

**BEFORE THE SELWYN DISTRICT COUNCIL
HEARINGS PANEL**

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of Privately requested Plan
Change 76 by Dunweavin Ltd.

BRIEF OF EVIDENCE OF NICOLE LAUENSTEIN

Date 14 / 10 / 2021

QUALIFICATIONS , EXPERIENCE AND CODE OF PRACTICE

1. My name is Nicole Lauenstein. I have the qualifications and experience in my field of expertise as set out in my evidence in chief. I confirm that I have prepared this evidence in accordance with the Code of Conduct for Expert Witnesses. Code of Conduct for Expert Witnesses contained in Part 7 of the Environment Court Practice Note 2014.

URBAN FORM, CHARACTER AND AMENITY

2. PC 76 is located within a FUDA and contributes to a well-functioning and compact urban form for Rolleston. It is consistent with the intent of the Rolleston Structure Plan and in accordance with good Urban Design Practice.
3. There is general agreement that the proposed site integrates well with the surrounding environment and will be visually perceived as an extension to the existing and new proposed residential subdivision of a similar scale and density. Within this context the proposal does not trigger any apparent conflict with surrounding sites and their activities, nor will there be any negative aspects from existing activities in the immediate surrounds on the proposed residential amenity of the site.
4. The ODP is underpinned by a concept design that extends the surrounding residential character of development into and through the site. The proposed development has been designed from the ground up around a central neighbourhood park which enhance the amenity of the proposal as it allows for generous tree planting, and provides a local focal point for the development. The layout can create a high amenity residential streetscape and generally slow traffic movements to support residential living. A fine grain local road network offers a high level of internal connectivity and well located connections to the wider neighbourhood.

SECTION 42 REPORT

5. From an urban design perspective, there are only a few minor matters to be addressed related to road alignments, pedestrian/cycling overlaid with the green network, and the retention and integration of site specific features.

Revised ODP

6. In response to requests from Council, and in consultation with our own traffic engineer, the ODP has been revised to include:
 - a) A reference regarding 'frontage upgrade' along the full extent of East Maddisons Road
 - b) A direct east-west secondary road connection.The access point has been positioned in a central location on East Maddisons road to achieve a balanced distribution. This is the preferred location from an urban design perspective as it leads directly to the central green space and when combined with the north south secondary road provides a clear structure for the development

c) Key pedestrian and cycle connections

A direct connection within the east – west road corridor and two additional shared pedestrian/cycle 'green links' in the south-west corner of the site have been added to enable future connectivity to the west and south to PC area 70.

7. Not included in the revised ODP is a possible additional road access point located at the north east corner of the Site. This would form part of the local roading (network not shown at ODP level). However, the shared pedestrian/cycle/green link shown on the ODP in this location can be future proofed to ensure vehicular access can be incorporated, if required at subdivision stage.

Remaining Matters – natural features and character

8. There is a minor disagreement in the description of the existing character of the site. The Site contains a water race, clusters of mature trees and shrubs, and several rural shelterbelts around the perimeter of individual properties, giving it a sense of enclosure. These are consequence of the rural activities and typical features within the context of rural lifestyle blocks, but I would not consider them strong natural features. In particular the water race is a manmade element and part of rural infrastructure. I do agree that they all contribute to the amenity and character of site but most of them are not compatible with a higher density residential development.
9. As I set out in my main evidence, a water race is not compatible with residential environment for several reasons:
- a) Technical and practical concerns
 - b) Issues around water flow
 - c) Health and safety concerns
 - d) Limited opportunities for pedestrian and cycle movement across
 - e) Ongoing maintenance and related costs.
10. Ms. Wolfer suggests to integrate the water race into a north-south, and then east-west, green corridor, or to align it with a road within a road corridor. This presents a possible aesthetic solution, but does not take the above concerns into account. The only place where parts of the water race could be expressed without conflict, is in the neighbourhood park. If, and how, this can be integrated is a matter for detailed design. For the purpose of the ODP I would recommend NOT to include the water race.
11. Apart from the retention of existing mature specimen tree where they can be suitably integrated, retention of rural infrastructure would be inappropriate in my view. Instead, through the introduction of a large reserve, some open character will be retained and, through careful street alignment, new viewshafts to the Port Hills will be created. This will enhance the overall amenity of the proposal and create tangible connections to the landscape features of the wider district.

QUALIFICATIONS AND EXPERIENCE

12. My name is Nicole Lauenstein. I have the qualifications of Dipl. Ing Arch. and Dipl. R.U.Pl. equivalent to a Master in Architecture and a Master in Urban Design (Spatial and Environmental Planning) from the University of Kaiserslautern / Germany. I was an elected member of the Urban Design Panel in Christchurch from 2008 to 2016 and am a member of the UDF (Urban Design Forum). Before moving to New Zealand I was a member of the BDA (German Institute of Architects) and the AIA (Association Internationale des Architects).
13. I am director of **a + urban**, a Christchurch based architecture and urban design company established in 1999. I have over 25 years of professional experience in architecture and urban design in particular within the crossover area of urban development, master planning, and comprehensive spatial developments
14. I have practised as an Urban Designer and Architect for the first 8 years in Germany, Netherlands, England and Spain and Australia before re-establishing my own architectural and urban design practice in New Zealand. In both practices I have undertaken many projects combining the architectural and urban disciplines. Projects have been varied in scale and complexity from urban revitalisation of city centres, development of growth strategies for smaller communities, architectural buildings in the public realm and private residential projects in sensitive environments.
15. Prior to my arrival in NZ I worked for several European Architects and Urban Designers. I was involved in a range of urban studies and rural area assessments for the governance of the individual federal states in Germany, investigating urban sprawl of major cities such as Frankfurt, Darmstadt, Rostock, Berlin and the effect on the urban and rural character. This work included developing mechanisms and criteria to facilitate sustainable development. Other work for private clients consisted of designing sustainable developments in sensitive areas within very stringent development guidelines.
16. My experience in New Zealand includes working on growth strategies for urban and peri-urban areas, including rural and urban residential developments, with a mixture of densities from low, to medium and high. I have prepared several urban analysis,

development strategies and design concepts, for both urban and rural residential areas within the Canterbury region (Lincoln, Rolleston, Tai Tapu, Ohoka, Rangiora, Kaiapoi, Lake Hood, Ashburton) I have also done this for Akaroa and the wider South Island, namely developments in Queenstown, Wanaka, Invercargill, Marlborough Region, Hurunui District, and Buller District.

My most recent urban design and architecture work includes:

- (a) Papa Otakaro Avon River and East/North Frame concept design, Christchurch Central City
 - (b) Kirimoko residential development in Wanaka Stages 1 - 6
 - (c) Urban analysis and strategic plans for Selwyn District Council Hurunui District Council, Christchurch City Council, Queenstown and Lakes District, Nelson and Buller District, Wellington CBD and Auckland City and the greater Auckland urban area, as well as
 - (d) Masterplans for urban development in Lincoln, Rolleston, Tai Tapu, Amberley, Rangiora, Ohoka, Ashburton, Christchurch, Westport Wanaka and Queenstown, Auckland
 - (e) Mixed Use development Hagley Avenue, Christchurch
 - (f) New Tait Building and Masterplan, north-west Christchurch
 - (g) Several commercial and residential 'rebuild' projects in Christchurch
 - (h) Master Plans for post-earthquake Inner-City block infill and brown field conversions in Christchurch.
 - (i) ODP's for rebuild projects in the Christchurch CBD
 - (j) Analysis and identification of Character Areas within Christchurch as part of the District Plan Review
 - (k) Several private Plan Changes
17. I have been involved in tertiary education, and have lectured urban design at Lincoln University at both graduate and post graduate level. I am currently a guest lecturer at ARA Institute of Technology teaching architecture and urban design. I have also delivered professional development workshops for both architects and urban designers.

18. I confirm that I have prepared this evidence in accordance with the Code of Conduct for Expert Witnesses. Code of Conduct for Expert Witnesses contained in Part 7 of the Environment Court Practice Note 2014. The issues addressed in this statement of evidence and appended report are within my area of expertise, except where I state that I am relying on the evidence or advice of another person. The data, information, facts and assumptions I have considered in forming my opinions are set out in the part of the evidence in which I express my opinions and/or in the appended report. I have not omitted to consider material facts known to me that might alter or detract from the opinions I have expressed.

SUMMARY

19. The proposed site is influenced by recent residential activities to the north and proposed residential activities to the south and west, should the request for PC70 be granted. This will effectively enclose the site on all sides with residential development. There is general agreement that the proposed site integrates well with the surrounding environment and will be visually perceived as an extension to the existing and new proposed residential subdivision of a similar scale and density. Within this context the proposal does not trigger any apparent conflict with surrounding sites and their activities, nor will there be any negative aspects from existing activities in the immediate surrounds on the proposed residential amenity of the site.
20. From an urban design perspective, there are only a few minor matters to be addressed related to road alignments, pedestrian/cycling overlaid with the green network, and the retention and integration of site-specific features.

URBAN DESIGN REPORT

21. I prepared a technical report for Plan Change 76 (lodged 15/12/2020), seeking the rezoning which can be found on Council's website. In response to the Council's Request for Further Information (RFI), I updated my original report to address specific queries. My updated report, titled
Plan Change 76 East Maddisons Road Rolleston, RFI- Urban Design / Landscape Matters and Visual Assessment dated 22/03/2021

There are no fundamental changes between the first version of the report and the final version, apart from the inclusion of responses to specific urban design and landscape matters (RFI), as well as a visual assessment.

22. The final report provides a brief introduction and scope. It sets out the assessment methodology for the urban and visual assessment and identifies the key regulatory framework as it relates to urban design matters. This is followed by the Assessment of effects with regard to landscape and urban matters:
- a) Description of the existing site character
 - b) Existing rural and urban characteristic of the receiving environments
 - c) Effects the proposal has on the character and visual amenity of the immediate receiving environments
 - d) Effects the proposal has on the wider context, rural environments and township characteristics
 - e) Urban assessment against the relevant objectives of the Operative District Plan
23. The visual assessment was undertaken in late 2020 with a focus on the visual changes experienced by the surrounding residential and rural areas, along with possible future public spaces, including street environments, as a result of the proposed development. This assessment also looks at potential reverse sensitivities and introduces possible measures to mitigate the effect of the proposed changes on the receiving environment.
24. Although the report assesses the proposal against selected objectives of the Operative District Plan, the underlying landscape and urban design matters that inform my opinion are mostly transferrable to the Proposed District Plan.

SUMMARY OF URBAN DESIGN REPORT

25. The following paragraphs of my evidence are a summary statement of the matters covered in my report.

Character and Amenity

26. The Site is fully surrounded by areas that are either:
- a) Established urban residential developments.
 - b) Residential developments of an urban density currently under construction; or
 - c) Are areas identified for residential development in the future (FDA)
- This indicates to me that it can be expected that this entire south west corner of Rolleston will intensify with residential development.
27. To ensure coherence with the existing and future surrounding residential areas, Plan Change 76 has adopted the same residential zoning as the already existing zones to

the north of the Site. While the proposed overall density for the Site would be marginally higher than that of the existing zones, I consider this will largely be indistinguishable on the ground when compared to surrounding residential development.

28. With regard to the change in character from rural to urban density as seen from the rural environment, I consider this to be appropriate for this setting on the edge of the township and therefore will not change the overall landscape values and character experienced within the wider receiving environment.

Rural to urban Character

29. The proposed development will modify the character of the landscape from rural lifestyle blocks to a suburban character, where buildings, infrastructure, and amenities are more concentrated and visible. This is in keeping with the residential developments, both to the north and on the opposite side of East Maddisons Road that I observed in my site inspection. Some aspects of the open character of a rural site will be maintained through the following measures:
 - a) Provision of a large reserve centrally located within the Site.
 - b) The retention of clusters of established trees around existing dwellings.
 - c) The mitigation provided by fencing and landscape planting towards the rural environment, both west and south, if required.
30. Most of the rural vegetation character will be removed from the Site, as it is incompatible with the proposed denser residential activities. Instead, street trees and private garden plantings will provide a foil for the denser built form and ensure a high amenity is created for public spaces and streetscape. The proposed neighbourhood park will, in my opinion, also enhance the amenity of the proposal as it allows for generous tree planting, and provides a local focal point for the development.
31. Considering the proximity to the urban edge of Rolleston, this change from a rural vegetation character to one that is residential in nature will, in my experience, be perceived as a natural extension of the township. Such a change in character does not preclude the proposal from creating a high amenity environment.
32. Our Space 2018-2048 has identified this Site as part of a larger future development area and as such indicates that development is anticipated in the future. That foreshadows a change in landscape values. The Site sits right at the edge of the township and is already surrounded by residential development to the north and east.

The proposed plan change area will naturally extend these existing residential developments west and southwards into the Site.

Visual amenity and edge treatment

33. Overall, the character and landuse of the area will shift from open and agriculturally focused, to a more concentrated high amenity residential development. I understand that the neighbouring areas to the west and south are likely to undergo a similar change in the near future. I think it is highly likely that the entire south west area between Dunns Road and Goulds Road will gradually transition from a rural to a residential character, creating a coherent visual amenity of a residential character.
34. Any long-term retention of rural characteristics would be inappropriate in my view. Instead, through the introduction of a large reserve, some open character will be retained and, through careful street alignment, new viewshafts to the Port Hills will be created enhancing the overall amenity of the proposal.
35. Part of the western edge, and all of the southern edge of the Site, shares a boundary with rural properties. However, due to the likelihood of residential development occurring on these sites in the near future, I have recommended that any mitigation between rural and residential activities should consist of fencing and landscaping measures only to avoid creating measures that are incompatible with future residential use.
36. Neighbouring rural dwellings are well set back from the Site, (80 -100m) which ensures that the rural outlook for these dwellings can be retained by using simple mitigating measures such as hedge type boundary planting along the boundary with the Site.

URBAN FORM, CONSOLIDATION AND CONNECTIVITY

(Appendix A)

37. Within the context of the township of Rolleston the proposed development will contribute to a well-functioning urban environment. The proposed ODP will ensure the Site interlinks well with the neighbouring environments and provides a high residential amenity and connectivity within the site. This is achieved by:
 - a) Provision of a direct north-south primary road connection from Brenley Drive/ Chris Drive new subdivision tying in to the ODP for proposed Plan Change 70.

- b) Provision of an east-west primary road connection from East Maddisons Road to possible future development to the west.
 - c) Provision of a mix of low and medium density housing areas with a minimum net density of 12 households per hectare averaged over the ODP area.
 - d) Provision of pedestrian and cycle links within and through the ODP area to connect to adjoining urban areas.
 - e) Provision of a neighbourhood park of 2000m² in a central location and smaller green local parks in proximity to medium density developments.
38. ODP 12 / ODP 10 are residential areas currently under construction and I am aware of proposed plan changes occurring in close proximity (PC 73 and PC70). I assessed PC 76 in relation to these current and future developments and consider that with regard to urban consolidation, cohesion and connectivity PC 76 will provide an important link between these all residential areas and the current edge of Rolleston. Should the Site remain rural, it will retain its rural characteristics and in my experience become an isolated space that is inaccessible and impermeable. As a result it would prevent the necessary connectivity between the surrounding neighbourhoods.
39. With the fast rate of residential development occurring to the north and north-west I consider PC 76 a natural and logical development sequence for this western part of Rolleston. The likely introduction of additional residential development to the west and south in the near future further supports this. This direction of growth is also fully consistent with the underlying structure initiated by the Rolleston Structure Plan in 2007-2009 and aligns with the identification of future growth path by the SDC (FDAs). Residential development of the nature and character proposed by PC 76 is in keeping with the character and typology of other developments in the area albeit of a slightly higher density of 12hh/ha and is anticipated.

Internal amenity and finer grain connectivity (Appendix B)

40. The proposed development has been designed from the ground up. The ODP is underpinned by a concept design that extends the residential character of development to the north into the site. In addition to the above mentioned key design elements the ODP will further provide following a finer grain and high level of internal connectivity through the local road network this will create a high amenity residential streetscape and generally slow traffic movements to support residential living.

41. I consider the pedestrian and cycling network to be well resolved with Pedestrian and cyclist using primarily the well-connected internal road network. 'On-street' cycling will be a safe mode of transport on these local roads. In addition, two separate shared cycle and pedestrian links onto East Maddisons Road are available to provide more permeability of the development towards the east; the Town Centre and the local destinations, such as Foster Park and the local high school. A well sized recreational reserve is positioned in a central location within the ODP area and key pedestrian pathways lead to and through this neighbourhood park.

Higher densities and consolidation

42. Increases in densities are a key tool to consolidate urban environments either through retrofitting existing areas or through the inclusion of medium density comprehensive areas in new developments. To achieve densities of 12hh/ha it will require the inclusion of different building typologies such as attached 2-3 storey terrace housing. The design concept shows that these higher densities can be located in areas that are in close proximity to recreational open space to compensate for the reduced private outdoor spaces on individual properties.
43. To support this higher density housing typology a high amenity street scape with a strong pedestrian/cycle connectivity and easy access to reserves is essential. It is also preferential for areas of increased densities to be located in proximity to commercial town centres or neighbourhood centres to provide for day to day needs within a walking distance. The Structure Plan (Appendix C) identifies two new neighbourhood/ local centres in close proximity at the intersection of Goulds Road and East Maddisons Road, one approximately 400m south-east of the site and one just to the west of the site, both within walking distance.
44. Gould Road is easily accessible from the site and provides a fairly direct connection to other important destinations such as the town centre, primary and high schools, larger recreational areas, and sports and community facilities (Foster Park). I therefore consider that the proposed ODP can easily support the increased densities and integrate medium density building typologies as part of a residential neighbourhood without compromising the amenity for residents.

SECTION 42 REPORT

45. I have read the sections of the Officers report where it pertains to urban design matters and the evidence of Ms Gaby Wolfer (attached as Appendix 2 to the S42 report).
Ms Wolfer and I agree on almost all urban design related matters.
I have therefore taken the liberty to focus my response on:
- a) suggestions and requests raised by the officer report that have been addressed via a revision of the ODP
 - b) and remaining matters that require further clarification. These being natural features and character of the site and related to this retention of trees and water race

Revised ODP (Appendix D)

46. The following modifications were requested by the S42 report:
- a) *The ODP and Policy B4.3.77 are amended to indicate the need for a 'frontage upgrade' along East Maddisons Road, which should be determined by the developer in collaboration with Council in accordance with the Engineering Code of Practice requirements.*
 - b) *The ODP and Policy B4.3.77 are amended to align the primary road network within PC76 with the roading network established in the subdivisions on the opposite side of East Maddisons Road.*
 - c) *The ODP and Policy B4.3.77 are amended to illustrate a more direct east to west aligned road through the site.*
 - d) *The ODP is amended to illustrate the walking and cycling routes within the site, including an east-west cycle route.*
 - e) *The ODP plan and legend are amended to replace the references to 'indicative roads' to 'primary' and 'secondary routes'.*
47. In response to these requests from Council, and in consultation with our own traffic engineer, the ODP has been revised to include:
- d) A reference regarding 'frontage upgrade' along the full extent of East Maddisons Road;
 - e) A direct east-west secondary road and road alignment.
- This east-west connection is the main access into the site from the east and forms a T intersection at East Maddisons Road. The access point has been positioned in a central location on East Maddisons road to achieve a balanced distribution. This is the preferred location from an urban design perspective as it leads directly

to the central green space and provides a clear structure when combined with the north south secondary road.

Shifting the access point further south will result in an imbalanced form for the development, pulling the neighbourhood park into a less suitable location. This will compromise the internal layout and access to open space within a short walking distance for the majority of residents. The neighbourhood park is a key community hub and supports the medium density areas.

Shifting this east-west connection southwards would also locate the road in close proximity to the Goulds Road / East Maddisons intersection, making this area more car focused and less pedestrian friendly. The intention of the underlying design is to provide a local internal east-west road terminating in a green links at the eastern and western ends for pedestrian and cycling priority, creating safe local shortcuts along desire lines.

f) Key cycle and pedestrian routes:

The key components of the pedestrian and cycle network have been added to the ODP. Where they coincide with local roads, these will take the form of footpaths and on-road cycling. Pathways will be pulled into, and through, the Neighbourhood park and the green links as shared pedestrian/cycle ways. The detailed requirement for cycling safety within the secondary road corridors, i.e. integrated into the carriageway or separated out and shared with pedestrians, is a matter for the detailed design at subdivision stage, in consultation with SDC experts.

Two additional shared pedestrian/cycle 'green links' in the south-west corner of the site, to enable future connectivity to the west and south to PC area 70.

This will improve permeability at a finer grain and allow for direct shortcuts for local residents. Both connections will be dependent on alignment with neighbouring development and should be removed if this does not occur as they will otherwise create areas of entrapment. Depending on the final PC70 layout, one connection may be sufficient to achieve a good level of connectivity.

48. Not included in the revised ODP is the possible additional road access point located at the north east corner of the Site. This would form part of the local roading network which is normally not shown at ODP level to retain flexibility for the detail subdivision

layout. To provide certainty for a highly interconnected pedestrian and green network, a shared pedestrian/cycle/green link is shown on the ODP in this location. This connection can be future proofed to ensure vehicular access can be incorporated, if required at subdivision stage.

Remaining Matters – natural features and character (water race and trees)

49. There is a minor disagreement in the description of the existing character of the site. In my opinion there are no strong natural or physical features on the site. However, that is not to say that there are none. The Site contains a water race, clusters of mature trees and shrubs, and several rural shelterbelts around the perimeter of individual properties, giving it a sense of enclosure. These are typical features within the context of rural lifestyle blocks and I would not consider them strong, or even necessarily natural, features. This is because they are all a consequence of the rural and residential activities on the site. In particular the water race is a manmade element and part of rural infrastructure. I do agree that they all contribute to a high amenity and character for the site but most of them are not compatible with a higher density residential development.

50. I am not a landscape architect but from experience in other projects I can confirm that rural shelterbelts will need to be removed as they are often too tall and cast large shadows. Keeping individual trees within a shelterbelt is also not possible as these trees are intertwined and would not have sufficient root stability thus making them unsafe.

Clusters of mature trees can sometimes be integrated into a new development layout if they are good structural specimens, are healthy, and have a sufficient lifespan to warrant their inclusion.

The mechanics however to ensure they survive the construction process is more complex. In my experience the retention of existing trees is most successful if they can remain untouched and are placed into future reserves, or are part of the integration of existing dwellings and associated garden. It is also best to look at a group of trees versus individual trees. For that reason I recommend that the retention of trees for this project is limited to these scenarios and only if the survival of the tree can be assured during construction in particular earthworks.

The underlying design concept for the Site has taken this into account and integrated existing dwellings into the layout. No specific trees have been identified at this point,

as this is a matter for detailed design and requires input from an arborist. There are however, no noted / protected trees on site.

51. I do understand the desire to keep a water race for the amenity it could provide. It also creates as tangible connection to the character and history of both the site and the district. However, a water race is not compatible with a higher density residential environment for several reasons:

- f) Technical and practical concerns - having a water race in a streetscape makes it extremely difficult to design services, conflict with perpendicular underground pipes create inefficient infrastructure, multiple culverts for driveway crossings would be required
- g) Issues around water flow - the water race is an artificial water race and part of rural infrastructure there is no guarantee that water will flow long term with SDC being able to turn water flows off permanently as rural areas serviced by the water race also develop into residential environments. This creates uncertainty. Should it shut down what happens to the channel? It would become a dry ditch or turn into a weed bed.
- h) Health and safety concerns – risk to children drowning depending on depth of water which may require fencing
- i) Similar to the conflict with driveways and underground piping the water race can also be a disconnecting element. Bridges or culverts will be needed for pedestrian and cyclist which creates limited opportunities for movement across the water race.
- j) Ongoing maintenance and related costs often become an issue long term.

52. Ms. Wolfer suggests to integrate the water race into a north-south, and then east-west, green corridor, or to align it with a road within a road corridor. This presents a possible aesthetic solution, but does not take the above concern into account. The only place where parts of the water race could be expressed without conflict, is in the neighbourhood park. If, and how, this can be integrated is a matter for detailed design. For the purpose of the ODP I would recommend to not include the water race.

APPENDIX A - Wider residential development

The illustration below shows future development areas in relation to the site.

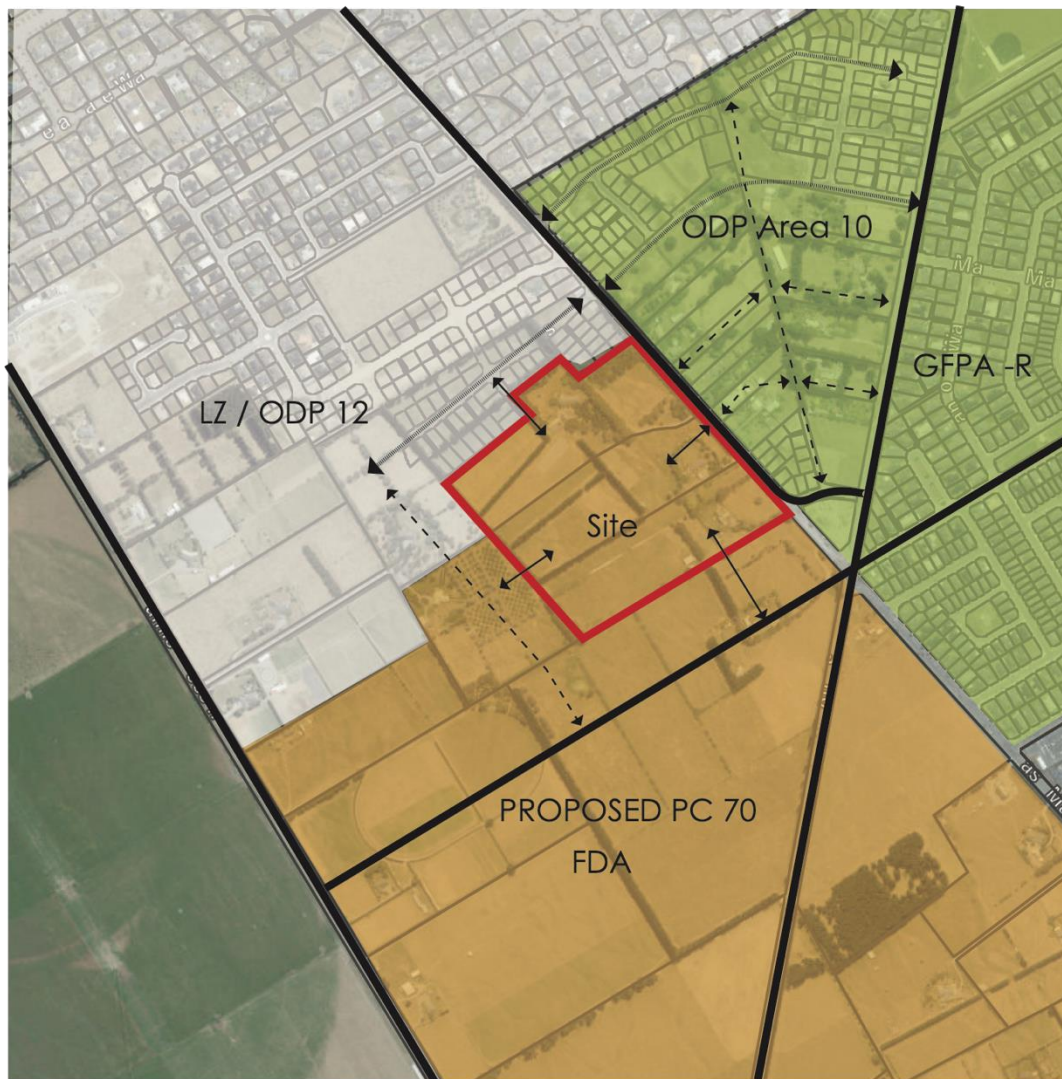


fig 9- future zoning / residential development areas Rolleston south-west

- key roads
- ↔ local connections into the site
- ↔ local connections beyond the site
- ↔ possible future connections beyond the site
- green field priority areas residential (GFPA - R)
- residential areas already zoned / under construction
- future development area (FDA)

APPENDIX B - Indicative design concept



APPENDIX C - Rolleston Structure plan

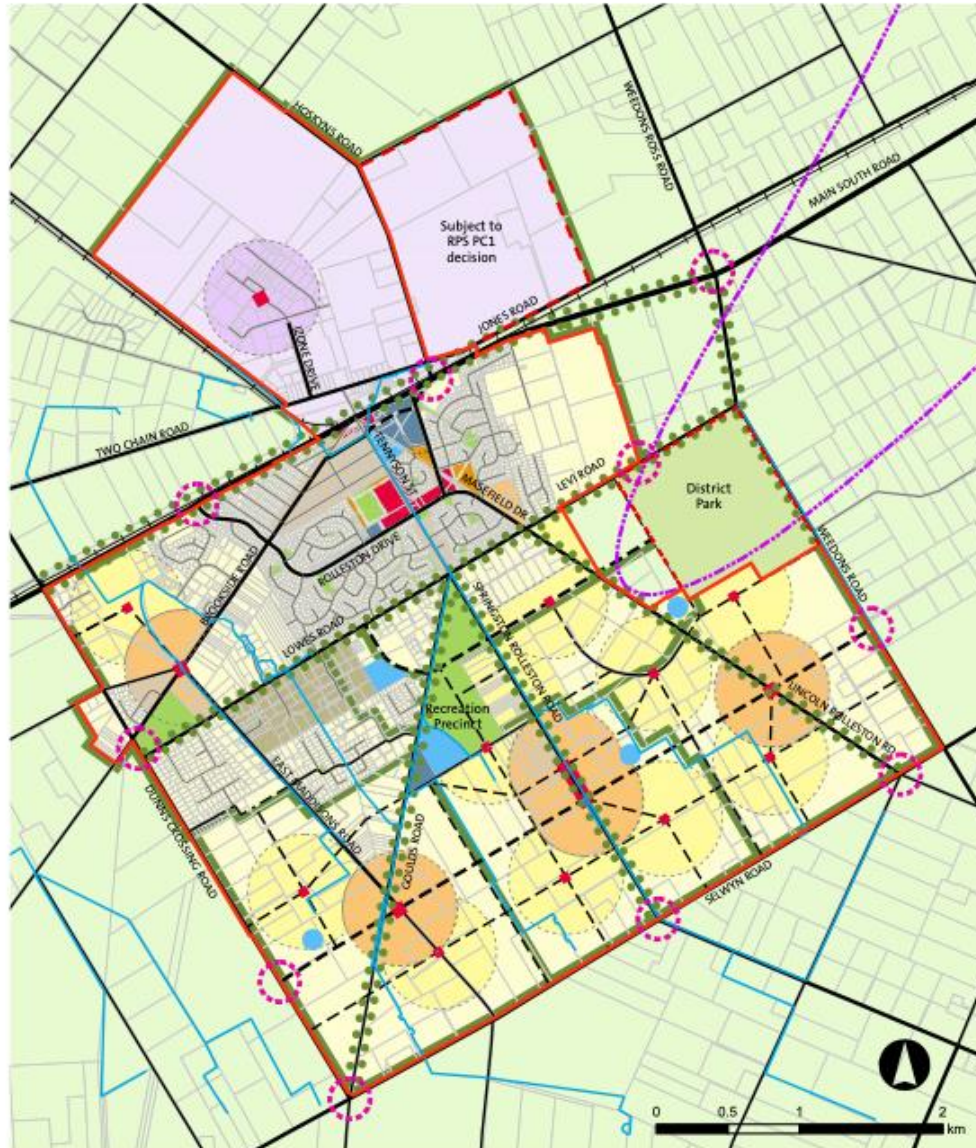


Figure 5.2: Rolleston Structure Plan



APPENDIX D - Updated ODP (in response to S42 requests)

