Private Plan Change Infrastructure Servicing Report

Version D

eliot sinclair

Edwards Road, Rolleston

Prepared for Rolly Central Limited

600017

Private Plan Change Infrastructure Servicing Report

Edwards Road, Rolleston

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Quality Control Certificate

Eliot Sinclair & Partners Limited

eliotsinclair.co.nz

Action	Name	Signature	Date
Prepared by:	Liam Jagvik Surveyor | Director BSurv MS+SNZ LCS liam.jagvik@eliotsinclair.co.nz		4 August 2025
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Status:	Version D		
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Distributed to:	Rolly Central Limited		

Version History

Status	Description	Author	Release Date
A	First issue of document	LJ	4 July 2025
B	Minor updates	LJ	14 July 2025
C	Update to water race	LJ	25 July 2025
D	Further water race updates	LJ	4 August 2025

Contents

1. Introduction

Eliot Sinclair & Partners Ltd (ES) has been engaged to prepare an Infrastructure Servicing Report in support of a proposed Private Plan Change for a site located at Edwards Road, Rolleston. This report provides an infrastructure servicing assessment in support of a rezoning request from General Rural (Outer Plains) to Medium Density Residential zoning (with provision for a neighbourhood centre shown on the associated Outline Development Plan), to enable the development of a mixed-use neighbourhood.

This assessment identifies feasible servicing options for the site based on known infrastructure availability and constraints and outlines the additional investigations, modelling, and consents that will be required to support development staging and implementation. The findings confirm that, with appropriate planning and infrastructure coordination, the proposed development can be serviced in accordance with Council expectations.

The purpose of this report is to provide a high-level assessment of infrastructure servicing requirements, constraints, and feasibility across the following five waters disciplines, as well as the utility services:

- Water supply (potable and firefighting)
- Wastewater collection and disposal
- Stormwater management
- Flood hazard response
- Water race considerations
- Power Supply
- Communication services

The report is informed by current Council infrastructure records, SDC's Five Waters Infrastructure Servicing Certificate (issued 28 April 2025), site-specific engineering design assumptions submitted to Council and relevant standards.

2. Site Characteristics

2.1. Existing Site

The subject site is located in Burnham, Canterbury, and comprises approximately **66 hectares** of land spanning several titles, legally described as:

- Lot 2 DP 491231
- Lot 3 DP 72132
- Lot 1 DP 20007
- Lot 1 DP 74061
- Lot 2 DP 74801

The Site is bordered by a future development Rolleston West Residential Limited to the north, a 30 hectare rural property to the east, Selwyn Road to the south and Edwards Road to the west. The Submission Site is shown in Figure 1.

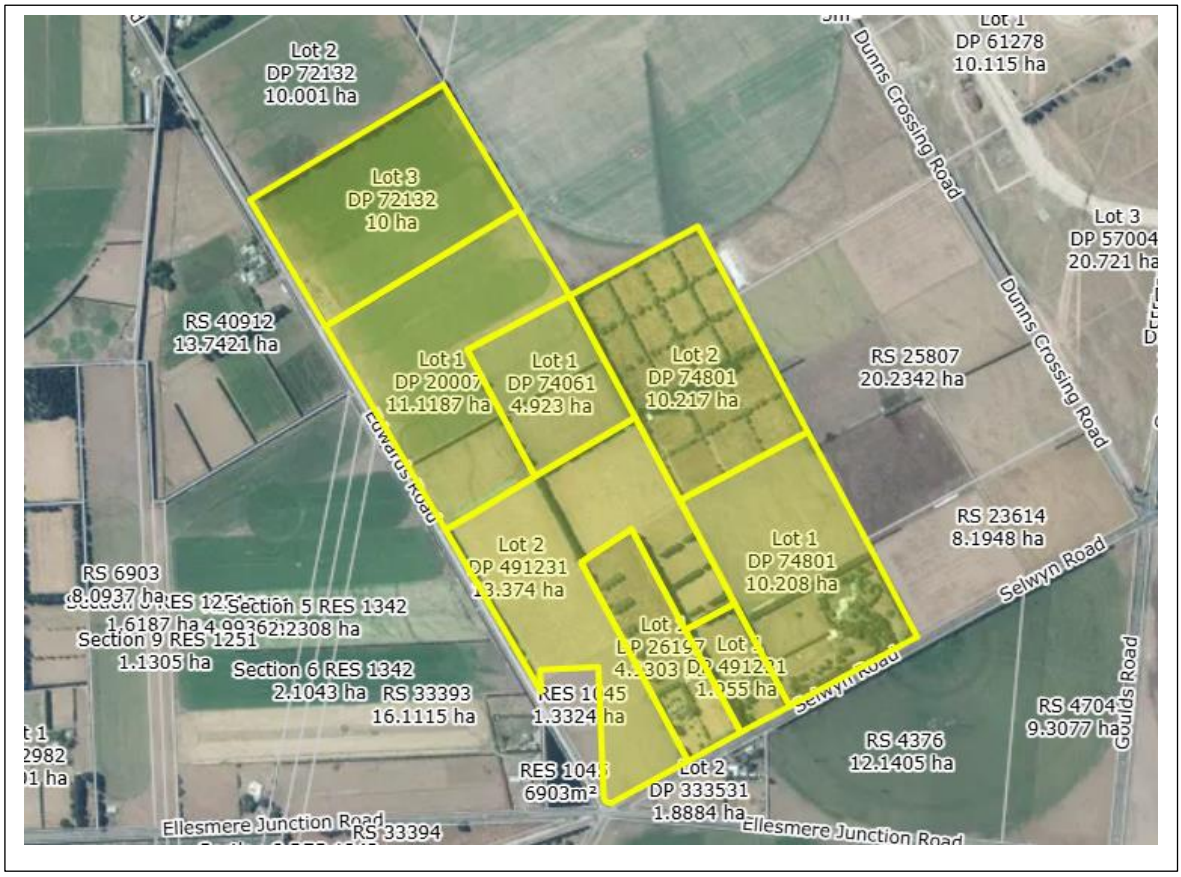


Figure 1. Aerial imagery illustrating extents of the site for the proposed land change.

Historically and currently, the site is used for pastoral farming and rural lifestyle purposes. The land is relatively flat, with minimal built development. It contains some existing paddock divisions and accessways, and has been subject to rural land management including grazing and cultivation.

2.2. Topography

A detailed topographical survey of the Site has not been undertaken at this stage. However, publicly available LiDAR data indicates that the Site is generally flat and slopes from north to south at a grade of around 1:200. The LiDAR contours are shown in Appendix A.

2.3. Soils

Engeo has completed a Geotechnical Assessment for the Site which indicates the subsurface geology generally comprise of topsoil ranging from 0.2 m to 0.4 m in depth, underlain by native sandy gravel to depths of at least 77.0 m below ground level.

2.4. Groundwater

The site is situated over an unconfined to semi-confined aquifer system, as indicated by Canterbury Maps (2025). Groundwater depth data from ECan well boreholes in the surrounding area indicate that groundwater is typically encountered between 4.0 m and 6.0 m below ground level (bgl). Notably, borehole M36/0018—located near the boundary of Lot 2 DP 491231, which forms part of the Site—recorded groundwater at a depth of 4.0 m bgl.

There are no community drinking water supplies within a 2.05 km radius of the site.

Additionally, no springs have been recorded in the vicinity (Canterbury Maps, 2025).

3. Proposed Development

At this stage, concept plans propose the development of approximately 1000 residential allotments and 6 commercial sites over a total land area of approximately 66 hectares. The exact configuration may be subject to refinement as the Plan Change and subsequent subdivision processes progress. The concept master plan is included in Appendix B.

4. Consultation with Selwyn District Council

A 5 Waters Certificate has been requested from Selwyn District Council which was issued 28 April 2025. The 5 Waters Certificate addressed Council's assessment for water supply, sewer, stormwater, land drainage and water races. The 5 Waters Certificate has been attached in Appendix C.

A further meeting was held with SDC staff with Council Officer's Casey Claborn (water supply and wastewater asset engineer) and Alex Ross (stormwater, land drainage and water races asset engineer) on Thursday, 8 May 2025.

5. Water Supply

5.1. Existing Infrastructure

There is currently no water supply infrastructure in the vicinity of the site to service the development.

5.2. Network Capacity

The ability to service the Site with potable and firefighting water supply is subject to hydraulic modelling by Selwyn District Council (SDC). The site is not currently included within the scope of SDC's most recent hydraulic modelling that informed the Water Supply Infrastructure Master Plan.

Hydraulic modelling will be required to be completed, using Council's consultant, to confirm whether the proposed 1000 residential and 6 commercial lots can be serviced based on the capacity of existing and planned infrastructure.

5.2.1. Servicing Context

SDC modelling will need to consider the possibility that the development is serviced entirely via Selwyn Road. The second scenario to model is expected to include multiple looped connections into adjacent developments to the north and east as an integrated solution in the future.

Council has advised that a new trunk water main will likely be required along Selwyn Road (from Dunns Crossing to Edwards Road). The size and extent of this main is to be confirmed. Cost share arrangements (where applicable) will be considered with Council.

The developer must secure a source water allocation (annual volume and instantaneous flow rate). Once secured, this allocation is to be transferred to SDC.

5.2.2. Servicing Strategy

Two options will be explored as part of hydraulic modelling and future engineering design:

1. **Option 1** – Confirm available capacity by extending the water main along Selwyn Road from the Dunns Crossing Road/Selwyn Road intersection, as shown in Figure 2 below.

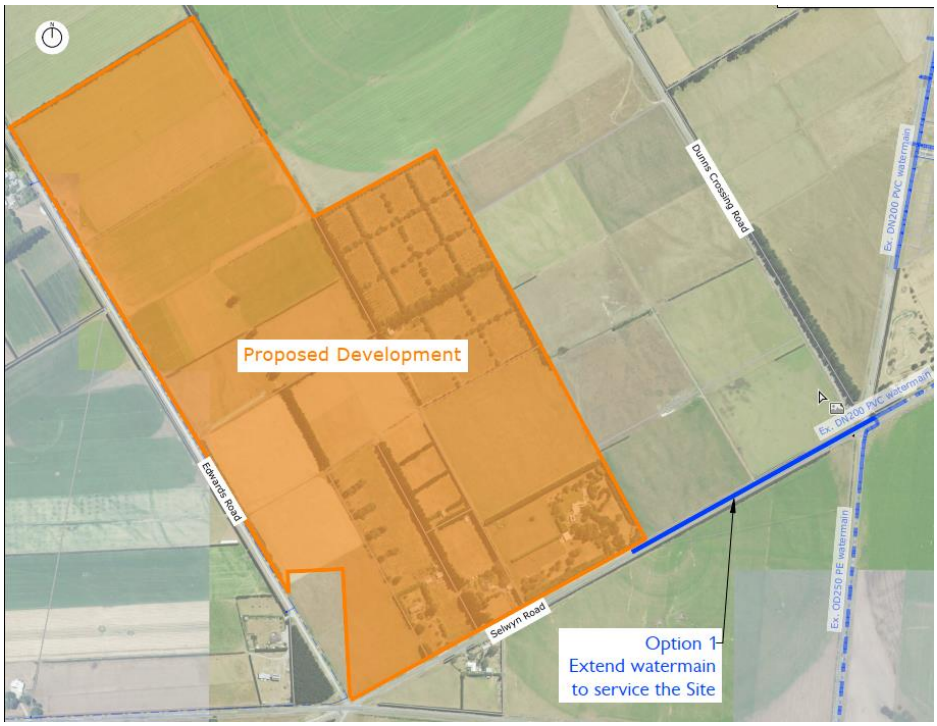


Figure 2. Option 1 – Extension from Dunns Crossing Road / Selwyn Road intersection

2. **Option 2** – It is understood that the area shaded in green shown in Figure 3 is earmarked for future development. This option will include hydraulic modelling of integrated infrastructure servicing between the Site and the neighbouring development, implemented over a progressive timeframe.

Figure 3. Option 2 – Integrated infrastructure servicing with future neighbouring development

A less desirable, but plausible, third option could also be to install an on-site bore and water supply treatment facility.

We anticipate the above assumptions and considerations will aid SDC's water modelling and enable SDC to confirm pipe sizes for the two servicing strategies. Ongoing consultation with Selwyn District Council and their modelling team will be necessary to determine two key factors: the capacity available within the surrounding network, and the timing of that availability. This will be an iterative process, which is typical for developments of this nature.

Subject to satisfactory modelling results, the site can be serviced by SDC's network.

5.3. Proposed Water Supply Demands

5.3.1. Potable Water Supply Demands

Note that 1000 lots and 15ha for the commercial area is the higher density for demand calculations. It will potentially be approximately 750 houses and 15Ha of commercial area. The preliminary potable water supply demands, based on the conceptual master plan, are summarised as follows:

- **Residential demand**: 0.125 L/s/lot × 1000 lots = **125 L/s**
  (in accordance with SDC CoP Section 7.4.1)
- **Commercial demand**: 1.0 L/s/ha × 15 ha = **15 L/s**
  (from anticipated mixed-use including school, aged care, and retail)
- **Total demand**: **140 L/s**

5.3.2. Firefighting Demands

The development will comply with **SNZ/PAS 4509:2008** - NZ Fire Service Firefighting Water Supplies Code of Practice.

- **Residential areas** will be designed to meet **FW2**, requiring:
    - 12.5 L/s within 135 m, and
    - An additional 12.5 L/s within 270 m (total 25 L/s).
- **Commercial areas** will be classified separately, with a minimum of **FW3** expected.

5.4. Summary

The existing network capacity and the necessary upgrades will need to be derived from SDC modelling of the wider network. On the information available to date, we consider that plausible engineering solutions are available, with timing and staging to be resolved through the plan change assessment process.

6. Sewer

6.1. Existing infrastructure

A DN600 rising main runs along Selwyn Road and Edwards Road toward the Pines Wastewater Treatment Plant. There is currently no gravity-fed wastewater infrastructure in the immediate vicinity of the site.

6.2. Network Capacity

Topography does not support direct gravity extension to existing infrastructure in Goulds Road.

The Site has not been included in Council's modelling completed to date.

SDC is in the process of remodelling the sewer infrastructure network in Rolleston which is expected to take 3-6 months, with a full report competed within approximately the next 12 months. Confirmation of the Pines Treatment Plant capacity is also required by SDC as part of the modelling being undertaken.

At the same time, there are planned Council upgrades occurring in the area which we understand will comprise a three phased approach:

1. Constructing a booster pump for the DN600 main at the Selwyn Road / Edwards Road intersection. Estimated commissioning December 2026.
2. Installing a new DN700 rising main from the Pines Treatment Plant along Ewards Road and heading towards Rolleston. The timeframe is unconfirmed, however it has been included in the 2033/34 LTP funding.
3. Integrating items 2 and 3. The timeframe is unconfirmed, however it has been included in the 2033/34 LTP funding.

6.2.1. Servicing Context

SDC's modelling will need to consider a staged approach to the sewer servicing for the site where temporary and permanent solutions are considered.

Council has advised that the preference is to service the development to a local pump station via gravity as a permanent solution. The local pump station would discharge to the Edwards Road/Selwyn Road pump station. Subject to topography, a local pump station may not be required and direct discharge to the Edwards Road pump station might be feasible.

6.2.2. Servicing Strategy

The servicing strategy for the site will be developed alongside ongoing Council modelling and infrastructure planning. A range of temporary and permanent options will be explored to ensure sewer servicing can be delivered in a staged and efficient manner. The purpose of the temporary solutions is to have SDC confirm the discharge capacity available for the site in a progressively staged manner. These options will be assessed through hydraulic modelling by SDC's modeller. The proposed servicing options include:

1. **Permanent solution A** – Gravity reticulation to the proposed Edwards Road/Selwyn Road pump station using a local pump station if required. SDC modellers to confirm capacity available using Options 1,2 and 3 in Section 6.2.
2. **Permanent solution B** – Low pressure sewer reticulation discharging to the existing SDC network either at the Edwards Road pump station or Goulds Road. SDC modellers to confirm capacity available.
3. **Temporary Option C –** Gravity reticulation to a local pump station with temporary rising main to Goulds Road. SDC modellers to confirm capacity.
4. **Alternative options may present subject to the modelling outcomes.**

Ongoing consultation with Selwyn District Council and their modelling team will be necessary to determine two key factors: the capacity available within the surrounding network, and the timing of that availability. This will be an iterative process, which is typical for developments of this nature.

6.3. Proposed Wastewater Demands

Note that 1000 lots and 15ha for the commercial area is the higher density for demand calculations. It will potentially be approximately 750 houses and 15Ha of commercial area. Therefore the design flows for the site, based on Selwyn District Council's Code of Practice (SDC CoP), are as follows:

- **Average Sewer Flow:** 1000 × 220 L/day × 2.7 + 15 L/s (commercial) = 594,015 L/day = **6.88 L/s**
- **Peak Wet Weather Flow**: 2.5 × 1.6 × 6.88 × 1.2 = **~33 L/s**

  (Includes factors for dilution, peaking, and future densification)

6.4. Summary

The existing network capacity and the necessary upgrades will need to be derived from SDC modelling of the wider network. On the information available to date, we consider that plausible engineering solutions are available, with timing and staging to be resolved through the plan change assessment process.

7. Stormwater

7.1. Existing Infrastructure

There is no reticulated SDC stormwater infrastructure is in the vicinity of the area.

The underlying geology in this area consists of sandy gravels, with groundwater typically encountered between 4.0 m and 6.0 m below ground level. This generally allows for disposal of stormwater to ground, consistent with common practice across the wider region.

7.2. Proposed Stormwater System

7.2.1. Design Requirements

Stormwater discharged to ground will be subject to site-specific infiltration testing and geotechnical confirmation.

The proposed stormwater system will be designed to retain and discharge runoff from all storm events up to and including the 1% Annual Exceedance Probability (AEP) event, in accordance with the SDC Engineering Code of Practice (CoP).

Stormwater runoff generated from hardstand areas subject to vehicular traffic (e.g. car parks and roads), or other forms of contamination, will require water quality treatment prior to discharge to ground. This treatment must meet the Canterbury Land and Water Regional Plan outcomes. Roof runoff is generally considered clean and does not require treatment.

For any stormwater infrastructure intended to be vested in Council, the developer must obtain an ECan discharge consent and will be responsible for operating the system for a period of two years prior to transfer to Selwyn District Council, subject to Council acceptance.

Existing overland flow paths needs to be maintained, refer to Section 8 for details.

7.2.2. Proposed stormwater management strategy

A discharge consent will be obtained to allow stormwater from the road reserve to be discharged to ground. This consent will be transferred to SDC after a two-year operational period, as required. A separate global ECan consent will be obtained for the discharge of stormwater to ground from future residential and commercial allotments. This global consent will be partially transferred to individual lot owners as their respective stormwater systems are developed and approved through the building consent process.

Stormwater runoff from the road reserves and residential driveways will receive treatment through green infrastructure solutions such as swales, rain gardens, and infiltration trenches prior to discharge to ground. The stormwater infrastructure will be designed and sized to attenuate and discharge runoff from the road catchments for all storm events up to and including the critical 1% Annual Exceedance Probability (AEP) event, in accordance with the SDC CoP.

All residential sites will discharge stormwater from roof and hardstand areas (not subject to vehicular traffic) via onsite soakage pits within each lot, sized with sufficient capacity to detain and discharge all rainfall runoff from events up to and including the critical 1% AEP storm event in accordance with the ECan global stormwater consent. The design of the roof soakage pits will be the responsibility of individual lot owners and will require approval during the building consent process.

Commercial sites will be required to provide on-site stormwater treatment and attenuation systems prior to discharging to ground. These systems must also be designed to manage storm events up to and including the 1% AEP event, in accordance with the ECan global consent. Design, construction, and compliance of the stormwater systems will remain the responsibility of the respective lot owners and must be approved during the building consent process.

Overland flow paths will be incorporated within the road reserves to convey pre-development stormwater runoff from upstream catchments through the development and toward downstream discharge points. Refer to Section 8 for further details. In addition, the road reserves will accommodate overland flow from within the development during storm events that exceed the critical 1% Annual Exceedance Probability (AEP) event.

7.3. Summary

Stormwater discharge to ground remains a proven and reliable solution for developments in Rolleston, supported by well-established and widely used treatment approaches such as swales, rain gardens, and soakage systems. The proposed stormwater management approach effectively addresses both water quality and quantity, while also aligning with regional and district planning requirements, ensuring the systems are readily approvable through the consenting process.

8. Flooding

8.1. Overview

Figure 4 and Figure 5 present the flood depth results from the SDC flood model for the 200-year ARI (0.5% AEP) and 50-year ARI (2% AEP) flood events, respectively.

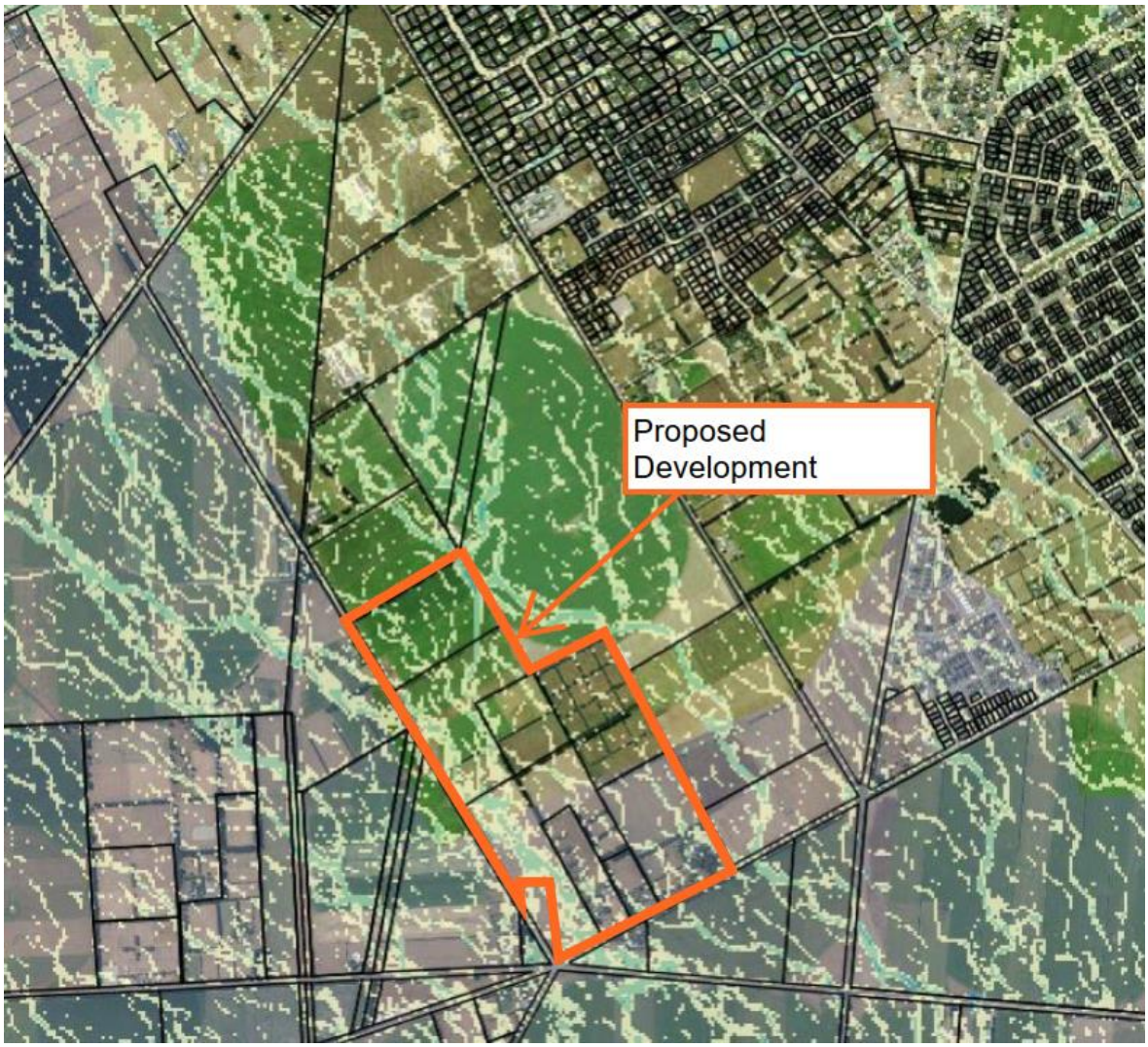


Figure 4. 200-year ARI flood event

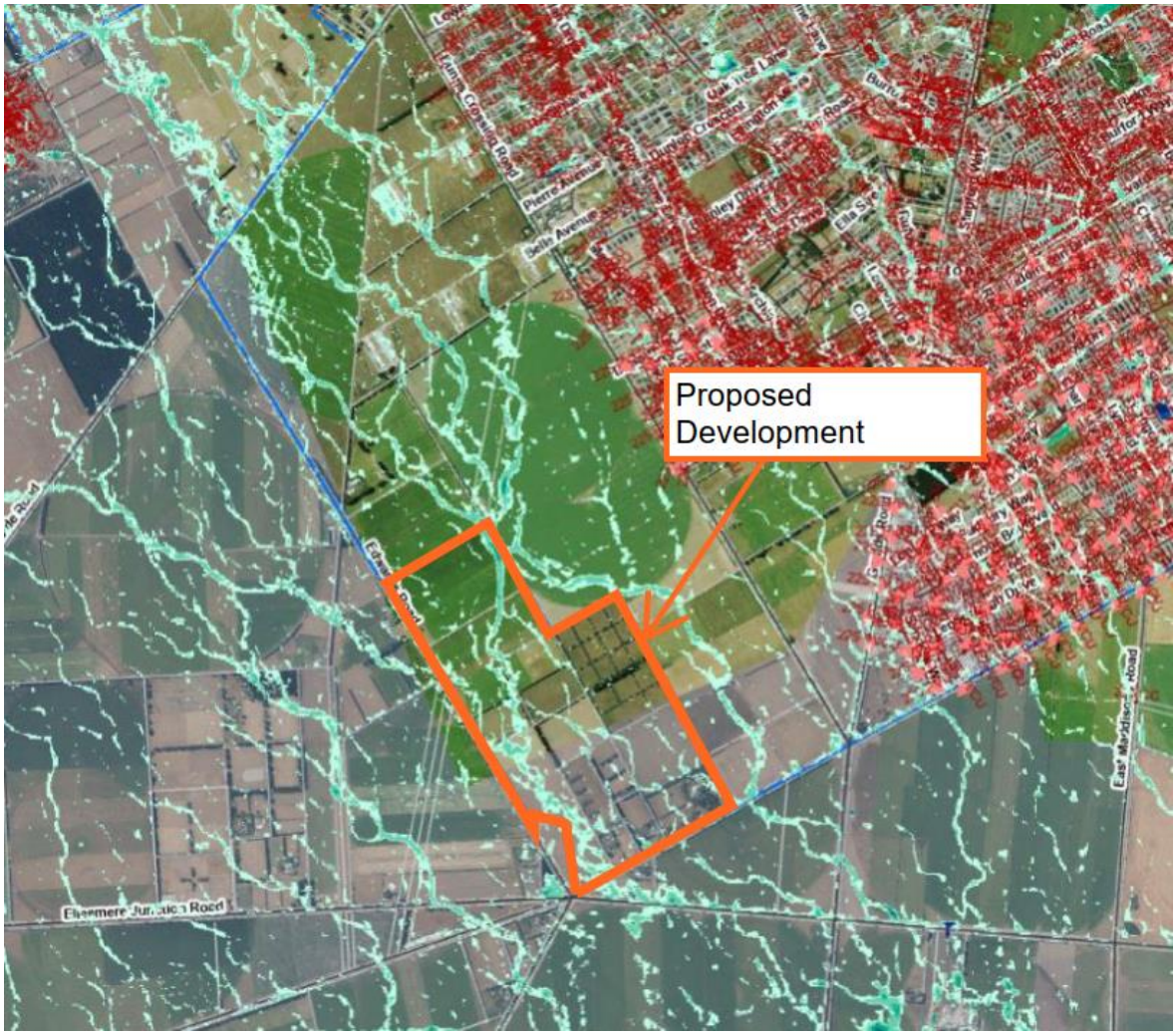


Figure 5. 50-year ARI flood event

8.2. Design Requirements

8.2.1. Flood Risk Assessment

Council requires a flood risk assessment submitted with the Engineering Acceptance package. The assessment include modelling and demonstrate the following:

- Overland flow paths
- Likely ponding depths and durations
- Flow velocities and blockage risks
- Capacity of downstream culverts and open channels

8.2.2. Finished Floor Level Requirements

As specified in Section 8.2.2 of the SDC CoP, the finished floor level for any new residential unit or other principal building must be at least 300 mm above the 0.5% AEP rainfall event level.

To meet this requirement, proposed lots will need to be filled to ensure the ground level is at least 75 mm above the secondary overland flow level conveyed within the road during a 0.5% AEP event. This assumes the finished floor level is 225 mm above ground level, consistent with NZ Building Code compliance documents E1/AS1 and E2.

In this case, the overland flow paths can be incorporated into the design of the road network. The roads will be shaped to act as secondary flow paths during high-intensity rainfall events, providing a controlled and predictable route for surface water runoff. This is a standard design consideration at the subdivision stage and can be effectively managed through bulk earthworks and typical road corridor shaping. As such, compliance with the flooding requirements and management of overland flows is not anticipated to pose any unusual or site-specific challenges.

9. Water Races

9.1. Overview

Selwyn District Council has water race (Paparoa water race, Asset ID# 630187) runs along the eastern boundary of the development site as shown in Figure 6. This race that extends beyond the site, both from the oncoming flow to the north and the continuation for the east. The water race was inspected on 17 July 2025. At the time of the visit, it contained some water along its length within the site. The form of the water race varies throughout: in some sections, it is a formalised channel approximately one metre wide, while in lower-lying areas, it presents as a natural depression with a gentle gradient.

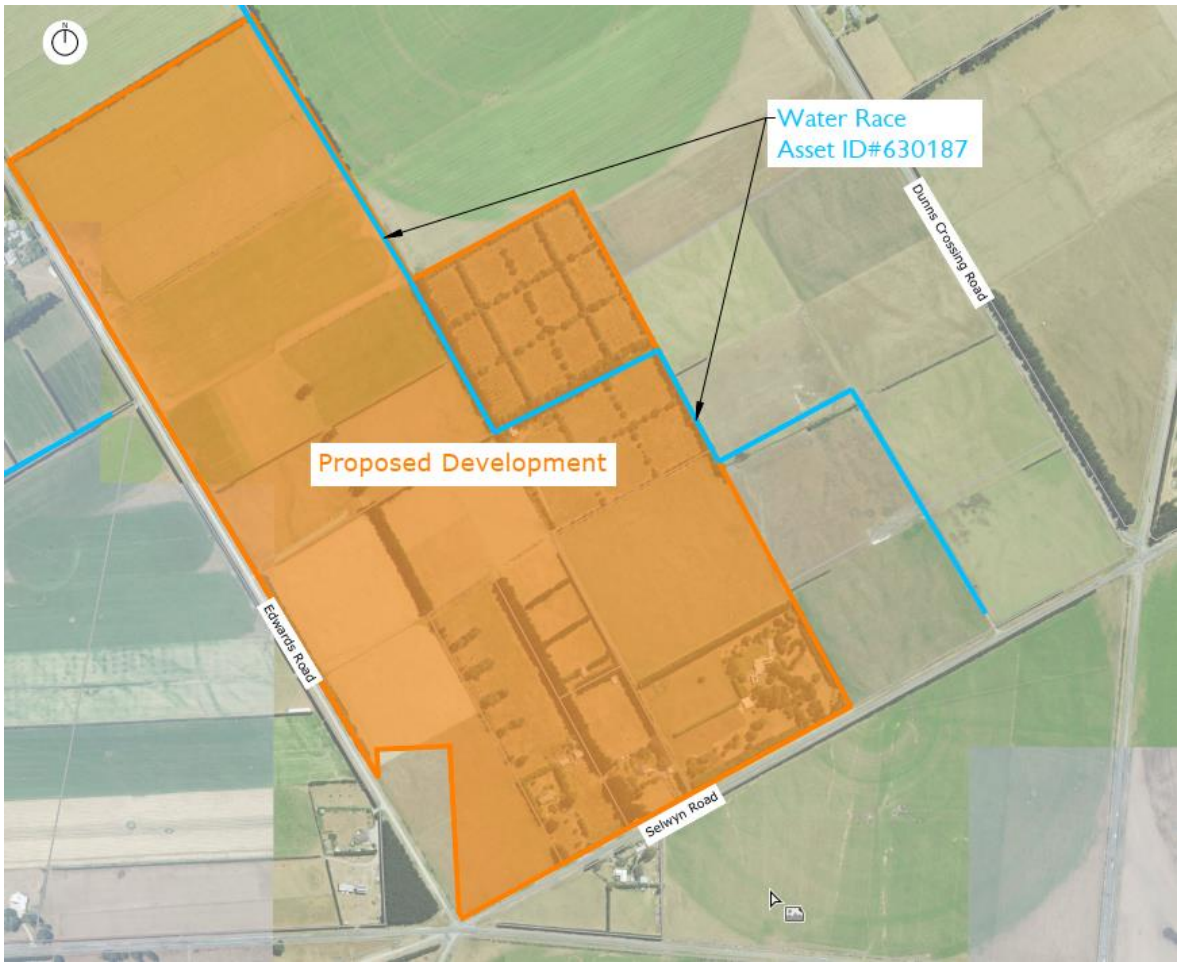


Figure 6. Water race through the site

9.2. Design Requirements

The 5 Waters Certificate states that Council's preference is for the water race to remain. However, at the subsequent meeting, Council Officer Alex Ross confirmed that the water race can be closed and infilled provided the oncoming flow at the Site boundary is accounted for in the design of the

subdivision. The oncoming flow will need to be integrated in the design for the Site which may become a temporary measure should the upstream race (and oncoming flow) be infilled by the neighbouring developer. Should the upstream developer maintain the water race, a permanent water race through the Site may be provided. The considerations for retaining, decommissioning or realigning the water race will be completed as part of the subdivision design. An ecological assessment for the water race is proposed.

10. Earthworks

Earthworks are likely be undertaken to ensure all future allotments will drain towards the Roads and ROWs, and to achieve the minimum freeboard above flood levels as required by Section 8.2.2. The site's cut and fill design will be optimised to achieve a balanced earthworks strategy. Soil required to raise ground levels will primarily be sourced from on-site cuts associated with road construction and service installation.

Earthworks will likely consist of stripping the turf layer, followed by removing the topsoil layer onto a clean insitu subgrade. Once the subgrade has been approved by a suitability qualified Engineer, further cutting or filling can commence to meet the design levels. All earthwork areas will be finished with a layer of topsoil and seeded with grass to provide long term stability.

All earthworks will need to be undertaken in accordance with NZS 4431:2022 – Code of Practice for Earth Fill for Residential Development.

Accidental discovery protocols will be in place should any unexpected uncontrolled fill or contamination be encountered.

An erosion, sediment, and dust management plan will be prepared and implemented in accordance with best practice and the recommendations from ECan's "*Erosion & Sediment Control Toolbox for Canterbury*". The appropriate consents will be obtained from ECan as required for discharging of any stormwater for the construction and operational phase in conjunction with subdivision and earthworks consents, and engineering approvals from Selwyn District Council.

11. Roading

The roading layout and access points will be designed in accordance with the Outline Development Plan, District Plan and SDC's CoP.

The subdivision will be accessed with either a Road (to be vested in Council as part of future subdivision consents) which will be designed and constructed in accordance with the SDC CoP. Specific detailing, such as a change in roading surface, may be adopted during detailed design to indicate a change in road hierarchy and/or to add visual amenity.

Roading access to the Site does not pose an impediment to rezoning of the Site and the detail for this can be confirmed at the time of a future subdivision consent.

12. Common Services (Power / Telecommunications / Gas)

Power and telecommunications services will be provided to service all allotments in accordance with utility company and industry standards at the time of development. All cables and ducts will be placed below ground, and kiosks will be placed within individual allotments.

Installation of reticulated gas services will not be provided.

Orion has confirmed that it has sufficient capacity on its network to service the proposed development at Edwards Road. However, there are currently no direct connections available to the site. New

connections will require alterations to the Orion network, including the installation of new cables or potential upgrades to existing infrastructure.

Enable Networks Ltd has confirmed that UFB fibre can be provided to the proposed development lots at Edwards Road. Standard network design, implementation and fees will apply as part of Enable's provisioning process. Fibre delivery is expected to be in line with Enable's typical subdivision processes, and there are no identified constraints to servicing the proposed 1000 residential and 6 commercial lots.

The Orion and Enable capacity letters have been included in Appendix D.

In conclusion, the Site can be serviced with communications and electricity. Reticulated gas will not be provided to the Site.

13. Conclusion

This Infrastructure Servicing Report has assessed the ability to service the proposed private plan change at Edwards Road, Rolleston, which seeks to enable approximately 1000 residential lots and 6 commercial lots across a 50-hectare site.

The site is currently not serviced by Selwyn District Council infrastructure; however, this assessment confirms that all five waters services can be feasibly provided through a combination of future Council-planned upgrades, developer-funded works, and standard utility extension processes.

The site is able to be serviced for stormwater, communications and reticulated electricity subject to detailed design in conjunction with appropriate Council consents being obtained. Potable water and wastewater servicing is anticipated to be available in time, however there is an iterative process with Council's modelers required to confirm the capacity for the development.

14. Disclaimer

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as an Infrastructure Servicing Report to support a Private Plan Change for the proposed residential and commercial development at Edwards Road, Rolleston.

The report is based on:

- Canterbury Maps (2022–2025)
- SDC Three Waters Infrastructure GIS layers
- Geotechnical Report
- Correspondence with Selwyn District Council, Orion, and Enable Networks
- Desktop review of site and infrastructure conditions by Eliot Sinclair staff
- Supporting documentation supplied by the client

Where data supplied by Rolly Central Limited or other external sources, including previous site investigation reports, have been relied upon, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Eliot Sinclair for incomplete or inaccurate data supplied by other parties.

Whilst every care has been taken during our investigation and interpretation of available data to ensure that the conclusions drawn, and the opinions and recommendations expressed are correct at the time of reporting, Eliot Sinclair has not performed an assessment of all possible conditions or circumstances that may exist at the site. Eliot Sinclair does not provide any warranty, either express or implied, that all conditions will conform exactly to the assessments contained in this report.

The exposure of conditions or materials that vary from those described in this report may require a review of our recommendations. Eliot Sinclair should be contacted to confirm the validity of this report should any of these occur.

This report has been prepared for the benefit of Rolly Central Limited and the regulatory authority for the purposes as stated above. No liability is accepted by Eliot Sinclair or any of their employees with respect to the use of this report, in whole or in part, for any other purpose or by any other party.

Appendix A. LiDAR Contour Plan

G:\Jobs\60\600017\Drawings\PDF

0 20 40 60 80 100
Meters

Notes:

Boundaries shown have been adopted from underlying LINZ XML cadastral database and are subject to cadastral survey.

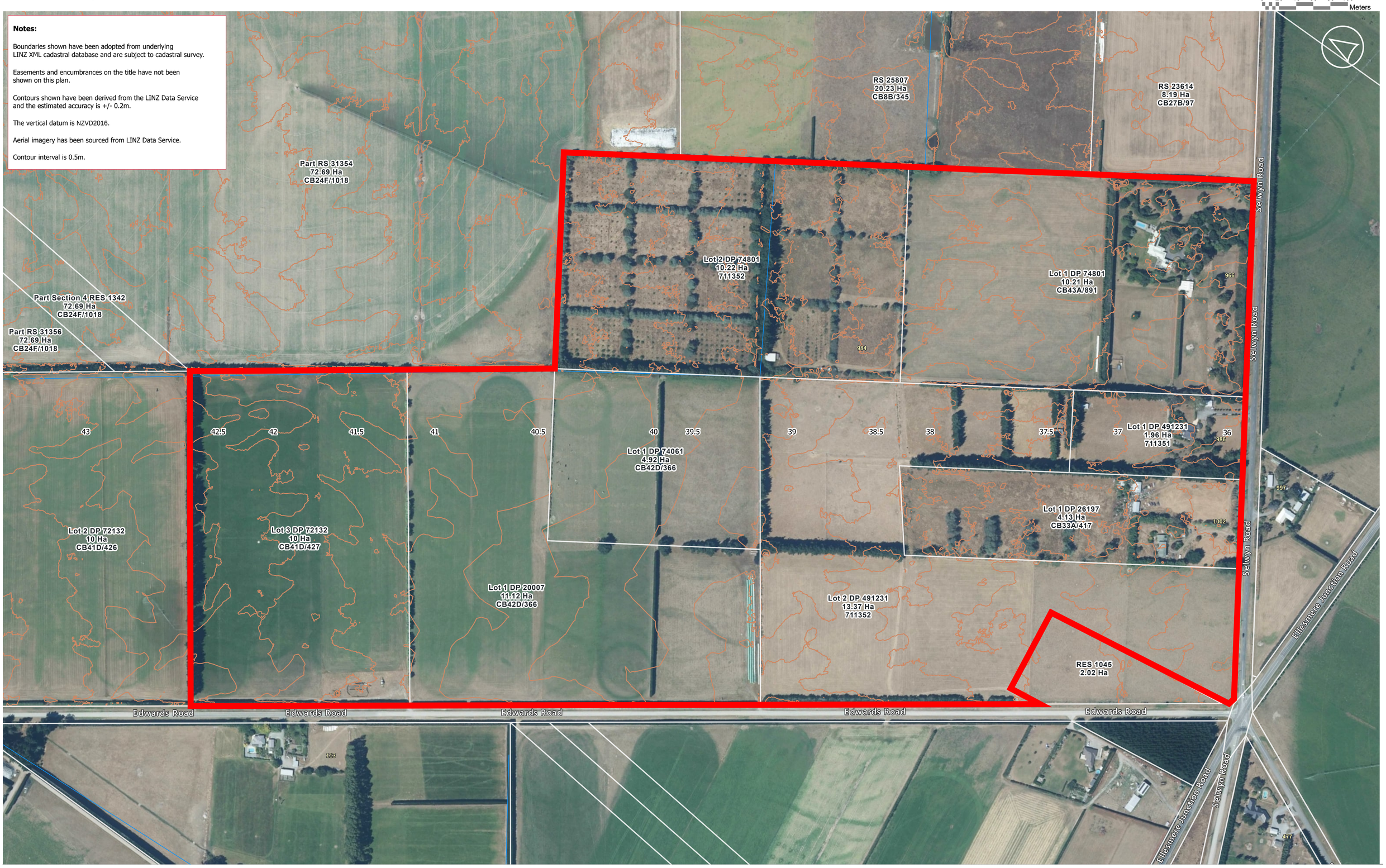
Easements and encumbrances on the title have not been shown on this plan.

Contours shown have been derived from the LINZ Data Service and the estimated accuracy is +/- 0.2m.

The vertical datum is NZVD2016.

Aerial imagery has been sourced from LINZ Data Service.

Contour interval is 0.5m.



NOTES
1.
2.

REV.	DRAWN	DATE	NOTE
A	NM	17.03.25	Preliminary

CLIENT

Tiranga Aotearoa Group

DESIGNED		
DRAWN		NM
REVIEWED		LJ
APPROVED	17.03.25	LJ
STATUS	PRELIMINARY	
SCALE	1:2000 @ A1	

EDWARDS ROAD DEVELOPMENT

EDWARDS & SELWYN ROAD
ROLLESTON

LIDAR CONTOUR PLAN

PROJECT	REV.
600017	A
SET	SHEET
VI	0002

eliot sinclair

Appendix B. Concept Master Plan

TOTAL AREA INCLUDING ROADS
196,694.7M2

TOTAL AREA INCLUDING ROADS
64,178.1M2

966 SELVYN ROAD
UNDER NEGOTIATION

986 SELVYN ROAD
UNDER CONTRACT

1002 SELVYN ROAD
UNDER NEGOTIATION

SELWYN ROAD

NEW ROAD

NEW ROAD

ELLESMERE JCT ROAD

ELLESMERE JCT ROAD

SELWYN ROAD

SWAMP ROAD

EDWARDS ROAD

ROADS
141,326 m²

1
10,099 m²

2
24,792 m²

2
54,975 m²

3
10,231 m²

4
10,082 m²

5
34,626 m²

6
3,500 m²

6
3,125 m²

6
6,610 m²

7
7,277 m²

9
3,127 m²

9
6,701 m²

11

12

13

390.43 m

501.87 m

169.11 m

N O R T H

PROPOSED SUBDIVISION PLAN
SCALE 1 : 2000

0 10 30 50 M 100 M

LEGEND:

- 1 AGED CARE
- 2 RETIREMENT VILLAGE
- 3 CHILDCARE
- 4 SHOPPING CENTRE
- 5 SCHOOL
- 6 PUBLIC PARK / RESERVE
- 7 FUTURE DEVELOPMENT- RESIDENTIAL SECTIONS
- 8 SECTIONS ALLOTMENT - RESIDENTIAL
- 9 MEDIUM - HIGH DENSITY RESIDENTIAL SECTIONS
- 10 EXISTING ROAD NETWORK
- 11 LAND OWNED BY OTHERS AND UNDER DISCUSSION FOR INCLUSION
- 12 PART OF EDWARDS ROAD BLOCKED OFF
- 13 NOT PART OF DEVELOPMENT
- OUTLINE OF DEVELOPMENT

ARCHITECTURE STUDIO LIMITED

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE PROCEEDING SHOP DRAWINGS OR COMMENCING ANY WORK.

REVISIONS

CLIENT

Tiranga Aotearoa Group

CONSULTANTS

EDWARDS ROAD DEVELOPMENT
ROLLESTON
NEW ZEALAND

SUBDIVISION PLAN

SCALE @ A1	As indicated
DATE	25.02.2025
JOB No.	0000
DRAWN	AA
CHECKED	RT
STATUS	CONCEPT

DRAWING No. A0.04

REVISION

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architecture studio
architecture | interior design

Appendix C. SDC 5 Waters Certificate

Five Waters Infrastructure Servicing Certificate

This certificate has been issued by the Infrastructure and Property Asset Management Team to be used by the applicant in Resource Consent and Building Consent applications.

This servicing certificate is valid for 6 months from the time of issue to submission of Resource or Building Consent application.

This certificate does not remove the requirement to obtain Engineering Acceptance or any other approval necessary to enable works associated with the development of the site. Engineering Acceptance must be granted prior any works occurring on Council infrastructure. More information about Engineering Acceptance can be found on the SDC website (link here).

Certificate Reference:

Property Location

Address:

984 Selwyn Road, Burnham

Edwards Road, Burnham

Legal Description:

LOT 2 DP 491231 LOT 2 DP 74801

LOT 1 DP 20007 LOT 3 DP 72132 LOT 1 DP 7 4061 BLKS III VII LEESTON SD

Proposed development: Subdivision – both residential and commercial

Number of proposed lots: 1000 Residential & 6 Commercial lots

Potential for future intensification: N/A

If yes, ultimate lot number: N/A

Residential/industrial: Mixed

Industry type: Commercial

Other information provided by applicant:

This is a private plan change, applicant previously spoken with Jo Golden.

District Plan:

General rural zone

Hazards & Risks: Plains Flood Management & Liquefaction Damage Unlikely Overlay

Rural Density – Code: SCA-RD2 – East Plains/Te Waihora ki Waimakariri

Servicing

Water:

Service Availability: To be confirmed with modelling
Details/Servicing limitations:

This development area was not included in the most recent hydraulic modelling which informed the current water supply Infrastructure Master Plan. Hydraulic modelling will be required at your cost using SDC's consultant to confirm the serviceability of this area based on existing and planned network infrastructure. Depending on the timing of adjacent development, this modelling may need to consider a scenario in which this location is serviced entirely via Selwyn Rd.

Note that the neighbouring area shaded in yellow is also pending development. An integrated approach to infrastructure servicing is likely to be more efficient and resilient. It is expected that there would be multiple looped connections to this neighbouring area.

For indicative planning purposes, a water trunk main along Selwyn Rd. from Dunns Crossing to Edwards would likely be required to service this area (size and extent TBC depending on modelling results). This would be complemented by connections to the neighbouring development's proposed water reticulation (to the north and east).

The developer will be required to obtain their own source water annual volume to service any lots created prior to Resource Consent being granted. It may be possible to stage the Resource Consent appropriately to allow the development to proceed while the allocation is obtained; however, that is a discussion to be had closer to the time of application with the SDC Asset Management Team. The instantaneous flows rate and annual volume requirement for the source water allocation will be subject to Council approval and once approved shall be transfer to the consents held by SDC at the Developers expense at a time that is appropriate to enable the subdivision.

Date: 28 April 2025

Name: Casey Claborn

Position: Principal Asset Management Engineer

Wastewater:

Service Availability: Not currently available, future availability to be determined in next Infrastructure Master Plan

Details/Servicing limitations:

This development area was not included in the modelling that informed the current Infrastructure Master Plan. SDC is initiating an update to the wastewater IMP to evaluate where further upgrades are required to service proposed growth throughout the District.

Wastewater servicing for this area of Rolleston depends on a planned new pump station to be designed and constructed at the intersection of Edwards Road and Selwyn Road. The delivery date of Edwards Road Pump Station is estimated as December 2026, however the servicing of this area may also depend on further stages of work, specifically pump and rising main upgrades currently planned in FY 2033/34 per Council's LTP. This uncertainty can be resolved in the next infrastructure master planning exercise (see below).

We recommend you engage proactively with Council regarding the servicing requirements for this development site, e.g. any updates to the proposed number of lots/density and your proposed servicing solutions. SDC's preference is for gravity reticulation to a local pump station, which in this area would pump through a new rising main to the proposed Edwards Road Pump Station.

Date: 22 April 2025

Name: Casey Claborn

Position: Principal Asset Management Engineer

Stormwater:

Property can be serviced: Yes, with an on-site solution

Details/Servicing limitations:

There is no reticulated stormwater network available for this site. Stormwater should be discharged to ground subject to the applicant demonstrating suitable ground conditions, including infiltration testing.

The applicant is responsible for obtaining any necessary consents required from Environment Canterbury. The Development Engineering Manager at Selwyn District Council must approve in writing all operational phase discharge consent conditions that will transfer to SDC. The developer will hold and operate the operational phase discharge consent for 2 years post the completion of the final stage of the proposed development associated with the SDC subdivision resource consent.

Upon submission of a fully compliant compliance monitoring report and confirmation from the Development Engineering Manager that the stormwater system is fully operational and without defect, the applicant can apply to transfer the consent to Council. If Council accepts the discharge under the network discharge consent the applicant can apply to surrender their operational discharge consent.

The applicant has asked SDC to confirm the following:

- **Whether a flood displacement and compensatory storage assessment will be required (including the flood events and levels associated with this assessment).**
- **The stormwater quantity requirements for this site (i.e. which rainfall events and durations require attenuation, if any)?**

Yes, the development will need to be hydraulically neutral as outlined in the Engineering Code of Practice for events up to and including the 1% AEP storm event for the critical duration. The stormwater system should be designed to achieve this requirement.

Designs and calculations demonstrating compliance with this requirement will be required to be submitted at Engineering Acceptance.

Council's committed Levels of Service for stormwater require that a flood risk assessment is carried out as part of design for subdivisions and infrastructure assets. The flood risk assessment should be submitted with the Engineering Acceptance package. This assessment must consider effects when the stormwater network exceeds its design level of service. This may require modelling to demonstrate likely areas and extent of ponding/flooding, flow velocities and ponding depths, and duration of flooding in large events.

The flood risk assessment shall:

- Be appropriately detailed to suit the size and nature of the total catchment
- Take account of the characteristics of the total catchment

- Include any relevant historical information on flooding. This could include reviewing records held be relevant bodies, discussions with the local inhabitants or appropriate field investigations
- Consider the proximity and nature of any river, stream or watercourse and associated flood plains or overland flow path
- Demonstrate how the capacity of culverts or watercourses downstream of the site will perform, and calculate the likelihood of upstream ponding resulting from under capacity or from blockage by debris or slips
- Investigate the upstream culvert and watercourse conditions and the location of the secondary flow path for floodwater in the event of blockage or under capacity
- Determine required flood levels to protect dwellings from flooding

The proposed design needs to demonstrate how it addresses the assessed flood risk. Flood design shall consider the overall site conditions, details of the drainage system and the probable impediments to free flow (both upstream and downstream) when determining the expected runoff and design flood levels, while meeting agreed minimum levels of performance. Council reserves the right to impose any requirements on the design and construction to ensure safe, reliable, and economic performance.

Figure 1 shows the 200-year ARI modelled flood event for this property, and Figure 2 shows the 50-year ARI modelled flood event. These model results indicate that several significant overland flow paths cross the property. The subdivision design must accommodate these existing overland flow paths and not obstruct them.

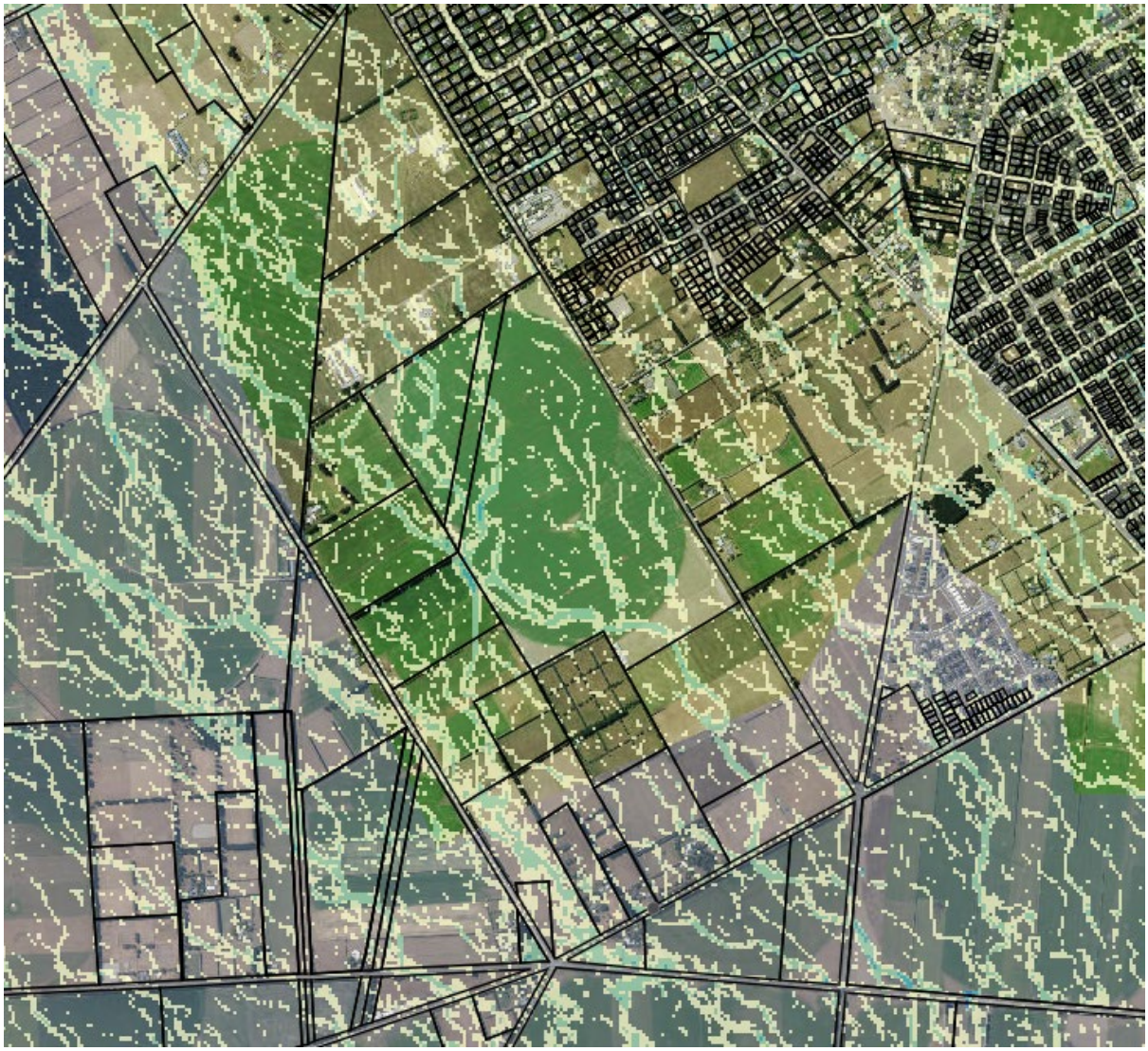

Figure 1 – Modelled 200-year flood event (Selwyn's flooding and coastal hazards)

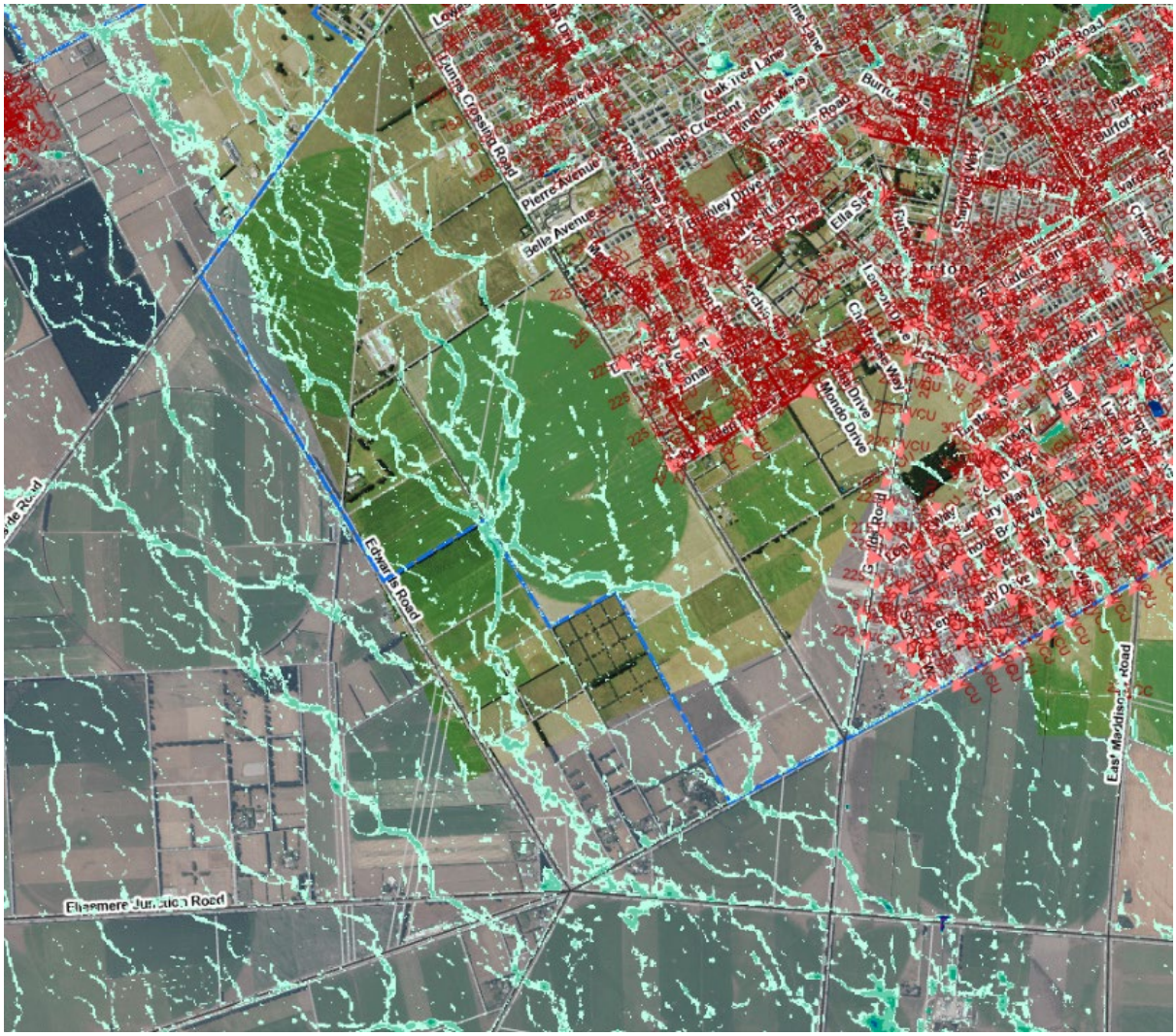

Figure 2 – Modelled 50-year flood event

- **Please provide SDC's stormwater quality requirements for this site.**

Stormwater treatment will be required to meet the outcomes of the Land and Water Regional Plan. Selwyn District Council prefer 'green' stormwater treatment devices over proprietary devices.

Date: 30 April 2025

Name: Alex Ross

Position: Principal Asset Management Engineer

Water Races:

Council Requirements:

As indicated by the applicant, a water race crosses the site (Figure 3). Council's preference is to keep water races open where possible. The applicant can consider diverting the water race or integrating the race into the subdivision design. We are happy to provide more detailed feedback on proposals if required.

- Based on SDC's GIS layers, a water race is situated along boundary of Lot 3 DP 72132, Lot 1 DP 20007, Lot 2 DP 74801 Asst ID 558606 (Paparua water race) as shown in figure 3

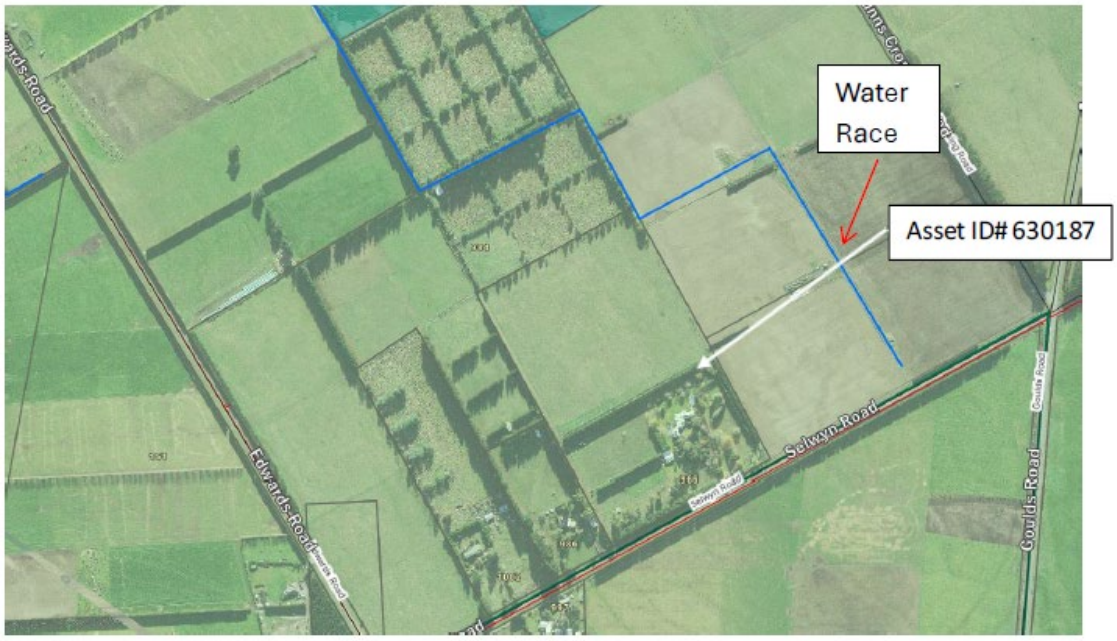

Figure 3 – Water race along site boundary of proposed development (*Water Race highlighted by Blue)*

Date: 30 April 2025

Name: Alex Ross

Position: Principal Asset Management Engineer

Issued:

Date: 28 April 2025

Name: Casey Claborn

Position: Principal Asset Management Engineer

Appendix D. Orion and Enable Capacity Letters

Eliot Sinclair
20 Troup Drive
8025 Christchurch
Canterbury New Zealand

19 May 2025

Liam Jagvik
ljj@eliotsinclair.co.nz
027 699 0592

UFB Fibre delivery to Edwards Road

In response to your email requesting confirmation from Enable of fibre delivery to the proposed lots at Edwards Road. I am pleased to be able to confirm the following:

These lots can be provisioned to provide full UFB fibre from Enable. Standard design, implementation and fees will apply.

I trust that the above confirmation allows you to continue the planning and consenting of this lot. Please let me know if you require any other information.

Yours sincerely

Richard Gilbert
Business Development Manager
richard.gilbert@enable.net.nz
+642221794444

Enable Networks Limited
Iwikau, Level 3
93 Cambridge Terrace
Christchurch, 8013
New Zealand

10.04.2025 **Reference** ORN1016516

Liam Jagvik

Dear Liam

Proposed subdivision – Various Edwards Road, Rolleston

Thank you for your request for a letter to confirm there is capacity on the Orion network to service the electrical needs of your proposed subdivision.

This letter is not suitable for 224 clearance purposes.

I confirm:

1. Orion has the capacity on the network to meet your request.

2. There are no specific connections available for this subdivision however:

    a. Connections can be made available for the Lots as described in Orion Application subject to alteration to the Orion network; and

    b. It is likely Orion will need to either upgrade existing network or lay new cables to create these connections. We recommend the developer engages an authorised Orion subdivision designer to help you through this process and submit a suitable design proposal so that your development may connect to the Orion network.

    c. There will be costs associated in providing the connection(s). The costs payable will be in accordance with the Orion [*extensions and connections or subdivision*] policy and will be the responsibility of the property owner.

    d. The next step will be to apply for a connection online at www.oriongroup.co.nz under "get connected".

3. Orion will request an easement in gross for all over boundary existing network not currently secured by way of easement at the developers cost prior to the issuing 224 clearance.

4. To comply with Orion's network security conditions an alternative feed from adjoining developments may also be required.

5. All proposed new structures near or under existing overhead lines (eg house, sheds, carports, garages or any other structures) must comply with the distances stated in the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP34:2001).

Orion New Zealand Ltd
565 Wairakei Road
PO Box 13896
Christchurch 8141
+64 3 363 9898
oriongroup.co.nz

6. **IMPORTANT:** This Capacity Letter will expire upon the earlier of the date upon which a connection for each of the lots for the development has been approved and livened or 6 months from the date of this letter in the case of a residential/rural subdivisions or, 12 months in the case of a commercial/industrial subdivision.

All terms and conditions will be subject to current Orion policies and practices.

Please contact me if you require any further information.

Yours faithfully

Mark Williams
Contract Manager - Connections (Non-Standard)
Email Mark.Williams@oriongroup.co.nz
Phone 027 2304383