

**Before the Hearings Panels**  
**At Waimakariri District Council**

**Under**      the Resource Management Act 1991

**In the matter of**      the Proposed Waimakariri  
                                 District Plan

Statement:

Gregory Kelley (Landowner, 479 Rangiora Woodend Road)  
Waimakariri District Council (Mr Peter Wilson)

Date: 18 October 2024



**INTRODUCTION:**

- 1 This Statement relates to conferencing in relation to the submission of Mr Gregory Kelley [391.1] to rezone 479 Rangiora-Woodend Road (5.89 ha) from rural to medium density residential.
- 2 This statement has resulted from views exchanged via correspondence from 2 September to 02 October 2024 and a meeting held on 03 October 2024.
- 3 The following participants were involved in this conferencing and authored this JWS:
  - (a) Mr Peter Wilson for Waimakariri District Council; and
  - (b) Mr Greg Kelley for himself (Submitter 391)

**PURPOSE      AND      SCOPE      OF**  
**CONFERENCING:**

- 4 The conferencing was focused on matters

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relevant to rezoning submission, including as identified in Minute 37 from the Hearing Panel, dated 30 August 2024. The questions asked of experts by the Hearing Panel and their answers are as follows:

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- a. determine if they can reach consensus on any outstanding matters in contention raised in the Officer Report;
- b. finalise the details of Outline Development Plans (ODP's) and associated provisions; and
- c. address any matters in contention identified in the Officer Report and subject to new evidence before / during the hearing.

### **MATTERS IN CONTENTION ARISING FROM THE HEARING**

5 Mr Kelley notes the following matters he considers were unresolved at the time of the hearing:

- (a) The risks to his water supply bore from Bellgrove South and the need to provide for a contingency water supply if the bore becomes unusable.
- (b) The amount of property to be rezoned, and any ODP provisions, including reserves, and the preferred location of roads and accessways that would apply to it.

6 Mr Kelly considers these matters have since been satisfactorily addressed in this Joint Statement (JS) such that Mr Kelley and Mr Wilson are now in agreement regarding the proposed zoning of his property at 479 Rangiora Woodend Road, and the South East Rangiora Outline Development Plan, including the amendments set out in the Attachments 4 and 5 of this JS.

### **Water supply bore**

6 Mr Wilson and Mr Kelley both consider that there are potential risks to the water supply bore arising from the Bellgrove South development, as outlined on the map below.



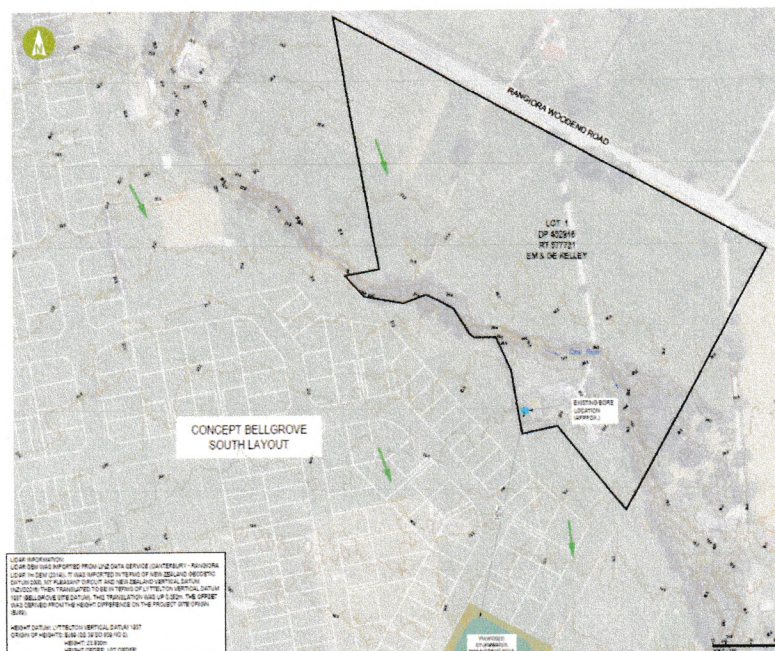


Figure 1 Approximate location of water supply bore (as per Bellgrove JWS)

7 Mr Wilson considers that the risks are as follows:

- (a) Water quality changes, arising from upstream earthworks
- (b) Water quantity changes, also arising from upstream earthworks.

8 Mr Wilson considers that upstream earthworks can affect downstream water quality and quantity, but that this risk cannot always be quantified or fully understood in advance of earthworks beginning. If a problem occurs, Mr Wilson considers it should be physically possible for a water connection to the new town main supply in Bellgrove South to be made, replacing the bore. This would require provision for it within the Bellgrove South ODP.

9 Mr Kelley states that he would like Bellgrove and any other developers impacting his property to be proactive in these matters with offers of water treatment and purification, connections to town services, fencing etc. prior to potential development beginning that could negatively impact us. We wish to be directly notified by the developers as we consider ourselves affected parties.

10 Mr Kelley states that the area around the



existing well at 479 is artesian in nature and particularly sensitive to the impacts of earthworks and development of the upstream Bellgrove land. Adverse effects could include reductions in water quality, and potentially interception of groundwater, cutting off or reducing the well water source. He considers that it is the responsibility of the upstream developer to protect the well, and in the event that this is not possible, provide the existing dwelling at 479 with a connection to the town supply. These matters are recorded on the ODP and in the ODP narrative, and can be addressed as consent conditions at subdivision stage. The ODP diagram includes a notation 'cross boundary water supply'. Note 1 has been amended to make it clear that development of all land in the South East Rangiora Development Area north of Northbrook Road should provide contingency for a town reticulated water supply to the existing dwelling at 479. The narrative also notes the requirement for developers of this land to install filtration and hygiene units to the well at 479 prior to any development works commencing, and to monitor water quality and quantity at the well post commencement of development works.

- 11 Both Mr Kelley and Mr Wilson consider that the Bellgrove South ODP should provide a viable physical connection for a future private water supply to the Kelley bore and outline this.
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#### **479 Rangiora Woodend Road – Land to be Rezoned and ODP**

- 12 Mr Kelley agrees with Mr Wilson that the entire property at 479 Rangiora Woodend Road should be rezoned MRZ.

- 13 Mr Wilson and Mr Kelley have discussed the potential content of an ODP for 479 Rangiora-Woodend Road. An amended ODP and narrative are included as attachments to this Joint Statement.
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14 Esplanade reserves and/or strips would be a requirement of subdivision in this location, as the Cam/ Ruataniwha River bisects the parcel, therefore, any allotment under 4ha that was created would require esplanade reserves and/or strips to be laid out adjacent to the Cam/ Ruataniwha River. Esplanade reserves do not move with the river, and become local purpose reserves, administered by the Waimakariri District Council in almost all cases. Esplanade strips move with the river, and are registered as an instrument on the relevant land title – in effect, an easement.

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15 The PDP planning maps set out the Natural Character setbacks for the Cam/Ruataniwha River as a Schedule 2 river (Table NATC-1, <https://waimakariri.isoplan.co.nz/draft/rules/0/228/0/0/0/224>). The recommended width for the setbacks is 20m for rural, open space, and recreation zones, and 10m for residential zones. These setbacks place rules on structures within them.

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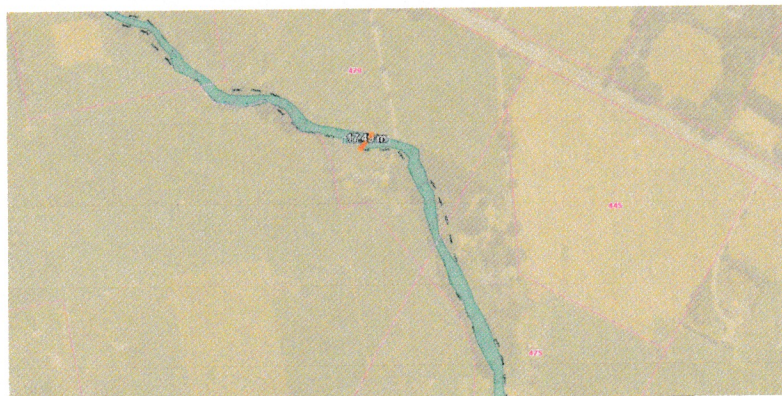


Figure 2 NATC setbacks for Cam

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District Plan Sub-17 requires a 20m esplanade reserve for conservation and natural hazard mitigation south of Kippenberger Avenue to the confluence with the Kaiapoi River. A 20 metre esplanade reserve on the southern side would significantly impact on the existing dwelling, removing most of the existing front yard and garden, and having a significant impact on privacy and security.

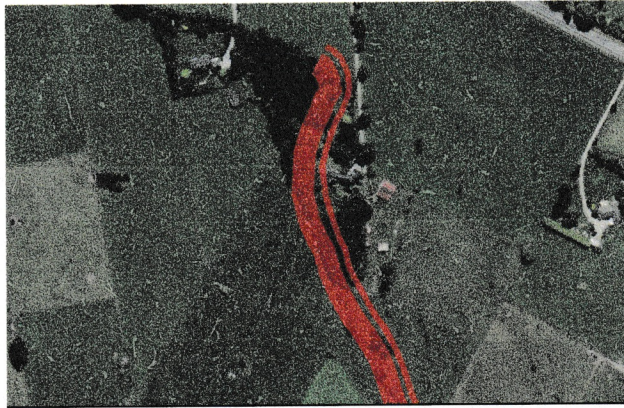
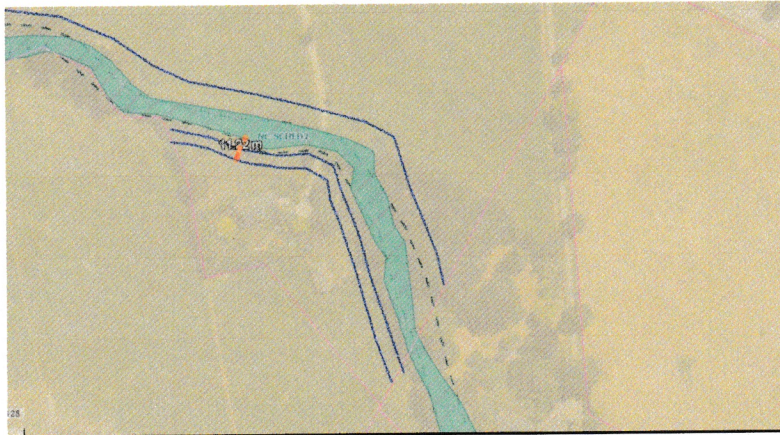
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We agree that the ODP should make provision for esplanade reserves and/or strips at the time of subdivision along the Cam River, including with respect to 479 Rangiora Woodend Road, with their purpose and width to be determined at subdivision stage

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*17 The Kelley Land – Transport Connections and Stream Crossing*

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18 Mr Wilson recommends and Mr Kelley agrees that the Leech block and all of the Kelley block be rezoned MRZ as per Mr Wilson's 42A Summary Table of Recommended Residential Rezonings, and that whether the roading network shown in Figure 41 at paragraph 606 in Officer Report A is necessary for the development of this land, is a transport and planning/development matter. Both agree that it is appropriate to refer to technical transport expertise in this regard.

19 Mr Collins has outlined that the land located north of the Cam/Ruataniwha River can be suitably accessed from Rangiora / Woodend Road, and that a vehicle connection across the Cam / Ruataniwha River to Bellgrove

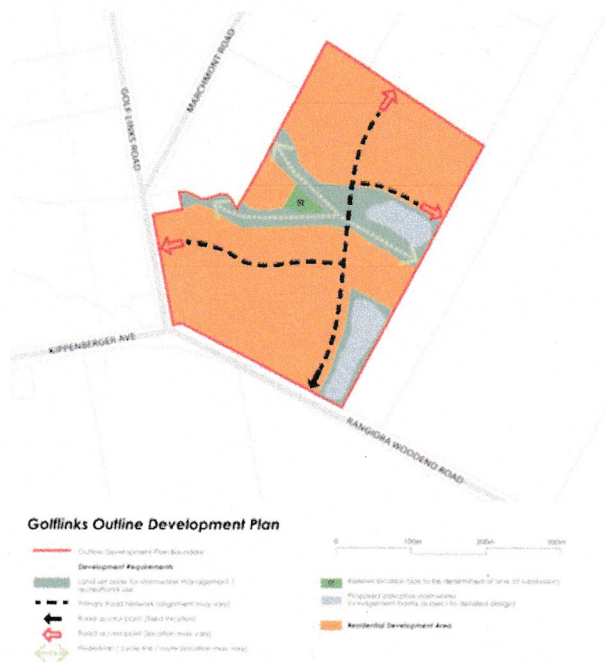


South is not necessary for achieving the transport connections required. On this basis, Ms Ruske-Anderson considers a vehicle crossing of the Cam/Ruataniwha River does not need to be included within the SER-ODP to result in a well-functioning urban environment.

20 Mr Wilson agrees with Mr Collins, considering that a vehicle crossing is not required.

Future provision for a pedestrian crossing should be made in the ODP, noting that this would not be created until there was land to access by way of development of the Kelley property.

21 If the Whimp/Hobson property on the north side of Rangiora Woodend Road is rezoned MRZ (no. 518), this will potentially affect the potential location of a complying vehicle road access point from 479 onto Rangiora Woodend Road. The Proposed District Plan requires a 200m separation between road intersections (TRAN Table 17) between an arterial and local road where the speed limit is more than 80km/hour, and 100m where the speed limit is between 60-80km/hour. The current speed limit is 70 km/hour. 479 has sufficient frontage (just) to accommodate both of these separation distances from the proposed road access point shown on the proposed ODP for 518 as below. It is likely the speed limit will be reduced in the future as the area develops.



30 if the development of 479 is limited to one vehicle access point onto Rangiora Woodend Road, it should still be possible to achieve an appropriate subdivision layout. Pedestrian connectivity to the Bellgrove land to the west is shown on the ODP.

31 Mr Wilson and Mr Kelley agree that the location of the vehicle access point onto Rangiora Woodend Road can be determined at subdivision stage, in accordance with the relevant District Plan rules. It does not need to be shown on the ODP, as the District Plan rules will ensure it is appropriately located in a safe and workable position.

**Date:** 29 November  
2024

## Signatories

Abel.

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**Mr Peter Wilson, Principal Planner,  
Waimakariri District Council**

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*Gregory E Kelley*  
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**Mr Gregory Kelley, Landowner**



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## **Attachment 1: North East Rangiora Outline Development Plan, incorporating the changes sought by BRL**

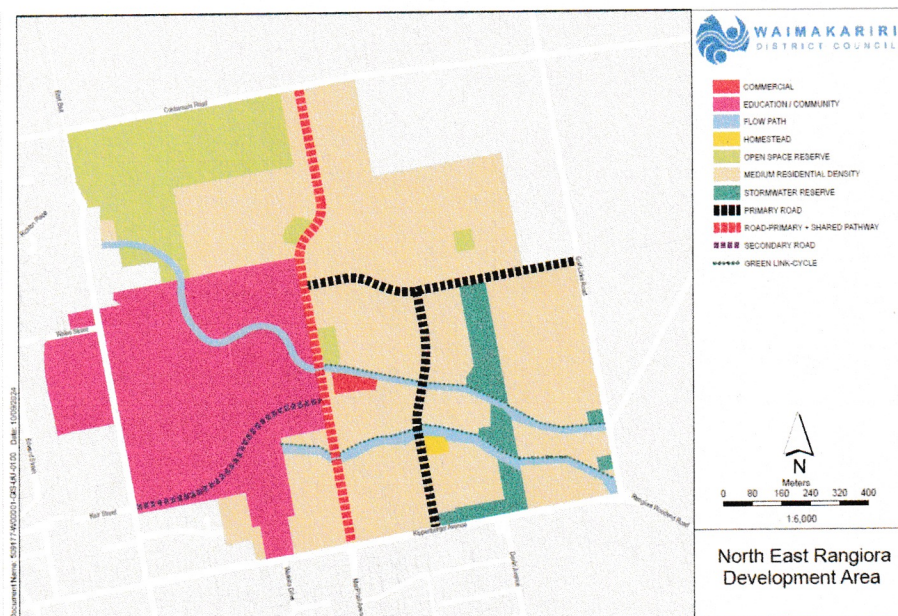


Figure 6. Agreed updated NER-ODP as it relates to BRL

## **Attachment 2: South East Rangiora Outline Development Plan, incorporating the changes sought by BRL -**



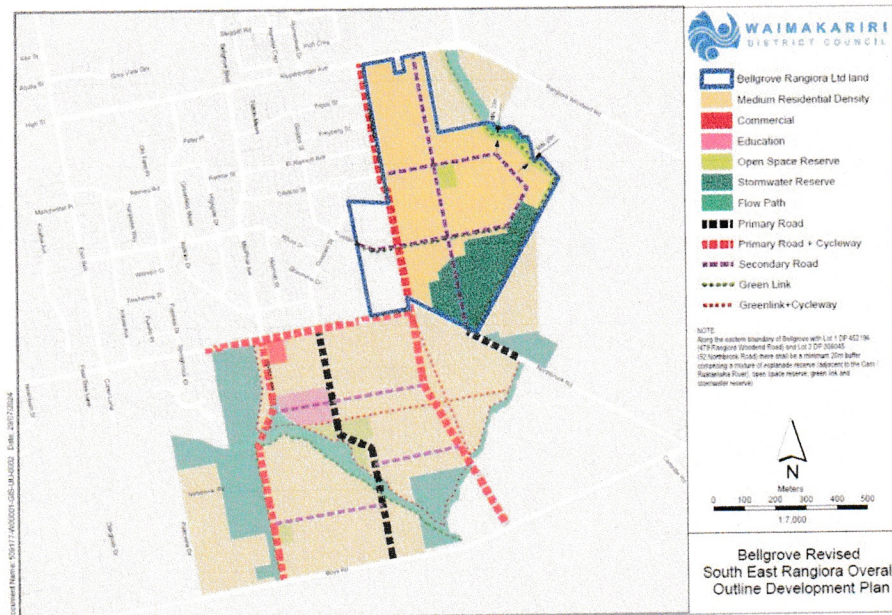


Figure 7. Agreed Updated SER-ODP as it relates to BRL



Figure 8 Agreed revisions to the Water and Wastewater SER-ODP

### Attachment 3: North East Rangiora Outline Development Plan Narrative Text, incorporating the changes sought by BRL

Text to be added as **bold and underlined**, with text to be removed struck through.

#### DEV-NER-APP1 - North East Rangiora Outline Development Plan

~~There are two development options for the North East Rangiora Development Area, and the realisation of one option over the other is likely to take some time and is subject to agreement between all the relevant landowners and parties involved. The key difference between the options is the exact location of the education precinct. If this shifts slightly north from its current location, as per Option A, there are implications for a number of other development features predominantly present in the western portion of the North East Rangiora Development Area. Other Outline Development Plan development features remain largely unaffected. The below sections identify where there are specifically different development outcomes under the two options.~~

#### Land Use Plan

The Outline Development Plan for the North East Rangiora Development Area provides for a variety of site sizes, medium density residential activity, is located in the general south/southwest portion of the Development Area, closest to the Rangiora town centre, and immediately adjacent to a neighbourhood/local centre, shown in the Outline Development Plan as commercial/business, located at the key north/south primary road that connects Kippenberger Avenue to Coldstream Road.



~~This maximises opportunities for walking/cycling proximity to local amenity and services, and enables access to local convenience goods and services to a maximised proportion of the Development Area's resident population which has positive flow on effects on neighbourhood businesses' sustainability.~~

Option A, which sees the education precinct shifted slightly north, enables the land located in the south west of the North East Rangiora Development Area to be utilised for medium density residential development. Locating medium density residential activity close to the Rangiora town centre takes advantage of the opportunity of a maximised resident population being able to access the Rangiora town centre in close proximity, and reinforces the intent of the Council's Rangiora Town Centre Strategy. The latter anticipates an enhanced pedestrian/cycling connection between the centre's north-eastern 'Station Corner' precinct and the residential growth area, with a possible additional crossing over the railway to connect to Keir Street. Option B, which retains The education precinct is retained within its current footprint, ~~enables less medium density residential development in the south west of the Development Area. Under both options and the multi-sports precinct would ultimately be extended to the land south of the existing Cricket Oval grounds east of East Belt.~~

~~For both options, the location of these medium density residential areas are fixed in the Outline Development Plan. This requires a concentration of medium density in these locations, meaning a minimum ratio of 70% medium density residential zone density and maximum of 30% general residential zone density. Additionally, medium density residential development could be located adjacent to the Rangiora Golf Course at the north-eastern edge of the Development Area, as well as adjacent to any internalised stormwater management areas or open space reserves, such as shown in the north-eastern reserve. This takes advantage of opportunities to overlook such high amenity features and offset limited private outdoor space feasible in medium density residential development. The Medium Density Residential Zone enables a minimum lot size of 200m<sup>2</sup> while the General Residential Zone enables a minimum lot size of 500m<sup>2</sup>.~~

~~Overall, The North East Rangiora Development Area shall achieve a minimum residential density of 15 households per ha, unless there are identified constraints to development, in which case no less than 12 households per ha shall be achieved.~~

The neighbourhood/local centre is strategically located to take advantage of high visibility, activity and traffic flow, including public transport, generated by the north/south primary road, ~~in a location to which the medium density residential activity in this vicinity connects well.~~ The co-location of the neighbourhood/local centre with a flow path ~~in both development options~~ offers opportunities for the commercial activity, particularly hospitality, to benefit from adjacent high amenity natural features. For these reasons, this is a fixed component of the Outline Development Plan.

The Rangiora High School is located within the North East Rangiora Development Area. ~~Development option A for this Development Area anticipates that the education precinct moves slightly northward to border the recreation and sports sites at the north, allowing greater connection to adjacent sports facilities and maximised opportunities for residential development closer to the town centre. This remains subject to agreement of all directly affected landowners and parties.~~ Option B sees the The education precinct will remain in its existing location. The school grounds also encompass the North Canterbury Community College. It is also feasible that preschool(s) are established in the Development Area. The historic Belgrove farmhouse and setting, located at 52 Kippenberger Avenue, has historic heritage value and is protected under the District Plan as a heritage site (HH052).

Development within the North East Rangiora Development Area is to be contiguous the Outline Development Plan does not anticipate physically separated or ad-hoc development. Where it is not feasible to achieve contiguous development, it must be demonstrated that it can be efficiently serviced and integrated with the remainder of the development area.

#### ***Movement Network***

The Outline Development Plan for the North East Rangiora Development Area provides access to this growth area through a network of primary and secondary roads that ensure development integration, efficient traffic management and public transport corridors. Only these more significant roads are identified in the movement network plan. The layout of additional tertiary roads to service the residential areas will respond to detailed subdivision design of those areas. The specific roading classification of all roads will be ultimately determined at the time of development, to provide flexibility and the ability to match the eventual roading classification system made operative through the District Plan. Primary and secondary roads for the North East Rangiora Development Area are located to ensure that all existing parcels of land, when developed, can be served by the roading network.



A key movement network feature for the North East Rangiora Development Area is a main north/south primary road which forms part of a wider future key Rangiora eastern north/south road connection that extends southward through the Rangiora North East Development Area and beyond to connect to Lineside Road. This road's entry into the North East Rangiora Development Area is fixed at the site of 76 Kippenberger Ave, to enable it to connect to MacPhail Avenue south of Kippenberger Avenue. The latter has been installed at a configuration that future-proofs it to fulfil this wider roading function. The northern exit of this north/south primary road connection must intersect with Coldstream Road between the District Council's Multi Sports Facility site at the northwest of the Development Area, and the Golf Course at the northeast of the Development Area. This primary road will be suitable for public transport, and will include separated shared pedestrian and cycle paths to allow for active modes. Its design will promote reduced vehicle speeds and increased safety to other street users. Rear access for driveways must be provided to new properties immediately adjoining the separated shared use path to avoid vehicle/cyclist/pedestrian conflict. The installation of an appropriate intersection has already been established at with Kippenberger Avenue and MacPhail Avenue as part of the development of Bellgrove North Stage 1, and will be required, as well as at its exit to Coldstream Road will need to be appropriately designed and installed as part of subsequent development.

Intersecting the main north/south primary road will be a number of secondary roads, to provide subdivision structure and logical east/west movement corridors for vehicles, pedestrians and cyclists. Secondary roads generally assume a form which is of a more residential nature and cater less to through vehicle traffic. A fixed component of the movement network is a secondary road that connects the north/south primary road with East Belt in the west, and includes cycling facility. This optimises opportunities foreshadowed in the District Council's Rangiora Town Centre Strategy, which anticipates an enhanced pedestrian/cycling connection between the centre's north-eastern 'Station Corner' precinct and the residential growth area through a possible additional crossing over the railway to connect to Keir Street. It also strengthens the close proximity between the North East Rangiora Development Area and the Rangiora town centre.

A secondary road connection into the North East Rangiora Development Area from the south (from Kippenberger Avenue) is located west of Devlin Avenue; ~~which extends into the South East Rangiora Development Area.~~

As well as cycleways at key roading corridors, the network of cycling infrastructure for the North East Rangiora Development Area includes cycleways along the two flow paths and references the wider cycling network beyond the Development Area.

Pedestrian footpaths will be provided on at least one side of each road. The movement network plan should be read in conjunction with the green network plan which also provides informal cycling and walking corridors, such as along green links. The principle of walkability is incorporated through the use of a connected roading pattern, additional pedestrian links and the location of open spaces.

#### ***Open Space and Stormwater Reserves***

The Outline Development Plan for the North East Rangiora Development Area indicates two open space reserves locations together with a network of stormwater management areas, identified and protected overland flow paths, and green links throughout the site.

The two open space reserves are located strategically in places that are highly prominent, easily accessed and have the ability to add to the character and identity of the development, as well as being within a 500m radius of all residential households in the Development Area. One open space reserve is shown in the northeast within the site, ~~and is connected by green links to the east and west of it.~~ A second open space reserve is located near the centre of the site. This reserve is located adjacent to a flow path, ~~and lies within the medium density residential area, making this key amenity particularly accessible to a large number of residents.~~ Some flexibility of the exact location of the open space reserves is possible, as long as they are accessible within a 500m radius of the respective north-eastern and south-western residential areas. To maximise functionality, accessibility and visibility, open space reserves must be bordered by at least one road, and a second either road or public accessway such as a green link.

Any required open space reserve should be prioritised in the early stages of a new residential development, and subsequently when further expansion extends beyond the margins of radius and/or resident population guidelines.

There are two flow paths through the North East Rangiora Development Area that to the southeast form the Taranaki Stream (northern flow path) and the Cam River (southern flow path), together with springs partway along. Protection of the flow paths, their carrying capacity, and appropriate setbacks is critical in any development, in order to convey floodwater in a localised flooding event and/or Ashley River breakout. Springs, identified or discovered, need to be protected and



the downstream channel separated from proposed stormwater management areas.

Waterbodies must be protected intact, or improved, as part of any development and any potential adverse impacts on the local and receiving waterbody ecology must be mitigated. Where possible, amenity planting will be encouraged, together with enhancement of habitat heterogeneity and in-stream conditions to improve stream health, facilitate migrations and promote recruitment. It is possible that some springs could feed directly into whanau mahinga kai areas and engagement with mana whenua is important.

A green link sleeves both sides of the flow paths, to enable high amenity planting and community value through walking and cycling paths. Appropriate waterbody setbacks apply where required by the Natural Character and Freshwater Bodies Chapter of the District Plan. Green links must be bordered by at least one road frontage (except in cases where they serve as a short connection strip) to provide appropriate access, visibility, amenity and safety for users. Where green links border both sides of a flow path, one road frontage between both sides is the minimum requirement.

The site is split into three stormwater catchments. For ecology reasons, it is a requirement to maintain flow quantities into waterways. Stormwater for the North East Rangiora Development Area discharges into the Taranaki Stream and Cam River. **A stormwater management area is shown to the south-east of the Development Area, with the first stage of this area established as part of Bellgrove North Stage 1.** ~~An attenuation basin is shown in the downstream southeast area of the area north of the Taranaki Stream to service the catchment north of the Taranaki Stream. Another attenuation basin is shown downstream in the south-eastern area of the Development Area to service the catchment south of the Cam River. The section of land between the two flow paths contributes runoff to the Taranaki Stream and Cam River. The catchment discharge is piped under the waterways and into the basins for the larger catchments either side of the flow paths.~~ Two smaller stormwater basins are shown in the south-eastern corner of the Development Area to service the smaller catchments of development of properties at the eastern edge of the site along Golf Links Road. All stormwater basins for the North East Rangiora Development Area are assumed could be dry basins, allowed by well-draining land. Alternative solutions for stormwater management could be proposed, provided the flow of water into the Taranaki Stream and Cam River are maintained **and not increased** and all future lots in the stormwater catchments can discharge into the appropriate basins.

Stormwater reserves provide attractive open space and visual relief in a built up residential environment, and can present opportunities for residential development adjacent to them to look out onto it and benefit from their amenity. Stormwater management reserves can also have a passive recreational purpose for walking, cycling and playing. Streams, springs and waterways are protected and included in the stormwater reserves where relevant. All stormwater ponds are subject to design detailing, but will be managed by an appropriately designed stormwater treatment system with high amenity values. The Outline Development Plan for the North East Rangiora Development Area provides an indicative size and location based on likely catchments around the key infrastructure.

#### ***Water and Wastewater Network***

The provision of reticulated water supply assumes a skeleton network for the North East Rangiora Development Area, where only water pipes 100mm in diameter and greater are specified. The exact location of the reticulation may change when road layouts are confirmed, noting that some identified road locations as specified under 'Movement Network' are fixed and others are flexible.

Reticulation upgrades proposed for Rangiora are both within Development Areas (East, North East and West) and within the existing network. Due to their location, all of the existing network upgrades can be attributed to the Development Areas. Source and headworks upgrades are not Development Area specific, rather they apply to the whole scheme.

A number of water network upgrades and constructions are required to service the Rangiora North East Development Area's three catchments. Reticulation requirements include upgrades to the existing network and extra over upgrades to development reticulation. These upgrades are required to maintain the existing levels of service to current and future customers. Requirements include new pipes and upgrades related to the East Belt Booster Main, East Rangiora Northern Link Main, North Northeast and Northeast Rangiora Supply Main, East Rangiora Northern Link Main, and Northbrook Road Booster Main.

Development in the Rangiora West, North East and East Development Areas also contribute to the requirement to upgrade a number of wider Rangiora sources and headworks, such as additional wells and associated pipework at Rangiora Source, new Surface Pumps and Generator at Ayers Street Headworks, new reservoirs at Ayers Street and South Belt, and a new Surface Pump at South Belt Headworks.



Three catchments make up the North East Rangiora Development Area for wastewater servicing requirements. Each catchment has an independent solution for wastewater infrastructure and only the key trunk infrastructure and pumpstations/rising mains are shown. The lay of the land is generally towards the south east, and developments reticulation would be installed with the lay of the land. Mains will follow general alignment with the roading network. There is sufficient capacity in the existing network to service the catchment that forms roughly the western half of the North East Rangiora Development Area, which can be discharged into the existing pipeline along MacPhail Avenue. A small catchment at the southeast of the North East Rangiora Development Area can be discharged into the existing pipeline along Devlin Avenue, provided the pipeline is extended to Northbrook Road. A third large catchment to the east of the Development Area is serviced by requires a new pumpstation on Kippenberger Avenue established as part of Bellgrove North Stage 1 (at the south-eastern point of the Development Area and pumped into a new rising main to Northbrook Road, where it would join onto a rising main to the treatment plant.

#### ***Fixed Outline Development Plan Features for the North East Rangiora Development Area:***

~~Location of a concentration of medium density residential activity (meaning a minimum ratio of 70% medium density residential zone density and a maximum 30% general residential zone density) in the southwest of the Outline Development Plan (Option A) or south of the Outline Development Plan (Option B) as well as immediately adjacent to the local/neighbourhood centre~~

- Location of roading connection of north/south road to MacPhail Avenue at Kippenberger Avenue (established as part of Bellgrove North Stage 1)
- A road to connect the new north/south road to East Belt
- A road to connect the new north/south road to Golf Links Road
- Location of flow paths and adjoining green links and cycleways, including any required waterbody setbacks
- Location of the local/neighbourhood centre at the north/south road corridor, in proximity to a flow path
- Separated shared pedestrian / cycleway at the north/south road corridor



#### **Attachment 4: South East Rangiora Outline Development Plan Narrative Text, incorporating the changes sought by BRL; and changes agreed by Peter Wilson and Greg Kelley (highlighted in yellow)**

##### **DEV-SER-APP1 - South East Rangiora Outline Development Plan**

##### **Land Use Plan**

The Outline Development Plan for the South East Rangiora Development Area provides for medium density residential activity, enables the option for some variety of site sizes. ~~Some medium density residential activity could be developed at key locations adjacent to natural flow paths or stormwater reserves, in order to take advantage of opportunities to overlook such high amenity facilities and offsetting limited private outdoor space feasible in higher density residential development. However this component of the Outline Development Plan is flexible and optional and will likely be dictated by development feasibility and market demand in these locations. The Medium Density Residential Zone enables a minimum lot size of 200m<sup>2</sup> while the General Residential Zone enables a minimum lot size of 500m<sup>2</sup>~~. Overall, the South East Rangiora Development Area shall achieve a minimum residential density of 12 households per ha.

A small optional neighbourhood/local centre, shown in the Outline Development Plan as commercial/business, is located at the juncture of Northbrook Road and Spark Lane. The latter will form part of the future north/south primary road connection that extends northward through the South East Rangiora Development Area and southward to connect to Lineside Road. Locating the neighbourhood/local centre at this strategic location offers a high degree of visibility which has positive flow-on effects on neighbourhood businesses' sustainability.

The land in the South East Rangiora Development Area north of an extension of Cassino Street is likely more suitable for urban development than the land south of it, due to the presence of artesian water south of this location, together with modelled effects of a 200 year localised flooding event. Groundwater south of a Cassino Street extension is artesian and close to the surface, which will likely result in more challenging construction of infrastructure.

Rangiora New Life School and Southbrook School are located south of



Boys Road. It is subject to Ministry of Education consideration whether an additional primary school is required in the South East Rangiora Development Area in the future to service its catchment. It could be feasible that preschool(s) are established in the Development Area. The South East Rangiora Development Area also contains the Northbrook Museum and Rosburn Receptions, a community asset, at Spark Lane.

Development within the Rangiora South East Development Area is to be contiguous; the Outline Development Plan does not anticipate physically separated or ad-hoc development. **Where it is not feasible to achieve contiguous development, it must be demonstrated that it can be efficiently serviced and integrated with the remainder of the development area.**

### **Movement Network**

The Outline Development Plan for the South East Rangiora Development Area provides access to this growth area through a network of primary and secondary roads that ensure development integration, efficient traffic management and public transport corridors. Only these more significant roads are identified in the movement network plan. The layout of additional tertiary roads to service the residential areas will respond to detailed subdivision design of those areas. The specific roading classification of all roads will be ultimately determined at the time of development, to provide flexibility and match the eventual roading classification system made operative through the District Plan. Primary and secondary roads for the South East Rangiora Development Area are located to ensure that all existing parcels of land, when developed, can be served by the roading network.

A key movement network feature for the South East Rangiora Development Area is an extension of Devlin Avenue at the western boundary of the area connecting to Boys Road, ~~with a green link~~ incorporating a cycling path adjoining the length of it. A new north/south primary road connection off Kippenberger Avenue ~~curves to~~ **also connects** to the existing Northbrook Road portion that runs in a south-eastern direction. This is coupled with also extending the existing Northbrook Road at the south of the existing developed and zoned land and intersecting it through the Devlin Avenue extension to meet the new north/south connection. Feedback provided by local property owners is that the existing bend at Northbrook Road causes dangerous driving conditions, and it is proposed that a small section of Northbrook Road at this location is stopped to allow the new road alignment. A cycleway will also be provided along Northbrook Road, which links into the wider cycling network within and outside of the Development Area.

The Outline Development Plan for the South East Rangiora Development Area also identifies the existing MacPhail Avenue and its extension along Spark Lane and to Boys Road as the main north/south primary road which forms part of a wider future key Rangiora eastern north/south road connection that will ultimately extend to meet Lineside Road in the south and meets Coldstream Road in the north through the South East Rangiora Development Area. This primary road will be adjoined by a green link with a cycleway and be suitable for public transport. Its design will promote reduced vehicle speeds and increased safety to other street users. The installation of appropriate intersections with Northbrook Road and Boys Road will be required.

East/west movement patterns through a number of secondary roads provide subdivision structure and connectivity, and are integrated with existing roading linkages west of the Development Area. Secondary roads generally assume a form which is of a more residential nature and cater less to through vehicle traffic.

As well as cycleways at key roading corridors, the network of cycling infrastructure for the South East Rangiora Development Area includes cycleways along the two key southern flow paths and references the wider cycling network beyond the Development Area.

Pedestrian footpaths will be provided on at least one side of each road. The movement network plan should be read in conjunction with the green network plan which also provides key informal cycling and walking corridors, such as along green links. The principle of walkability is incorporated through the use of a connected roading pattern, additional pedestrian links and the location of open spaces.

**A pedestrian link will be provided across the Cam/Ruataniwha River in the location shown on the ODP, to provide connectivity to the Green Link along the north side of the Cam/Ruataniwha River at the time of**



## **subdivision of LOT 1 DP 452196 (479 Rangiora-Woodend Road).**

### ***Open Space and Stormwater Reserves***

The Outline Development Plan for the South East Rangiora Development Area shows ~~three~~ **four** open space reserve locations together with a network of stormwater management areas and green corridors throughout the site.

The open space reserves are located strategically in places that are highly prominent, easily accessed and have the ability to add to the character and identity of the development, as well as being within a 500m radius of all residential households in the Development Area. One open space reserve is located east of the new north/south primary road connection off Kippenberger Avenue, and ~~north~~ **south** of a ~~Cassino Street Galatos Street~~ extension, and is connected by green links. Flexibility of the exact location of the reserve is possible, as long as it is accessible within a 500m radius to the north-eastern residential areas in the South East Rangiora Development Area.

### **A second open space reserve is proposed along the eastern boundary of Bellgrove South (Lot 2 DP 452196) with Lot 1 DP 452196 (479 Rangiora Woodend Road) and Lot 2 DP 306045 (52 Northbrook Road) which combines to form a minimum 20m buffer along this boundary of the South East Rangiora Development Area.**

A ~~second~~ **third** open space reserve is located in the south of the site, east of the Northbrook Stream flow path, and the same philosophy of flexibility in exact location applies. A ~~third~~ **fourth** optional smaller open space reserve is located further south, east of the Northbrook Waters, adjacent to the extended Spark Lane which will form part of the main north/south primary road. This reserve is proposed in this location to maximise access to, and enjoyment of, the Northbrook Waters reserve which provides community amenity through attractive landscaping and walking/cycling paths. To maximise functionality, accessibility and visibility, open space reserves must be bordered by at least one local road, and a second either local road or public accessway such as a green link.

Any required open space reserve should be prioritised in the early stages of a new residential development, and subsequently when further expansion extends beyond the margins of radius and/or resident population guidelines.

A network of green links is anticipated throughout the Development Area, including alongside flow paths connecting key amenity features such as open space and stormwater reserves. Green links provide safe and attractive active mode corridors and play opportunities, can have a role in stormwater management, and offer visual relief from otherwise built up residential areas. Green links must be bordered by at least one road frontage (except in cases where they serve as a short connection strip) to provide appropriate access, visibility, amenity and safety for users. Where green links border both sides of a flow path, one road frontage between both sides is the minimum requirement.

### **Esplanade reserves and/or strips may be required along the banks of the Cam/Ruataniwha River at the time of subdivision. Their purpose and width will be determined at subdivision stage.**

There are three flow paths in the South East Rangiora Development Area. Streams, springs and waterways are protected and included in the stormwater reserves where present. Appropriate waterbody setbacks apply where required by the Natural Character of Freshwater Bodies Chapter of the District Plan. Waterbodies must be protected intact, or improved, as part of any development and any potential adverse impacts on the local and receiving waterbody ecology must be mitigated. Where possible, amenity planting will be encouraged together with enhancement of habitat heterogeneity and in-stream conditions to improve stream health, facilitate migrations and promote recruitment. Efforts must be made to ensure any adverse impacts on kēkēwai (waikoura-freshwater crayfish), which are present in the culturally significant mahinga kai area of the Northbrook Stream (the flow path linking Northbrook Road and Boys Road in the Rangiora South East Development Area), are avoided.

A network of stormwater reserves are identified for the South East Rangiora Development Area to respond to five stormwater catchments: just north of Northbrook Road at the eastern edge of the Development Area (**split into one**



large area within Bellgrove South (Lot 2 DP 452196) and one smaller on the eastern most point north of Northbrook Road (within Lot 2 DP 306045 (52 Northbrook Road)), north of Boys Road at the south-eastern point of the Development Area, and a small stormwater reserve north of Boys Road south Northbrook Waters, with proposed attenuation basins. The ground in this area is known to have relatively high groundwater and therefore it is assumed that these would all be wet basins.

Stormwater reserves provide attractive open space and visual relief in a built up residential environment, and the location of them provide opportunities for adjacent higher density residential areas to look out onto them and benefit from their amenity. Stormwater will be managed by an appropriately designed stormwater treatment system with high amenity values. The South East Rangiora Development Area's stormwater catchment discharges to the North Brook. All stormwater ponds are subject to design detailing. The Outline Development Plan for the South East Rangiora Development Area provides an indicative size and location based on likely catchments around the key infrastructure.

#### ***Water and Wastewater Network***

The provision of reticulated water supply assumes a skeleton network for the South East Rangiora Development Area, where only water pipes 100mm in diameter and greater are specified. The exact location of the reticulation may change when road layouts are confirmed, noting that some identified road locations as specified under 'Movement Network' are fixed and others are flexible.

Reticulation upgrades proposed for Rangiora are both within Development Areas (East, North East and West) and within the existing network. Due to their location, all of the existing network upgrades can be attributed to the Development Areas. Source and headworks upgrades are not Development Area specific, rather they apply to the whole scheme.

A number of water network upgrades and constructions are required to service the South East Rangiora Development Area's four catchments. Reticulation requirements include upgrades to the existing network and extra over upgrades to development reticulation. These upgrades are required to maintain the existing levels of service to current and future customers. Requirements include new mains related to South Belt Booster Main and Boys Road Booster Main.

Development in the Rangiora West, North East and South East Development Areas also contribute to the requirement to upgrade a number of wider Rangiora sources and headworks, such as additional wells and associated pipework at Rangiora Source, new Surface Pumps and Generator at Ayers Street Headworks, new reservoirs at Ayers Street and South Belt, and a new Surface Pump at South Belt Headworks.

Four catchments make up the South East Rangiora Development Area for wastewater servicing requirements. Each catchment has an independent solution for wastewater infrastructure and only the key trunk infrastructure and pumpstations/rising mains are shown. The lay of the land is generally towards the south east, and developments reticulation would be installed with the lay of the land. Mains will follow general alignment with the roading network.

The catchment directly east of Devlin Avenue and north of Northbrook Road requires a new pumpstation at the eastern ~~end point~~ of the South East Rangiora Development Area at Northbrook Road. It will pump to the existing pump station at Northbrook Road, which then discharges to the Rangiora Wastewater Treatment Plant via an existing rising main, and pumping into a new rising main to join onto a shared rising main for the north-eastern catchment (in the Rangiora North East Development Area) to the Rangiora Wastewater Treatment Plant. A second catchment south of Northbrook Road, east of the North Brook Stream discharges into a new proposed booster pumpstation at eastern Boys Road, which discharges into a fourth pumpstation at Boys Road/Spark Lane extension via a new rising main. Finally, two smaller catchments west of the North Brook Stream discharge directly into the fourth proposed pumpstation.

It should be noted that artesian water is located roughly south of an extension of Cassino Street in the remainder of the South East Rangiora Development Area, east of Devlin Avenue, and groundwater is close to the surface. This likely makes construction of infrastructure challenging and will likely carry higher than typical costs, particularly when developing large catchment areas. A pressure system may need to be considered for the South East Rangiora Development Area's catchments if gravity reticulation cannot be kept shallow enough. Such considerations will inform development feasibility.

There is potential for the quality and/or quantity of the water supply to the existing domestic well at 479 Rangiora Woodend Road to be adversely affected by upstream development which proceeds ahead of development of this property. Development of all land in the South East Rangiora Development Area north of Northbrook Road should provide contingency for connection to the

town reticulated water supply to the existing dwelling at 479 in the event that a potable well supply cannot continue to be provided. The developers of this land should install filtration and purification measures to the well at 479 prior to any development works commencing, and monitor water quality and quantity at the well post commencement of development works and provide this information to the property owner at 479 and the Council. These matters will be addressed by way of consent conditions at subdivision stage. It is anticipated that the owner of 479 will be an affected party to any subdivision and earthworks consents involving land within the South East Rangiora Development Area between Kippenberger Avenue, Rangiora-Woodend Road and Northbrook Road, and 518 Rangiora Woodend Road.

**Fixed Outline Development Plan Features for the South East Rangiora Development Area:**

- Extension of Devlin Avenue ~~with an adjoining green link~~ containing a cycleway
- Extension of Spark Lane to connect to Boys Road with adjoining green link containing a cycleway
- Location of new north/south road connecting Kippenberger Avenue with Northbrook Road
- Realignment of Northbrook Road to cross Devlin Avenue extension and connect to the new north/south road east of Devlin Avenue
- Cycleways at Northbrook Road, Devlin Avenue, and Spark Lane
- Location of flow paths and adjoining green links, cycleways, and required water body setbacks



*Attachment 5: Changes to the South East Rangiora ODP agreed to by Peter Wilson and Greg Kelley*