Gallina Nominees, Heinz Wattie Pension Fund, and Brookside Road Residential Ltd

BROOKSIDE ROAD PLAN CHANGE

URBAN DESIGN STATEMENT

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Introduction

This technical report has been prepared for the Plan Change application by Gallina Nominees, Heinz Wattie Pension Fund, and Brookside Road Residential Ltd for the approx. 110ha site in the west of Rolleston to be rezoned from Rural Outer Plains to Living Z Residential (LZ) and Business 1 (B1) under the Operative Selwyn District Plan.

Background

The ODP is based on a Design Concept with a focus on movement connectivity and residential amenity. It has been tested by developing an Indicative Subdivision Layout to confirm that:

1. a density of a minimum of 12hh/ha can be achieved
2. the movement network offers good connectivity into and through the site for a variety of modes
3. the desired residential amenity and character under the proposed LZ requirements will be achieved

Rolleston - Urban Form

Rolleston started as a small settlement centred around SH1 but quickly grew into a township with a centre focused on the southern side turning its back to the highway corridor. This was further consolidated with the establishment of the IZone and IPort Business Park to the north and all urban residential, commercial and community growth being guided to the south, east and west but remaining entirely south of the state highway. The highway has since been established as a hard northern boundary to the residential part of the township.
Gradual expansion created a more and more imbalanced urban form and a centre with limited growth capacity combined with issues around high amenity connections between residential developments and linkages to the centre.

Structure Plan

Since 2009 the Rolleston Structure Plan (RSP) has guided development in Rolleston providing a clear blueprint for growth of the Township. Following this bigger vision Rolleston has developed into a key regional centre with a main commercial area around the local domain and several well distributed sub-centres to the south, east and west. The Structure Plan introduced a large centrally located reserve (Foster Park) with a variety of community, educational and recreational facilities creating a second central hub. The community footprint has therefore extended significantly southwards starting to balance out the original irregularly expanding and disconnected urban form. (fig. a) At the time, the RSP identified an urban limit and set aside specific ODP areas for development within a 40 year time sequence leading up to 2075 (fig b).

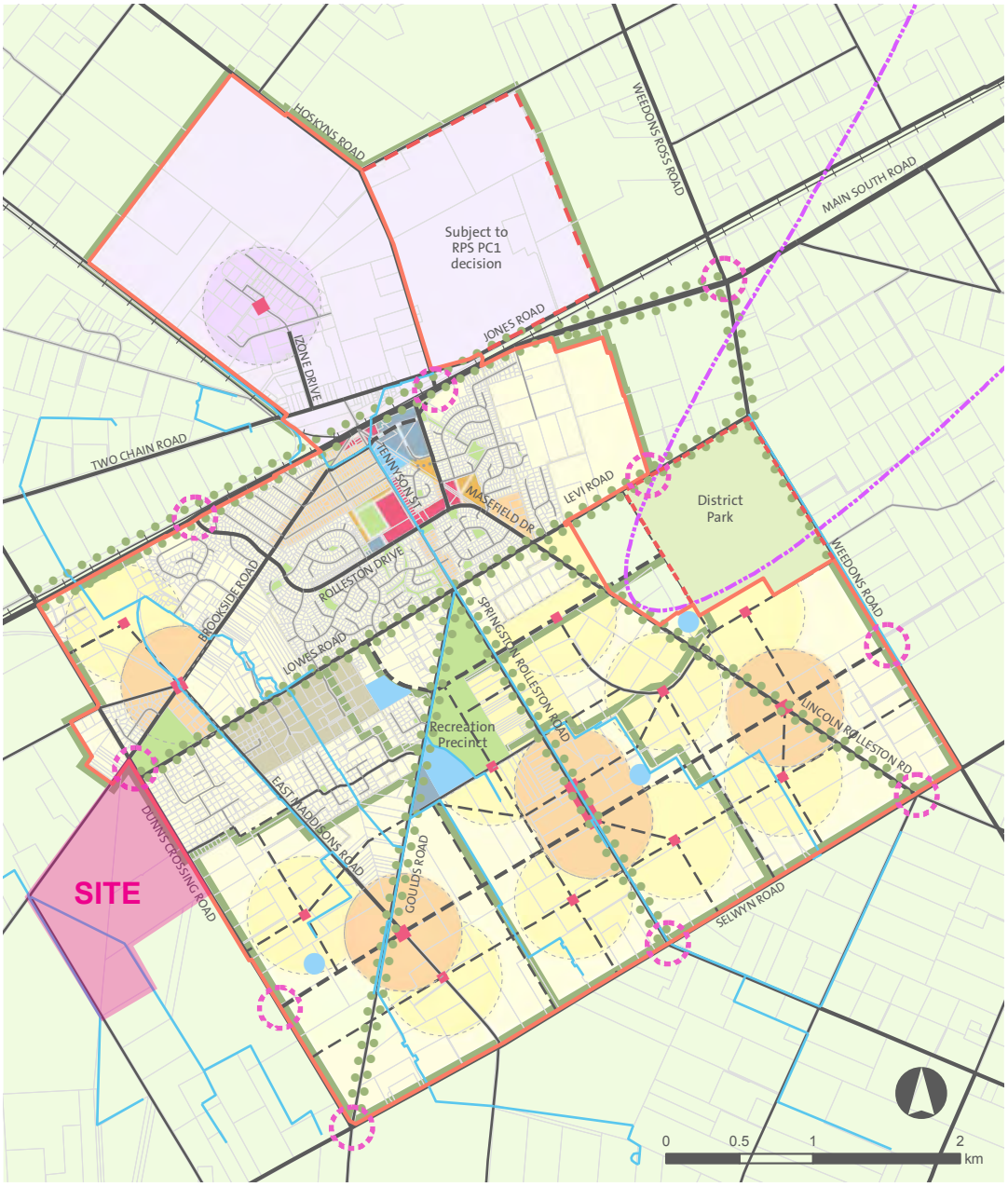
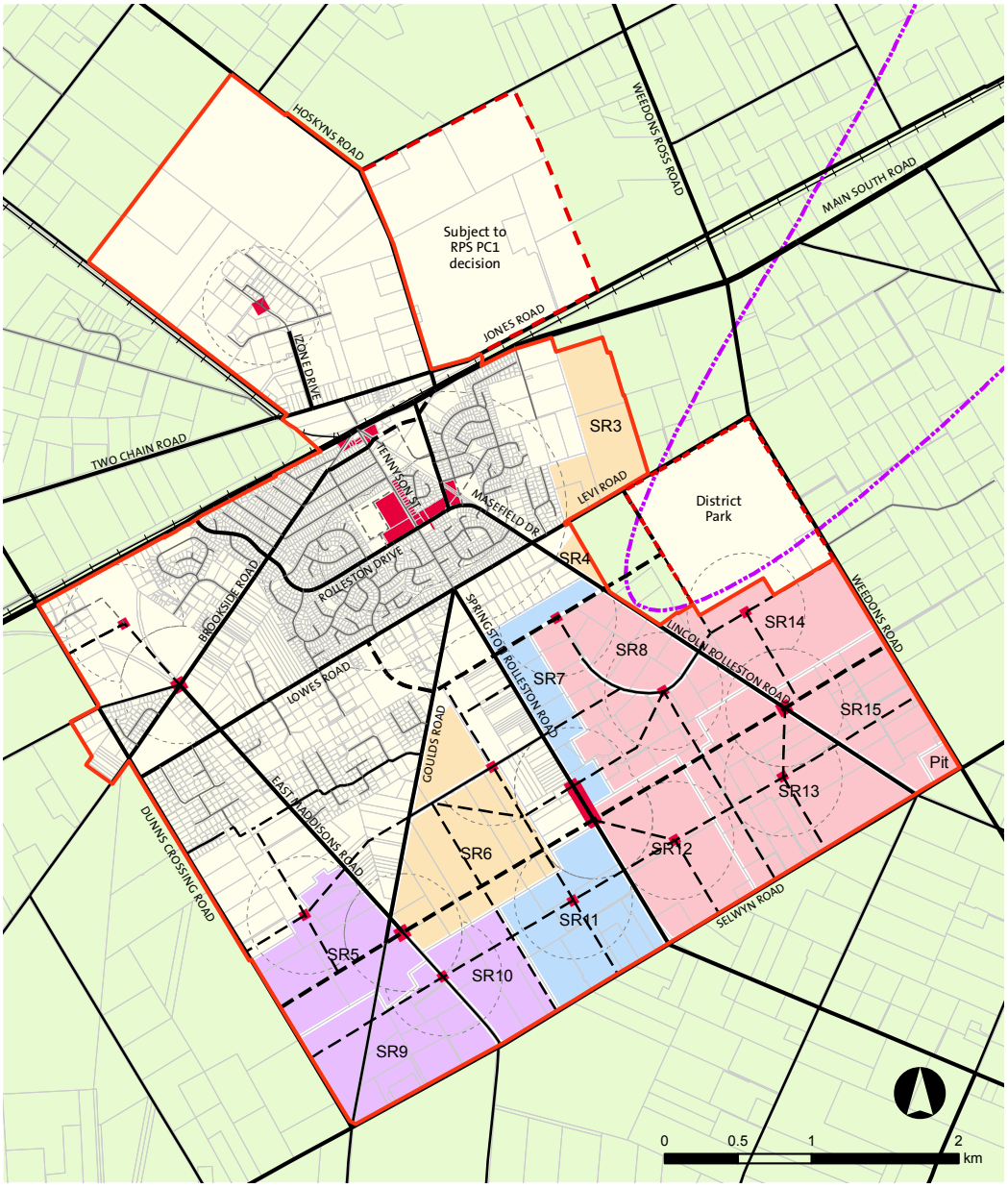


Figure 5.2: Rolleston Structure Plan

- Study Area
- Railway
- National Arterial
- Main (primary) roads
- Proposed main (primary) roads
- Local (secondary) roads
- Proposed local (secondary) roads
- Local (minor) roads
- Walking and Cycling Link
- Town Centre
- Neighbourhood Centre
- Local Centre
- Comprehensive Housing
- Medium Density Residential (20HH/Ha)
- Medium Density Residential (15HH/Ha)
- Low Density Residential (10HH/Ha)
- Low Density Residential (7HH/Ha)
- Community Facilities
- Education Facilities
- Green Corridors and Green Belt
- District Park
- Recreation Precinct and Reserves
- Rural land
- Avenue Planting
- Izone Southern Business Hub
- Water Races
- Noise Contour
- 5 Minute Walk (400m)
- Key Gateways

(fig. a)
Rolleston Structure Plan



Staging of Greenfield Residential Development

Study area
Noise Contour
Town Centre
Neighbourhood Centre
Local Centre
5 Minute Walk (400m)
Rural land

Residential Development Stage
Stage 1: 2007-2016
Stage 2A: 2017-2026
Stage 2B: 2027-2041
Stage 3: 2041-2075

Railway
National Arterial
Main (primary) roads
Proposed main (primary) roads
Local (secondary) roads
Proposed local (secondary) roads
Local (minor) roads
Indicative local (minor) roads

(fig. b)

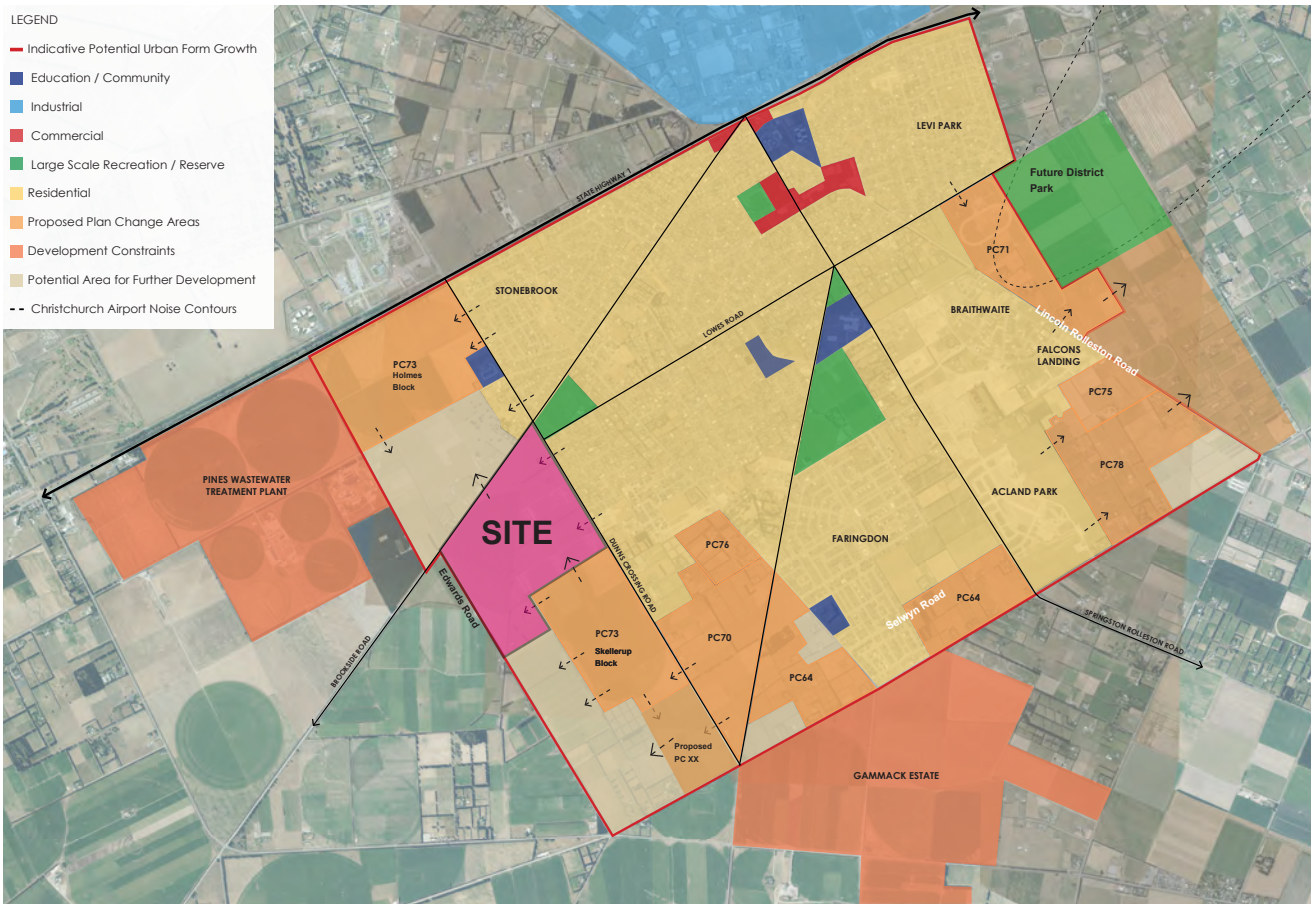
Current urban form and growth Rolleston 2021

The areas originally identified in the Rolleston Structure Plan as ODP's (fig b) are also known as Future Urban Development Areas (FUDA) and are all filling up rapidly with either development completed, construction in progress or are part of a plan change process. There are few isolated areas of infill to the north of Selwyn Road remaining to be resolved until the Structure Plan vision is completed. It is notable that almost all of the areas identified in the Structure Plan sequencing in 2009 have been developed or are in the process of development in an altogether different sequence and in a much faster time frame than initially expected.

Future Urban Growth and the wider development context

Rolleston in its current form has limited connectivity within the older residential areas and there is a disconnect between the original commercial centre and the new community hub around Foster Park. The Structure Plan does provide for connectivity within the new areas and the east-west and south connectivity through Foster Park will assist greatly in creating a better functioning urban environment.

However, due to the position of the original towncentre to the north in close proximity to the SH1, Rolleston will most likely always have issues with consolidation of urban form and connectivity impacting on the function of the urban environment.



(fig. c),
Future growth analysis

Growth to the north is severely limited due to the strong boundary the State Highway provides which directed most of the residential growth towards the south with some expansion to the west and east.

Expansion to the east has been limited due to the overlaying noise contour restrictions in favour of Christchurch International Airport. The Gammack Estate to the south of Selwyn Road is held in a perpetual charitable trust that prevents the land from being sold or subdivided for urban development, and requiring it to be used for agricultural purposes. As such, growth to the south is considerably constrained.

The Waste Water Treatment Plant (WWTP) and Resource Recovery Centre, related sensitivities and State Highway 1 severance being a road of national significance will remain impediments to development to the north and north-west and therefore present definitive and defensible 'boundaries' to development in that direction.

As a result, the next sequence of development is bound to jump across the roads to the south-east (across Lincoln Rolleston Road) and south-west (across Dunns Crossing Road) where there are no physical constraints to development.

Although not identified as an FUDA, the western side of Dunns Crossing Road is a logical next step in the sequence of development within the urban growth pattern of Rolleston, as controlled by the Structure Plan.

Looking back at the specific history of development in Rolleston the Structure Plan has set the overall directions and all development since has followed in this direction. The proposed Plan Change is a logical next step in this sequence and a natural continuation of the existing Rolleston urban environment.

Site Description

The site measures approximately 110 ha across several titles. The two main properties are both triangular shaped and over 40ha in size. One triangle is currently used by Tegel as a chicken rearing farm accommodating seven large sheds, associated outbuildings and storage sheds for farming equipment. The second triangle is used for pastoral grazing. There are several rural dwellings with common domestic curtilage around established gardens. Typical of the rural edge of Rolleston the site is flat with shelterbelts delineating individual properties or functioning as internal windbreaks. Road boundaries are either planted up with rural hedges including some mature trees or display open style rural fencing enabling views across the land.

Main access points are primarily driveways to individual properties or gated entry points onto farm tracks. Along Dunns Crossing Road three existing rural residential dwellings are located with direct access off the road but with a generous setback from the road boundary. Dwellings and associated garages and sheds are in parts screened by established boundary vegetation and larger landscaped gardens. Through intermittent gaps between the dwellings open farmland can be seen beyond the domestic curtilage.

View across the Site to the Port Hills in the South

View into Site from North corner at Brookside Road / Dunns Crossing Road intersection

View into Site from Dunns Crossing Road at southern boundary

Location and immediate context

The Site is located approx. 3.5km to the west of the commercial town centre and bounded by Brookside Road to the north, Dunns Crossing Road to the east and Edwards Road to the west. It shares a boundary to the south with Proposed PC Area 73 (Skellerup Block) and remaining rural land.

North - Brookside Road

The immediate northern neighbourhood across Brookside Road is predominantly rural with a smaller pocket of rural residential at the far eastern corner in proximity to Brookside Park. Further north across Burnham School Road PC 73 is proposing a residential development on the Holmes Block of an urban density and a small commercial area adjacent to the existing primary school.

The Pines WWTP to the northwest does not directly impact on the Site. Brookside and Lowes Road are the main connecting movement corridor from the Site to the town centre, approx. 3.5km away. Brookside Road also provides a tangible connection back to the rural environment and long distance viewshafts to the Selwyn River.

Brookside Road looking towards the West / Selwyn River

Typical rural residential dwellings on Brookside Road

East - Dunns Crossing Road

The adjacent neighbourhood along Dunns Crossing Road to the East is primarily urban in character with several rural lifestyle blocks transitioning into an urban density through infill development. At the far northern end of the Site Brookside Park breaks up the built form and provides a large open green space of approx. 4ha. It is the local neighbourhood park for the wider community and offers various sport fields and associated clubrooms. There is a strong sense of gradual change with all lifestyle blocks opposite the Site undergoing intensification through infill development which has brought with it a change of character of this road from rural to residential. Along the entire eastern boundary the streetscape has a dual character with residential style kerb and channel, a footpath and individual property access to the eastern side and an open berm and swale with rural style fencing and shelterbelt planting to the western side. Further south the road changes to a more rural character with larger lifestyle blocks and rural activities on either side.

Dunns Crossing Road looking South

Edge of Brookside Park

The alignment of Dunns Crossing Road is an important contributor to the sense of place for Rolleston as it offers long distance views to the Southern Alps in one direction and to the Port Hills in the other direction.
Lowes Road south of Brookside Park extends through to Levi Road in the east creating the main east-west connection through Rolleston and a fast and easy link for the site to Foster Park, the town centre, educational facilities and the proposed new District Reserve off Levi Road.

Dunns Crossing Road looking North

Typical residential development East of Dunns Crossing Road

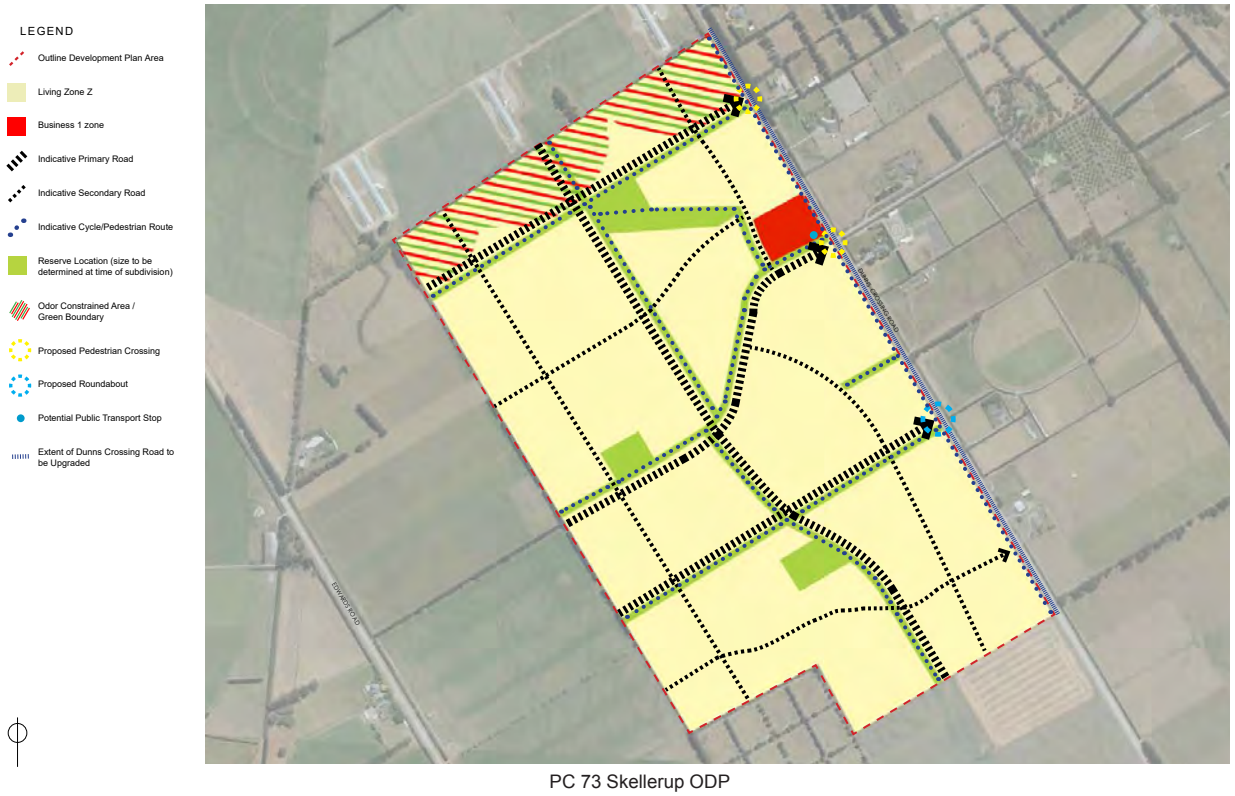
Pedestrian link to Sheridan Drive

Entry to Boulez Mews

Residential under construction Dunns Crossing Road

South

The southern neighbour is currently still a rural property with similar characteristics as the site itself. Plan Change 73 seeks to rezone the Skellerup block land from rural (although currently zoned as Living 3) to residential (Living Z). Should PC 73 be approved the environment along the southern boundary would be of a full residential character with direct links to the site as provided in the ODP below.



PC 73 Skellerup ODP

West

Across Edwards Road to the west the land is zoned Rural Outer Plains and displays typical rural characteristics with open farmland interspersed by rural dwelling with a domestic curtilage and typical rural fencing and shelterbelts dissecting the landscape. Edwards Road is a rural gravel road with very low traffic volume only used for access to rural properties.

Edwards Road looking South

Typical edge treatment Edwards Road

Character and Amenity

The Rolleston Structure Plan also sets out key objectives and development principles to guide future growth and set achievable and desirable outcomes. The following six development principles of the RSP have guided the Design Concept and Indicative Layout for this Plan Change proposal.

1. *Provide a public edge to public open space*
   - Avoid new development 'turning its back' or privatising edges to major landscape features and recreational areas;
   - Minimise access barriers to allow for a wide spectrum of the resident population and visitors to physically access or visually overlook these features

2. *Create a continuous network of open space*
   - Establish an inter-connected network of open space centred on larger public open space reserves, including the
   - Recreation Precinct and 100Ha District Park.
   - Provide walking and cycling access and ecological links between larger reserves through the use of linear open spaces, such as green corridors, water races, avenue style street connections and smaller local parks.

3. *Integrate land use and movement*
   - Provide a range of convenient and pleasant walking and cycling options for linking residents to key destinations;

4. *Higher density development at nodal points*
   - Closely match the spread of population density to centres and/or key movement corridors, including public transport routes, which require the highest levels of activity and provide the higher quality amenities.
   - Establish smaller block sizes within higher density areas to maximise the choice of routes and reduce travel distances.

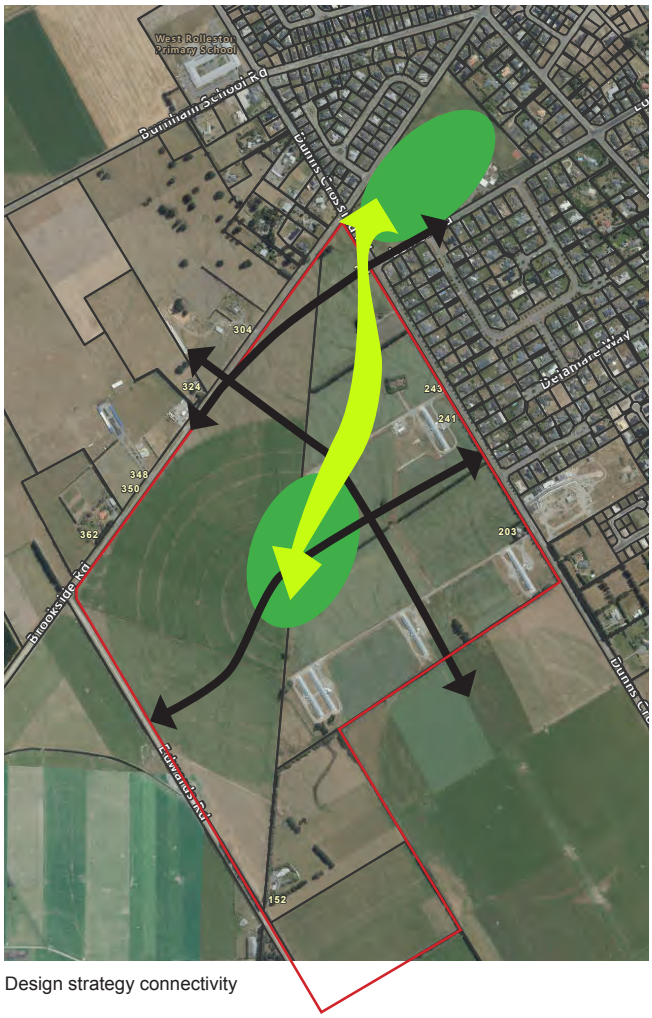
5. *Overlapping mix of land uses*
   - Provide a choice of housing typologies to cater for a range of different lifestyles.

6. *Consider climatic conditions*
   - Street alignments should maximise the opportunity for properties to gain good sunlight and daylight access. The long end of blocks should be within 20° off north-south to offer the best prospect for buildings to be both energy efficient and address the street.
   - Consider other climatic conditions, such as prevailing winds. Rolleston has a temperate climate that requires protection from cold easterlies, strong north-westerly winds and southerly storms.

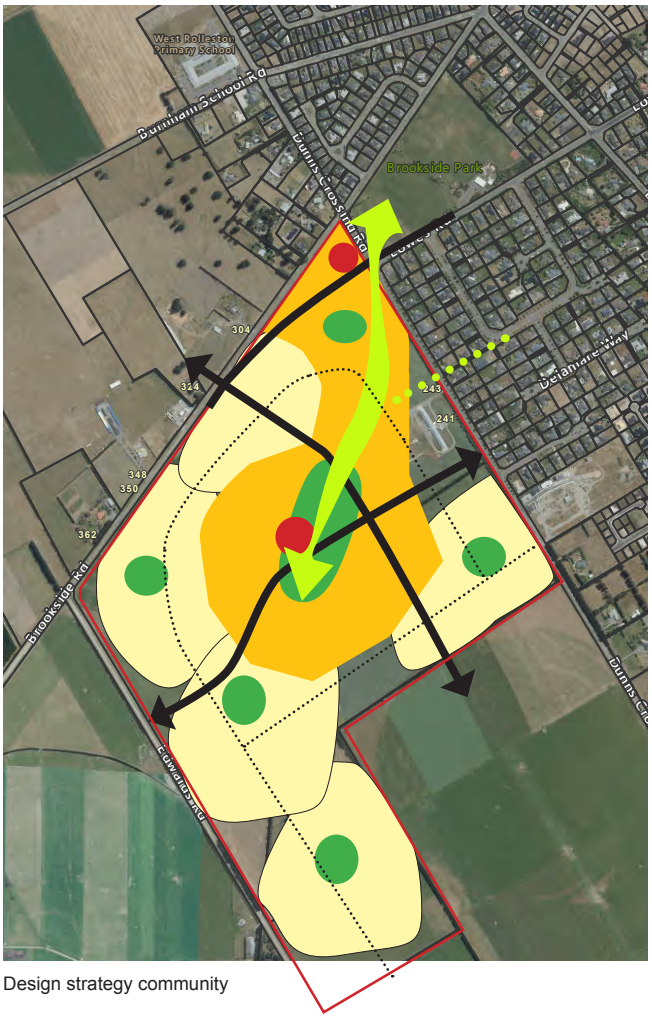
Design concept Key design drivers

- extend diagonal link along a desire-line through the site with high amenity pedestrian and cycling facilities to create a green link between the centre of the site and Brookside Park/ Lowes Road
- create diverse living environments including Medium Density housing supported by open green spaces
- provide a high amenity for all internal connections to support pedestrian and cycle movement
- create a strong interface and new connections with the immediate residential neighbourhood east and south
- build on the close walking and cycling network providing safe and direct links to the town centre, large open spaces and the new local centres in proximity to the site
- integrate centrally located green spaces and small local commercial centres in strategic locations to support the residential community
- create a clear east west and north south road hierarchy
- re-align Brookside Road directly with Lowes Road to resolve potential conflict

Three of these key design drivers, the diagonal green link, the central green space and the primary road hierarchy create the underlying physical structure that guides the site layout. Long term the underlying design concept provides an integrated, cohesive neighbourhood precinct.

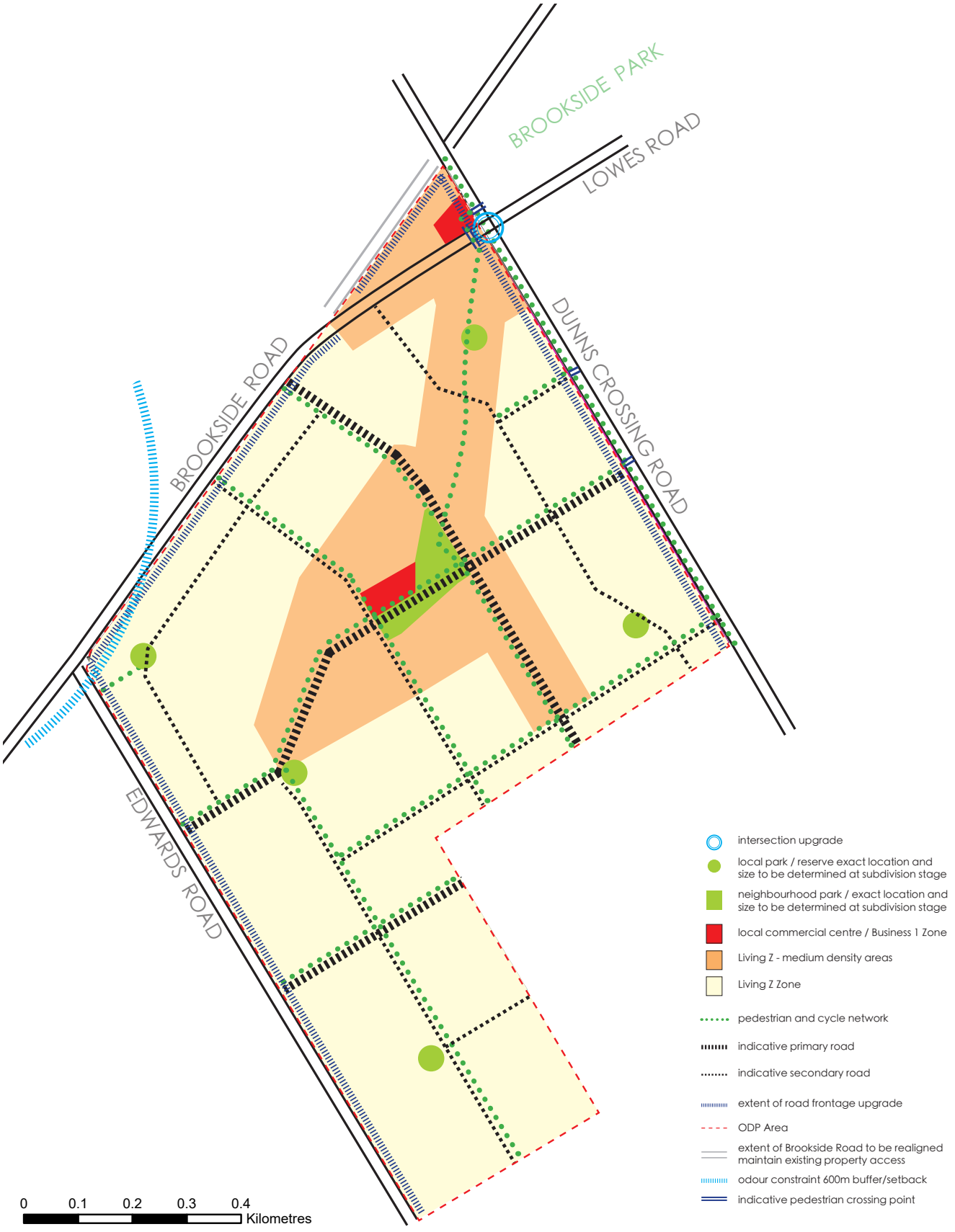


Design strategy connectivity



Design strategy community

Outline Development Plan



Movement and Connectivity

Key connections

Although Rolleston is a fully established township in its own right with a fast-growing population supported by established commercial/ business and industrial areas and associated work places there is still a significant portion of Rolleston residents who commute to Christchurch on a daily basis. This makes Lowes and Dunns Crossing Roads important and well used road connections linking to either Weedons Road, Park and Ride facilities or to the western access to the Motorway/ State Highway. An upgrade of the intersection of Dunns Crossing with SH 1 is expected in the near future.

External

Brookside Road and Lowes Road form the most direct link to the town centre for all modes of transport.
The distance to the key shopping area, schools and other community facilities in town is approx. 2.5km for the north- eastern part and 4.0km the for the south-western part of the development site, and well within a 5 to 8 minutes cycling distance and a 20 to 40 minutes walking distance.

The commercial activities proposed by PC 73 would provide alternative local commercial centres in closer proximity. The Holmes block commercial area would be located 700m from the northern corner of the Site and the Skellerup Block local commercial area would be approx. 800m away from the south-west corner of the Site. Both areas would be within a 10min walking distance.

Along the northern part of Dunns Crossing Road there is a lack of connectivity through the existing eastern neighbourhood on the opposite side. This is a result of the existing infill development pattern with only very few east-west direct connections through to East Maddisons Road and further onto Foster Park. There is one narrow pedestrian and cycling connection and one possible road connection is under construction. Further south new connections are proposed as part of PC 76 and PC 70 providing a far better connectivity reaching the southern end of Foster Park and the proposed new neighbourhood centers in Faringdon.

Internal

Within the site there is a natural movement desire line from the centre to the north-east corner to Brookside Park and towards Lowes Roads and on towards Foster Park and the towncentre. It will be the primary pedestrian and cycle route into the site from the north-east/ Brookside Park and a key contributor to the wider pedestrian/cycle network.
Further internal connectivity within the Site is provided through main east-west and north-south primary roads and secondary roads. Additional local roads and pedestrian and cycle paths will provide the finer grain network and create further direct linkages to neighbouring areas.
The realignment of Brookside Road with Lowes Road will provide clarity and avoid conflict of intersection spacing. The termination of part of Brookside Road also allows the existing small enclave to the north to be directly connected to the residential development on the site.

Access

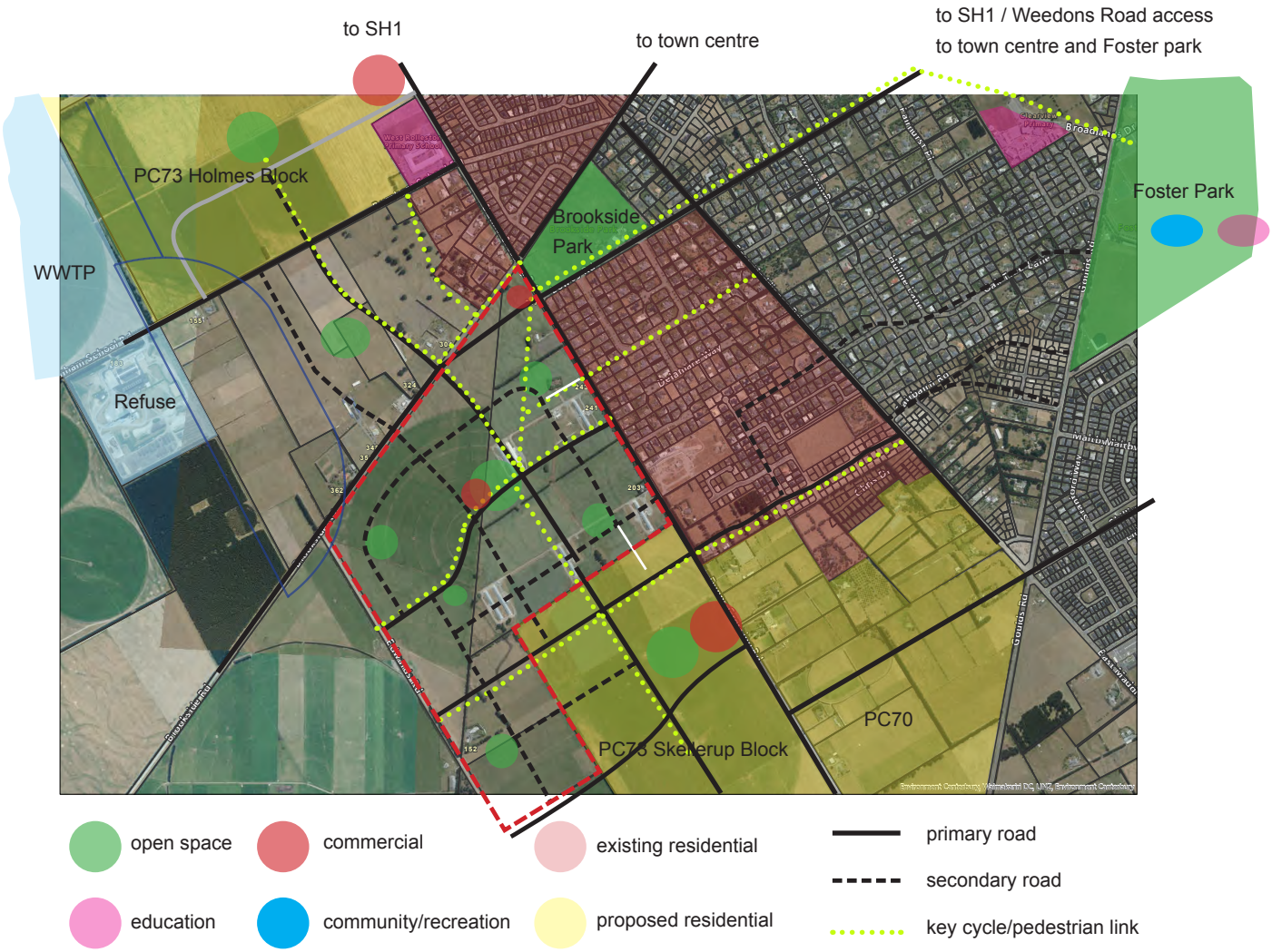
Along Dunns Crossing Road four vehicular access points into the Site are proposed and evenly distributed. Wherever possible they are responding to opportunities for direct connections across Dunns Crossing Road and where this cannot be achieved they are appropriately off-set to avoid intersections conflicting with each other. The northernmost access point is the realignment of Brookside Road leading into the northern corner of the site servicing the medium density environments. This will be a key access road not only to this Plan Change area but also to the area directly to the north which could likely to be a residential infill area in the future, sitting right between PC 73/ Holmes and the proposed PC Site.

Further south a second, but short entry into the northern part of the site has been located in line with a well-used pedestrian link through the residential development opposite Dunns Crossing Road. This access has been deliberately designed to only feed into the north-eastern area of the site and will not be used as a key access for the entire site.

The central access point is the main entry to the site off Dunns Crossing Road and leads directly to the central green space and commercial area via a continuous east-west primary road through the entire PC site.

The southernmost access point along Dunns Crossing Road is a secondary entry servicing the entire southern part of the Site. The exact location is to be confirmed at subdivision stage to ensure it aligns directly with an opposite road or is offset to form a T intersection, dependent on adjacent development.

To the south, PC 73 Skellerup ODP offers very good opportunities for direct connectivity which have been pulled into the site. To the north and west, new connections onto Brookside and Edward Road are proposed to ensure good links to future development is available if required. The northern connections along Brookside Road have been logically positioned to be able to extend across the gap to potentially link up with PC 73 Holmes Block.



Prioritizing walking and cycling

All internal roads and non-vehicular links provide a safe environment and a high amenity to encourage the adoption of walking and cycling for the majority of trips both within the neighbourhood and further afield.
The benefits of high amenity cycle and walking infrastructure are well documented and with regard to better physical and mental health, reducing emissions and energy use and general improved community social integration. The following design principles have informed the pedestrian and cycling strategy for the ODP:

1. Create direct routes along desire lines to key destinations, to existing and future adjacent neighbourhoods and use local ‘shortcuts’ for pedestrian and cycle movement where possible
2. Create Safe pedestrian and cycle routes in particular for school children and elderly with passive surveillance over public pathways from adjacent activities - ‘eyes on the street’
3. Avoid conflict between transport modes by catering for different users and creating slow traffic environments where cycle routes are sharing the road
4. Create visually interesting streetscapes to encourage walking and cycling

The ODP promotes active transport modes through the provision of a well-connected pedestrian and cycle network using the internal roading layout for general circulation and dedicated shared pathways along primary roads.
The proposed internal roading pattern coupled with a minimum of 12hh/ha residential densities also encourages the provision of public transport that presently terminates at Brookside Park. Dunns Crossing Road, Lowes Road or Brookside Road are possible extensions of this route into the site to the central green space.

Hierarchy of movement corridors

The proposed arrangement of movement corridors as defined by the ODP primarily ensure the proposed future development is:

- integrated with the surrounding context
- anticipates future connection as required
- provides appropriate internal connectivity within the ODP area

The ODP includes the key roads that are vital to achieve the desired connectivity and has the opportunity to include a variety of additional local roads and accessways at the detailed subdivision design stage. A clear hierarchy of movement corridors assists with legibility in an area, particularly important in a flat terrain such as Rolleston where there are very little topographic or natural features to aid wayfinding.

Secondary north-south routes are also indicated on the ODP as well additional internal roads to provide for internal circulation and additional neighbourhood-to-neighbourhood connections. The ODP retains flexibility with regard to additional local roads. There is the opportunity to either locate local roads around the perimeter of larger reserves, have private lots directly adjoin reserves where suitable or use shared access ways with extensive opportunity for landscaping to create a high amenity and passive surveillance over these public spaces.

Block layout

The subdivision design which underpins the ODP adopts north-south blocks where practical. The north –south orientation is best urban design practice to maximize solar access for dwellings and minimize the number sections serviced via the north where private outdoor space and property access are in conflict.
This principle however, has to be balanced with other requirements and restrictions such as lot geometry, minimizing road intersections on collector roads, keeping blocks to an appropriate walkable size and making efficient use of the available land itself.

Placemaking

Community and neighbourhood identity around green spaces

Several public open spaces are included in the ODP in order to add amenity to the neighbourhood, relief for more compact residential clusters and provide residents with the opportunity for recreation.

The larger reserve in the centre of the site forms a key community space with two primary roads as boundaries and a local commercial centre co-located. This neighbourhood park has the opportunity to function as the green heart of the development and offers a 'spatial break' and 'meeting place' for the medium density development and potential aged care living environments in close proximity. It promotes social interaction between a diverse range of residents and creates a hub for the local community.
Cycle and walkways will be routed through this green space bringing the wider community into the heart of this new neighbourhood and allow further opportunities for engagement.

Four additional smaller local parks are evenly distributed throughout the site to ensure green spaces are within an easy walking distance to all dwellings. These reserves create a similar focal point, albeit much smaller in scale. Here the green space functions as a local recreational space for the neighbourhood and a break in the environment to balance out the more built up form.
Whilst the exact and final size of these reserves will be determined at the time of subdivision, it is anticipated that the central green space will be larger between 4500m2 and 6000m2 and the additional green spaces will be substantially smaller around 1000m2 to 2000m2. Both will be able to accommodate a variety of active and passive recreational opportunities along with landscaping.
The location of the reserves is such that all residents within the ODP area are able to access open space within a 400m walking radius. To provide easy access and adequate passive surveillance, all reserves have minimum of two road frontages.

Commercial areas to support day to day living

Two small local commercial areas have been included in the proposal to support the higher density areas and provide day to day necessities within a short walking distance. One commercial area is co-located with the larger central green space along the main east west-road connection to ensure easy access from all direction. This commercial area will create the central hub for the community and could include the local dairy, small boutique shops and a café or to make good use of the relationship with the neighbourhood park.

The second local commercial area has been placed opposite Brookside Park to create a small local hub to service the northern part of the development and to encourage an active relationship with Dunns Crossing Road and the activities within the park. This commercial area would form a more public gateway with opportunities for pedestrian priority crossing over Dunns Crossing road and a local bus stop. Good passive surveillance over the footpaths, the wider intersection area and the adjacent open space would be achieved.

Lifestyle choice and density

The ODP aims at achieving a minimum of 12 hh/ha which for the site translates to an overall approximate yield of 1320 residential sites. The Selwyn District Plan promotes diversity with respect to residential development, thereby improving choice, variety and affordability. A range of section sizes and housing typologies is required to provide future residents with choice and variety. It promotes a mixed community reflective of the varied NZ population with a varied demographic spread. This approach creates a stronger socio and economic diversity, along with a range of price points for future residents, including more affordable options.

Living Z (Minimum min 500m2 / average 600m2)

The ODP is based on a Living Z zoning for the site as this zone provides the appropriate density coupled with bulk and location rules to achieve the desired 12hh/ha. This is the most appropriate density zoning to best integrate the new development into the surrounding existing and future residential environment. It will achieve a cohesive built environment.

The key elements that organise the site are the movement corridors, green links, open spaces and the connections to the neighbourhood which create a natural structure for the placement of lots. The result is a layout with a diversity in lot sizes from 400m2 to 800m2+, (including small lot medium housing) varying in orientation and location offering a wide range of options that will result in diverse architectural design responses throughout the development. In a new development of this size it is important to provide opportunities for such variety to encourage social, economic and cultural diversity reflective of the wider community.

All road-facing sites have enough width to allow for breaks between built form and space for landscaping in front and side yards to soften the visual impact of the built environment including fences. This will contribute to the residential street character and the amenity within the public realm. In addition, the proposed road design itself and the plan provisions in relation to road-side fencing will create a welcoming residential streetscape.

In preparation for the ODP the proposed suite of LZ rules guiding subdivision design and dwelling design, bulk and location have been considered with as much care as possible at this conceptual stage. Overall the rules are working well and will guide development in achieving the desired residential character.

Medium density housing

Medium density is a key housing typology to achieve the desired density and diversity It can be successfully integrated into the wider housing mix of the LZ zone.

The Rolleston Structure Plan's Design Principle 4 promotes co-locating increased density with open green spaces as it is best urban design practice to locate "density around amenity" for the following reasons:

1. the open space provides those residents with additional opportunity for outlook
2. the public open space compensates for smaller sections and reduced recreation opportunity within the private environs
3. higher numbers of dwellings around public open space increases levels of active and passive surveillance
4. a more built up environment improves the spatial definition of the open space, better defining its edges
5. neighbourhood parks provide additional opportunity for on-street parking to support adjacent medium density housing

Within the ODP area the most suitable locations for medium density housing are therefore around the central green space, the green corridor and the smaller reserves. Whilst "density around amenity" is a key rationale for the location of medium density residential typologies, it is not the only suitable location.

Additional locations for medium density housing in smaller clusters occur throughout the development often in midblock locations around shared access roads and within quiet cul-de-sacs or in areas where the geometry of the underlying land creates unique 'left over' pockets and infill site suitable for smaller lots.
Varying density and lot sizes allows for a better use of the land resource, aids wayfinding, legibility of road hierarchy and adds visual interest to the streetscape.

In addition, the requirement to achieve a minimum net density of 12hh/ha requires the inclusion of a generous proportion of medium density housing which should be distributed throughout the ODP in several smaller clusters where they can naturally be integrated into attractive local street with low traffic volumes.

In general, medium density should not be located next to adjoining existing residential or rural parcels owned by others or along major roads with very high traffic volumes.

The ODP does specify indicative areas for medium density residential, however it is best practice to identify these through a thorough and more detailed design process at the subdivision stage when more accurate and detailed information is available to make better informed decision and assess the suitability and effect of each location. Some flexibility as to the exact location of all medium density areas should therefore be retained.

Interfaces

Dunns Crossing Road

Dunns Crossing Road will gradually transform from a rural road to an urban road with direct access to residential driveways. The frontage alongside the development area will be upgraded to urban standard in line with the existing developed areas to the east. This will be undertaken as part of future subdivision.
Dwellings will address the street with front doors, habitable room windows etc. ensuring active frontage and promoting passive surveillance of the street space, increasing levels of real and perceived safety;

However, Dunns Crossing Road will remain a key traffic route and slightly larger lots may be required along this boundary in close proximity to intersections and roundabouts to allow for a reasonable setback for dwellings. The LZ Zone does allow for a range of lot sizes and this flexibility can be used placing slightly larger lots along this boundary where required to better accommodate on-site vehicle manoeuvring to reduce the need for vehicles to back out onto these roads creating potential traffic safety issues.

Brookeside Road

The road frontage of Brookside Road alongside the development area will be realigned near its eastern junction with Dunns Crossing Road. It will also require upgrading to urban standard in line with existing developed areas; this will be undertaken as part of future subdivision. Access to existing properties affected by the realignment will continue to be provided by integrating the remaining part of Brookside road into the local road network.

Driveways will come directly off Brookside Road and dwellings need to address the street with front doors, habitable room windows etc. ensuring active frontage and promoting passive surveillance of the street space, increasing levels of real and perceived safety.
This will give Brookside Road a more residential character.

Similar to Dunns Crossing Road slightly larger and wider lots should be placed along this boundary to allow for north facing outdoor areas and associated fencing to be set back from the road boundary and to better accommodate on-site vehicle manoeuvring. This will reduce the need for vehicles to back out onto this road creating potential traffic safety issues.

Integration with other Plan Change areas

To integrate the proposed ODP with PC 73 no specific measures are required apart from aligning road connections.
Three road connections are proposed in a north south direction and two in an east west direction to create good connectivity between the two developments. Several include a shared cycle and walkway separated from the road which should be extended into the site to increase cohesion and provide consistency. Gateway and signature entries should be avoided at the thresholds between developments or at least visually downplayed to strengthen overall cohesion within the neighbourhood.

Parks and Reserve

Passive surveillance is required over perimeter pathways in the reserve and any pedestrian and cycle / green links to ensure safety. Dwellings should have active / habitable spaces facing the reserve and /or link.
The current fencing rules for fences along reserve boundaries will provide appropriate guidance for the reserve interface with maximum fencing height restrictions and the requirement to provide passive surveillance over public spaces. The fencing style should be consistent along the full boundary i.e. rural style open fencing to create a cohesive look.
In addition, layered landscaping on the reserve side and within properties will assist to transition the scale of the build-up form into the reserve landscape and allow privacy screening and screening of service areas.

Western boundary to rural / Edwards Road

The ODP needs to balance the current interface with the rural environment as well as anticipate that the urban area may extend on this land in the far future. Along Edwards Road the road reserve corridor itself provides sufficient separation to address any reverse sensitivities between the rural and residential activities. Edwards Road is currently a gravel road and will require upgrading to facilitate residential living including direct access to properties and resurfacing to avoid dust from passing vehicles.

Should any properties be internally accessed from the east (i.e. at the Brookside / Edwards Road intersection), a consistent rural, open style fence will act as property demarcation towards the road / rural neighbour to the west. Combined with the more generous planting this will mitigate any potential reverse sensitivity towards the neighbouring rural activities.
The rural neighbours to the west are primarily established farm blocks with mature landscaping around existing rural dwellings creating a visual buffer.

Southern boundary - rural

There is one rural dwelling in visual proximity to the development approx. 100m from the south-west corner of the site across Edwards Road.
This property has a well-established garden with mature planting providing a reasonable visual screen towards the site. In addition, the views into the site are currently blocked by a large shelterbelt running the full length of the southern boundary. Removal of this shelterbelt will allow views into the site and some intermittent screening could be added to this boundary through landscaping measures such as of hedge type planting suitable for a residential scale and the provision of an open style rural fence. No other mitigation measures are required. It is not recommended to place larger lots along this boundary as this would preclude cohesive future development.

Rules to consider under the Operative District Plan

The fencing rules under the Operative Plan create some anomalies in particular for corner sites where 1.8m high road side fencing meets the 1m height restriction, or 'drop-down requirement', of the internal boundary fence within a 3m setback from the road. This creates visually awkward results and the actual reasons for the lowering of the fence:

- a high amenity street scape through cutting back fences
- increasing openness and passive surveillance over the street
- good visual splays for driveways

cannot be achieved with this combination of disparaging fencing rules.

A possible solution would be to exempt the affected corner sites from this 'drop-down requirement' and replace it with a requirement to achieve 30% visual permeability where currently 1.8m high road side fencing is permitted on corner sites and for this fencing not to extend past the front façade of the house where it faces the non-fenced road boundary. In addition, this road side fencing could be set back so planting can be used to screen this visually prominent fence in parts and soften the impact it has on the street amenity.

Summary and conclusion

The proposed Outline Development Plan captures the essential components of an underlying conceptual subdivision plan while retaining a measure of flexibility to respond to additional opportunities and constraints, as well as market changes.

In summary the ODP:

- creates a the direct green link along a desire line form the center of the site to Brookside Park
- provides for connections to adjacent development in the future;
- delivers residential development at a minimum density of 12 households/hectare and provides for a variety of residential house types, lifestyles and price points;
- promotes social interaction and neighbourhood cohesion through the inclusion of neighbourhood reserves and strategically located internal and external local connections
- provides day today services in the form of two well integrated small commercial areas within walking distance
- encourages active transport modes through the provision of shared paths that provide both internal connectivity as well as links to the wider Rolleston area with a focus on walking and cycling;
- is consistent with the development principles of the Rolleston Structure Plan

APPENDICES

1. Visual assessment

2. Outline development Plan

BROOKSIDE PLAN CHANGE
CHARACTER AND VISUAL ASSESSMENT

21/ 10/ 2021 | Final

report by
a+urban
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Document Status	Final issued
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Ckecked	NC/JC
Date	20.10. 2021

1. INTRODUCTION and METHODOLOGY

A standard assessment approach has been used to identify the existing natural features and character including any heritage features of the site and its surroundings and to assess the potential effects of the proposed development on existing visual character and rural/urban amenity.

A combination of desk top analysis and field assessment has been undertaken to identify the potential visibility of the proposed development from surrounding areas.

In broad terms, the assessment consists of the:

a) Identification of the key elements or attributes of the proposed development;
b) Identification of the landscape values and character of the site and the surrounding area;
c) Identification of relevant assessment criteria within the context of the relevant statutory instruments, Best Practice' and Urban Design Guide; and
d) Assessment of the effects of the proposed residential development on the existing visual character and rural/urban amenity.

By considering the above, the likely effects of the proposed development are able to be identified and rated.

The methodology used in this assessment is in line with the requirements set out in the Landscape Assessment and Sustainable Management 10.1, (NZILA Education Foundation), dated 2.11.2010 and Visual Assessment Best Practice.

2. STATUTORY DOCUMENTS / REGULATORY FRAMEWORK

2.1 RESOURCE MANAGEMENT ACT

Section 6 - Matters of National importance:

"In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

s.6 (a) 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;

s.6 (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development;

s.6 (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna."

Section 7 - Other Matters

"In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to -

(c) The maintenance and enhancement of amenity values."

The site is not located in either an Outstanding Natural Landscapes (ONL) or a Visual Amenity Landscapes (VAL).

With regard to section 7(c), the Selwyn District Plan provides more detailed guidance in the form of objectives and policies.

2.2 NATIONAL POLICY STATEMENT - URBAN DEVELOPMENT

Although it makes no specific reference to landscape matters Policy 8 clearly states that

Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:

a. unanticipated by RMA planning documents; or

b. out-of-sequence with planned land release.

2.3 OPERATIVE SELWYN DISTRICT PLAN

Under the Operative Selwyn District Plan, the Site is zoned Outer Plains Rural. There are several policies in the Rural Objectives and Policies of the Selwyn District Plan which relate to Landscape Values and Amenity which have been taken into consideration.

3. ASSESSMENT OF EXISTING ENVIRONMENT

3.1 EXISTING SITE CHARACTER

The Site is located approx. 2.5km to the west of the town centre and bounded by Brookside Road to the north, Edwards Road to the west, Dunns Crossing Road to the east and rural land / PC 73 (Skellerup block) the south. The Site measures approximately 110 ha across several individual rural properties and can clearly be divided into 3 parts. The eastern triangle of approx. 45ha contains the chicken farm, the similarly sized western triangle is dominated by wide open grassed farmland used for grazing and the smaller southern part is approximately 20ha and also used for cattle grazing.

fig 1. Site

Landscape and vegetation

Typical of the rural edge of Rolleston the site is flat with shelterbelts delineating individual properties or functioning as internal windbreaks. Similar to the surrounding rural environment, the site itself also includes shelterbelt planting associated with rural activities and domestic curtilage planting to support rural style living. Both vegetation types create visual focal points within the landscape. Shelterbelts include species such as Cypressus macrocarpa, Pinus radiata, some Populus nigra 'Italica' and several standalone Eucalyptus trees. They vary significantly in height between 5m to over 15m. The largest and longest shelterbelts run in a northeast to southwest direction across the site, perpendicular to Dunns Crossing Road to provide shelter from southerly winds. The other major shelterbelt runs along the Dunns Crossing Road boundary blocking the prevailing easterly wind.

There are some small clusters of various exotic trees and some smaller native shrubs on site that form either part of larger gardens around existing dwellings or have been planted along driveways. These well-established trees provide a sense of scale and a counterpoint to the otherwise flat topography. They also act as a visual screen for residential activities and provide shade. Road boundaries are either planted with rural hedges including some mature trees and display open style rural post and wire fencing, or are kept open allowing views deep into the site with the large sheds in the background.

Apart from the common rural infrastructure such as a water race, rural shelterbelts and farm buildings there are no important natural landscape or heritage features on the Site. As a result, there are no specific natural or heritage features that warrant retention or protection.

fig 2. view from corner of Brookside Road and Edwards Road

fig 3. view from corner of Dunns Crossing Road and Brookside Road

Built environment

The Site contains seven large sheds for chicken rearing and other associated equipment sheds and storage buildings. All sheds are well screened from Dunns Crossing Road and the adjacent residential environment by large, dense shelterbelts.

The Site also contains a few smaller rural residential lifestyle blocks with a common domestic curtilage around individual dwellings along Dunns Crossing Road and Edwards Road. Properties feature mostly single storey houses, plus auxiliary buildings such as stand-alone garages, sheds, and other structures associated with rural living. All dwellings are located towards the perimeter of the Site interfacing with Edwards or Dunns Crossing Roads. Access points to the Site are either rural style informal driveways to each individual property or gated entry points onto farm tracks, which allow access to, and views into the rural site.

There are no built environment or heritage features on site of any significance.

3.2 CHARACTERISTIC OF THE RECEIVING ENVIRONMENT

Topography and natural features

The proposed Site is located on relatively flat land typical for rural properties within the Canterbury Plains.
There are no topographical attributes within the site itself and no defining features. There are no natural elevations or features such as natural waterways within the Site apart from a rural water race which is a common man-made rural element in the wider Rolleston environment. The site naturally drains towards the south but most runoff goes straight to ground due to the porosity of the local soil.

Vegetation

Typical for the Canterbury Plains the vegetation in the surrounding rural environment is used predominantly for shelter belts to block the prevailing easterly winds and runs along property boundaries or edges of paddocks. They include similar species as those found on the site (Macrocarpa, Pinus, Poplars and several standalone Eucalyptus 5mto over 15m in height) and are predominantly planted along property or road boundaries. Vegetation types in the surrounding rural residential blocks to the south on Nobeline Drive are mainly exotic species, with small amounts of native species located near dwellings in private gardens.

Vegetation in the adjoining residential environment to the east and west is also predominantly exotic but of a smaller scale and larger variety, including typical garden planting such as ground covers and shrub planting as well as trees ranging from 4m - 8m in height. Although new residential developments are introducing more native species, exotic plants in particular exotic trees still dominate the landscape.

Due to the large-scale land use changes seen throughout the plains, including the site, there are only remnants of indigenous vegetation left in the wider surrounding environments but none have been identified in the PSDP on site or in close proximity to the site. The existing vegetation pattern found on site is largely made up of exotic species. As a result, the site and wider area has a low sensitivity to change, given the high level of fast growing introduced exotic species.

Sensory qualities

Within the Canterbury Plains flat open fields sit against a backdrop of the Southern Alps to the west and the Port Hills to the east. This creates opportunities for expansive views that are intermittently interrupted by large shelter belts or rural structures which have become integral to the rural aesthetic and identity. The natural characteristic of the environment is therefore considered to be modified, with a rural character as opposed to a natural character. (refer to Canterbury Regional Landscape Study Review (2010) by Boffa Miskell).
The land surrounding the proposed site mirrors the overall character of the region. The wide, open nature of the site allows for views to the Port Hills giving a sense of scale and provide a landmark for orientation in the otherwise flat topography.

Rural environment Brookside Road - (north)

The environment to the north of the site consists of a group of smaller rural lifestyle blocks with several smaller dwellings and established gardens at the eastern end and larger rural blocks adjacent to the WWTP. Brookside Road displays rural characteristics, with open style rural fencing to either side allowing views into the PC site into the rural land to the north. At the Edwards Road intersection, the road changes to a rural gravel road leading to Selwyn River past the Pines WWTP which is bounded by large pine trees.

Rural environment (west and south)

The environment surrounding the site to the west and south is characterised by wide open paddocks with boundaries delineated by open style rural fencing and rural shelterbelts. Where vegetation is absent the flat topography enables open views across the grassed paddocks to the wider rural landscape. The silhouette of the Port Hills form a strong visual backdrop to these and give a sense of place.

Built form in the rural environment

Whilst the scale, character, form, and materiality of structures varies throughout the wider receiving environment, dwellings and farm structures are common throughout the rural area. To the south, the rural environment is free of buildings. It displays the typical rural characteristics of the area, being a generally open rural landscape intersected by shelterbelts, drainage channels and open style rural wire fencing.

To the south-west there is a single rural dwelling on Edwards Road opposite the far south-west corner of the Site. it displays the typical domestic curtilage and is visually well screened from the Site. Beyond this dwelling there are no structures visible apart from fences and some isolated farm sheds.

Residential environment east

Dunns Crossing Road forms a 'transitional' boundary from residential to rural on the western side of the township.

The streetscape reflects this semi-urban and semi-rural character with a soft berm and open style fencing to the western side and a standard residential road edge treatment with kerb, footpaths and regularly spaced driveways to the eastern side giving it a residential character.

Built form in the urban environment

Opposite the Site across Dunns Crossing Road a typical suburban character is evident with a suburban density of dwellings, increases in hard surfaces and general infrastructure present in the landscape. These residential characteristics are also evident in the vegetation around individual properties and within the streetscape. Trees are generally exotic species and of a smaller stature to prevent excessive shading. Streets have a distinct residential character with hard surfaces dominating and intermittent street trees in a linear arrangement and ornamental vegetation to front yards. Properties are surrounded by solid 1.8m fencing to internal boundaries with roof lines showing prominently.

To the south of the Site Dunns Crossing Road still retains a semi-rural character with larger properties and dwellings hidden behind tall boundary planting. However, it is clearly evident that this area to the south of the Site is rapidly transforming into a full residential character.

Summary

Overall, the receiving environment can be divided into three categories with their own specific characteristics:

1. a rural open landscape to the south and west absent of building with large shelterbelts and distant views to Port Hills;

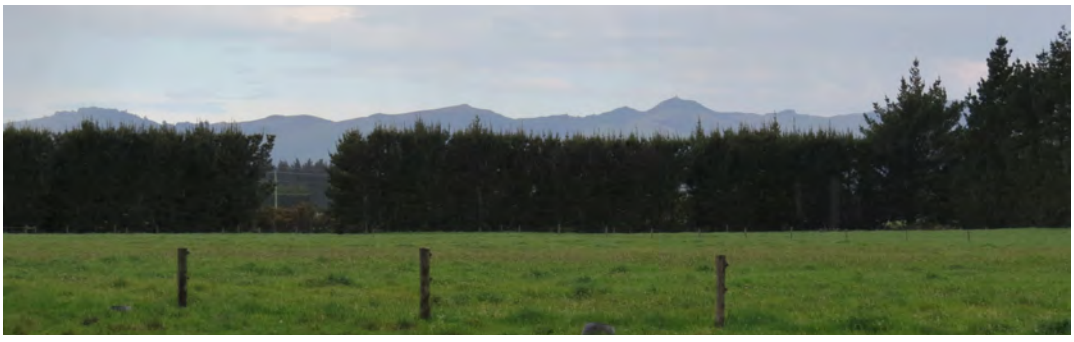

fig 4. unbuilt rural

2. a rural residential character to the north with various structures including dwellings, auxiliary structures and exotic vegetation clusters

fig 5. typical rural residential dwelling Brookside Road

3. a suburban, built up character with established detached residential dwellings, associated domestic scale landscaping, dominant property fencing, and residential streets with kerbs and channel, footpaths and regularly spaced driveways.

fig 6. typical residential dwelling Dunns Crossing Road

Possible future developments

There are several plan change applications proposing residential developments to the western edge of Rolleston. In particular PC 70 and 73, if approved, will affect the character of Dunns Crossing Road and the immediate environment to the south of the Site. PC73 would introduce an urban residential density to the southern boundary of the site and introduce residential characteristics similar to those experienced in the newest developments to the east of Dunns Crossing Road.
(refer to Urban Design Technical Report, urban growth plan Fig C for further detail)

3.3 EFFECTS ON LANDSCAPE CHARACTER

Landscape character is the combination and composition of biophysical elements such as topography, vegetation, built form and sensory qualities perceived by humans. Landscape character is also spiritual, cultural,and social associations. (Landscape Assessment and Sustainable Management 10.1, (NZILA Education Foundation)

The site is located directly on the rural / urban interface and therefore displays a generally rural character with several suburban characteristics along roads where it meets the current edge of the township. It is used principally for a rural purpose and rural activities such as chicken rearing and cattle grazing.

Natural landscape character

The wider natural landscape is the Canterbury Plains with the Southern Alps and Port Hills as visual landmarks in the distance. These identifying features can only really be experienced where views from public spaces are unobstructed and along streets that are aligned with specific view shafts such as Dunns Crossing Road.
The natural landscape character of the receiving environment is already highly modified, due to the changes introduced by agricultural land use and the proximity to the township. This is reflected in the surrounding rural environment with limited vegetation cover and several dwellings and larger farming structures to support a variety of larger scale farming activities. Apart from selected clusters of trees and shelterbelts, the key contributor to the amenity of the natural landscape is the sense of open space and the views to the surrounding landscape this openness allows. Beyond this there are no discernible natural landscape features.

The development proposed in the Plan Change will modify this character of the landscape from a rural environment to a more urban character, where buildings, infrastructure and amenities are concentrated and visible. This is in keeping with the residential development on the opposite sides of Dunns Crossing Road.
Some aspects of the open character will be maintained in the development through the following measures:

a. provision of a large reserve at the centre of the Site creating opportunities for distance views to the Port Hills
b. provision of additional reserves distributed around the Site;
c. the retention of clusters of established trees within the site around existing dwellings where these dwellings will be integrated into the future subdivision layout;

Open space character and amenity

The proposed development incorporates several open spaces. A larger centrally located open space the site, and 5 additional local neighbourhood reserves. The open spaces break up the built form, retain a sense of openness for the site and allow for longer distance views towards the Port Hills. This diagonal green link creates a high amenity connection between the central open space and the recreational reserves / Brookside Park to the north east. It offers opportunities for bulk plantings of native vegetation and large specimen trees which will enhance the natural amenity of the site. To retain open character where possible, medium density development will be concentrated towards the centre of the site or co-located adjacent to larger open space.

Rural vegetation character and amenity

Most of the rural vegetation occurs along the site boundary on Dunns Crossing Road. As a result of the proposed development this road will change from a semi-rural to a fully urban road with direct access to residential driveways on both sides. The road frontages of Brookside Road and Edwards Road will also be upgraded to an urban standard and therefore change in character form a fully rural road to a semi urban street. Dwellings will address the street with front doors, habitable room windows etc. as required by the current district plan rules for the Living Z zone ensuring active frontage and promoting passive surveillance of the street space, increasing levels of real and perceived safety.

The sparse rural vegetation within the site, primarily shelterbelts, will be removed as their scale makes them incompatible with residential development. The result will be initially a sparsely vegetated site but once the greenspaces and street trees are developed and the residential private gardens establish, the new residential vegetation character will emerge. The tree-lined primary roads through the site will enhance the amenity and provide pedestrian/cyclist connections to adjoining developments. The large central neighbourhood park will provide a high amenity environment appropriate for residential living and another area for larger scale planting including clusters of trees and native vegetation. Although the rural vegetation character will be removed it will be replaced with a residential character and associated vegetation of a similar if not higher amenity.

4.4 EDGE TREATMENT AND MITIGATION MEASURES TO RURAL ENVIRONMENTS

The ODP needs to balance the current interface with the rural environment as well as anticipate that the urban area will extend on this land in the far future.

West

Along Edwards Road the road reserve corridor itself provides sufficient separation to address any reverse sensitivities between the rural and residential activities. Edwards Road is currently a gravel road and will require upgrading to facilitate residential living including direct access to properties and resurfacing to avoid dust from passing vehicles.

fig 7. Edwards Road looking south

Should any properties be internally accessed from the east (i.e. at the Brookside / Edwards Road intersection), a consistent rural, open style fence will act as property demarcation towards the road / rural neighbour to the west. Combined with the more generous planting this will mitigate any potential reverse sensitivity towards the neighbouring rural activities.
The rural neighbours to the west are primarily established farm blocks with mature landscaping around existing rural dwellings creating a visual buffer.

South

There is one rural dwelling in visual proximity to the development approx. 100m from the south-west corner of the site across Edwards Road. This property has a well-established garden with mature planting providing a reasonable visual screen towards the site. In addition, the views into the site are currently blocked by a large shelterbelt running the full length of the southern boundary. Removal of this shelterbelt will allow views into the site and some intermittent screening could be added to this boundary through landscaping measures such as hedge type planting suitable for a residential scale and the provision of an open style rural fence. No other mitigation measures are required. It is not recommended to place larger lots along this boundary as this would preclude cohesive future development.

fig 8 Edwards Road rural dwelling

North

Should the other proposed Plan Changes (PC73) including this plan change be approved it is unlikely that the activity north of the site will remain rural in the long term. The area would be surrounded by residential activity on three side and very likely change rapidly. However, the development proposed by the Plan Change needs to be able to address visual amenity and reverse sensitivity related issues along this boundary whilst the activities adjacent are still of a rural nature. Currently the area is used for low intensity farming primarily grazing and is visually open allowing full views into the Plan Change site.

With regard to Visual Amenity several existing dwellings would be affected by the proposed change in character. This area is already undergoing a transition from rural to residential with limited farming activities taking place and small rural residential lots on the eastern edge to Dunns Crossing Road introducing a semi residential scale and character to Brookside Road. As a result, the Brookside Road reserve corridor itself will provide sufficient separation to address any potential reverse sensitivities between the existing rural and proposed residential activities by including generous shrub planting and street tree planting within the road reserve to partially screen dwellings and break up continuous roofscapes.

fig 9 Brookside Road

3.5 EFFECTS ON LANDSCAPE VALUES

SDC has not identified the Plan Change Site as a development area. However, urban / residential growth is evident along this western edge of the town. Several residential infill developments are under construction to the east and several proposed Plan Changes to the north and south of the Site are currently being processed. As a result, the proposed Plan Change Site will naturally extend the existing residential development to the east of Dunns Crossing Road westwards within a context of similar residential proposals. The continuation of residential dwellings at a similar density at the edge of a township is part of a natural extension of the urban form of a settlement and can be visually and physically integrated without altering the core landscape values.

To ensure coherence the plan change has adopted the same residential zone Living Z in response to the already existing zones adjacent to the Site. While the proposed overall density for the plan change Site is marginally higher than the existing Living Z zones and will initiate change to the Site itself and the immediate neighbours, the proposed plan change retains a density that will largely be indistinguishable on the ground when compared to surrounding residential development. It is considered appropriate for its setting on the edge of the township and therefore does not change the overall landscape values experienced within the wider receiving environment.

4. VISUAL ASSESSMENT

4.1 EXISTING VISUAL CONTEXT

The visual context of the receiving environment is considered to be an approximately 400m buffer around the ODP boundary. A series of key viewpoints along the main roads were selected to show a representative sample of the likely visual effects which could result from the proposal. Viewpoints are generally located on public land, and where possible located as close as possible to existing or proposed residential dwellings. In assessing the potential effect of a proposal, the quality and openness of the view is considered as well as the availability of alternative views.

fig. 10 extent of visual assessment area

Views from the North

Where dwellings to the north of the site do not have their own boundary vegetation or tall, closed fencing blocking views, they experience views across Brookside Road through open style post and wire fencing deep into the site across pastoral land onto the existing large farm sheds and the Port Hills as a backdrop

fig. 11 view from Brookside Road into Site

Views from the South

There are no dwellings on the rural land to the south apart from the rural lifestyle blocks on Edward that would be affected by the proposal and will be covered in the segment ‘Views from the West’.

fig. 12 Edwards Road looking towards southern boundary of Site

Views from the West

There are two rural dwellings (one unoccupied and used as a storage shed) on Edwards Road that have intermittent views onto the site from their rural driveways. Most of the views are currently blocked by the boundary vegetation of the Site which when removed will allow views into the propose development. Both rural dwellings have established boundary vegetation around the existing dwelling screening views onto Edwards Road. This vegetation is primarily a windscreen to shelter from the prevailing easterly and southerly winds and also serves as a dust screen from the gravel road. A key impact for these residents will be the change in character from a rural road to a semi-residential road on their approach to their dwelling/property via Edwards Road. Both properties have alternative views into the rural landscape towards the north or south and to the west.

fig. 13 view from northern corner of Edwards Road across Site

Views from the East

Apart from one larger open stretch at the northern end there are currently only limited views into the Site from the East across Dunns Crossing Road, either through small gaps in the boundary vegetation or where farm and dwelling access points are located. As a result residential development to the east mostly have views across the road onto dense and tall boundary vegetation on the PC site. However once this is removed they will experience open views onto the proposed development.

fig. 14 view across Dunns Crossing road towards Site

Views from Brookside Park

From Brookside Park users currently experience a filtered view onto the open Site through a row of medium sized boundary trees.

fig. 15 Lowes Road looking towards Site

fig. 16 edge of Brookside Park looking towards Site

The key viewpoints outlined above have been used as a reference point where it is considered that the effects are likely to be similar with regard to the potential effects on visually sensitive receptors.

The table in Appendix A lists the potential visual effects for each view or group of views and how the effects may potentially be mitigated. The effects take into account the likely sensitivity of the receptor or affected party (based on type), combined with the likely magnitude of effects (a combination of distance from the proposal and degree of change) to determine what the likely residual effects from the proposal will be. Detailed mitigation measures will be covered in Section 5 of this document.

4.2 SUMMARY OF EFFECTS ON VISUAL AMENITY

The proposal would result in an overall change in character from open and rural to one that is more dense and suburban in nature. The receiving environment is to maintain aspects of openness through the introduction of a green link and several neighbourhood reserves providing connectivity and accessibility throughout the wider site. Management of fencing and bulk and location of the development as per the LZ requirements in the operative plan will also help create a sense of openness throughout the site.

Rural neighbours

The most significant effects will be experienced by the small rural lifestyle properties to the north across Dunns Crossing Road, which currently experience open rural views into and across the Site and have an access road of a rural standard and character. A key change will be the loss of a distant view to the Port Hills and a sense of openess. However, views into the site are predominantly experienced from south facing rooms or from driveways and there is scope to increase the vegation on these properties to screen views into the Site. There are also alternative views available with rural outlook to the north and west.

For rural residents on Edwards Road the proposal would change the current fully rural outlook to one that is partially residential in character but with sufficient alternative rural views still remaining to the south and to the east this will have less of an impact. Both properties also have ample vegetation screening towards the Site to ensure that views from dwellings and associated outdoor areas will not be adversely affected.

Brookside and Edwards Road will at least partially be required to be upgraded to the required urban road standards and will have several residential driveways/access points. This will transform the road from a rural road to a semi rural/residential road. Whilst this will impact on the experience of a rural character for all rural dwellings when approachoing their property the fact that they have only just left the residential street environment of west Rolleston does mitigate this imapct. The visual and physical proximity to the edge of the residential development is present in almost all current views as a backdrop and therfore already forms part of the view and experience when approaching their rural properties.

Reverse sensitivity

There are no concerns about adverse effects with regard to reverse sensitivity between the rural and residential areas where either Edwards Road or Brookside Road create a spatial buffer between these activities .

Reverse sensitivity to the south alongthe internal boundary to the rural neighbour is minimal and can be adressed through such as appropriate fencing to prevent stock from reaching into residential garden as well as planting on residential properties to create a denser visual and physical screen for privacy if required. However, the area is currently used for grazing and will most likely be a desirable outlook for residents.

Residential neighbours

There are no adverse effects on openness for most residents along Dunns Crossing Road where views into the site are currently blocked by dense/tall vegetation and shelterbelts surrounding the site.
Most properties along Dunns Crossing Road also display some level of boundary treatment such as fencing or planting partially screening views onto the street and into the Site. For these residents, the visual amenity experienced from their property will remain once the development is completed and the large on-site shelterbelts are removed.
For properties on Dunns Crossing Road that are currently experiencing either views into the site have open views onto the street their view will change from rural to suburban in character. The effects however are minor as the proposal is an extension of their existing development in character and visual amenity.

Some mitigation of the effects is possible to improve the overall amenity and provide a sense of open character and rural characteristics through street tree planting, consistent open style fencing and planting on private allotments.
A further mitigating factor is the fact that the adverse effects are primarily experienced from driveways and entrys to dweelings. Rooms outdoor areas requiring privacy tend to be already fenced or visually screend from the road by vegetation.

The combination of all the above mitigation reduces the effects on these existing residential properties. In addition, the proposed development will be similar to the existing residential development in which the residents live.The scale, density and location of the proposal would allow it to appear as a natural extension of existing developments.

Motorists, cyclists and pedestrians along Dunn Crossing Roads currently have fleeting views into the Plan Change site. Their experience will change with the introduction of the urban road standards and driveways and dwellings addressing the street ensuring active frontages and passive surveillance of the street space. This change from rural to urban is already occurring along this road and is anticipated. A change in landuse and visual amenity from rural to suburban is expected when travelling to/from Rolleston township. Effects on road users are therefore considered negligible.

5. MITIGATION MEASURES

The following mitigation measures are suggested to either avoid, remedy or mitigate any potential effects on Landscape Character, Landscape Values and/or Visual Amenity. Some measures are key components of well-functioning urban environments and typically incorporated into residential developments to ensure an open character with a high level of amenity is achieved:

MM1 - provision of an diagonal green corridor linking the central reseve to Brookside Park.
This is provided for on the ODP. Detailed design matters will be confirmed at the time of subdivision consent applications.

MM2 - provision of additional smaller recreational reserves / neighbourhood parks.
This is provided for on the ODP. Detailed design matters will be confirmed at the time of subdivision consent applications.

MM3 - where practicable existing individual mature specimen trees may be retained and integrated into the future residential development in suitable locations such as open green spaces, green links or within the road reserve where they can be included without conflict with services. Established trees can provide immediate scale, visual points of reference and a break in the roofscape of the development. Decisions on any retention of trees should be undertaken at detailed design stage and can be addressed as part of the subdivision design.

MM4 - Density distribution that is responsive to the amenity of the Site and adjoining sites.
This is provided for through the proposed Living Z zone which is a fairly flexible residential zone allowing for a range of lot sizes, including medium density. Higher densities and smaller lots would be located towards the centre of the Site and adjacent to high amenity open space and high amenity street environments. Larger lots can be located strategically at Site access points, along the southern and western boundary adjacent to existing rural land if required, to enable slightly larger building setback and allow for denser landscaping This will assist with reducing 'urban-like' effects onto the open character of the adjoining rural properties.

MM5 - High Amenity Streetscape.
The ODP proposes a roading layout that allows for an efficient use of land by having a clear street hierarchy with different road reserve and carriage way widths in direct response to expected traffic flows. Key roads align with views to the Port Hills to the south to provide a point of orientation and smaller local roads are deliberately designed to reduce traffic flow and speed to create a high amenity residential streetscape with a focus on pedestrian movement.

MM6 - Consistent low / permeable fencing adjacent to reserves (as required by operative District Plan rule 4.17).
Closed board timber fences can have an adverse effect on the amenity of residential developments and the sense of space, particularly as lot sizes decrease and the distance between fences is less. Solid fences can also have a negative effect on the character and safety of public reserves by limiting the potential for passive surveillance from adjoining properties.

MM7 - Rural fencing and planting at rural interface
To mitigate potential visual amenity and reverse sensitivity effects on the adjoining rural property, it is suggested that an open style low rural fence is used in combination with the ability for future lot owners to undertake tree planting and evergreen shrub planting on private property.

MM8 - Road boundary treatment to all boundary roads
If fencing is required to road frontages low open style rural fencing is recommended to achieve a cohesive streetscape.
This can be incorporated into developer covenants. Hedge type planting on private property by future lot owners should be used to achieve additional privacy for outdoor living areas if required. The upgrade of the boundary roads from a rural standard to a residential standard, whilst changing the appearance, will improve the amenity for pedestrians and cyclists.

MM9 - Street trees
New street trees on all proposed road, but in particular on boundary roads, will provide a partial vegetation screen for views into the denser development and break up the roof scape .

All the above mitigation measures are either covered in the ODP or are already part of subdivision design standards and district planning rules. No specifically tailored mitigation measure are therefore required for this development proposal.

APPENDIX A
Visual assessment table and views

Viewpoint and area where visual assessment of viewpoint applies

VISUAL ASSESSMENT TABLE - 5.1a

VIEWPOINT	VISUALLY SENSITIVE RECEPTORS (VSR)	DISTANCE FROM PROPOSAL	TYPE OF VIEW (open , partially screened. intermittent fleeting etc)	DESCRIPTION OF EXISTING VIEW	SENSITIVITY OF VSR	MAGNITUDE OF CHANGE	DESCRIPTION OF EFFECTS	MITIGATION MEASURE
1. View east from corner Edwards Road Brookside Road	Public street	NA	open	Open and unobstructed view deep into Site across flat pastoral land with large farmsheds , shelterbelts and silhouette of the Port Hills as a backdrop	NA - public road fleeting views while moving through	moderate	The greatest effects would be the change from rural to residential character experienced from this vantage point. Passersby experience open views into residential development with views of drivewyas , frontyards , new dwellings and associated landscaping and boundary fences on the Plan Change area.	
2.a and b View east from Edwards Road across Site	Residents at Edwards Road	approx. 100 m south-west of Site	fully screened	This property has currently very limited views onto Edwards Road due to dense boundary vegetation screening. Only glimpses along the access driveway are possible	very low due to extensive screening vegetation on rural properties	moderate	The greatest effects would be the change from rural to residential character experienced by residents when traveling to and from their property. Residents experience fleeting views into residential development with views of drivewyas , frontyards, new dwellings and associated landscaping and boundary fences on the Plan Change area.	dwellings / properties remain well screened alternative views are available no mitigation required however MM 7,8 and 9 will have a mitigating effect
3. View onto southern boundary	no dwelling within assessment area, (proposed PC 73 Skel-lerup)	NA	partially screened	From this vantage point passersby experience views across the road through rural mesh/wire fencing into the site onto open paddocks and shelterbelts located deeper within the site	NA - public road fleeting views while moving through	moderate	The greatest effects would be the change from rural to residential character experienced from this vantage point. Passersby experience open views into residential development with views of drivewyas , frontyards , the new dwellings, associated landscaping and boundary fences on the Plan Change area.	no mitigation required however MM 7,8 and 9 will have a mitigating effect
4.a and b View south from Brookside Road	Residents north of Brookside Road	min 30m to site boundary (width of road reserve 20m plus standard large rural dwelling setback)	open and partially screened depending on individual property	These dwellings have driveways and front yards facing Brookside Road with limited boundary vegetation or fencing on their property blocking views. They experience open and unobstructed views deep into the Site across flat pastoral land with large farmsheds, shelterbelts and the silhouette of the Port Hills as a backdrop	medium due to dwellings turning their back onto the Road, some boundary vegetation on individual properties, not affecting main indoor or outdoor spaces	moderate	The greatest effects would be the loss of open views and the change from rural to residential character experienced from their front yards. They will experience open views of the new dwellings, associated landscaping and boundary fences on the Plan Change area. Main effect is loss of distant view over rural land to Port Hills. Consistent low open post and rail fence and private property boundary planting to screen dwellings as well as street tree planting will assist in creating an open residential character with rural references that will reduce adverse effects.	no mitigation required however MM 7,8 and 9 will have a mitigating effect
5. View west from Brookside Park	Public space	NA / no dwelling	open - viewed under / through canopy	Users of the park experience views deep into Site across flat pastoral land through established tree canopy - seasonal changes due to trees being deciduous	low / publicly accessible site non permanent views	moderate	The greatest effects would be the change from rural to residential character experienced when using the open space including loss of distant views into the rural environment	no mitigation required however MM1, MM6 and MM 7.8 and 9 will have a mitigating effect
6. a and b View west from Dunns Crossing Road	Residents east of Dunns Crossing Road	min 24 m to Site (width of road reserve 20m plus standard 4m dwelling setback	partially open partially screened due to dense shelterbelt on PC site	a. dwellings have open views to the Site via driveways and front yards facing Dunns Crossing Road but some properties have either tall fencing or dense screening vegetation limiting views onto Dunns Crossing Road. b. resident experience no views onto the plan change area due to tall shelterbelt on the PC site .	medium due to Road buffer, some boundary vegetation on individual properties, and not affecting main indoor or outdoor spaces	moderate	The greatest effects would be the change from rural to residential character experienced from their front yards with open views of new dwellings, associated landscaping and boundary fences on the Plan Change area. Open road frontages and private property planting to partially screen dwellings as well as street tree planting will assist in creating an open residential character with a high visual amenity	no mitigation required however MM1, MM6 and MM 7.8 and 9 will have a mitigating effect
7. Dunns Crossing Road south	Public space and rural residents east of Dunns Crossing Road	min 80m between dwellings and site	screened	rural dwellings have limited views to the Site via driveways and front yards facing Dunns Crossing Road with selected boundary vegetation on their property partially screening views. No view into the site are possible due to existing shelterbelt on site	low due to screening	moderate	The greatest effects would be the change from rural to residential character experienced from their front yards with open views of the new dwellings, associated landscaping and boundary fences on the Plan Change area.	no mitigation required however MM1, MM6 and MM 7.8 and 9 will have a mitigating effect

VIEWPOINT 1
Corner Brookside and Edwards Road

View south-east from corner of Brookside Road and Edwards Road

VIEWPOINT 2a
Edwards Road

View east from Edwards Road across Site

VIEWPOINT 2b
Edwards Road centre

View north along Edwards Road

SITE

VIEWPOINT 3
Edwards Road south

View from Edwards Road towards southern boundary of Site

VIEWPOINT 4a
Brookside Road west

View south-east from Brookside Road (west) across the Site

VIEWPOINT 4b
Brookside Road east

View south-west from corner Brookside Road and Dunns Crossing Road

VIEWPOINT 5
Brookside Park

View west from Brookside Park

VIEWPOINT 6a
Dunns Crossing Road north

View west from corner of Lowes Road and Dunns Crossing Road

View south from corner of Lowes Road along Dunns Crossing Road

VIEWPOINT 6b
Dunns Crossing Road centre

View north-west along Dunns Crossing Road from centre of Dunns Crossing Road

VIEWPOINT 7
Dunns Crossing Road south

View north-west along Dunns Crossing Road from south of Dunns Crossing Road

Residential environment Dunns Crossing Road

Open Space Brookside Park

Rural environment Edwards Road

Rural Residential environment Brookside Road