

Development

To: Sam Le Heron – Consents and Certificates Lead

From: Jonathon Brooke – Project Engineer

Subject: Engineering comments for Foodstuff North Island Limited resource consent application

Date: 29 April 2019 File: 2018/9962

Purpose of this Memo

1. To provide a summary of the multiple engineering assessments on the potential effects with regards to the Foodstuff North Island Limited resource consent application at 980 Te Rapa Road.

Background

2. Planning Guidance Unit (PGU) requested engineering comments from Strategic Development Unit (SDU) on the resource consent application lodged by Foodstuff North Island Limited to construct and operate a new PAK'nSAVE supermarket with a drive-through fuel facility.
3. Foodstuff North Island Limited supplied the following engineering reports as part of the resource consent applications:
 - Integrated Transportation Assessment (ITA) by Traffic Planning Consultants (TPC)
 - Engineering Report by Babbage
4. Due to the complexity of the applications Hamilton City Council (HCC) engaged the following experts to assist with the assessment of the proposed development:
 - Alastair Black from Gray Matter for Transportation
 - Mike Meister from WSP Opus for Transportation
5. Alastair Black has been engaged to provide a detailed assessment of the ITA and assisted HCC with formulating Transportation s92 queries. He also provided the safety engineer comments within the Road Safety Audit on behalf of HCC.
6. Mike Meister has been engaged to provide a detailed assessment of the 2031 VISSIM model and a strategic overview of Alastair Black and TPC assessments.
7. My role in assessing the resource consent applications was to liaise with the experts and provide an understanding of HCC standards, practices and processes. HCC uses the Regional Infrastructure Technical Specifications as guidance on engineering practices and design solutions. It is considered to be an acceptable means of compliance for infrastructure related standards within the HCC Operative District Plan. In this context it is used for setting conditions of resource consent for subdivision and development. The content is amended from time to time to reflect best practice and new technologies. Public infrastructure is expected to be designed in accordance with the latest specifications in this document.

8. I assessed the three waters proposal for the resource consent application, as it was a standard design and layout within the assessment abilities of a Development Engineer.

Transportation

9. I concur with Alastair Black's evidence and his assessment of the applicant's transportation proposal.
10. I concur with Mike Meister's evidence and his strategic assessment of the transportation effects.
11. Upon review of the expert's advice the sufficient mitigation has not been provided and the proposal as it currently is will have adverse effects in terms of efficiency and safety.
12. Conditions have been proposed, if a decision to grant is given, that will mitigate the transportation effects.

Stormwater

13. Babbage propose to manage stormwater quality prior to discharge into Council's reticulation via grassed swales.
14. I disagree with paragraph 4, section 8.3 of Babbage's Engineering report due to climate change not being considered as part of the stormwater quantity management solution.
15. While the impervious areas are going to decrease the rainfall intensity, due to climate change, will increase the amount of stormwater generated from the site. Council requires all new development to manage this increase in stormwater quantity on site prior to discharge.
16. The Final Integrated Sub-Catchment Management Plan by Wainui Environmental, provided as part of the site subdivision consent, 11.208.6674.001, requires quantity control mitigation to include the effects of climate change. This requirement will apply to the site via a consent notice condition included in the subdivision consent.
17. Conditions have been proposed, if a decision to grant is given, that will mitigate the quantity stormwater effects generated by climate change.
18. HCC owns a 1200mmØ and a 2300mmØ stormwater pipe lines which run through the site. Paragraph 5, section 8.3 of Babbage's Engineering report states that these pipelines will be built over and will be done so in accordance with Section 5.12.10 if the Regional Infrastructure Technical Specifications. This is acceptable mitigation to protect HCC stormwater assets.

Wastewater

19. Babbage propose a connection into the proposed 225mm public pipeline as shown on drawing C04 in Appendix B of Babbage's Engineering Report. This solution will be in accordance with the Regional Infrastructure Technical Specifications and is considered to be an acceptable means of compliance for managing wastewater.

20. As per section 9.1 of Babbage's Engineering report the existing 225mmØ wastewater trunk main will be relocated into Eagle Way and Maui Street extension. This realignment work is being completed under the subdivision consent 11.2018.6674.001.

Water Supply

21. Babbage propose a single water connection from the proposed 250mm public pipeline as shown on drawing C07 in Appendix B of Babbage's Engineering Report. This connection will be separated internally into a fire protection and potable water supply.

22. HCC would direct development's proposing a private fire protection supply to note section 6.2.3.3 of the Regional Infrastructure Technical Specifications:

- Third paragraph *"It should not be assumed that current pressure and flow will be available in the future when designing private fire services as these are likely to reduce in the future due to demand growth and pressure management."*

23. An on-site storage tank for fire protection will provide the assurance against reduced pressure and flow due to future demand growth.

24. The above layout with an on-site storage tank for fire protection shall provide the site with a suitable level of service for pressure and adequate fire flow capacity.

Recommendation

25. I have reviewed and contributed to the draft engineering conditions appended to the section 42a report.

JB

Jonathon Brooke
Project Engineer
Date 24/04/19