 0.5m at time of install and are to be of species that maintain a clear stem for the bottom 1m once mature to ensure stormwater can flow around them cleanly.

2.4.7 STORMWATER SWALE PLANTING

3D VISUAL OF SWALE CORRIDOR (SWALE S2)

This profile illustrates how the swales function as an integrated asset for the development. Accommodating stormwater runoff, treatment, biodiversity, amenity, and shared pathway network. Swale S2 is 50m wide.

KEY

- 1 NEIGHBOURHOOD CENTRE (COMMERCIAL)¹
- 2 BELL ROAD COLLECTOR
- 3 SWALE BASE WITH LOWFLOW CHANNELS
- 4 SWALE / TREATMENT PLANTING
- 5 SHADE / AMENITY TREES³
- 6 SHARED PATHWAYS (ON & OFF-ROAD)²
- 7 MID BLOCK CROSSINGS
- 8 SWALE NS
- 9 GRASSED AREAS (UPPER SWALE)



NOTES:

1. Refer to the Residential, Commercial and Industrial Design Guides for how the adjoining land interfaces with these swale corridors, particularly with regards to fencing controls, landscape treatments, CPTED considerations, etc.
2. Shared pathways are located above the 1:100 year event RL in most instances, with some sections dropping to accommodate mid block crossings and enable the inclusion of curves in the alignment, but will sit above 1:50 year event RL as a minimum performance standard (and align with Western Bay of Plenty District Council's Development Code)
3. Trees located within the swale floor are to have clear main stems for the bottom 0.5m at time of install and are to be of species that maintain a clear stem for the bottom 1m once mature to ensure stormwater can flow around them cleanly.

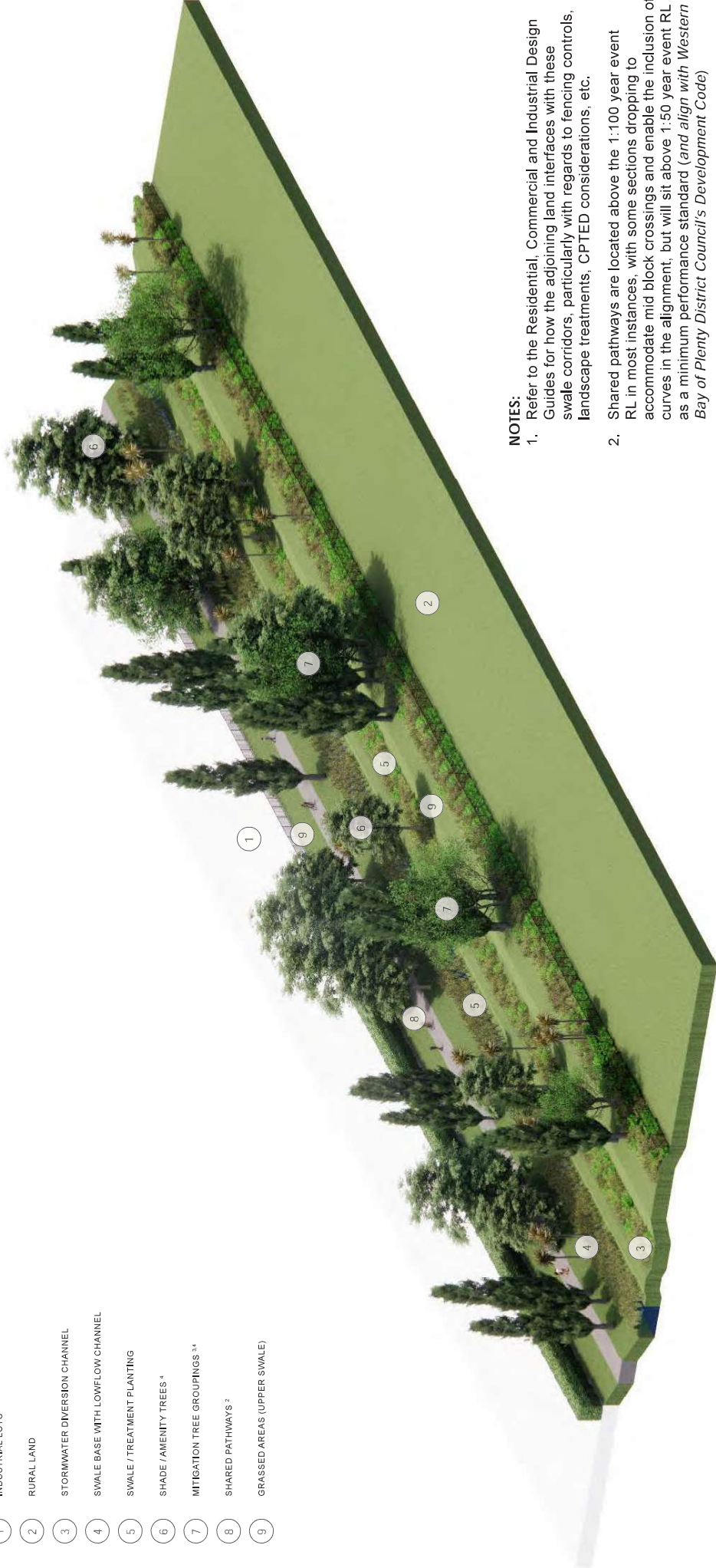
2.4.8 STORMWATER SWALE PLANTING

3D VISUAL OF SWALE CORRIDOR (SWALE S3)

This profile illustrates how the swales function as an integrated asset for the development. Accommodating stormwater runoff, treatment, biodiversity, amenity, open space and shared pathway network. Swale S3 is 35m wide.

KEY

- 1 INDUSTRIAL LOTS¹
- 2 RURAL LAND
- 3 STORMWATER DIVERSION CHANNEL
- 4 SWALE BASE WITH LOWFLOW CHANNEL
- 5 SWALE / TREATMENT PLANTING
- 6 SHADE / AMENITY TREES⁴
- 7 MITIGATION TREE GROUPINGS^{3,4}
- 8 SHARED PATHWAYS²
- 9 GRASSED AREAS (UPPER SWALE)



NOTES:

1. Refer to the Residential, Commercial and Industrial Design Guides for how the adjoining land interfaces with these swale corridors, particularly with regards to fencing controls, landscape treatments, CPTED considerations, etc.
2. Shared pathways are located above the 1:100 year event RL in most instances, with some sections dropping to accommodate mid block crossings and enable the inclusion of curves in the alignment, but will sit above 1:50 year event RL as a minimum performance standard (and align with Western Bay of Plenty District Council's Development Code)
3. Refer to Sheet 3.2 Landscape Mitigation, and Assessment of Landscape Effects Report for more detail on mitigation requirements
4. Trees located within the swale floor are to have clear main stems for the bottom 0.5m at time of install and are to be of species that maintain a clear stem for the bottom 1m once mature to ensure stormwater can flow around them cleanly.

PLANTING STRATEGY

Wairakei South has two large stormwater attenuation areas that manage runoff coming from the development and the wider catchment upstream of the site. The primary stormwater treatment for the development is achieved through the vegetated stormwater conveyance swales, therefore the two wetland areas are not needed to service this function, but they are still needed for attenuation capacity during larger rain events.

Due to their low-lying nature of the ground levels which is required to maximise storage volume, they are not suitable for secondary recreation functions such as open space, sports fields, etc. Instead, these management areas support wider ecological and cultural outcomes, improves the water quality (in addition to the treatment swales), increases resilience and provides a high level of amenity to the development.

All management areas are to be planted with native species that specialise in these environments and are proven to successfully treat stormwater runoff. All other areas which are out of the regular floodable areas will mostly be grassed, providing open space for passive recreation opportunities (where suitable to do so).

Clusters and individual specimen trees will be scattered throughout the wetland to provide scale, shade, amenity, and attract birds into the area. Most trees are to be native species, with some larger stature, faster growing exotics proposed for the corridors on the edges of the development area to support the landscape visual mitigation requirements.

Where possible all native plant species will be sourced from the local suppliers with seed sourced within the local ecological district to ensure good establishment and extension of natural habitat.

PLANTING PALETTES

The below is a list of proposed trees shrubs and groundcover plants that are suitable to be used in the stormwater management areas. Final selections are to be confirmed at Engineering Approval stage and subject to further engagement with Iwi, and council review.

RIPARIAN



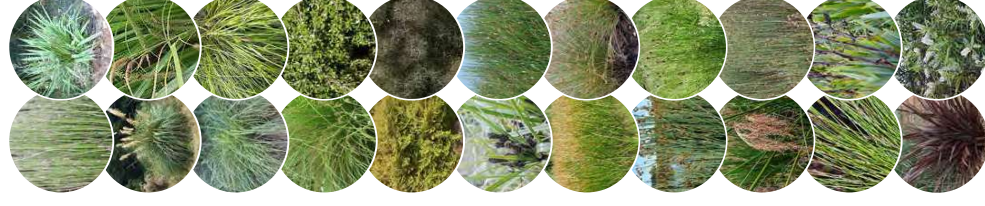
| |
|--|
| Aristotelia serrata / Makomako |
| Austroderia fulvida / Toetoe |
| Carex maorica / Maori Sedge |
| Carex secta / Purei |
| Carex testacea / Sepckled Sedge |
| Coprosma repens / Mirror Plant |
| Coprosma robusta / Karamu |
| Dianella nigra / Turutu |
| Dodonaea viscosa / Akeake |
| Kunzea robusta / Kanuka |
| Leptospermum scoparium / Manuka |
| Muehlenbeckia complexa / Small Leaved Pohuehue |
| Phormium tenax / Harakeke |
| Veronica stricta / Koromiko |

TREES



| |
|--------------------------------------|
| Agathis australis / Kauri |
| Alcyon excelsus / Titoki |
| Coprosma lucida / Karamu |
| Cordyline australis / Tī Kōuka |
| Dacrycarpus dacrydioides / Kahikatea |
| Knightia excelsa / Rewarewa |
| Myoporum laetum / Ngaio |
| Myrsine australis / Mapou |
| Plagianthus regius / Ribbonwood |
| Podocarpus totara / Totara |
| Prunnopytus ferruginea / Miro |
| Prunnopytus taxifolia / Matai |
| Sophora microphylla / Kowhai |
| Syzygium maire / Maire Tawaki |
| Vitex lucens / Puriri |

WETLAND



| |
|---|
| Apodasmia similis / Oioi |
| Astelia grandis |
| Austroderia fulvida / Toetoe |
| Austroderia toetoe / Toetoe |
| Carex Geminata / Rautahi |
| Carex Lessoniana / Cutty Grass |
| Carex Maorica / NZ Sedge |
| Carex virgata / Swamp Sedge |
| Coprosma propinqua / Mingimingi |
| Coprosma tenuicaulis / Hukihuki, Swamp Coprosma |
| Coprosma tenuifolia / Wavy-Leaved Coprosma |
| Cyperus ustulatus / Giant Umbrella Sedge |
| Eleocharis acuta / Sharp Spike Sedge |
| Elocharis sphacelata / Bammbuo Spike Sedge |
| Juncus australis / Leafless Rush |
| Juncus edgariae / Edgar's Rush |
| Juncus pallidus / Giant Rush |
| Machaerina articulata / Jointed Twig Rush |
| Machaerina juncea / Bare Twig-Rush |
| Machaerina tenax |
| Phormium tenax / Harakeke |
| Phormium tenax 'purpureum' |
| Veronica stricta / Koromiko |

2.5.1 NORTHERN STORMWATER MANAGEMENT AREA

The northern stormwater management area, positioned near the main entrance of the development, is envisioned as a sculptural landscape feature that creates an immediate sense of identity and arrival.

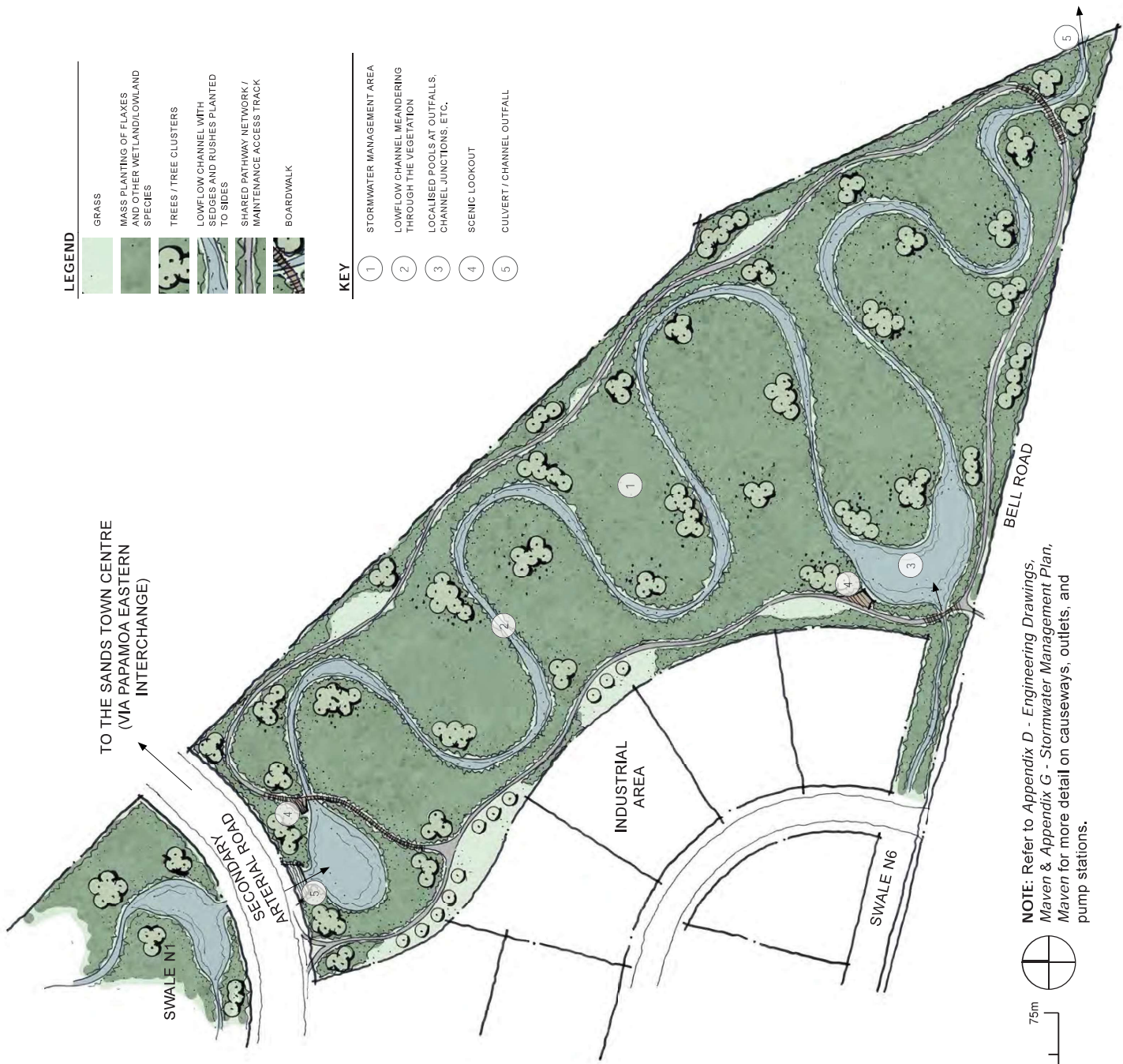
This expressive environment is shaped by meandering low-flow channels that weave through a mosaic of densely planted wetland habitats, forming a dynamic and visually engaging foreground to the development.

Planting palettes are intentionally curated, using deliberate species selections to introduce form, rhythm, and architectural structure. Tree clusters would also be present across the site.

Around the wmanagement area, an access track and shared-use pathway form a continuous movement corridor that supports multimodal travel, fitness loops, and passive recreational experiences.

Overall, this area becomes a bold, sculptural entrance experience setting the tone for a development supporting wider ecological and cultural outcomes and improving the water quality, resilience and amenity of the development.

Final design is subject to further collaboration and inputs from local iwi, Western Bay of Plenty District Council and the developer.



LEGEND

- GRASS
- MASS PLANTING OF FLAXES AND OTHER WETLAND/LOWLAND SPECIES
- TREES / TREE CLUSTERS
- LOWFLOW CHANNEL WITH SEDGES AND RUSHES PLANTED TO SIDES
- SHARED PATHWAY NETWORK / MAINTENANCE ACCESS TRACK
- BOARDWALK

KEY

- 1 STORMWATER MANAGEMENT AREA
- 2 LOWFLOW CHANNEL MEANDERING THROUGH THE VEGETATION
- 3 LOCALISED POOLS AT OUTFALLS, CHANNEL JUNCTIONS, ETC.
- 4 SCENIC LOOKOUT
- 5 CULVERT / CHANNEL OUTFALL



NOTE: Refer to Appendix D - Engineering Drawings, Maven & Appendix G - Stormwater Management Plan, Maven for more detail on causeways, outlets, and pump stations.

2.5.2 SOUTHERN STORMWATER MANAGEMENT AREA



The southern stormwater management area, positioned between the development and surrounding rural landscape offers a large-scale regenerative ecosystem that incorporates flow channels with pools through expansive wetland and lowland vegetation, including clusters of native trees to maximise ecological and hydrological performance.

All low-flow channels connect and lead to the engineered outlet situation in the southeastern corner where water levels are controlled and flows run back into the Kopuaroa Canal and out to the Kaituna River.

Raised recreation areas adjacent to the surrounding residential lots and green link local purpose reserves ensure strong connectivity to the reserve and offer flexible space for informal play, rest areas, community gathering, and expansive views over the reserve out to the Papamoa Ranges.

A connected pathway network runs around and through the immersive natural environment. Offering residents and visitors with a series of contrasting experiences from shaded groves to open water views and close ecological encounters. This pathway second as a maintenance access track to support ongoing management of the area.

Final design is subject to further collaboration and inputs from local iwi, Western Bay of Plenty District Council and the developer.



LEGEND

| | |
|--|---|
| | GRASS |
| | MASS PLANTING OF FLAXES AND OTHER WETLAND/LOWLAND SPECIES |
| | TREES / TREE CLUSTERS |
| | LOWFLOW CHANNEL WITH SEDGES AND RUSHES PLANTED TO SIDES |
| | SHARED PATHWAY NETWORK / MAINTENANCE ACCESS TRACK |
| | BOARDWALK |

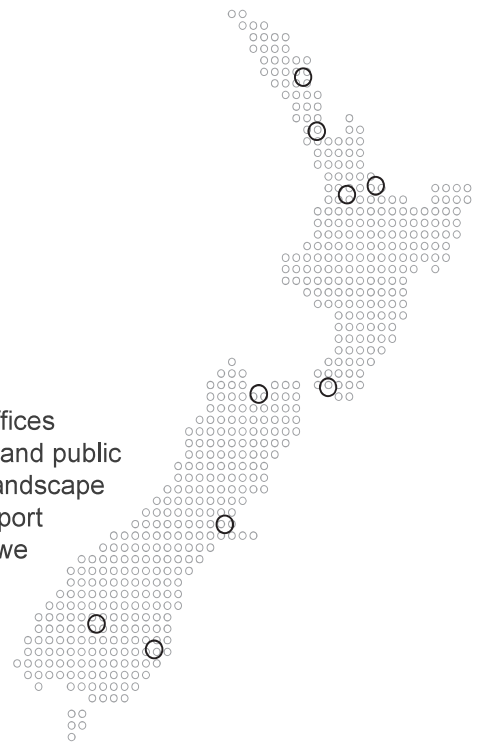
KEY

- 1 STORMWATER MANAGEMENT AREA
- 2 LOWFLOW CHANNEL MEANDERING THROUGH THE VEGETATION
- 3 LOCALISED POOLS AT OUTFALLS, CHANNEL JUNCTIONS, ETC.
- 4 SCENIC LOOKOUT
- 5 CULVERT / CHANNEL OUTFALL
- 6 NEIGHBOURHOOD RESERVE
- 7 GREEN LINK / LOCAL PURPOSE RESERVE
- 8 CANAL STOPBANK

NOTE: Refer to Appendix D - Engineering Drawings, Maven & Appendix G - Stormwater Management Plan, Maven for more detail on causeways, outlets, and pump stations.

Together. Shaping Better Places.

Boffa Miskell is a leading New Zealand environmental consultancy with nine offices throughout Aotearoa. We work with a wide range of local, international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, Te Hīhiri (cultural advisory), engagement, transport advisory, climate change, graphics, and mapping. Over the past five decades we have built a reputation for creativity, professionalism, innovation, and excellence by understanding each project's interconnections with the wider environmental, social, cultural, and economic context.



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