Appendix L
Regional Consenting Requirements Memorandum

Whiterock Consulting Ltd
638 Carrs Rd
RD2 Rangiora, 7472
T: 03 312 8830, M: 027 480 4883
Email: fiona@whiterockconsulting.co.nz

6 December 2021

Rebecca Parish
Foodstuffs (South Island) Limited
Private Bag 4705
Christchurch 8140

Dear Rebecca

ROLLESTON PAK'NSAVE REGIONAL COUNCIL CONSENT REVIEW

1. Introduction

Foodstuffs proposes to establish, operate and maintain a PAK'nSAVE supermarket at 157 Levi Road, Rolleston (Figure 1). Whiterock Consulting Ltd has been engaged by Foodstuffs (South Island) Ltd (Foodstuffs) to review the background site conditions and provide advice on stormwater treatment and disposal along with an assessment of the development against the rules in Environment Canterbury's (ECan's) Regional Plans.

Key elements of the proposed development include:

- New PAK'nSAVE supermarket, with associated carpark;
- Construction of stormwater treatment systems and other inground services;
- Overall upgrades to the site associated with the development include changes to signage, site access, car parking and landscaping;

Figure 1: Site Location

2. Background Site Conditions

The Landcare Soils Maps (SMaps) shows the surface soils (defined to 1 m below ground level) at the site are expected to be:

- Eyre*f* shallow loam
- Templeton*f* moderately deep silt
- Templeton*f* deep silt

Nearby bore logs show topsoil underlain by sand or silt to 1.5 to 3 m below ground and then gravels to the base of the bore holes. A review of stormwater consent applications for the residential subdivisions to the south and south-west found very rapid soakage was reported from depths varying from 2.5 to 4.5 m. All of the stormwater designs for the roading networks and houses are based on rapid soakage via soak pits. Soakage testing undertaken in the general area by Whiterock Consulting Ltd has found soakage rates in excess of 6,000 mm/hr at depths varying from 2 to 4 m below ground level.

According to the piezometric contours on Canterbury Maps, groundwater flows in a general north-west to south-east direction. Canterbury Maps shows there are 24 wells within 1,000 m of the site with groundwater levels varying from 12.7 – 21.5 m below ground level (m bgl). Two public supply wells (BX/0827 & BX/0508) are located 290 m to the south-west of the proposed development area at its nearest point. The wells are 181 m and 188 m deep respectively and have 100 m well

protection zones. Therefore, the site development and stormwater discharge will not be within the public supply protection zones.

The two nearest long term water level monitoring wells, that are at a similar piezometric contour are summarised below:

- M36/5248 (depth 32 m) located approximately 1,900 m north-east of the site. A total of 101 water level readings have been taken between 1997 and 2017. The highest water level reading is 13.28 m bgl. This well is located at a similar piezometric contour and land level to the site.
- M26/0255 (depth 24.4 m) is located approximately 1,240 m to the south south-west. A total of 435 water level readings have been taken between 1975 and 2018. The highest water level reading is 5.78 m bgl. This well is on land that is approximately 4 m lower than the site.

These two wells along with the piezometric contours are shown in Figure 2 below.

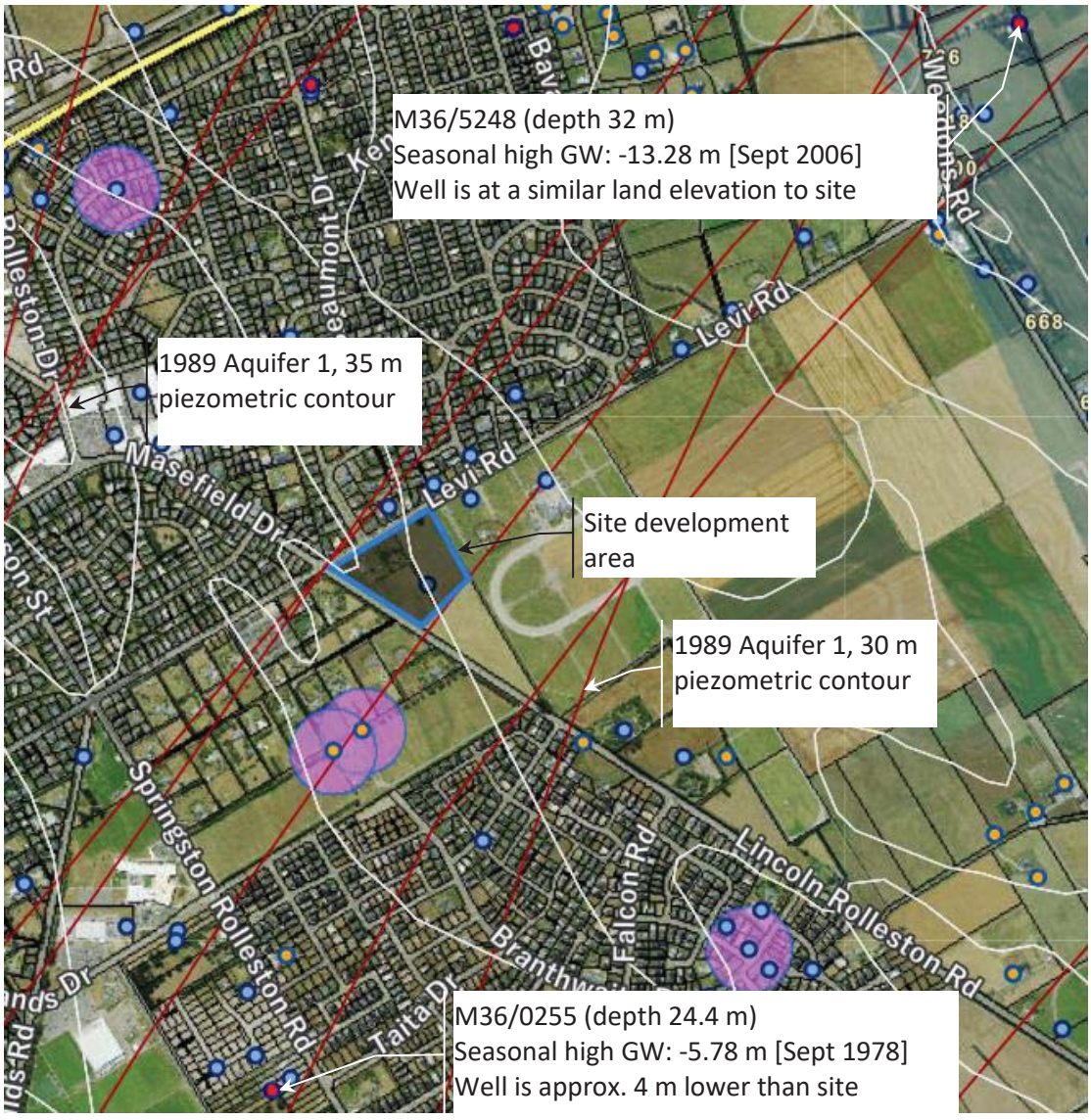

Figure 2: Wells Plot

Based on the groundwater level information, the depth to seasonal high groundwater is expected to be greater than 8 m bgl.

There are no nearby surface waterways. Therefore, protection of groundwater is considered to be the key environmental consideration.

3. Proposed Activities

It is proposed to develop the northern half of the site into a PAK'nSAVE supermarket. The site activities are outlined below.

- Earthworks:
  Earthworks will be required across the site for the construction of the building foundation, reshaping for the car park and installation of services. The deepest excavations are expected to be 5 m bgl for the stormwater soak pits.
- Discharge of construction phase and developed phase stormwater to land:
  - Construction phase stormwater will be managed on-site in accordance with the ECan Erosion and Sediment Control toolbox.
  - Developed phase stormwater will be discharged to land via soak pits sized to contain and dispose of all stormwater from events up to and including the 2% AEP (50 year), 24 hour duration storms.
    - Stormwater from the hardstand areas will be treated using a proprietary filter such as a Stormwater360 Stormfilter. This provides a high level of treatment and is a commonly consented treatment system for commercial sites.
    - Roof water is considered to be relatively free of contaminants and will be discharged directly to ground via soak pits (no treatment).
- Air discharges:
  - Construction phase dust can be a nuisance if not properly managed. The contractor will have a water cart on-site during dry and windy periods to manage dust.
- Fuel storage:
  - During the construction phase there will be refuelling of heavy equipment using a mobile fuel container.

4. ECan Consent Requirements

ECan's operative Regional Plans are:

- Canterbury Land and Water Regional Plan;
- Canterbury Air Regional Plan

The activities that have been assessed are:

- Discharge of stormwater;
- Dewatering;

- Earthworks;
- Air discharge for fugitive dust during construction works

Table 1 summarises the proposed activities and the ECan consent requirements.

Table 1: Summary of ECan Consents			
Activity	Relevant Rule/s	Comments	Consent required
Stormwater discharge	5.94A - 5.96	- Selwyn District Council (SDC) holds a global stormwater consent for Rolleston, but it does not include this site. - The site is commercial and therefore a consent is required to discharge developed site stormwater to land. - The site is not on ECan's Listed Land Use Register [LLUR] and therefore not considered to be contaminated. - Stormwater, excluding roof areas, will be treated prior to discharge to soak pits. The expected treatment is: • Proprietary filters (e.g. Stormwater360 stormfilters) for all hardstand areas. • No treatment for roof areas	Yes
Dewatering	5.119	- Depth to seasonal high groundwater is estimated to be 8 m bgl. The deepest excavation is expected to be 5 m (for the soak pits). Therefore, no dewatering is expected.	N/A
Excavation	5.175	- The site is shown on Canterbury Maps to be located over the unconfined aquifer - More than 100 m^3 of material will be excavated - The deepest excavations are expected to be 5 m bgl (soak pits). - Seasonal high groundwater expected to be 8 m bgl and therefore, there is more than 1 m separation between the base of the excavation and seasonal high groundwater.	No
Hazardous Substance (portable container)	5.179	- During site construction there will be a requirement to refuel heavy equipment on-site with a portable container. - All of the conditions of the permitted activity rule can be met with site management.	No
Air Discharge (dust)	7.32	- A dust management plan will be prepared in order to meet the conditions of the permitted activity rule.	No

In summary the following ECan consents are required for the proposed development:

- Stormwater (construction and developed): Activity is considered to be a **restricted discretionary** and a consent is needed

For all of the activities that do require consents, it is considered that design solutions are available to adequately mitigate the potential effects on the environment. Therefore, consents for the above activities should be obtainable.

Yours Sincerely

WHITEROCK CONSULTING LTD

Fiona Ambury
Natural Resources Engineer, Director
CPEng, CMEngNZ, IntPE(NZ)

Document prepared by

Aurecon New Zealand Limited

Level 2, Iwikau Building
93 Cambridge Terrace
Christchurch 8013
New Zealand

T +64 3 366 0821

F +64 3 379 6955

E christchurch@aurecongroup.com

W aurecongroup.com