

Attachment 8 – Engineering

17 February 2025

Woolworths NZ Ltd

Our reference: 532253

Attention: Daniel Shao

Dear Daniel

Land Use Consent – Civil RFI Response – RMA/2024/3209

We have been engaged by Woolworths NZ Ltd., to provide civil engineering input into this project. As part of this engagement, we have been asked to provide feedback on two 'other matters' identified in Council's RFI dated 06/01/25 relating to wastewater demand and the presence of an existing stormwater pipe/easement.

Wastewater Demand

Feedback from Woolworths NZ Ltd.'s internal operations team is that their expected occupancy for the proposed supermarket (to calculate wastewater flow):

There could be between 30-40 staff working in the stores during the busiest hours. WWNZ typically provide 4-6 toilets for staff plus 1-2 shower facilities. WWNZ also provide one accessible toilet for customers - as a ballpark I suggest allowing 10 customer usages / flushes per hour.

Figure 1 shows the proposed layout for assessing wastewater generation.

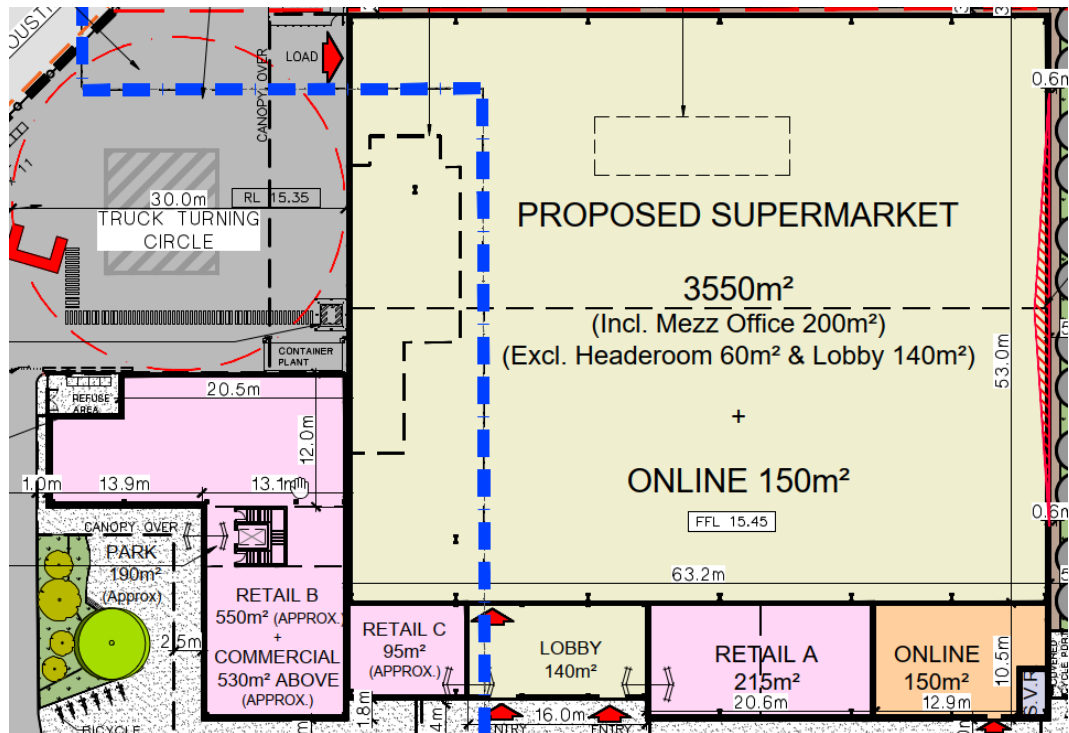


Figure 1 Proposed Layout for assessing wastewater generation.

There isn't a direct conversion from NZBC Discharge Units (DUs) to a flow rate and using the CCC IDS would be more generalised and less accurate than using DUs.

To give an indication of the likely wastewater generation for the total site including the supermarket and retail areas we have based our calculations of Discharge Units (in accordance with NZBC G13/AS2) on the following fixtures in each space:

- Supermarket – 5 staff toilets with basin, 2 showers, 1 accessible customer toilet with basin.
- Retail spaces A & C – For each space: 2 x staff toilets with basin, 1 x kitchen with sink and dishwasher.
- Retail space B and commercial space above – For each space: 4 staff toilets with basins, 1 customer toilet with basin, 2 showers.
- We have assumed that one of the tenancies will be either a café or bar with a kitchen (i.e. sink, dishwasher, glass washer, coffee machine, drinking fountain).

Total Discharge Units (in accordance with NZBC G13/AS2) is 173Dus. For comparison this is approximately equivalent to 6 residential dwellings with kitchen, laundry, bathroom, ensuite, separate toilet.

Trade waste

Feedback from Woolworths NZ Ltd.'s internal operations team for another Christchurch supermarket is that their expected trade waste generation is likely to be:

- Total annual volume approx. 1825m³/year.
- Average total daily volume 5m³/day.
- Max daily volume 10m³/day.
- Max flow 2L/sec.

Note that we have not allowed any trade waste assumptions for the retail areas, but it would be appropriate to consider some contingency for the trade waste within Council's network.

Stormwater Easement

The development/all buildings are clear of the stormwater easement, except for a lightweight canopy structure (associated with the pick-up parks) that has a cantilevered roof over the easement area.

There are several options for stormwater disposal as identified in the engineering assessment, and it is anticipated that the existing stormwater easement won't be needed to service the proposed development, in which case GDL will apply to the Council to surrender the easement. This will be confirmed during detailed design.

If this pipe/easement is not abandoned, GDL will either seek bylaw dispensation, or remove/relocate the canopy structure.

Yours sincerely



Liam Jagvik

Surveyor | Director

BSurv MS+SNZ LCS

liam.jagvik@eliotsinclair.co.nz

Submissions and Section 42A Recommendations

- [77] Mr Bonis (planner) appeared for Woolworths and argued that the 'plan anticipated' St Albans Commercial Centre is more appropriately aligned with a LCZ than a NCZ based on the anticipated role and function of the St Albans Centre as shown in the development plan in the ODP Appendix 15.15.5. Mr Bonis was not proposing any change to the provisions that applied to the outline development plan, nor an increase in the retail thresholds.
- [78] Mr Lightbody opposed the change, relying on issues of scope (there being no change to the zoning beyond a name change). Further he expressed concerns about the change in zone affecting the centres hierarchy, relying on Mr Heath's analysis.

Findings and Evaluation

- [79] The Panel has found that the request by the submitter is within the scope of PC 14, for the reasons in Part 1 at [210] of the report. However, the Panel has recommended that the submission is rejected on its merits. That is because, the zone nomenclature is largely moot, as the nature of the activities within the zone are defined in the development plan, and associated rules in Appendix 15.15.5, which the submitter accepts and seeks no change to. The Panel accept the recommendation of Mr Lightbody on merit and retain the status quo equivalent zone as more appropriate.