

Attachment B – Memo, Kevin Kemp – Timaru District Council –
Engineering and Servicing Requests

Memo

To: Matt Bonis, Planz
From: Kevin Kemp, Timaru District Council
CC: Jen Vella C/- Anderson Lloyd
Date: 21 October 2024
Subject: Urban Growth Rezoning: Engineering Memo

PURPOSE

Panel Minute 6¹ sets out the following process steps associated with the Group G* Hearing for rezonings as follows:

- (1) Preparation of a short 'Preliminary' s42A Report identifying information that the Reporting Officer considers is required to enable them to make a full assessment for each request for rezoning. Due **29 October 2024***.
- (2) Submitter information is required by **20 February 2025***.
- (3) Finalised s42A Report recommendations for each rezoning request is due **21 May 2025***.

* Additions or amendments to dates responding to Minute 13 [5]

The purpose of this Memo is to set out the Engineering Requirements to be contained within the Preliminary s42A Report. The Memo sets out all information and analysis that the TDC Infrastructure Group would require to provide recommendations in individual rezoning submissions to be included in the Finalised Section 42A Report.

The Engineering information required to be supplied to TDC Infrastructure for analysis of rezoning submissions is provided in **Appendix A**.

ROLE OF COUNCIL OFFICER IN THIS PROCESS

My full name is Kevin Thomas Kemp, and I am the Stormwater Team Leader – Drainage and Water Unit – Infrastructure Group

My qualifications include a Masters of Applied Geography in Resource and Environmental Management from Texas State University – San Marcos (USA)

¹ Minute 6 – Revised Pre-Hearing Directions of the Hearings Panel [Dated 21 March 2024], with dates and hearing stream amended as per Minute 13 [paragraph 5(g)].



I have over 10 years' experience in Land Development Engineering and Planning including 6 years with Timaru District Council operating as the Subdivision and Compliance Officer for the District Planning Unit/ as the Infrastructure Planner for the Infrastructure Group, as well as approaching one year as the Stormwater Team Leader also within the Infrastructure Group. I have been involved on behalf of Council on land development from a pre-application phase through to the end of defects liability for residential and commercial developments. Where necessary I have also provided input or facilitated input into the Proposed Timaru District Plan on behalf of the Infrastructure Group.

Statement of resolving requests for Submitters

The following attachment sets out the information that would be required by the Council's Infrastructure Group in order to consider individual submission points. Submitters are asked to review the technical information provided by the Timaru District Council in the first instance as supplied through the associated links. If it is not clear what the capacity constraints are, or the Timaru District Council's infrastructure strategy / Long Term Plan is seeking to provide within the next 10 years then e-mail William Ching, Infrastructure Planner at william.ching@timdc.govt.nz for assistance.

Submitters are asked when seeking additional assistance to reference the subject site, submission number, relief requested in the submission and IS and LTP sections already reviewed in the email request so the team can focus on a specific query. Due to the volume of requests, responses may take several working days.

The Council will not undertake additional modelling work to assess the viability of a given rezoning request. However, may be able to provide clarification or outputs of work already undertaken.



Kevin Kemp

21 October 2024

Appendix A: Rezoning and FDA Requests Engineering Matters for Consideration

Author: Kevin Kemp

Date: 21 October 2024

Introduction

Typical engineering matters and requirements which submitters may wish to / should address in terms of their submission are either:

- Their rezoning requests; and / or
- Amendments to SCHED15 – seeking to expedite a timeframe for the Development Area Plan (to be prepared by the Council).

Council will assess and make recommendations based on the supplied information from the submitter. Council will not undertake any modelling on submitters behalf but may assist with arranging modelling at the submitter's cost and time permitting.

Information Sources

Higher Level Documents

The following links may provide useful higher-level information for submitters:

- Timaru District Council provides a certain level of information as it relates to infrastructure on its publicly available mapping system²:
(<https://www.timaru.govt.nz/maps>)
- Timaru District Council's Long-Term Plan identifies where funding is allocated for infrastructure projects moving forward. Funding to establish expansion of infrastructure to serve un-zoned/ undeveloped areas is largely not provided for within this document:
(<https://www.timaru.govt.nz/council/publications/plans/long-term-plan>)
- Timaru District Council's Infrastructure Design Standard provides the design standard for both Council funded assets and assets that will be vested with Council, through processes such as subdivision, as well as to provide a publicly available guide for developments to reference for private design:
(https://www.timaru.govt.nz/_data/assets/pdf_file/0007/901177/TDC-Infrastructure-Design-Standard-Full-Documents-Version-1.pdf)
- Timaru District Council's Infrastructure Strategy sets out the 30 year vision and plan for our community's infrastructure:

(https://www.timaru.govt.nz/_data/assets/pdf_file/0007/878722/LTP-2024-34-Infrastructure-Strategy-Pages-231-330-PDF.PDF)

² For the Proposed District Plan Map, please visit <http://timaru.isoplan.co.nz/eplan>.

Water Servicing

The following links may provide useful information as it relates to water servicing

- [TDC Infrastructure Design Standard Part 7](#), which details the engineering requirements for water supply.
- [TDC Construction Standard Specifications](#)
- Where additional modelling does exist the Council will look at providing this as requested along with any supporting material that is already held that may of use.

Key points to note in relation to the provision of water services are:

- For Rural Lifestyle / FDA requests detail will need to be provided as to which scheme the submitter wishes to connect to and how this will not impact on the capacity of the existing scheme to service its existing and intended environment. The level of servicing proposed will need to be included in this assessment including reference back to Council's Infrastructure Design Standards.
- In addition, for Rural Lifestyle where no reticulation is available, either:
 - (a) if alternative water source is proposed i.e., a well, that evidence that a water supply is achievable via well(s) should be provided (and the appropriateness of the alternative supply for its intended use); or
 - (b) submitters should consider the need for evidence to be provided in relation to how an existing supply will be extended, including an assessment that the scheme being extended either has capacity or can be upgraded to provide capacity
- For Urban / urban periphery schemes, these systems are generally on demand, information on the capacity at the periphery of the urban areas and the wider capacity in the systems will need to be provided to assess the impacts of the additional connections of the overall operation of the system.
- Address the mechanism to mitigate any effects of the extension and if it needs to be supported through the application of financial contributions.
- For large greenfield developments (Industrial, Residential or intensive Rural Lifestyle) proposed on the edges of existing townships, the capacity in the water system is township dependent on a number of factors, which will need to be addressed. New pipelines and source/treatment upgrades would likely be required; essentially the area will need to install its own servicing and contribute toward upgrades to existing scheme and treatment infrastructure upgrades to support the proposed development. Refer to relevant AMP / IS for comment on specific schemes and planned projects. If an AMP / IS does not consider the area proposed for rezoning, specific upgrades have not yet been identified and it cannot be assumed that there are upgrades that can provide the capacity required for the development. In these situations, Council's usual practice is for the submitter to demonstrate that a suitable supply is available.

Wastewater Servicing

The following links may provide useful information as it relates to wastewater servicing

- [TDC Infrastructure Design Standard, Part 6, which details the engineering requirements for wastewater.](#)

- [TDC Construction Standard Specifications](#)

Key points to note in relation to the provision of wastewater services are:

- Capacity in the existing system to which the connection is proposed and whether it is sufficient for intensification / brownfield. Whether there is capacity on the periphery for extension to the existing system and what is the overall impact of such extensions on Councils service delivery (including any implications on key assets that support the network).
- Address the mechanism to mitigate any effects of the extension and if it needs to be supported through the application of financial contributions.
- For Rural Lifestyle where no reticulated services currently exist Council has no planned extension of services into these areas. If submitters wish to propose an expansion of an existing service to these areas this will need to be addressed and permission from Council to seek such connections will be needed, with Council's current policy only supporting the connection of urban areas to reticulated wastewater.
- Private on-site septic disposal systems will need to obtain consent where no reticulated service is available. Note Environment Canterbury rules apply to on-site systems³, and that the Proposed Plan (noting submissions) seeks to set a density of 1 residential unit / 2ha for unreticulated Rural Lifestyle⁴. This is below the permitted level of 4ha as outlined in ECan's LWRP. Detailed analysis as to the suitability of such systems should be provided as there may be constraints in the ability of Council to receive large volumes of on-site holding tanks being discharged to Council networks throughout the District.

Stormwater Servicing

The following links may provide useful information as it relates to stormwater:

- [TDC Infrastructure Design Standard, Part 5, which details the engineering requirements for stormwater.](#)
- [TDC Construction Standard Specifications](#)
- [TDC Stormwater Management Areas](#)

Key points to note in relation to the provision of stormwater services are:

- Council practice is that all new development in the district must achieve stormwater neutrality i.e. post-development stormwater flows off the site must not exceed pre-development flows. Stormwater quality must also be considered. Refer to the 2018 Consolidated Bylaw [Chapter 15](#), the Infrastructure Design Standard (IDS) (link above) and Environment Canterbury Requirements. Stormwater design is site specific, and dependent on availability of local servicing and ground type. Although site specific, general requirements for both rural and urban developments are summarised below.
- For Rural Lifestyle, these sites are generally outside of formal stormwater drainage schemes and need to consider effects related to stormwater neutrality. If an infiltration solution is proposed, Council expects that sufficient information will be provided to

³ Canterbury Land and Water Plan. Rule 5.8

⁴ Proposed District Plan. Policy SUB-P15(3), Rule SUB-S1(4).4

demonstrate that this is a feasible solution for the site and is compliant with Discharge to Ground requirements of the Regional Council.

- For Urban (refer to any Stormwater and Drainage details (Plan 5302) and IDS), new urban developments proposed that are not infill developments will potentially need to install stormwater management systems, which may include stormwater ponds/swales/wetlands/etc intended to vest with Council. It will need to be demonstrated sufficient land area is made available for properly sized stormwater management areas. Ground conditions should be considered.
- All urban areas have applications lodged with the Regional Council for Stormwater Discharge Consents. The application documents are available from the ECAN Consent Search and should be reviewed and the requirements of the associated stormwater management plans incorporated into the proposed rezoning information.

Hazard Information

Hazard information is available through the above mapping links and the publicly available EPlan. It is noted that additional information will be provided at the time of the Natural Hazards Hearing (Hearing F); which will be made available as Council receives it.

Key points to note in relation to hazard information are:

- Council practice is that development should be avoided in overland flow paths. If redirection of an overland flow path is under consideration this needs to be carefully modelled to demonstrate how the new flow path will function without having effects upstream or downstream.
- Flood Hazard/Risk Assessments shall be supplied with rezoning submissions to confirm whether the proposed zone change will be adversely impacted by either stormwater or river flooding in up to a 1 in 200 year rain event or subject to High Hazard Areas in 1 in 500 year events.
- Where flood hazard mitigation, taking into consideration the zoning sought, is proposed - and this will alter ground levels, proposals should explain and demonstrate impact upstream or downstream in accordance with the requirements within relevant planning documents.

Geotechnical Information

The following links may provide useful information as it relates to geotechnical information:

Links to:

- [TDC Infrastructure Design Standard, Part 4 which details geotechnical information requirements.](#)

Key points to note as it relates geotechnical information are:

- As necessary, demonstrate that the ground is suitable for development. This may extend to a report that would consider standards such as NZS4404:2010, NZS4431:2022, MBIE guidance and reference to TDC IDS Part 4 (link above) which sets out some of the matters to be considered in planning and constructing a land development project.

Esplanade Reserves

In relation to Esplanade Reserves it is noted that if there is a watercourse running through the development site, Esplanade Reserve provision may be triggered by the RMA (which is reinforced through the Proposed District Plan). The esplanade details, including dimensions, is identified in Schedule 12 – Schedule of Esplanade Provision of the PDP.

Transport Requirements

The following links may provide useful information as it relates to transport requirements:

- [TDC Infrastructure Design Standard, Part 8 - Roading which details roading information requirements.](#)
- [TDC Construction Standard Specifications](#)

Key points to note as it relates to transport requirements are:

- For urban rezonings / FDAs, and where the density proposed for Rural Lifestyle / FDAs would result in a material increase in yield, it is likely that a transport assessment will be necessary. If that is the case a suitably qualified and experience transportation engineer should provide an Integrated Transport Assessment (ITA).
- Proposed District Plan Rule TRAN-R10 sets out the parameters for a basic and full ITA (noting that this rule is subject to submission). A suitably qualified and experience transportation engineer would be able to provide guidance as to the extent and scope of an ITA based on the nature and extent of the rezoning submission.
- For Rural Lifestyle / FDAs, the types of matters to be considered would be:
 - The proposed density, and accordant potential yield of new lots (refer to appropriate standards to calculate such as NZTA Research Report 453);
 - Condition and capacity of the existing supporting road network, and identification of any need for localised upgrades;
 - Traffic count (and potential increase), vehicle crossings.
 - Opportunities to provide pedestrian / cycleway connectivity (where relevant, that is peripheral urban locations proximate to existing connections).
 - Vehicle kilometres travelled (VKT).
- For Urban rezonings / FDAs, the types of matters to be considered with relation to transport would include:
 - Type of rezoning and vehicles generated (i.e. Industrial rezonings vs Residential).
 - Traffic generated by the new rezoning (referenced to NZTA Research Report 453);

- Condition and capacity of the existing supporting road network, and identification of any need for localised upgrades, or capacity improvements at intersections within the wider network.
- Assessment of increased traffic and parking demand, and implications on the efficiency, effectiveness and safety of the wider network.
- Any proposals for new roads.

Conclusion

The above points provide initial direction to submitters, as to the level of information required to allow Council Officers to assess the impacts of growth-related zone changes on the infrastructure network. As Council Officers will review information provided and will not provide modelling that it does not currently hold to support submissions seeking change, rather information provided will be audited and conclusions reached as to the implications on the infrastructure network.

If additional clarity is required please contact via e-mail William Ching, Infrastructure Planner at william.ching@timdc.govt.nz.