

ref: Todd/22903

30 August 2022

Fast Track Consenting Team  
Ministry for the Environment

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Attention: Samantha Maxwell & Jess Hollis

Dear Samantha and Jess

## **99 & 103 State Highway 1, Waikanae**

This letter has been prepared in response to the request for additional clarity regarding three-waters servicing of the proposed 'Waikanae North' development. Further details on the proposed servicing solutions are provided in the following sections.

It is worthy to note that Cuttriss Consultants are the project design engineers for the adjacent Manu Park development and have significant amount of land development experience within the Kapiti Coast District. Experience includes negotiating and agreeing development agreements for similar developments to the Waikanae North project. We have a comprehensive understanding of Councils servicing requirements and we work for Council on infrastructure upgrades as part of their long term maintenance.

### **Wastewater**

As noted in the letter dated 31 March 2022, wastewater can be provided from the adjacent Manu Park development via a 150mm wastewater main. To connect to this main, either a wastewater pump station or a low-pressure pump system will be required. The low-pressure option will be advanced should the wastewater modelling that is currently being undertaken determine that there is insufficient capacity in the Council network. This low-pressure system would allow for detention storage on private properties with off peak discharge to the mains on the Manu Park development.

In addition, part of the control of peak flows could include sustainable options such as the re-cycling of greywater for toilet flushing, which would reduce overall water demand and also reduce the overall volume of wastewater generated by the development and directed to the Council network.

Whether a centralised system of tanks and pumps is proposed; or individual smaller tanks for each dwelling in combination with a low-pressure reticulation system, either option can provide the required peak flow control which would allow the proposed development to connect to downstream reticulation network without affecting capacity issues. There would be no requirement for Council to undertake upgrades to the downstream reticulation system.

As the pump station or low-pressure pump system is only serving the proposed development, it is anticipated that the cost of this would be borne by the developer.

Any capacity upgrades to the existing reticulated system would be a long-term project for the Council given the current zoning of the site and therefore, the proposed wastewater solution outlined above does not rely on Council upgrades of existing reticulation.

In summary, to provide adequate wastewater servicing, the development can connect to the Council main within the Manu Park and install the necessary systems on the site to control flows to this system should there not be sufficient capacity in the Councils network.

As noted above, funding of all new wastewater infrastructure onsite will be by the developer.

## Water Supply

As noted in the letter dated 10 August 2022, the Stantec report modelling completed for Manu Park modelled future peak scenarios to 2047 based on anticipated growth in Waikanae. Based on this modelling, we can confirm that water supply infrastructure upgrades to service the proposed development will be required off site.

These infrastructure upgrades may include one of the following two options indicated in the Stantec report:

- Pipe upgrades upstream of Hemi. In this option, pipe upgrades east of Main Road (the old SH1) will be required as well as upgrade of Hemi Street itself to ensure water can be delivered effectively to the development. This will likely take the form of a 150mm or larger upgrade along Main Road from Elizabeth Street to Hemi Street. In addition, pipe upgrades in David Street and Sylvan Avenue will be required to provide an effective second supply to the wider Waikanae North development as a whole. Refer further detail in Section 5.2.1 of the Stantec Report.
- Use of the proposed Ngarara Loop upgrade. As set out in the Stantec report the Ngarara Loop upgrade has been proposed to deliver water to a proposed development area in Ngarara. Refer further detail in Section 5.2.1 of the Stantec Report.

All of the upgrade works identified in the Stantec report can occur within existing road corridors.

Further modelling has already commenced to confirm the exact upgrades required. Our full suite of resource consent application information will include further modelling and concept design of upgrades required.

We will work with Council to ensure that the upgrade will be timed to be completed to service the development of the Waikanae North site and therefore will need to be implemented to provide water supply to the development. We have been involved in similar projects where developments have required upgrades beyond the subject site and the delivery and timing of such developments has been adequately covered in Development Agreements.

The funding of this infrastructure upgrade will be either confirmed in a developer's agreement which shares the cost between the developer and Council, or it will be funded by the developer.

Funding of all new water-supply infrastructure onsite will be by the developer.

## Stormwater

The stormwater management concept for the proposed development is as follows:

- The development will be hydraulically neutral.
- Any additional stormwater generated from the development will be managed on site and will be either disposed of in suitably sized soakpits or attenuated in suitably sized stormwater ponds (refer areas illustrated on the proposed scheme plan) and/or tanks.
- The ponds will be sized to ensure that any flood storage area lost to allow for the development will be compensated within the storage area to ensure no net loss of flood storage volume occurs. As part of the stormwater modelling currently being undertaken, we are exploring whether additional storage can be provided to alleviate wider flooding issues.
- Attenuated stormwater will be discharged into the existing network at a rate no greater than what is currently discharged off site and therefore we do not anticipate any upgrades will be required to existing stormwater infrastructure.
- Stormwater will be treated as close to source as possible with Water Sensitive Urban Design devices in accordance with the relevant Good Management Practices documents on GWRC's website:
  - Best Practice Subdivision and Development Guide by Kapiti Coast District Council (KCDC) 2007 (Provides examples of good Water Sensitive Design outcomes)
  - Low Impact Urban Development Stormwater guidelines by KCDC 2012 (A technical design guide for Water Sensitive Design devices)
  - Water Sensitive Design for Stormwater Guideline Document 2015/004 (GD04) by Auckland Council
  - Water Sensitive Design for Stormwater: Treatment Device Design Guideline by Wellington Water Limited 2012
- Applying a Water Sensitive Design approach to the development seeks to embrace mana whenua values, consider baseflow and temperature effects, and protect streams.
- Funding of all new stormwater quality and quality infrastructure on site will be by the developer. No off-site stormwater upgrades are required so not costs will be borne by the Council.
- Stormwater assets (except on-site storage and treatment devices) will likely be vested with Council and as such, will be designed to meet Council requirements.



## Summary

Based on our assessment of the existing infrastructure, our experience on adjacent developments, our investigations on-site, review of options assessments, oversight of modelling work currently being conducted, our discussions with Council and other service providers, and our preliminary design, we are satisfied that the proposed development can be adequately serviced and that this servicing will be available at the time of development.

Yours sincerely



Nicola Todd  
Director  
**CUTTRISS CONSULTANTS LTD**