

Appendix 2: OUTLINE DEVELOPMENT PLAN – NARRATIVE

Southeast Rangiora Development Plan

Context

This area comprises approximately 57 hectares and is situated on the south-east side of the urban edge of Rangiora between the Northbrook Reserve to the north and Marsh Road to the south. The ODP provides for the integrated development of this new residential area that will yield around 600 housing units over the next 10-15 years.

The development is anticipated to progress in three sequential stages from north to south as depicted on the ODP as Blocks A B and C. The new REL Road traverses Block A north of Boys Road before forming the eastern boundary of Blocks B and C

The ODP identifies Block C as an 'odour constrained' area comprising a wetland area and a future light industrial/[commercial](#) zone, The detailed design and layout for Stage C to be determined once details of future road alignments and level crossings in the area have been finalised. A separate plan change or consenting process will be required before the industrial / [commercial](#) development can proceed.

The ODP comprises four 'layers' comprising a 'blue network, green network, movement network and a (resulting) land use pattern. The purpose of this methodology is to provide an integrated approach that maximises the opportunities to protect and enhance natural environmental features and integrate these into the built environment.

[The landscape character and identity outcomes for the Site will be the result of landscape interpretation as well as stakeholder liaison, including with historical landowners and mana whenua. Part of this is the recognition of the Ngahere Rangiora \(SASM 016\) overlay in the Proposed WDP.](#)

Blue Network

The blue network consists of three spatial elements which are to be recognised and provided for during the development of the Site.

1 Northbrook and Middlebrook

The Northbrook and esplanade reserve forms the northern and part of the western boundary of Block A in the form of a 20m wide ecological space that will include riparian planting and walkway that allows for interaction with the space. The Northbrook has significant ecological and cultural enhancement with further potential for enhancement. The Northbrook reserve will have two large ponds bordering the Site, supporting various waterbirds, and coupled with the Northbrook itself, may provide suitable spawning ground for native fish, such as upland bully and kanakana, and Kōura, a keystone species found in one of the Northbrook tributaries.

The Middlebrook has been modified for much of its length within the Site, but its ecological significance remains high. It already features more extensive riparian planting than the Northbrook and this shall be expanded with its proximity to the Block B stormwater retention and a future biodiversity area in Block C. Like the Northbrook, this waterway provides a social, cultural, and amenity value for the Site and the surrounding area.

2 Overland flow path

The overland flow path will be undeveloped and planted without impeding any flow rate. It shall be encased in planted greenspace and stormwater treatment areas providing large areas of landscaped open space. In Block A the lowest point in the land is the Northbrook, which already forms the overland flow path for the upper part of the development. The esplanade surrounding it shall be designed to accommodate additional flow in significant rain events.

In Block B, the overland flow path runs across the southern portion and is designed to collect water from the Site's western boundary and channel it south of any urban development or stormwater retention to the eastern boundary. This flow path also functions as a high amenity space and shall accommodate a shared pedestrian/cycle corridor.

3 Stormwater management areas

The stormwater management areas shown on the ODP will be multi-functional. Most of the time they will be dry and provide amenity and passive recreation areas for local residents. However, their principal function is surface water attenuation and filtering out contaminants prior to water entering the Northbrook and Middlebrook.

Green network

The green network comprises four key spatial and functional elements:

- Ecological green space integrated into the blue network and providing important protection to the ecological functions of the existing waterways;
- Open space and recreation - neighbourhood parks to provide for a range of active and passive recreation activities;
- Green links for internal amenity and fine grain connectivity;
- Green interfaces to manage effects of development within and between the development area and surrounding environment.

1 Ecological green space

Riparian planting should provide both habitat, shade, and resource for invertebrate species and provide habitat connectivity for non-aquatic species. Harakeke, cabbage tree, and kowhai, for example, are effective habitat and provide nectar for bellbird and tauhoe (waxeye). These riparian strips promote the ecological connectivity between the waterway and the surrounding spaces.

The planting also needs to support banks stability. *Carex spp.* and other inundation tolerant species for example help limit erosion and the subsequent sedimentation of waterways that harms invertebrate communities. Further up the banks of the waterway harakeke, cabbage tree, lancewood, pittosporum, and kowhai are effective bank stabilizing plants.

The Northbrook is a potential lamprey spawning site, and with a conservation status of “Threatened – Nationally Vulnerable,” the preservation of this waterway as a potential lamprey spawning habitat is critical and should be protected. Large rocks and tree roots provide habitat, promote bank stability, and help to oxygenate the water. This is important for small fish species, invertebrates, and koura which have been found in one of the tributaries of the Northbrook.

Further planting of greenspaces within the Site will be undertaken to support the dispersal of many bird and flying invertebrate species by creating an integrated network. [This will include responding to the ‘podocarp overlay’ as proposed by the PWDP as part of the Ngā Tūranga Tupuna Overlay titled the Ngahere Rangiora \(SASM 016\). This shall be recognised by planting specific native tree species in public spaces as key landscape character elements, creating native plant communities that reflect natural plant communities focused on strengthening or recreating indigenous fauna habitats, and establishing specific plant communities that support specific cultural practices. Podocarps will be obvious tree species choices, including totara, miro and kahikatea to provide strong character and associative landscape values and suit different parts of the existing site conditions.](#)

Open Space and Recreational green space and SMAs

Green open spaces will provide amenity for existing and future residents in Rangiora. These spaces should maintain the “open” character of Rangiora and ensure that local residents (particularly those in higher density areas) have adequate provision of and access to quality outdoor spaces. Council’s open space requirements cited in the Long Term Plan and Activity Management Plans shall be adhered to during [subdivision](#) design.

The green open spaces provided for in the ODP will ensure that local residents (particularly those in higher density areas) have adequate provision of and access to quality outdoor spaces. Council’s open space requirements cited in the Long-Term Plan and Activity Management Plans shall be adhered to during subdivision design.

Landscaped buffer areas shall be provided along the periphery of the area where it adjoins non-residential activities. This will ensure effects arising from conflicting land uses are minimised, particularly reverse sensitivity with rural neighbours, unless otherwise specified

Several public open spaces to add amenity to the neighbourhood, relief for more compact residential clusters, and provide residents with the opportunity for recreation. A central neighbourhood park of min. 2000m² is to be established in Stage A and B respectively. The precise location and size of these recreational reserves shall be determined based on the number of reserves established in the wider area and shall ensure people living within the development block have access to open space/reserve within a 400m walking radius of their homes. These local parks will provide passive recreation opportunities which is essential for the level of residential density proposed. All three neighbourhood parks function as the green heart of the development and offer a 'spatial break' and 'meeting place' for the medium density development.

Whilst the exact location and final size of the reserves will be determined at the time of subdivision it is anticipated that the central green space in Block B will be larger, between 5000m² and 6000m², and the central green space in Block A will be smaller around 2000m². Both shall be able to accommodate a variety of active and passive recreational opportunities along with landscaping. The third large greenspace is located adjacent to the Northbrook in Block A and shall be designed to form an extension of the esplanade environment. This reserve will have a strong focus on tree planting and natural landscaping and is strategically placed to accommodate the retention of existing specimen trees where practical and shall provide several pedestrian crossing points over the Northbrook.

The ODP identifies several key green links to ensure the pedestrian connectivity at a finer grain, these are to be no less than 10m in width, and shall be designed and landscaped to minimise their length and maximise views in from local roads and surrounding properties to ensure adequate passive surveillance.

Interfaces and edge treatment Green interfaces shall be provided to manage effects of development within and between the development area and surrounding environment.

Edge treatment of private property boundaries (fencing and planting) towards open space reserves, green links and utility reserves shall be considered during subdivision design to ensure maximum passive surveillance over all public spaces (incl. roads, reserves) is achieved. This can/will be enforced through district plan rules, consent notice and /or developer covenants.

A residential - rural interface treatment consisting of fencing and planting requirements is proposed only along the boundary with the existing rural lifestyle properties to the south of Block B.

Along the western boundary to the small pocket of rural lifestyle land a 10m landscaped channel will provide some distance and visual mitigation.

The proposed residential interface with the REL will be managed the landscape treatment of the stormwater flow path adjacent to the REL and the landscape provisions for this space

which will include landscape planting, the stormwater conveyance, some mounding, and the use of part of this area for a pedestrian and cycleway.

Movement Network

Access and Transport

The ODP employs a roading hierarchy that delivers a range of integrated transport options, including active transport connections from the development area to adjacent neighbourhoods that facilitate the use of existing and future public transport route options. Road connections shall be designed to achieve permeability, whilst minimising the number of new intersections and maintaining appropriate intersection spacing.

The ODP features a primary north south route which Council has designated for the Rangiora Eastern Link (REL) that provides a connection point from Northbrook Road to Marsh Road. Boys Road will form the main east-west primary road, linking the existing adjacent urban fabric to the Northbrook Esplanade. Several additional north south and east west connections are provided as secondary roads. The proposed road hierarchy will deliver an accessible and coherent neighbourhood that provides safe and efficient access to the new development and can cater for extensions to existing public transport routes and/or new routes along the primary roads.

The Council's planned intersection upgrade at Boys Road/REL Road is also identified on the ODP. ~~In~~ addition Boys Road will require widening of the road corridor, to be co-ordinated with residential subdivision, to achieve an urban standard where possible, whilst co-ordinating with management of the existing waterways and adjacent rural land uses. Property access to Boys Road should also be provided where possible although alternatives may need to be considered where this crosses existing waterways.

Two secondary road intersections with the REL are indicated for Block B, south of Boys Road, to provide for efficient travel via the REL noting that this provides the primary north south connection. These intersections should be designed to minimise delays for traffic on the REL. South of Boys Road, property access or other local road intersections to the REL are to be avoided. The internal road alignment for Block B is to be designed to reduce the potential for vehicles to short-cut between the REL and Boys Road.

The internal road network for Block B shall include an alignment that leaves open the potential for a local road connection to the west, should a Road Rail Level Crossing be agreed between the Council and Kiwi Rail in the future. The secondary road shall also be aligned to leave open the potential for a future road connection across the SMA flow path should residential development of the existing rural lifestyle properties south of Block B occur in the longer term.

Although not shown on the ODP, an alternative road layout for Block B would exclude road access to the REL with all road access from Boys Road. The road access connecting to the REL would be downgraded to greenlinks.

An integrated network of local roads will facilitate the safe and efficient distribution of internal traffic, provide access to properties and the commercial area(s), assist in connecting the open space reserves network both within and beyond the site and provide links to adjoining neighbourhoods.

The transport network for the area shall integrate into the pedestrian and cycle network established in adjoining neighbourhoods and the wider township.

Boys Road frontage is anticipated to be upgraded to an urban standard in accordance with the Engineering Code of Practice. This work is to be undertaken in a manner that encourages future residential properties to front directly onto Boys Road, thereby providing direct access to those properties

Cycling and walking paths will be located wherever possible within reserves and green links to provide a pleasant amenity for users and enhance the levels of activity in these public areas. Where pathways are contained within the road reserve they are to be incorporated into the roading design of the overall road network giving adequate space to accommodate cyclists and to facilitate safe and convenient pedestrian movements. Three indicative pedestrian crossing points are shown on the ODP on Boys Road at key locations where main pedestrian connections cross primary and secondary roads to support a safe pedestrian and cycle network.

There is allowance for a future second road connection across the Northbrook to be established if required

Pedestrian Network

For Block A, the Northbrook Esplanade shall form the main pedestrian connection with a shared cycle/walk trail from which several green links lead into the development. A second pedestrian route will run in a north-south direction along the existing paper road forming an active edge to the elevated landscaped utility reserve.

This north-south connection shall extend across Boys Road and continue through Block B, directly connecting to the large SMA at the south of Site. This path shall follow an infrastructure corridor consisting of green links, smaller roads and the local neighbourhood park.

This north-south connections shall extend across Boys Road, and continue through Block B directly connecting to the large SWMA at the south of the Site. This path shall follow an infrastructure corridor consisting of green links, smaller roads and the local neighbourhood park. A second key shared path shall connect from the REL Road through the site in an east –west direction via the landscaped overland flow path towards the existing urban neighbourhood and the local primary schools directly to the west of Block B. This east -west corridor provides for a future connection to

Denchs Drive via Hegan Reserve if a future pedestrian crossing of the railway line can be agreed with Kiwirail.

Cycling and walking paths will be located wherever possible within reserves and green links to provide a pleasant amenity for users and enhance the levels of activity in these public areas. Where pathways are contained within the road reserve they are to be incorporated into the road design with adequate space to accommodate cyclists and to facilitate safe and convenient pedestrian movements. Their exact location shall be determined at detailed design stage to ensure proper alignment with the Block A and B network and to ensure the safety for all road users

Three indicative pedestrian crossing points are proposed on Boys Road at key locations where main pedestrian connections cross primary and secondary roads to support a safe pedestrian and cycle network..

~~For Block C the pedestrian/cycle network connects to the shared cycle/walkway within the REL Road corridor for travel to the south west and to the north where there are also connections through the stormwater reserve. A small local road connection and / or shared path could provide for local walking and cycling connectivity to Dunlops Road.~~

Land Use

Residential use and density

The development area shall aim to achieve a minimum net density of 15 household per hectare,. This is to be averaged over the area of the Site, excluding the area identified as an Odour Constrained Area where dwellings are not permitted 500 m from the edge of the Wastewater Treatment Ponds.

The zoning framework supports a variety of site sizes and building typologies to achieve this minimum density requirement. Areas of higher densities within the Site shall be strategically positioned to avoid effects on neighbouring developments and shall be integrated with amenities such as key open spaces to provide shared outdoor spaces in close proximity and to balance out the relation of built form to open space.

As this area is to be developed in stages, confirmation at the time of subdivision of each stage and an assessment as to how the minimum net density of 15 household per hectare for the overall area can be achieved.

Medium density areas within the Site are able to be supported by adjacent amenities that include key open spaces including a neighbourhood park, local parks, green corridors and a small commercial hub within the Site.

Local commercial centre Block A

A small commercial area is proposed adjacent to the intersection of the REL with the Northbrook Esplanade to maximise opportunity service the recreational activities with good walking and cycling accessibility. It shall be limited to a café/bar and ancillary activities, in a single tenancy, of no more than 650m² and with local road access, to minimise effects on the local transport network.

The site provides a frontage overlooking the Northbrook Stream and incorporate the unobstructed longer distance views across the SW areas to the north to Mount Grey. Any proposal in this small commercial zone shall directly engage with the Northbrook walking and cycling trail and the Council park by providing active frontages.

Future Local Commercial Centre Block B

A potential commercial centre has been identified on the ODP in Block B to provide a range of local shops and services within walking and cycling distance of residents should this be needed.

If required, this indicative local commercial centre on Boys Road could be of a similar scale and nature as that proposed on Northbrook Road. The indicative location is in a strategic position with north-south and east-west walking and cycling corridors to provide easy accessibility

Community and Educational Facilities

The provision of new educational facilities is not part of the design concept but could be provided within the Site or in the wider area albeit subject to a needs assessment.

The existing Museum and community facilities are to be integrated with appropriate, access and carparking and pedestrian linkages to allow the continuation of its use.

Odour Set Back area

No sensitive activities are provided for in the 'Odour Set Back Area' (Block C) due to the wastewater treatment area adjoining the ODP at the southern boundary across Marsh Road. The restriction in this area is either regulated through a future zone change or shall be supported by an appropriate, enduring legal/planning mechanism (such as a covenant, consent notice, certification) imposed at the time of subdivision.

Servicing

Stormwater

Detailed stormwater solutions are to be determined by the developer in collaboration with Council at subdivision stage and in accordance with Environment Canterbury requirements. Systems will be designed to integrate into both the transport and reserve networks where practicable.

Site stormwater management is anticipated to encompass a network of pipes, swales, basins, and treatment devices to provide conveyance, treatment and disposal to either groundwater recharge or discharge to nearby streams.

It is expected that stormwater design and construction would be undertaken in accordance with:

- WDC Engineering Code of Practice.
- Christchurch City Council (CCC) Construction Standard Specification (CSS).
- CCC Waterways, Wetlands and Drainage Guide (WWDG).
- Auckland Regional Council Technical Publication 10 (ARC TP10) Stormwater management devices design guideline.
- New Zealand Building Code (NZBC) Clause E1 Surface Water.

In addition, as part any application for subdivision consent the following requirements will be met:

- to undertake groundwater and spring water level monitoring and spring flow investigation across the Site to inform the construction methodologies that are applied in different parts of the Site, related to shallow groundwater issues; and
- to specify construction measures to ensure that shallow groundwater is not diverted away from its natural flow path for those areas where the shallow groundwater (in water bearing seams or layers) is likely to be intercepted by service trenches and hardfill areas.

Wastewater

The provision of infrastructure to service the area shall align with the Council's indicative infrastructure staging plan, unless an alternative arrangement is made by the landowner/developer and approved by Council.

A duplicate sewer main will connect existing development north of the site to the Rangiora wastewater treatment plant into which effluent from Stages A B and C will be discharged.