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Silverstream Forest

Concept Masterplan

Prepared for
Guildford Timber Company

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May 2024

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Ā Mātou Tirohanga

Our vision

Something truly special.

Our vision for Silverstream Forest is to create a unique residential development where people live closer to nature. Development has been designed to fit sensitively along the forest ridge line, and the steeper slopes would be retained in native bush and pine.

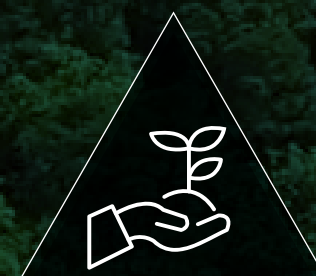
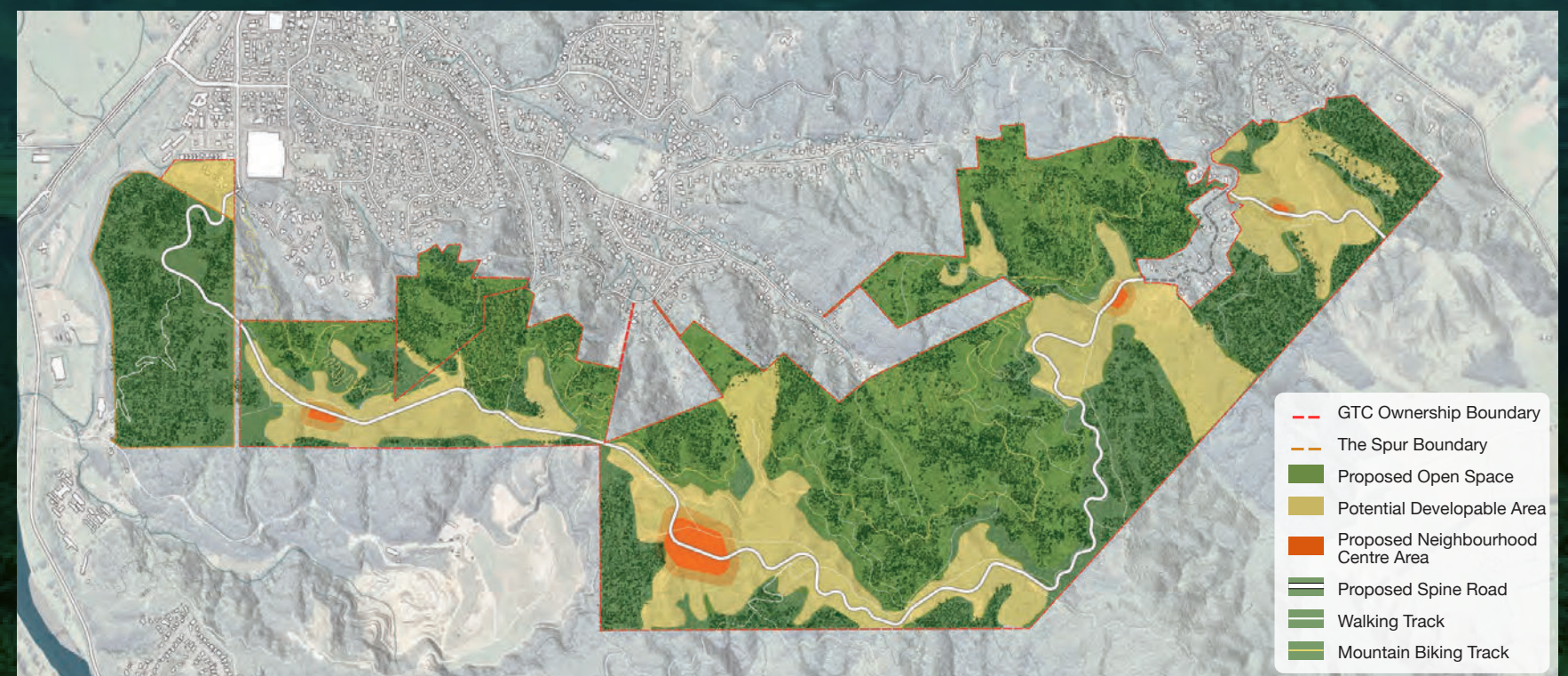
The site, known as the Southern Growth Area is over 330Ha and has been earmarked for future housing growth for the Hutt since 2007. It is one of the last remaining large greenfield sites in single ownership, located just 10 minutes walk from Silverstream Railway Station, within a 20 minute drive from Porirua, Upper Hutt & Petone and just 30 minutes by car or train ride to Wellington CBD.

We've developed a concept masterplan for the Silverstream Forest that shows up to 1500- 2040 homes could be built. This concept masterplan draws upon earlier assessments and earlier master planning work undertaken in 2007 and 2021 with input from Upper Hutt City Council, that confirmed the suitability of the site for residential development.

This masterplan would deliver a new suburb for Upper Hutt with significant benefits to the region:

- Creates 1500-2040 new houses across 5 distinct neighborhood areas.
- Mixed use activities to support the resident use, providing community accessible services.
- Quality housing across a range of typologies and price points
- Staged development to be built over a 15-year period.
- Has significant economic benefits to the region it will create an estimated 200 permanent construction jobs for the life of the project.
- Represents in today's figures an estimated \$1.38billion of housing and \$170-\$180 million total infrastructure spend.
- With an estimated 25-35% of that being spent in the local economy on services, materials and equipment.
- Will help meet Wellington Regions housing need of 90,000 more homes for 200,000 more people in the new 30 years.
- Makes a sizable contribution to Upper Hutt's housing supply.

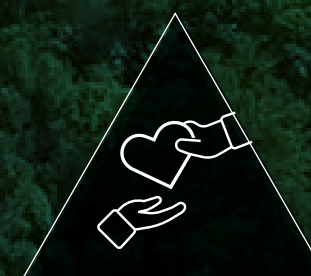
There is potential to develop an extensive reserve network with accessible walkways and cycleways for recreation and enjoyment, which is a sizable recreational asset.



Sustainability



Innovation



Connection



Guardianship



Creating New Homes



Background

01

1.1 Introduction

1.1.1 Introduction

The Guildford Timber Company Ltd (GTC) is looking to create a significant residential development in Upper Hutt, known as Silverstream Forest. Silverstream Forest comprises both land owned by GTC in Silverstream at 44 Kiln Street (known as the Gateway), and within the Southern Growth Area and land currently owned by Upper Hutt City Council (UHCC), known as the Silverstream Spur. The Spur provides an important access route and connection linking the new development to the Gateway and existing Silverstream Village and to existing amenities and infrastructure.

In 2014-2021 GTC and UHCC explored options of a Land Swap of suitable future reserve land owned by GTC for the Council owned Silverstream Spur. s 9(2)(b)(ii)

UHCC is currently advancing Plan Change 49 v-1 (PPC49v-1) to rezone the Spur Natural Open Space and provide for a Policy and rule framework that allows for an infrastructure and roading corridor through the Spur. The hearing process is underway.

The land to be developed by GTC is predominantly zoned 'Rural Hill'. The Spur is split-zoned between 'Rural Hill' and 'Residential Conservation' zones. 44 Kiln Street was recently rezoned for High Density Residential and is within a walkable catchment to the Railway, and can be developed to 9 storeys under the District Plan.

1.1.2 Plan Change 50

UHCC is currently reviewing the rural zone chapters of its District Plan through 'Plan Change 50' (PC50). PC50 will be guided by both the Land Use Strategy, the 2023 Housing and Business Development Capacity Assessment (HBA), the Future Development Strategy 2024 and the National Policy Statement for Urban Development – to enable sufficient housing capacity to meet future demands.

GTC has filed a submission seeking the rezoning of the Silverstream Forest land via its submission on PC50 to residential and a special purpose precinct at Arvo Road, that plan is in its infancy with further submissions expected in late May 2024.

1.2 Concept Masterplan

1.2.1 Concept Masterplan

This concept masterplan document sets out the proposed approach for development within the Gateway, Silverstream Forest and the Spur sites. It is a vision-based precursor to a more detailed masterplan that GTC was developing to support a proposed plan change for the area as part of the UHCC PC50 plan change and/or any resource consent that would be acquired via the Fast Track Approval Bill (if successful).

1.2.2 Low Impact Development Principles

The Guildford Timber Company is owned by an intergenerational family of Hutt locals who care about the form of development delivered by the property. Low impact principles for Stormwater and Road Design will be the key to a successful built environment in this location.

1.2.3 Ā Mātou Tirohanga

Guildford Timber Company's vision for Silverstream Forest is to create a unique residential development where people live closer to nature. A resilient and sustainable development that is a benchmark for future living.

Development will fit sensitively along the forest ridge line, and the steeper slopes will be retained in native bush and pine.

There is opportunity for the undeveloped area to become a public reserve with accessible walkways and cycleways for recreation and enjoyment. Areas of harvested pines will be re-planted with native trees as part of our efforts to restore and improve the ecological, biodiversity, and catchment management values of the future reserve.

The site will be developed sympathetically to its environment in order to minimize biodiversity loss and climate change effects. At Silverstream Forest this will be done by creating a development that has low embodied and operational energy targets for the housing and infrastructure, on site carbon sequestration through exotic and native trees, and enhanced biodiversity through extensive regenerative planting of permanent native bush.

1.2.4 Recreation

Access to parks and open space is known to improve people's physical and psychological health. It also strengthens communities by providing opportunities for outdoor activities and enjoyment. We believe our proposed forest track infrastructure offers the beginning of a wonderful footprint for future recreational opportunities.

1.2.5 Living with Nature

We're proposing housing that fits sensitively along the forest ridge-tops, set within mature pine and regenerating native forest and at the Gateway offers the chance to live in a highly urban community, with unprecedented access to natural areas right on your doorstep. This is-a once in a-lifetime opportunity to create a residential development – an entire new suburb within an existing forested environment; something that's uncommon in the Wellington region.

1.2.6 Restoration and Conservation

Silverstream Forest is an important ecological corridor, connecting natural areas on both sides of the valley. One of the most exciting possibilities of the development is the opportunity to enhance the ecological and biodiversity values of the area, by creating the opportunity for an extensive public reserve.

The aim is to revert harvested land not needed for the development into native forest, to benefit future generations.

The development of housing and roads would be done in a way that interweaves with the natural values of the future reserves, while providing opportunities for local residents to enjoy, and get involved with protecting nature.

1.3 Overarching Principles

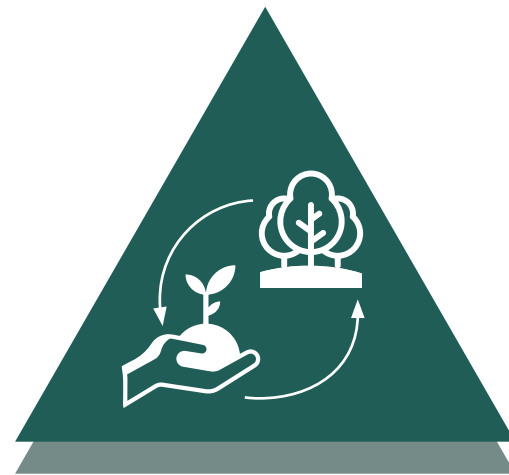
The Guildford Timber Company aim to ensure that a long-term legacy is achieved through the development of a masterplan that is grounded within the existing natural environment, in a way that responds to the bush setting, the underlying topography and the ecological context, and which is guided by their overarching principles:



Sustainability

We conserve and respect the natural environment.

Development that is resilient to climate change and natural hazards and addresses Aotearoa's sustainability targets.



Innovation

We need to think differently and be future-focused.

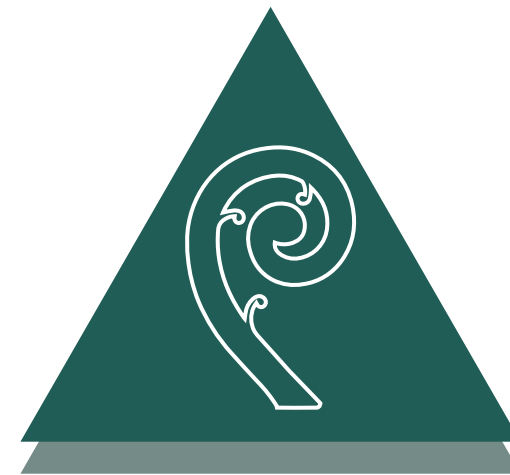
Adopt cutting-edge research and technology for sustainable development.



Connection

We feel a strong sense of place within the community.

Silverstream Forest will be an extension of the existing area.



Guardianship

We're committed to caring for the land that's been entrusted to us.

Promote kaitiakitanga through leadership and helping people to connect with nature.



Creating New Homes

We are committed to providing affordable homes to serve the needs of the community.

Provide high-quality affordable housing catering to a range of occupants and in response to market requirements to help address the housing crisis.

1.4 History of Guildford Timber Company

The Guildford Timber Company is a family-owned company that was established in 1926. It has a 90+ year history and association with Upper Hutt, and in particular with Pinehaven and Silverstream.

Silverstream Forest was first planted in pine trees in the 1920's by Sir Francis Chichester and Mr Geoffrey Goodwin. They met in 1923 when Francis Chichester emigrated to New Zealand at the age of 18.

The pair went into partnership and built up a successful business in aviation and land development, creating the suburb of Pinehaven into a residential conservation zone in Upper Hutt. The men then moved their attention to the Blue Mountains area of Whitemans Valley, which neighbours what is now the Silverstream Forest.

GTC owns approximately 330ha in the Silverstream/Pinehaven area. Its land comprises the steeper slopes surrounding existing residential areas, and the rolling ridges around the southern and eastern sides of the Pinehaven valley, extending over into Blue Mountains. Since 1928 the land has primarily been used as a commercial pine plantation, much of which is ready to be harvested, to make way for redevelopment for housing.

GTC has always maintained a strong environmental and social ethic in the management of its land. It has always sought to protect remnant and regenerating areas of indigenous vegetation, and continues to plant a range of native species like rata, beech, rewarewa, kamahi and manuka over the winter planting season to enrich the forest.

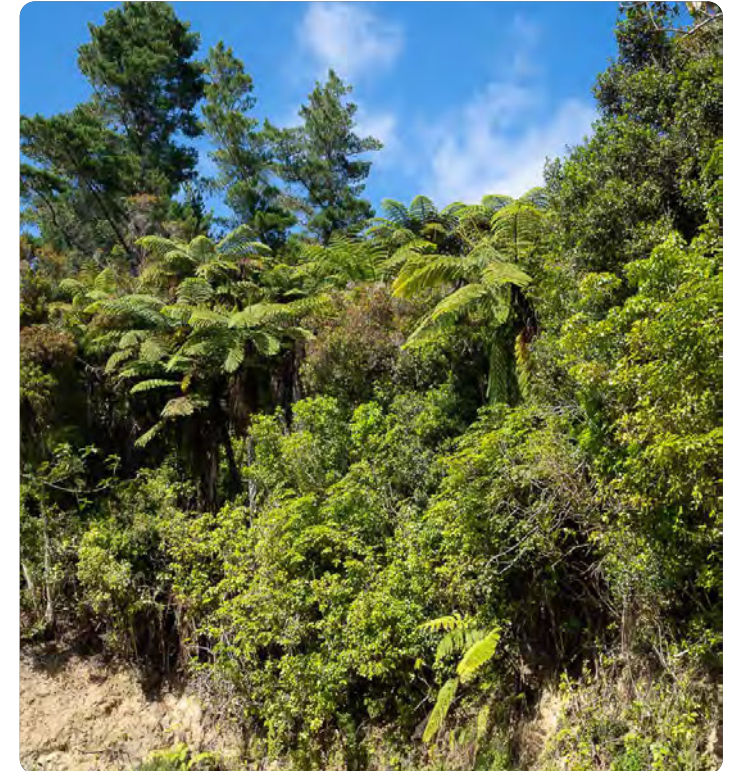
About 30,000 native trees have been planted by GTC since beginning their restoration programme. Over the last five years alone, they've planted almost 20,000 native trees to restore areas where pine trees have been harvested. In the next few years, harvested blocks will be reverted back into permanent native forest and GTC will embark on a pest management programme to ensure the new plantings thrive.

Continuing a Legacy

The families feel strongly about continuing on the legacy that Francis and Geoffrey left them, by continuing to support the development of the beautiful suburbs and communities of Silverstream and Pinehaven, which they've called home for almost 100 years.



View looking northwest, of Pinehaven and Silverstream - Silverstream forest in the foreground and to the left.



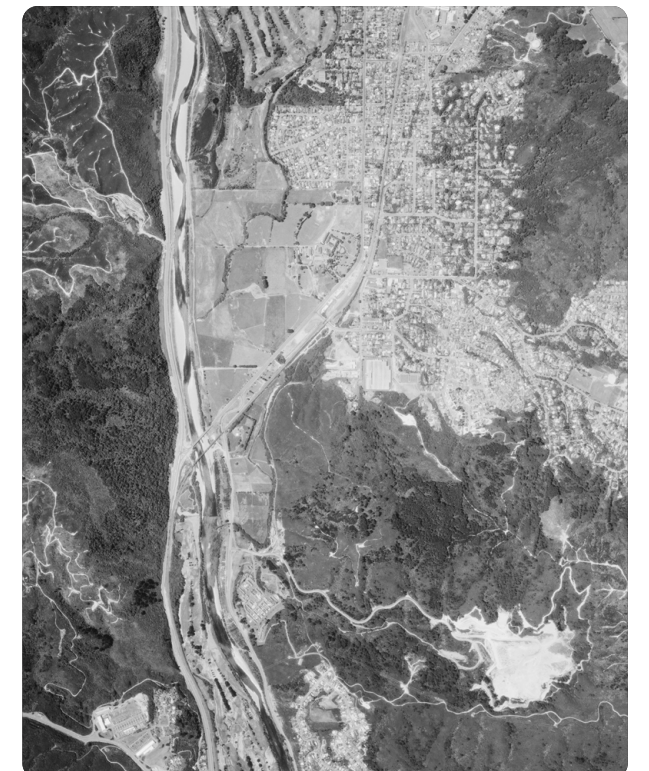
Native bush regenerating in Silverstream forest.



References to Geoffrey and Francis' passion and involvement in aviation.



Pinehaven streets named after the Goodwins and the Chichesters.



The transitional nature of production forestry highlights the Spur in 1985. Source: Retrolens

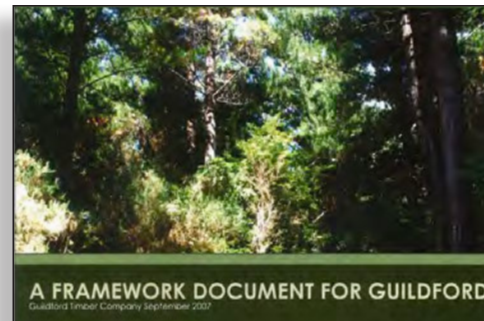
Planning history of the Southern Growth Area

The Southern Growth Area has been planned since 2007. Throughout that time Upper Hutt City Council and GTC have worked together to plan for the transition of this land from forest to housing. Details of this is set out in chronological here.

2007

Upper Hutt Urban Growth Strategy

The Guildford Growth Framework formed the basis of the Southern Growth Area for the Upper Hutt Urban Growth Strategy (2007). This was adopted by Upper Hutt City Council in 2007.



2007

Masterplan -SKM

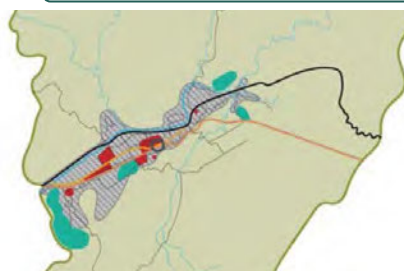
Site first identified as being potential future urban development and formally assessed by James Lunday from Common Ground, Boffa Miskell Limited and SKM. The development was feasible from an infrastructure planning perspective and the environmental effects, constraints assessments and infrastructure and serving work done to support that framework was comprehensive and extensive.

2016

Upper Hutt Land Use Strategy

Identified the SGA as the largest of the and four urban edge expansion areas

Identification of the edge expansion areas considered criteria including topography, environmental constraints, access, infrastructure, and landowner enthusiasm and capability. The SGA was identified as a location that “needs to be considered as a key strategic housing location for the next 30 years”



Upper Hutt Land Use Strategy (2016)

2021

Wellington Regional Growth Framework

The SGA was also incorporated in the Wellington Regional Growth Framework 2021 (“WRGF”), as one of two future urban areas in Upper Hutt.

Infrastructure Accelerator Fund

Also in 2021 there was a joint application by UHCC and GTC to obtain IAF funding for infrastructure. To unlock the development potential of Silverstream Forest, access for a road and infrastructure corridor was required. In this application the road and infrastructure corridor would extend from Kiln St in Silverstream, over GTC’s land at 44 Kiln St, and over the Spur to GTC land on the ridge where development would occur.

2021

Development of the Pine haven Flood Management Plan and Plan Change 43

In parallel to the development of the growth strategies, the Southern Growth Area was also assessed and taken into account for the Pinehaven Flood Management Plan (PFMP). This was used as the basis of informing Plan Change 43 to the Upper Hutt District Plan and stormwater infrastructure improvements to Pinehaven. These stormwater improvements to address existing issues and future climate risk are currently being implemented.

2021

Provision for supporting infrastructure for the SGA in UHCC Long term Plan

In 2021 consistent with the pattern of Council lead planning for the SGA it was recognised as a future urban area in the UHCC Long Term Plan 2021- 2031 as a high growth area called the Southern Growth Zone, that was recognised and accounted for in the planning for public infrastructure upgrades for growth planning purposes. It that would require a replacement Silverstream Bridge in years 4-10 and a new pine haven reservoir in years 11-20 (page 137). Both of these investments were identified as requiring significant capital investment but have been planned for in the LTP to provide for Medium Term Growth.

2021 - 2022

Reconfirming the Masterplan

The IAF application sought a contribution from Government towards the cost of the road, infrastructure corridor, and water reservoir that would service at least the first stage of development at Silverstream Forest: approximately 400 houses. A Concept Masterplan, engineering strategy and cost estimations were completed for this application. This included detailed consideration of three waters, network utilities, stormwater and traffic infrastructure – for much of the site. This was a joint application with UHCC and UHCC supported those assessments presented.

Studio Pacific Architecture then prepare a concept masterplan to reconfirm the development, environmental and infrastructure assumptions for developing the Southern Growth Zone in 2022. Envelope Engineering also undertook concept level engineering work to confirm if the development is able to be implemented through private investment and that existing Council Infrastructure connections can be provided for water supply and wastewater. GTC were able to confirm that up to 1600 household units could be provided to help create those communities and contribute to the regions place-making. This plan further demonstrated the connections, constraints and infrastructure/ services for the site.

Kiln Street Masterplan

In 2022, Studio Pacific Architecture also created a set of detailed development options for the Kiln Street site to inform discussions with UHCC.

2022 - 2024 (ongoing)

Plan change 49 - variation 1 to enable roading network utilities and water tanks on the spur (currently being heard)

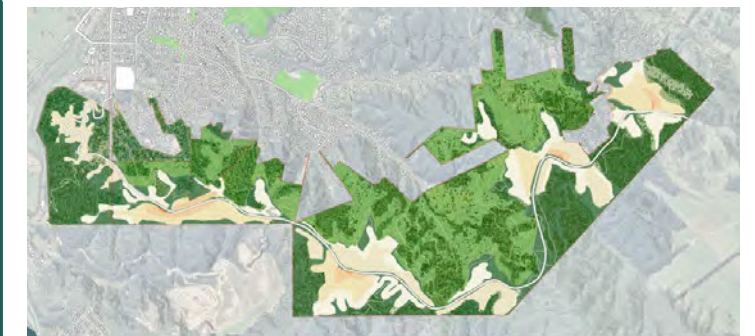
Variation 1 was notified on 5 October 2022, PC49 proposes to “.... Enable site-specific provisions for infrastructure, including a transport corridor.

Provide access to the Silverstream Spur for a range of recreation, conservation and customary purposes, as well as potential future access to the Southern Growth Area (through the proposed site-specific provisions).”

2024 (ongoing)

Plan Change 50

GTC has filed a submission seeking rezoning of its land to residential and special purpose precinct. Through that process GTC will seek to have that land rezoned residential via that proposed plan. Further submissions are expected by the end of May 2024 and hearing in 2026.



2022 IAF Masterplan

Conclusions on planning history for the SGA

This detailed history of the site, including Council lead planning processes and provision in the Long-Term Plan, joint planning undertaken with Council and GTC and GTC’s own work including its own financial feasibility work demonstrates that development of the SGA are well connected and planning for the infrastructure for the SGA has been advanced by Council, over the last 17 years. As the remaining pine forest on the SGA matures and is harvested SGA is primed for re-development.



What is Informing Our Concept Masterplan?

02

2.1 Regional Context

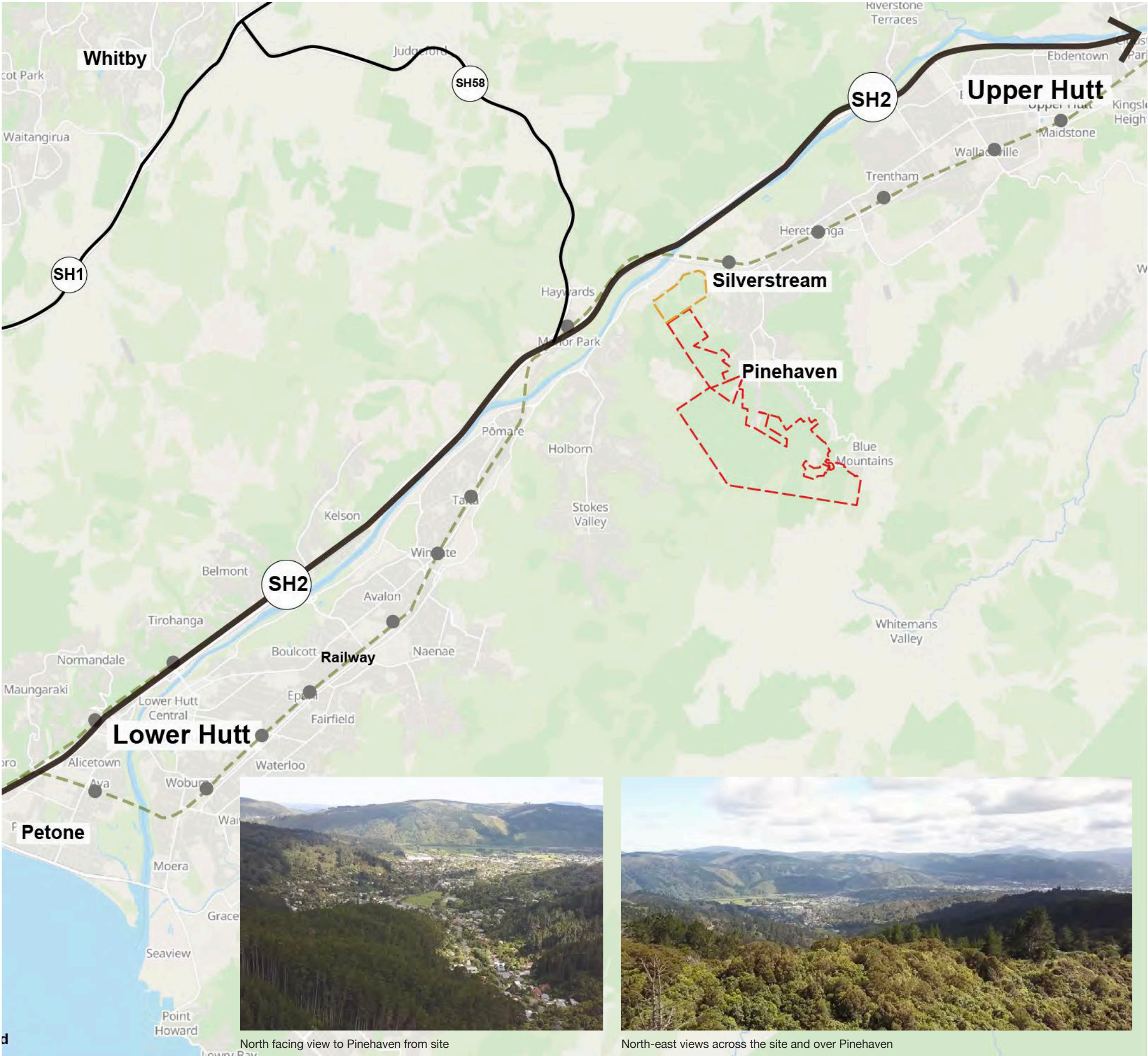
The site is located immediately adjacent to Silverstream and Pinehaven, in between Lower Hutt and Upper Hutt. It is well connected to surrounding areas via SH2 and the Hutt Line railway connection.



2.2
Site Context

The site is strategically located with excellent public transport links and is well-connected to nearby town centres. Porirua, Upper Hutt, and Petone are all within a 20-minute drive. Access to SH2 is straightforward via Fergusson Drive from Klin Street, and Wellington Railway Station is less than a 30-minute train ride away, offering convenient access to the central amenities of Wellington.

Additionally, Silverstream Forest’s proximity to public transport and key amenities enhances its appeal as a great place to live. It is only a 10-minute walk from the northern boundary of the site to the nearest bus stop on Field Street. Similarly, the Silverstream train station is just a 10-minute walk away. Being connected to and having access to the most important centres and amenities makes Silverstream Forest a great place to live.



North facing view to Pinehaven from site

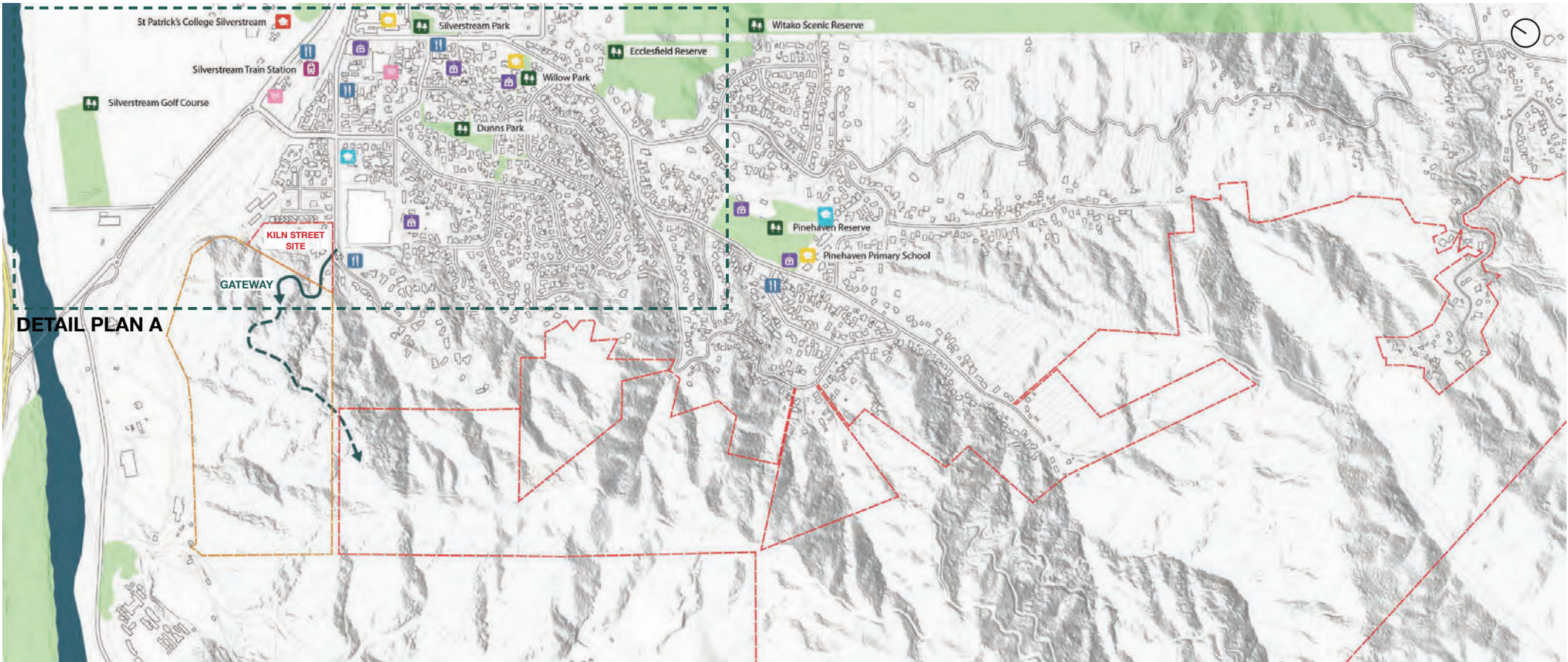
North-east views across the site and over Pinehaven

2.3 Existing Amenities and Access

The site is ideally located in close proximity to existing amenities in Pinehaven and Silverstream. These include the Silverstream Railway Station, Silverstream shops & New World supermarket, Pinehaven (primary) School, local bus routes and access to State Highway 2 linking the area to the rest of the Hutt Valley and the greater Wellington region. There is good connectivity into existing UHCC services and three waters infrastructure via the Spur and Kiln Street.

Kiln Street is the closest road link to the site from Silverstream and Pinehaven. Other access points exist off some Pinehaven streets, but these are all walking and cycling links given the steep terrain.

Blue Mountain Road and Avro Road take you up to the eastern/back end of the site. However, these are narrow, winding roads with limited capacity and does allow for integration with existing infrastructure services/networks.



DETAIL PLAN A



2.4
Hydrology

The development is within the Pinehaven Catchment as well as neighbouring catchments to Stokes Valley and Mangaroa. The topography provides for a relatively fast response to rainfall runoff through the streams running into the valleys towards Pinehaven and Silverstream and ultimately the Hutt River. The existing streams and extensive tree cover across the site to attenuate runoff. However following harvesting of Pine trees runoff is exacerbated. Substantial stormwater control and catchment management which will be integral to the design intent of this development will be required as part of the development to provide for stormwater neutrality.

- Management of stormwater and run off is planned for and will be primarily achieved through:
- Minimising imperious surfaces and using low impact stormwater design
 - Maintain native vegetation cover and replanting reserve areas with native vegetation to minimise stormwater management and run-off requirements and downstream effects in the long term
 - Providing attenuation ponds and providing rainwater tanks to harvest and manage peak flows.



Pine logs ready for the port



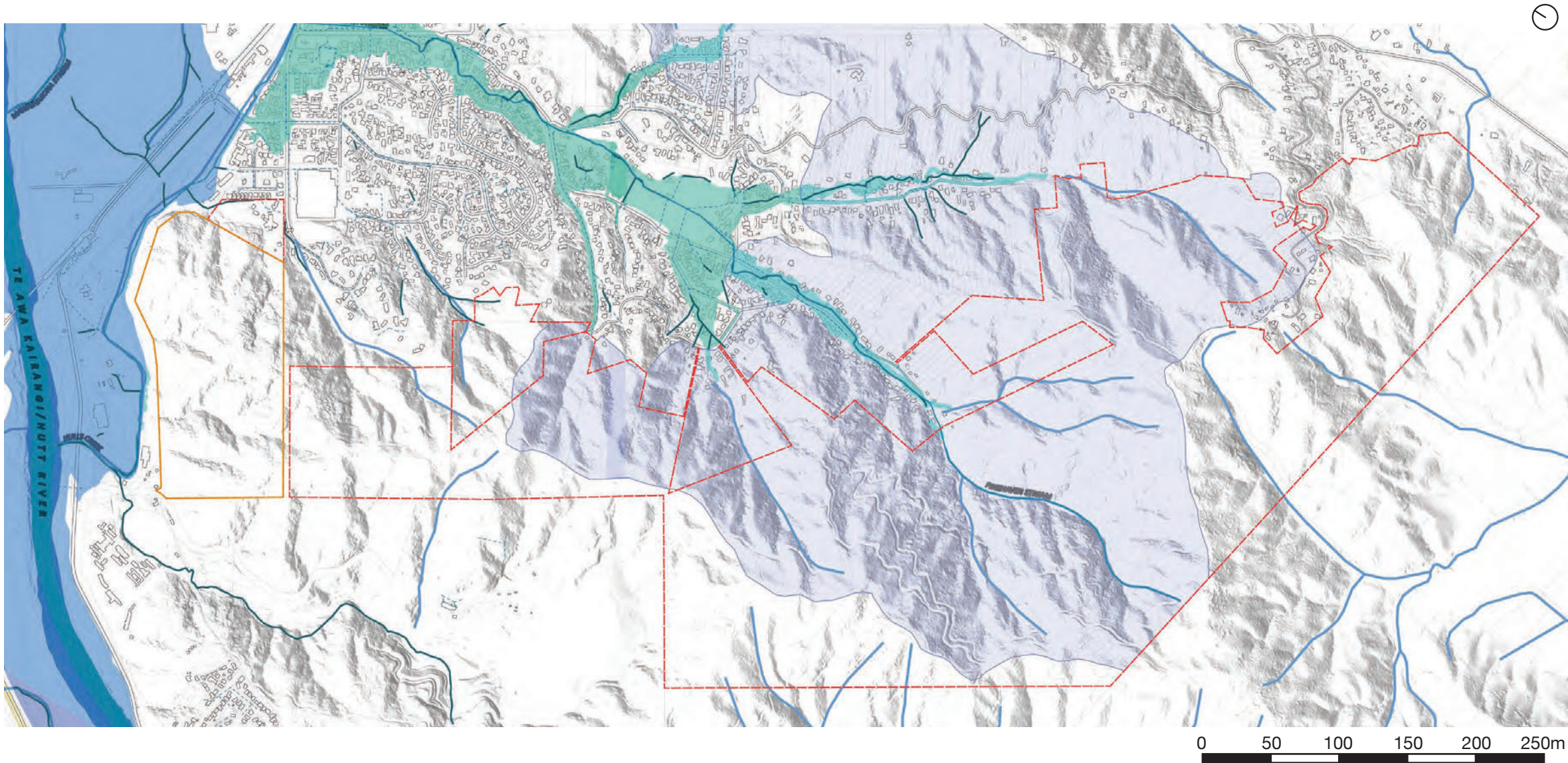
A harvested area ready to plant, with native bush protected

LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Stormwater (Channel)
- Stormwater (Piped)
- Pinehaven Catchment Overlay (UHCC)
- Detailed Catchments (GWRC)

Flood Hazard Extents (GWRC)

- 2% Aep Flood Hazard
- 1% Aep Flood Hazard
- 0.23% Aep Flood Hazard



2.5

Landform + Topography

The site rises west to east along a ridge line from the Spur (~140m above sea level) to the top of Avro Road (~380m above sea level). Predominantly the landform has north-eastern and north-western aspects looking up the Hutt Valley to the Akatarawa Forest and the Remutaka ranges. Slopes on the southern side of the ridge line have sweeping views into Whiteman’s Valley, Stokes Valley, Lower Hutt and to Te Whanganui-a-Tara, Wellington Harbour.

Steep slopes constrain development opportunities on the site but also provide sun and stunning views of the surrounding areas while retaining much of the green backdrop enjoyed by existing residents. The existing network of forestry tracks promote suitable access routes.



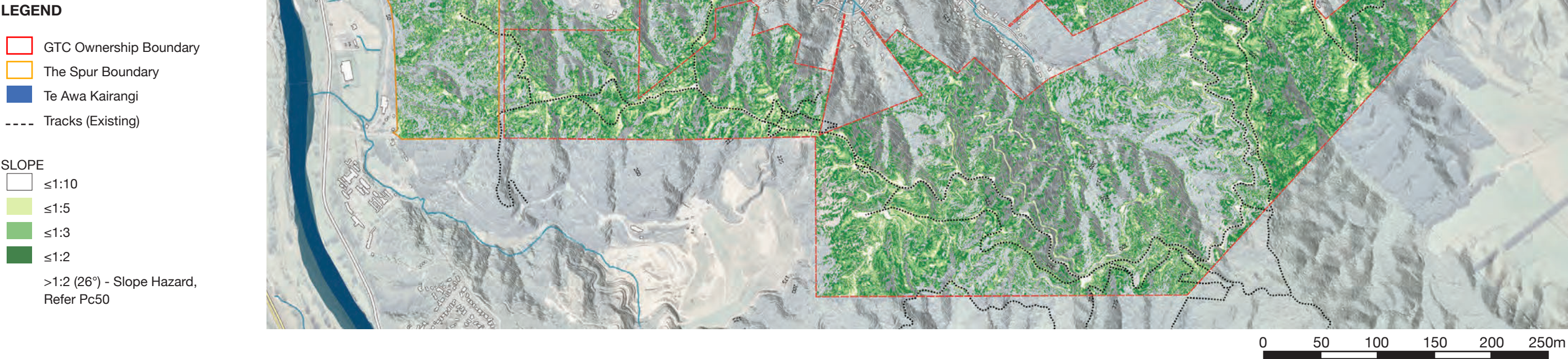
Views to Hutt Valley



Views to Wellington Harbour



Landform allowing a network of trails for biking and walking



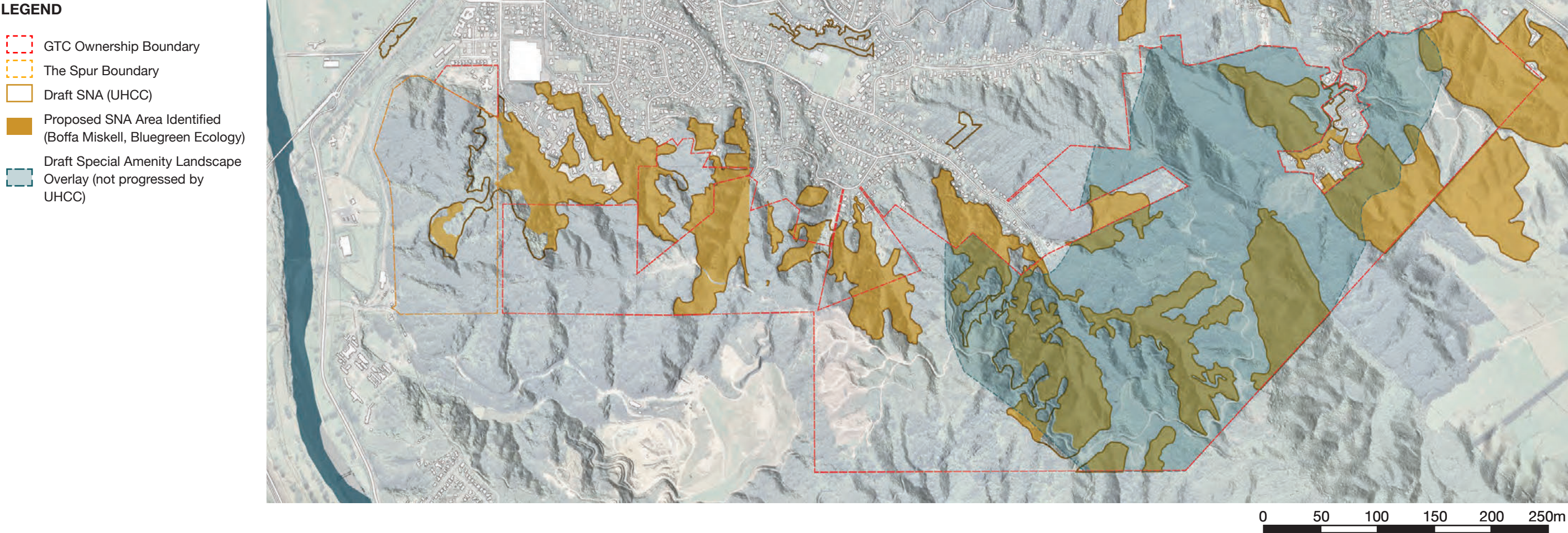
2.6 Significant Natural Area + Special Amenity Landscape

GTC have built upon work completed by UHCC over the last decade that has identified Draft Significant Natural Areas and Special Amenity Landscape Overlays for Tiaki Taio draft plan change. This work has primarily been GIS based with some field visits across the region. UHCC chose not to progress with the Special Amenity Landscape Overlay, but the work undertaken has formed a useful base against which to understand potential constraints. GTC has worked with Boffa Miskell and Blue Green Ecology to undertake more detailed visual, landscape and ecology assessments.

These assessments have fed into this masterplan and informed decisions on how the site should be used. In particular the character of Pinehaven and Silverstream has been defined by the hills and forest. Retaining and improving this character through retiring commercial forest and allowing housing to be sensitively sited and controlled through design measures is a key design driver to enable quality development.



View northwards from site



2.7 Ecology

In terms of managing ecological terrestrial and freshwater values, updated reports building on the Boffa Miskell work has been completed to understand the values of remnant and regenerating forest. Gullys across the site also have freshwater values associated with streams that run through the site. The avoidance of these significant natural areas and provision for regeneration of this land through provision of reserves is a core part of the place-making for the site and management of ecological effects. These reserves also provide for management of landscape values and will provide stepping stones for ecological connection between Silverstream forest and other ecological areas across the district.



Ruru spotted on site



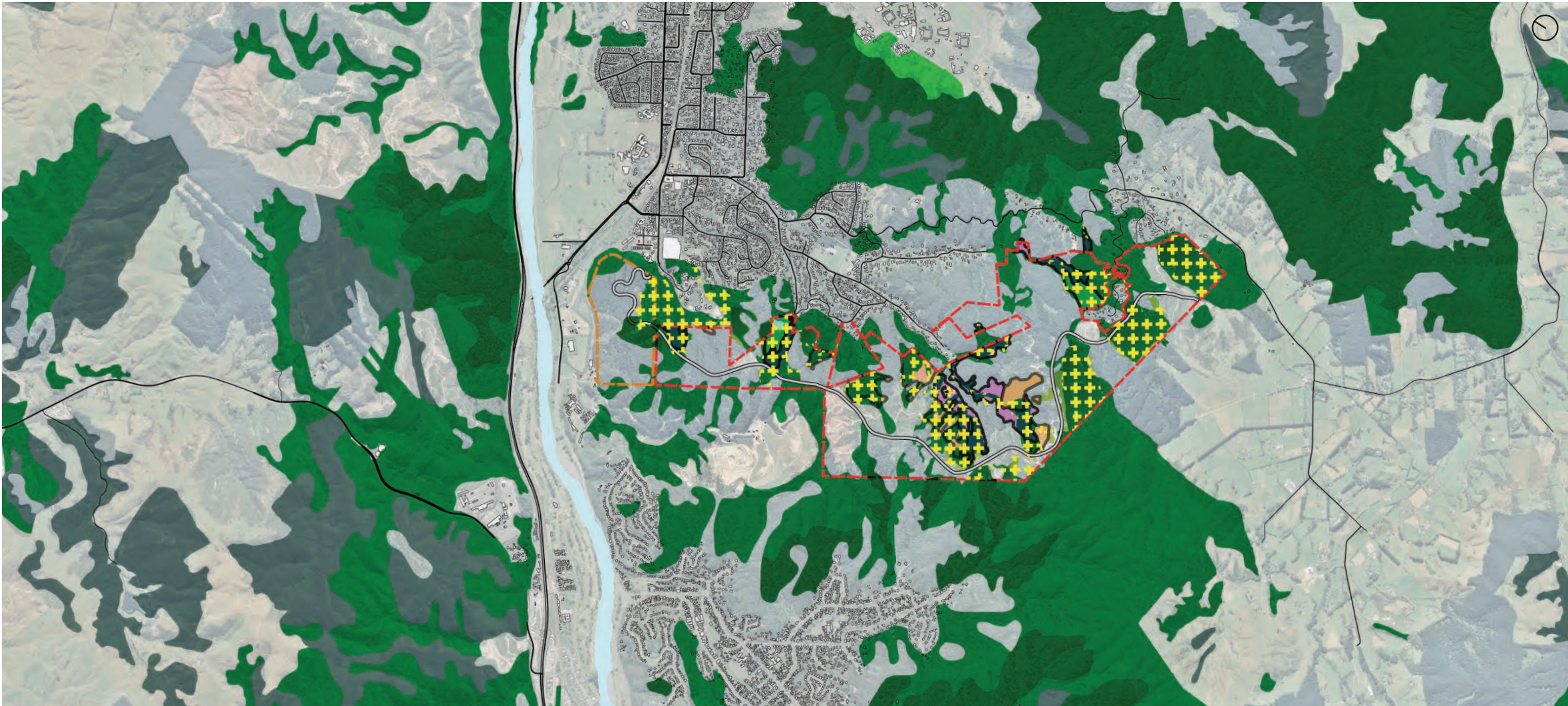
Mixed native forest on site



Beehives on site

LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Broadleaved Indigenous Hardwoods
- Indigenous Forest
- Manuka and/or Kanuka
- Kamahi Forest w Emergent Pine
- Secondary Beech Forest
- Fernland
- River
- Draft Significant Natural Areas within the site



2.8

Site Sensitivities










With the elevated position of the site, views from external suburbs/areas have been identified and considered in terms of their prominence and sensitivity. By using Geographic Information Systems (GIS) data, the map opposite plots the areas of land (including 8m above ground level, to account for potential building heights) that will be visible from an identified viewpoint.

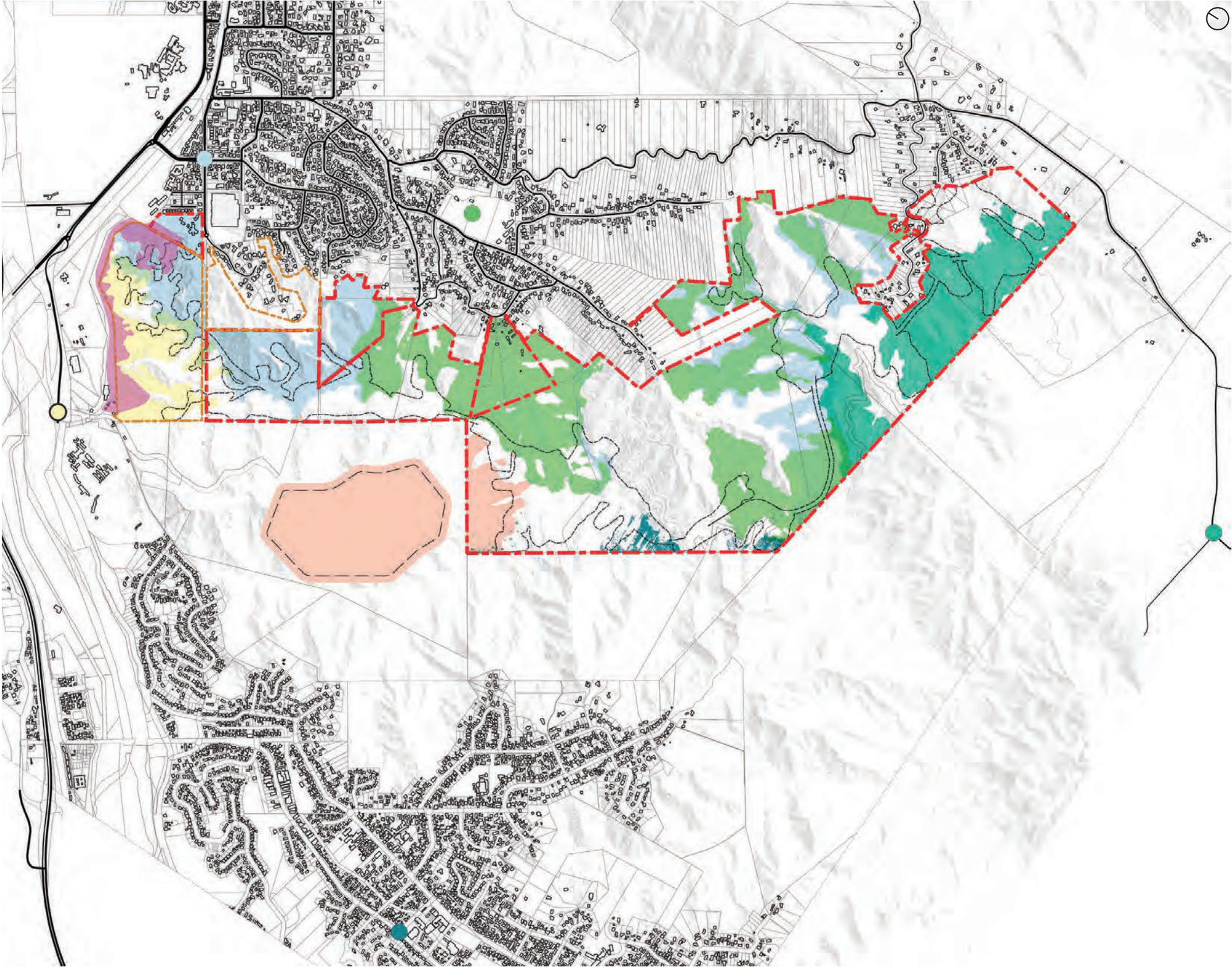
These viewpoints include:

- 1. Pinehaven Reserve
- 2. The intersection of Kiln Street and Field Street
- 3. A location on the Eastern Hutt Road
- 4. The centre of Stokes Valley

There are also existing constraints within the site, in terms of constraints in relation to the Silverstream Landfill – visual, noise and odour – and more minor effects from the Silverstream Railway (train enthusiasts) in terms of a noise buffer that need to be considered when creating new residential areas on the site.

LEGEND

-  GTC Ownership Boundary
-  The Spur Boundary
-  Whitemans Valley View In
-  Pinehaven Reserve View In
-  Kiln Street Intersection View In
-  Eastern Hutt Road View In
-  Stokes Valley Centre View In
-  Landfill impacts
-  Rail Corridor adjacency impacts



2.10 Technical Considerations

The proposal presents opportunities amidst the unique characteristics of the landform, steep topography, access challenges, and site hydrology. Embracing these features, we’re poised to develop a holistic three waters approach that ensures a sustainable water supply to our vibrant new community. This approach will encompass innovative strategies for water capture and reuse, while also prioritising the preservation of waterways.



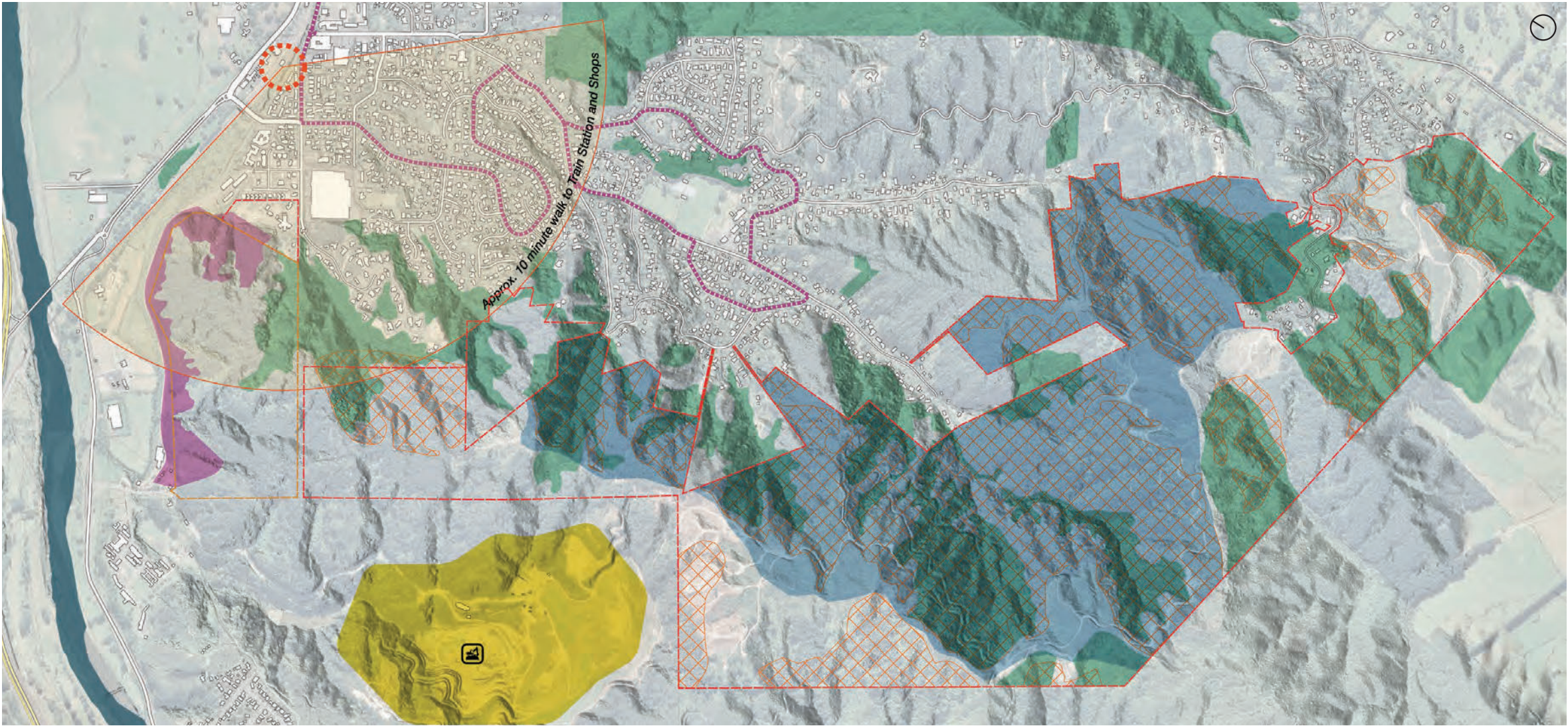
Slope constraints across the site



Access to the site from the Silverstream Train Station

LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Draft Significant Natural Areas
- Silverstream Landfill Site
- Potential adverse impact to existing Pinehaven area due to development within catchment zone
- Development constraints due to steep slopes
- Limited service to existing bus route
- Land in proximity to rail corridor & noise impacts



2.11 Opportunities

Silverstream Forest offers the opportunity to provide 1500-2040 homes to help address Upper Hutt City Council’s and Greater Wellington’s housing crisis,. It provides a sensible, considered and long planned for new suburb with a range of housing typologies and price levels to help meet projected housing demand goals.

In addition, the following can be realised:

- On-site carbon sequestration to offset the carbon attributed to the development.
- Significant biodiversity and ecological benefits offered by the potential reserve areas.

- Significant developable land area and associated housing yield offering a range of typologies.
- An enviable reserve to link into the existing community and wider recreational routes.
- Social and cultural assets – connectivity by bringing people closer to nature.
- Connects into/integrates with existing services/ infrastructure and routes.



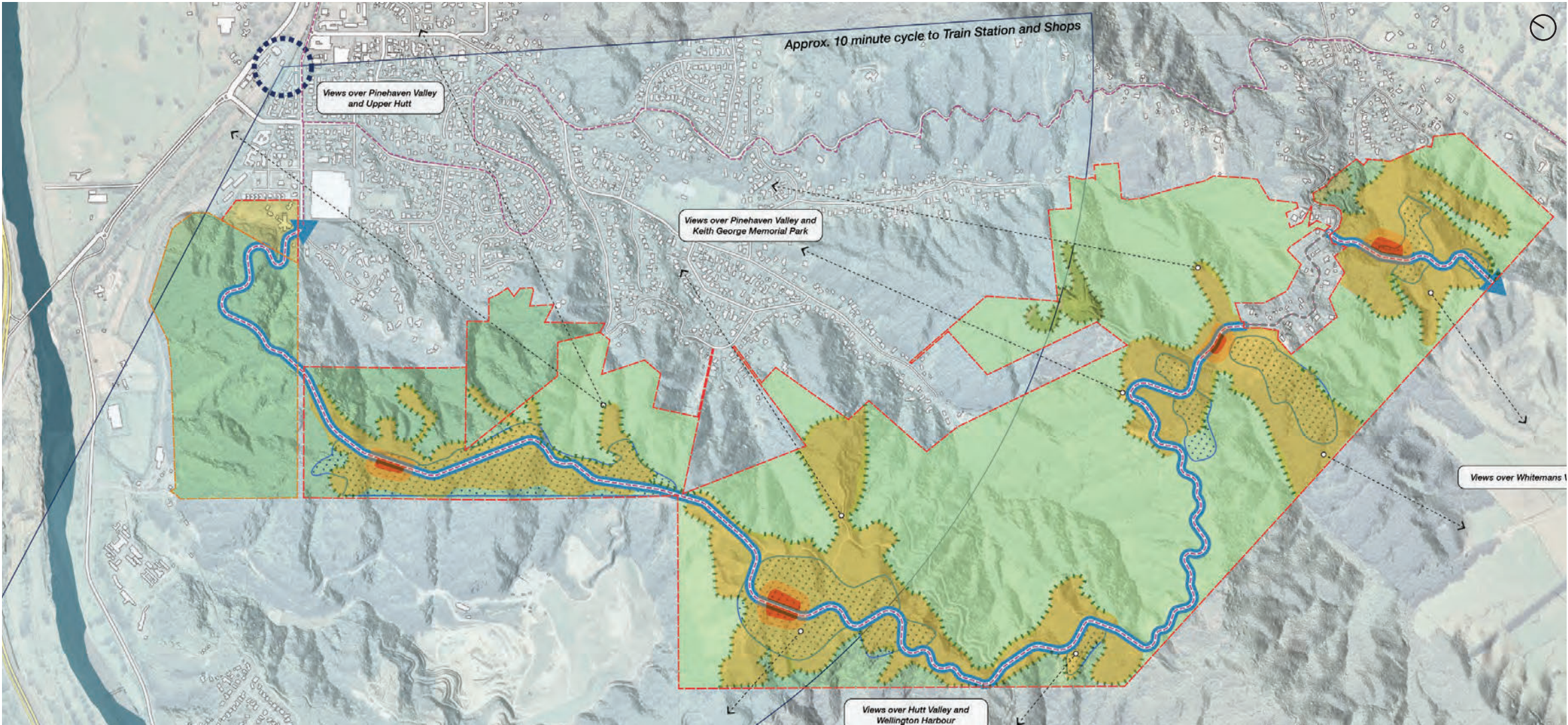
Opportunity to live and connect with nature for the new and existing communities



Incredible aspect and views lead to sought after living opportunities

LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Potential Developable Area
- Potential Hub / Centre
- Potential Reserve + Open Space
- Favourable topography
- → Key Amenity Views
- ■ ■ High-value properties with close proximity to open space and recreation
- ➡ Opportunity for a multi-modal spine road
- Potential new bus route connecting into existing Pinehaven community
- = Potential future connection to Whitemans Valley / Blue Mountain Road
- ⤵ Potential opportunity for cycle connection to existing amenities





Concept Masterplan

03

3.1 Concept Masterplan

3.1.1 Overview

This concept masterplan has been developed through the contextual analysis including site visits and desktop studies and a visioning workshop with the Guildford Timber Company, and builds upon earlier site assessments and planning work. Over that time, GTC's earlier iterations of the Masterplan have been presented to the community and made available via the UHCC webpage about the Southern Growth Area and Silverstream Forest website. GTC has sought input from leading and trusted environmental experts and thinkers that New Zealand has to offer on its journey to masterplan the site.

These studies and assessments have included:

- Transport modelling
- Power
- Stormwater
- Waste water and water supply and other services
- Reverse sensitivity assessments including odour and noise
- Cost estimates to confirm feasibility
- Urban design
- RMA planning
- Ecology
- Consultation with the wider community and relevant stakeholders

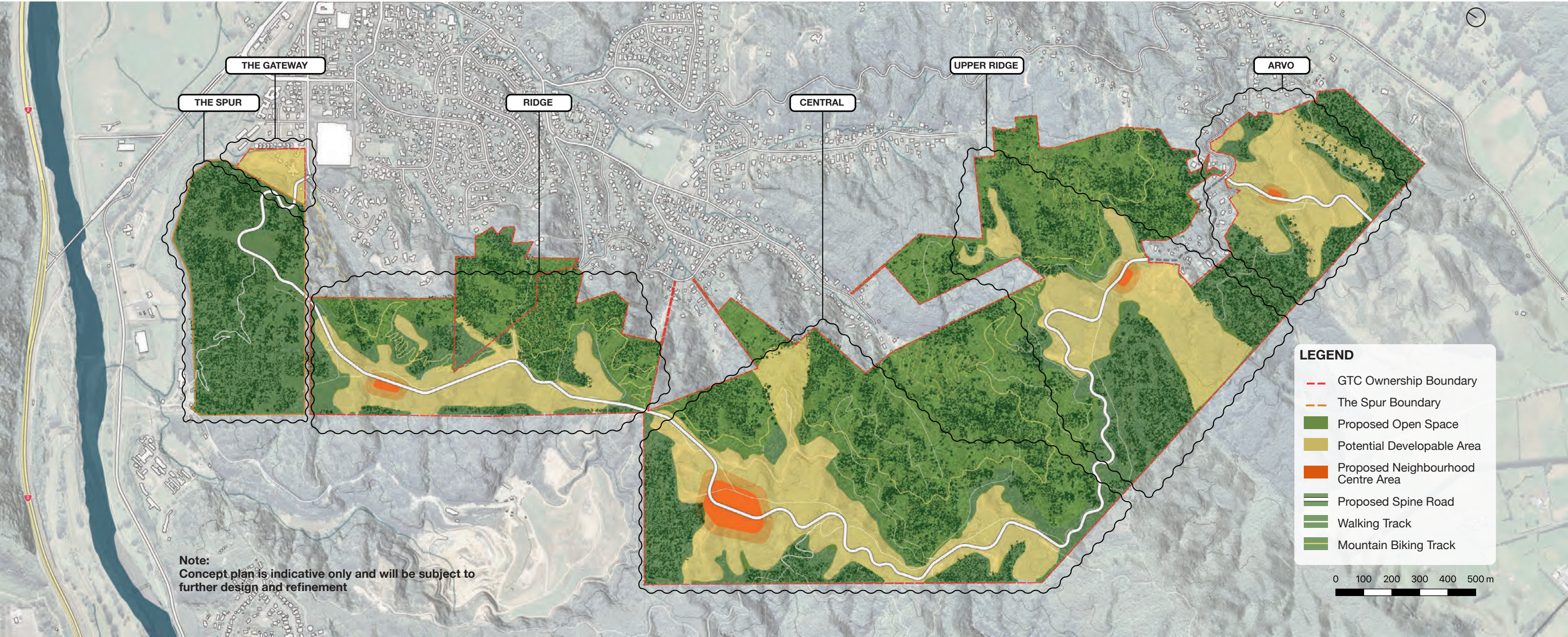
In line with the vision and principles of GTC, features of the proposed concept masterplan include:

- Embedded principles of sustainable design – architecture, landscape architecture, urban design and engineering, water sensitive urban design (WSUD), climate change adaptation and resilience and reduction of natural hazards.
- The potential to establish a reserve that covers a large proportion of the site, providing a network of walking and cycling routes for access and recreation.
- A series of thriving, interconnected neighborhoods that offer modern urban amenity within a forest setting and which are well-connected to the existing Pinehaven and Silverstream areas.
- Housing numbers to help to meet the predicted deficit in available homes in the Hutt in the medium term.

3.1.2 The Neighbourhood Areas

Silverstream Forest comprises development of six unique neighborhood areas, each with a distinct identity and offering a range of housing typologies and different residential proposition while retaining a cohesive identity as a new suburb for Upper Hutt.

- The Gateway – 44 Kiln Street
- The Spur
- The Ridge
- Upper Ridge
- Central Forest
- Arvo



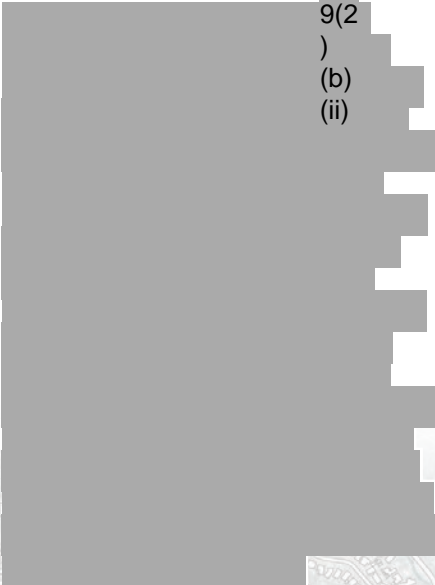
3.2
Zones

3.2.1
The Gateway

The Gateway provides a conclusion of the high density residential zone for Silverstream and entrance into the Southern Growth Area. It will include approximately 100 household units (a mix of apartment and townhouse development) and complementary mixed use commercial activities located minutes from the Silverstream Railway, expressway and existing Silverstream community. It is anticipated that a commercial or residential built edge will define the development and will use the spur as a back drop for providing apartment and or walk ups housing that is close to the shops and railway station.

3.2.5
The Spur

This site will not only provide the main infrastructure link into the Southern Growth Area



3.2.2
Ridge

The Ridge provides the first major residential village. The community will be defined by the forest edge and views out across the valley. Reserve edge housing will be provided similar to the Spur and using local access ways to minimise large local feeder roads. The development around the first community hub will be primarily terraced housing and the hub would potentially provide up to two story mixed use buildings. The primary road corridor with walking and cycling will connect to the spur open space and reserve tracks in this stage.

3.2.3
Central

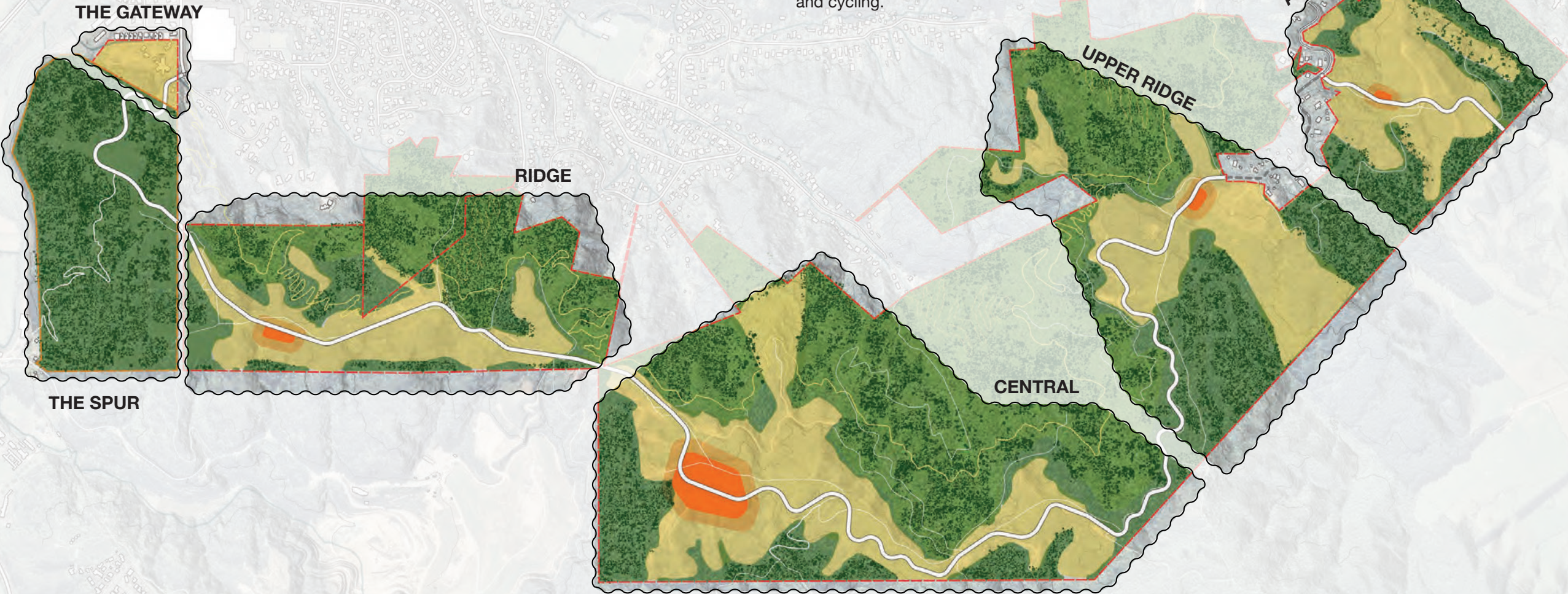
This village is the main residential space and will provide the local economy for residents. While there will be areas of reserve edge housing, because of the views to the south and north and larger areas of flat land and typography that can manage larger building forms, this will be the most built up area of the Southern Growth Area. The community hub will be the largest and provide necessary services for the new residents in this community as well as spaces to connect. It is possible that up to 4 story mixed use buildings could be provided in this space. Around the community hub, walk ups may be considered as well as medium density housing in the remaining development areas. Recreation tracks will be guided through this village so residents can access key services through walking and cycling.

3.2.4
Upper Ridge

This village is more defined by the natural typography and regenerating forest opportunities. A major internal road will be built between the two villages and provide a transition from the busier central village into reserve edge housing and some levels of terraced housing as you lead up to a small community hub. Some rural lifestyle homes will be provided as well before the development connects back into the existing Arvo Road and then turns and provides for residential terraced housing that looks over the Mangaroa Valley. Walking tracks will be provided through the development to the 100 year plus native forest to the south of the property.

3.2.6
Arvo

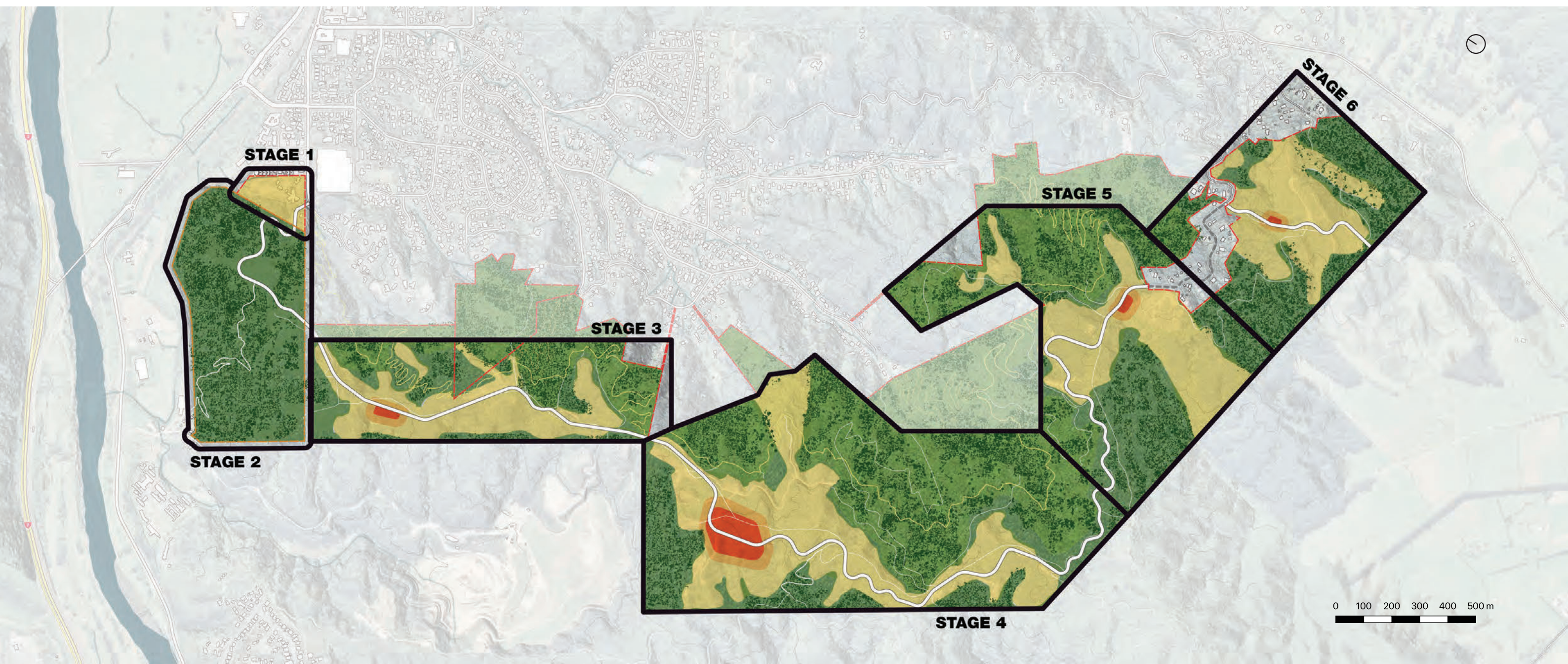
This is the last stage in the Silverstream Forest development, and will conclude with extending the construction of access road and services into the Arvo Road Precinct and construction of the dwellings. This area will provide for more lifestyle housing that is more consistent with a rural lifestyle zone with larger lots. Where appropriate houses will be clustered in the form of hamlets to minimise infrastructure but also provide connected communities on this north facing site, with views to the east towards Mangaroa.



3.3

Masterplan Staging

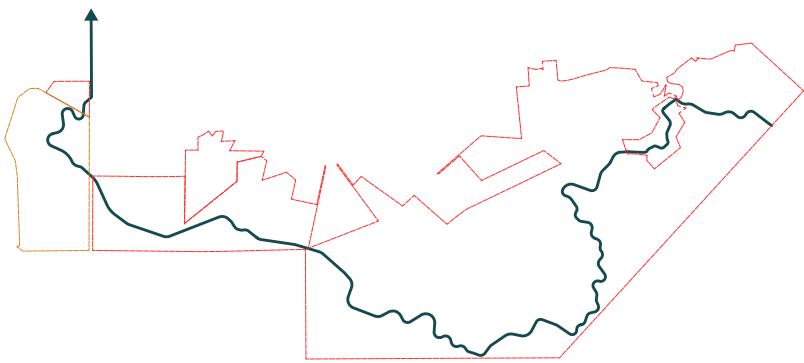
The masterplan is proposed to be delivered across six stages of development, beginning with the Gateway (Kiln Street) in the north and completing at Arvo in the south.



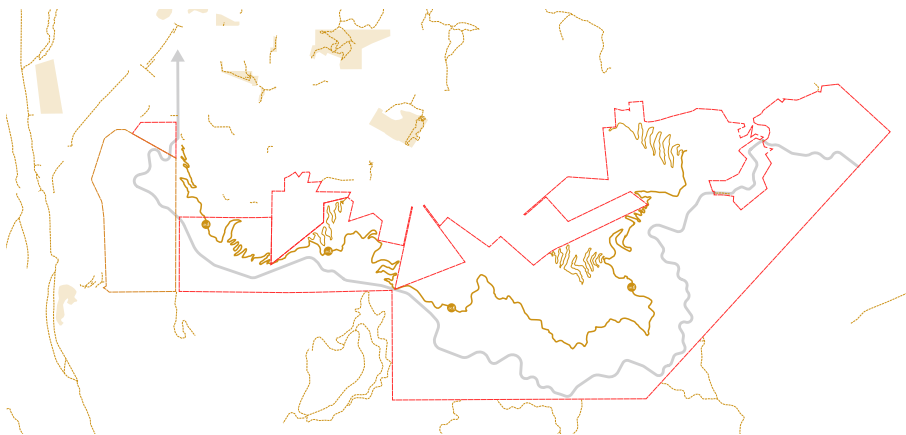
3.4

Key Moves Summary

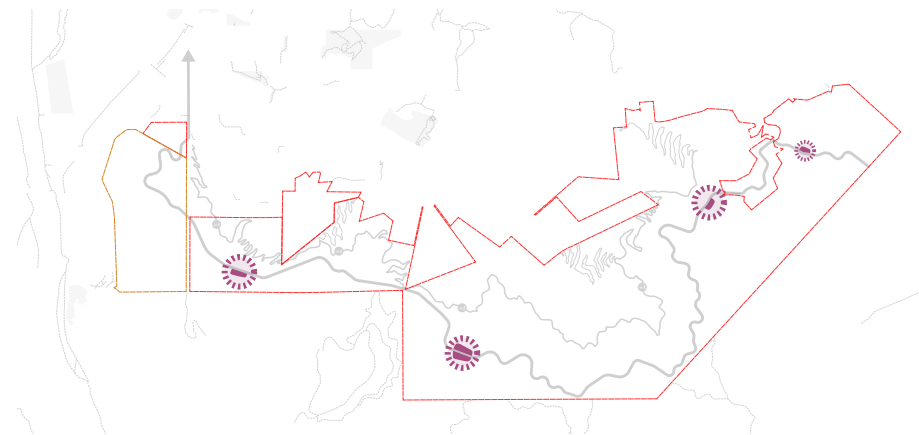
Underpinning our concept masterplan are the following key moves that are described below and developed further in the next stages of the masterplan.



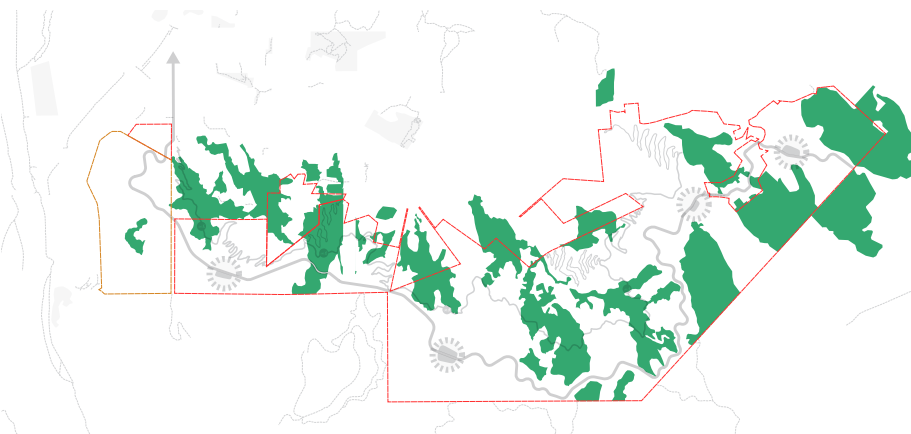
1. A Connected Community
Connect people with amenities via safe, sustainable, and accessible transport choices



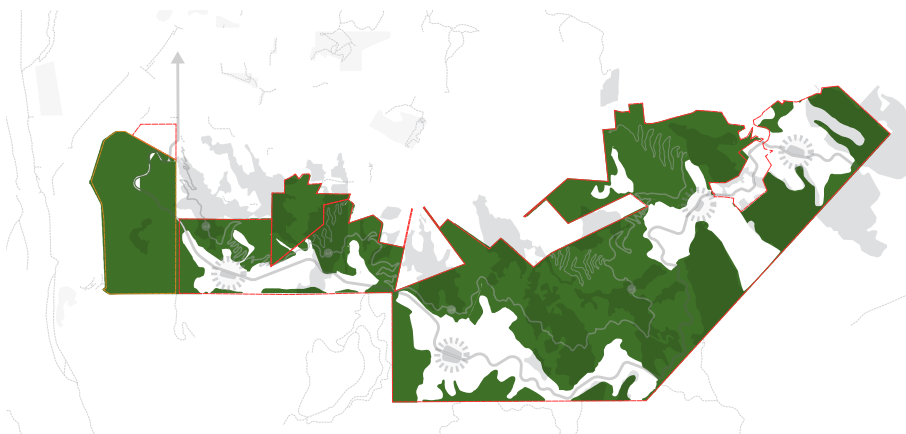
2. A Healthy and Well Community
Connect people to nature and recreation opportunities to enable healthy communities



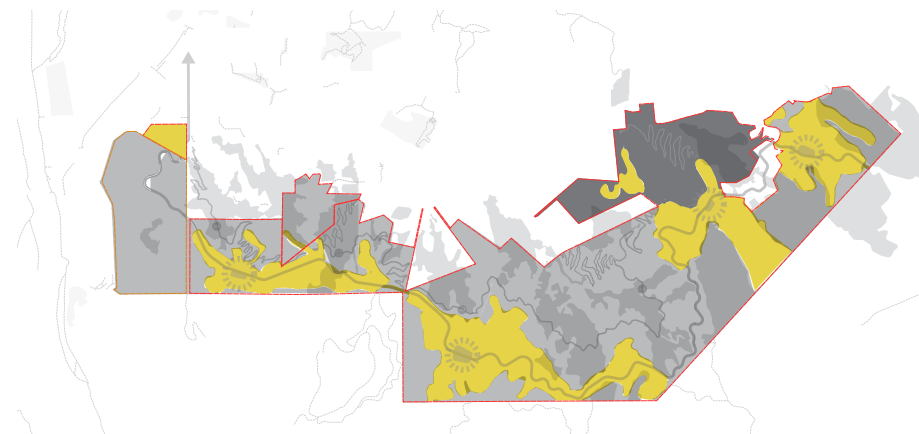
3. A Vibrant Community
Enable attractive community hubs that provide opportunities for learning, sharing, and growing local economies



4. Sustainable + Resilient Environment
Development that is resilient to natural hazards and climate change, sustainably designed and minimises greenhouse gas emissions



5. Forest Living
High-quality housing that is appropriate for its context and provides choice.



6. Affordable Housing
Provide high-quality, affordable housing to meet the needs of the community.

3.5
Recreation

Connect people to nature and recreation opportunities to enable healthy communities.

Provide safe and well-connected public spaces and places that meet the community’s needs. Along with the planned reserve this will include smaller open space and play areas within the new neighbourhoods.

A network of cycling and walking routes – on and off-road – will be developed to link into local and regional recreational routes such as connecting to Wainuiomata via the summit tracks as well as the Hutt Valley River Trail, Korau Recreation Reserve and up to the Remutaka Rail Trail.

These proposed recreational assets will have health, recreational, environmental, cultural and economic benefits for the community and the wider area.

3.5.1
Silverstream Forest Reserve

GTC will engage with mana whenua Taranaki Whānui ki te Upoko o te Ika, The Wellington Tenth Trust and Ngāti Toa Rangatira to better understand their vision for the forest. There is an exciting opportunity to set up a community trust (or partnership) which could help design and develop the park for environmental, social, heritage conservation, public recreation, and enjoyment. Features of the reserve will include:

- Custodianship – possibility to partner with mana whenua and council, as well as local and regional groups such as Forest & Bird, as well as Greater Wellington Regional Council.
- Enhanced biodiversity and ecological corridors.

- Wayfinding and interpretational signage.
- A long-term Park/Reserve Management Plan.

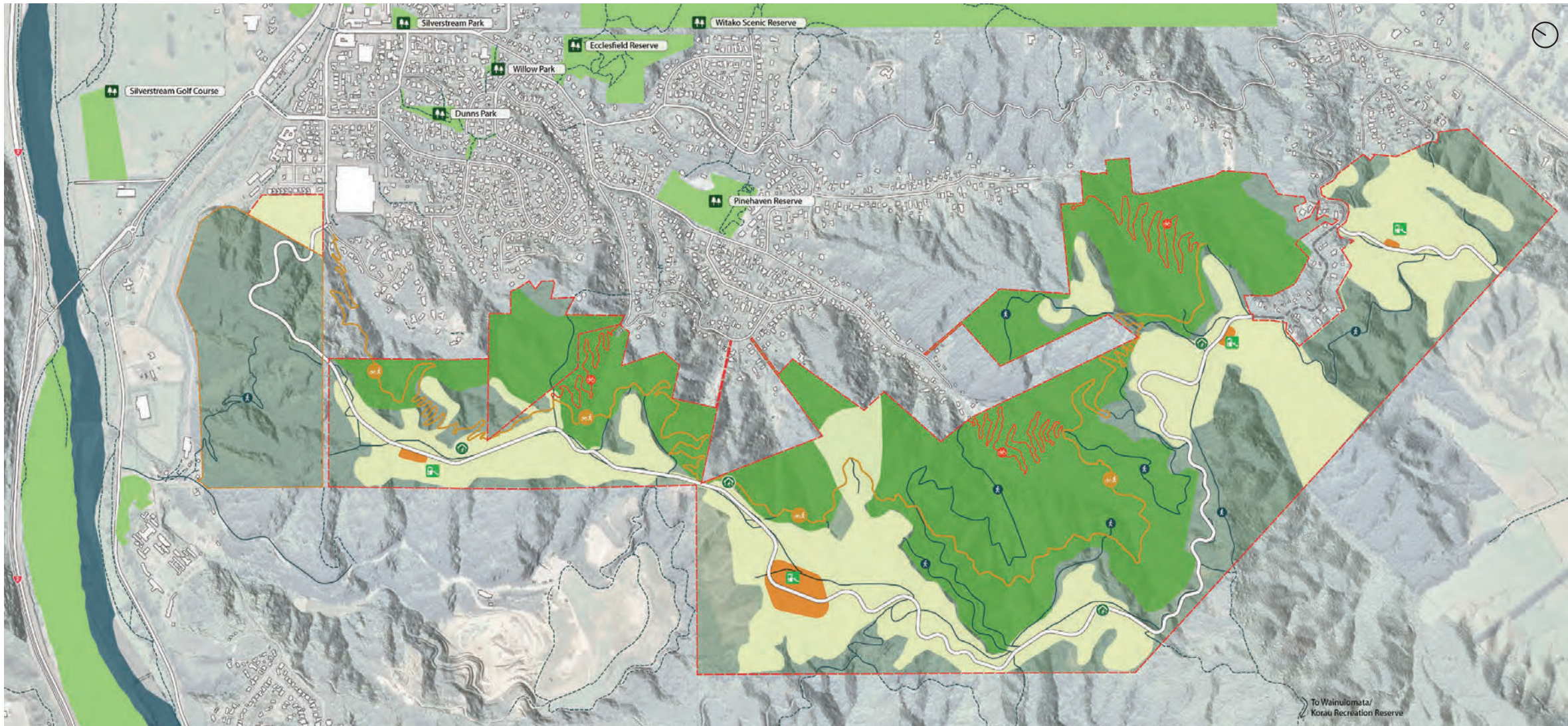
3.5.2
Recreational hubs

To aid access to the reserve and recreational network a number of recreational hub facilities are proposed. These would serve as meeting places, start/end points for walks or bike rides and typically would include an open shelter structure, toilets, tap water, furniture, information, wayfinding and interpretative signage.



LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Proposed Reserve
- Regenerating Indigenous Forest
- Existing Open Space
- 🌲 Existing Park or Reserve
- 🏠 Proposed Neighbourhood Park and Play Area
- 🏠 Proposed Recreation Hub
- 🚶 Proposed Shared Walkway and MTB track
- 🚴 Proposed MTB track
- 🚶 Proposed Walkway
- Existing Walkway
- Potential Developable Area
- Proposed Neighbourhood Centre Area
- Proposed Spine Road



3.6 A Sustainable & Resilient Environment

Development that is resilient to natural hazards and climate change, sustainably designed and minimises greenhouse gas emissions.

Good development includes providing homes with low carbon emissions (both in terms of embodied and operational energy) and designing healthy neighbourhoods with sustainable transport options and a resilience to climate change and natural hazards, such as flooding, drought and fire.

New Zealand has an international obligation to respond to the UN Sustainable Development Goals (SDG) and in particular:

- Meet the objectives of the Paris Agreement to limit global warming to 1.5-2°C above pre-industrial levels.

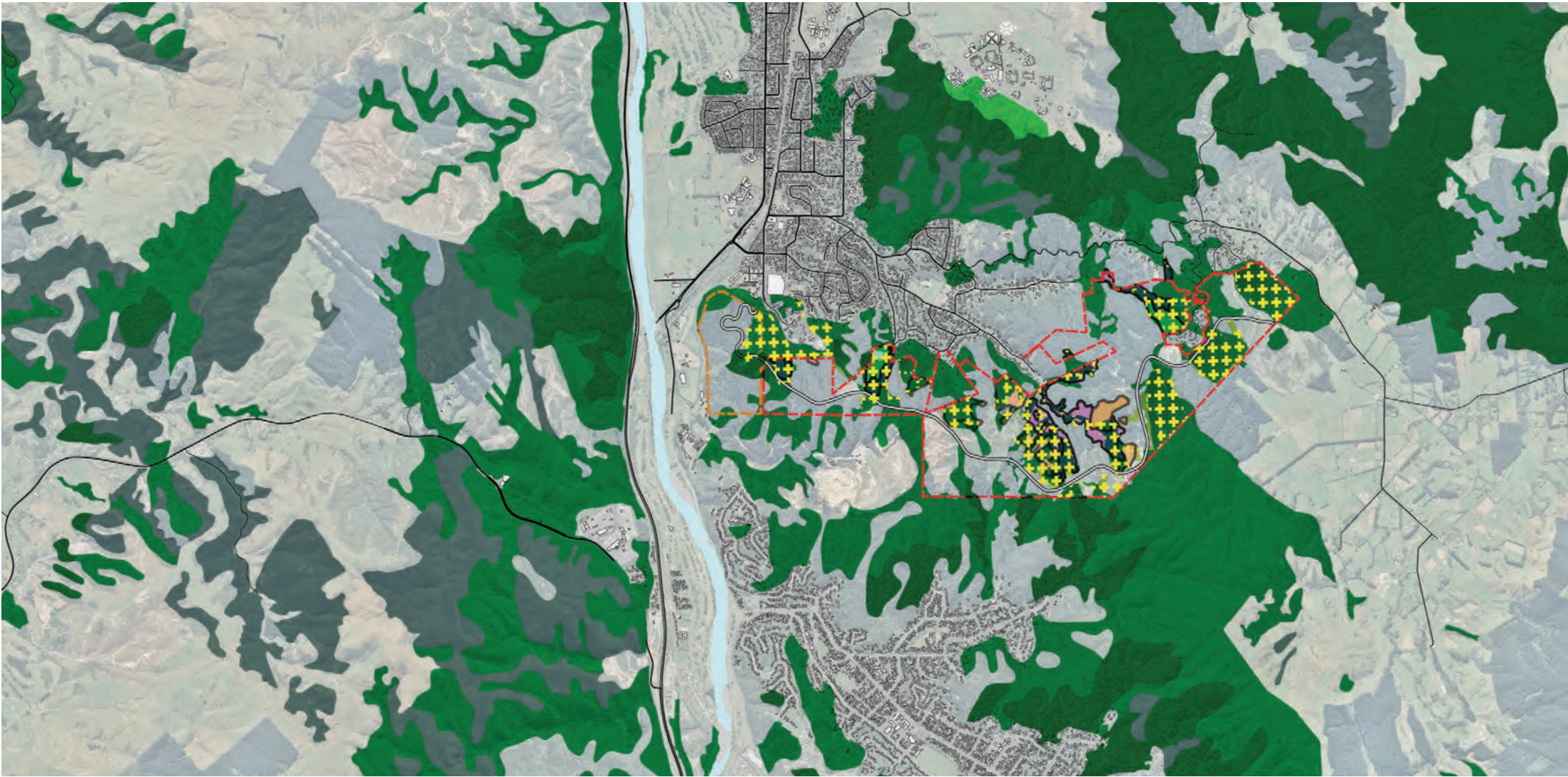
- Report on greenhouse gas emissions under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

New Zealand is on the path to a low emission, climate resilient future. The Government has declared a climate emergency and has committed to being Carbon Zero by 2050 and has established the Climate Change Commission to support this journey. In their first official report the Commission recommends increased urgency and action - “we need strong and decisive action to address climate change.”



LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Broadleaved Indigenous Hardwoods
- Indigenous Forest
- Manuka and/or Kanuka
- Kamahi Forest w Emergent Pine
- Secondary Beech Forest
- Fernland
- River
- Draft Significant Natural Areas
- Draft Significant Natural Areas within the site
- Further strengthening of native Green Infrastructure Network within development



3.7

Climate Change Commission (CCC) Vision

The Climate Change Commission’s vision is of a thriving, climate-resilient and low emissions Aotearoa where our children thrive.

This future for Aotearoa is equitable and inclusive, protects livelihoods and makes economic sense. It is also a future that is possible if we take opportunities to evolve and change.

It is a country where people are respected stewards of the land. Where an innovative and resilient food and fibre sector succeeds in a low emissions world. Where abundant native bush stores carbon and is home to native birds and plants. Where our plantation

forests support a flourishing bio economy, enabling low emissions construction, materials and energy.

Recommendations from the CCC report that can be incorporated into the Silverstream Forest development include:

- NZ Building Code must increase insulation & energy efficiency minimums.
- Consider EV plugs & access to EV charging in multi-unit housing.
- Native forests have added biodiversity & cultural benefits – over monoculture exotic plantations.
- Native forests require pest and predator control plus need to consider vulnerability of these carbon sinks to fire and disease.
- Considering future costs of carbon emissions in development feasibility – carbon accounting.
- Working from home and walkable neighbourhoods.

- Reduce emissions where feasible, use offset only for hard to abate sectors.

This requires communities around the country to have access to safe, convenient, well-integrated, affordable and accessible public or shared transport (including national public transport like trains and coaches), and extensive, high-quality cycling and walking infrastructure.

Silverstream Forest will include:

- Low-carbon strategies and targets for embodied and operational energy – low carbon materials and energy efficient buildings (See Forest Living below).
- Carbon Sequestration – opportunity to offset the carbon associated with the buildings.
- Setting aside significant areas of land for natural

processes, resulting in enhanced biodiversity of the area.

- Minimising development in areas identified as having significant indigenous vegetation and biodiversity values and areas of high amenity value.
- Creating more efficient homes and workplaces that use much less energy and water, are warmer, dryer and are better ventilated.

LEGEND

- GTC Ownership Boundary
- The Spur Boundary
- Water Sensitive Urban Area
- Significant Natural Area
- Proposed Reserve
- Regenerating Indigenous Forest
- Existing Open Space
- Existing Park or Reserve
- Proposed Recreation Hub
- Proposed On-lot Rainwater Collection
- Proposed Shared Walkway and MTB track
- Proposed MTB track
- Proposed Walkway
- Existing Walkway
- Proposed Spine Road

