BEFORE THE INDEPENDENT COMMISSIONER
AT WAIRARAPA

UNDER	of the Resource Management Act 1991 ("**RMA**")
AND	
IN THE MATTER	of an application by Woolworths New Zealand Ltd ("**Woolworths**") for resource consent in relation to site at 134 Main Street, Greytown known as FreshChoice Greytown

---

STATEMENT OF REBUTTAL EVIDENCE OF LEO HILLS ON BEHALF OF WOOLWORTHS NEW ZEALAND LIMITED

TRAFFIC

29 SEPTEMBER 2023

Russell McVeagh

A A Arthur-Young / S F D Barnett
Phone +64 9 367 8000
Fax +64 9 367 8163
PO Box 8
DX CX10085
Auckland

1. INTRODUCTION

Background and experience

1.1 I outlined my qualifications, experience and commitment to comply with the Environment Court Expert Witness Code of Conduct in my evidence in chief ("**EIC**") dated 1 September 2023.

1.1 I have read the statements of evidence relating to traffic / transportation of all the following expert witnesses on behalf of Waka Kotahi New Zealand Transport Agency ("**Waka Kotahi**"):

(a) Mr Terry Church (traffic);

(b) Ms Kathryn St Amand (planning); and

(c) Ms Roxanne Hilliard (corporate).

1.2 This statement focuses on traffic / transport issues raised in the above statements and in particular that of Mr Church.

2. REPLY

General Assessment Criteria

2.1 Mr Church has said (specifically at paragraphs 8.1-8.2 and throughout Section 9) that my assessment has not adequately assessed the proposal against "Standard 22.1.6" of the Combined Wairarapa District Plan ("**District Plan**").

2.2 I am not a planning expert and thus will defer to Ms Panther Knight's assessment of the relevant District Plan provisions. I understand Ms Panther Knight confirmed in her rebuttal evidence that Section 22 of the District Plan contains assessment criteria that can, and indeed did, inform my assessment of transport effects arising from the Proposal.

2.3 I also note that rather than constrain my assessment to specific Assessment Criteria, I have assessed the proposal generally, however the matters covered in the Assessment Criteria at section 22.1.16 of the District Plan have been addressed in the assessments I have undertaken.

Seasonal Peak

2.4 Mr Church (specifically at paragraphs 5-4-5.6) has commented in detail regarding to my assessment in regard to peak summer months and the seasonal fluctuations of traffic volumes potentially impacting the accuracy of my findings.

2.5 In particular, in the week of my survey, the average volume along SH2 was in the order of 9,460 vehicles per day ("**vpd**"), whereas the average summer months are recorded by Mr Church as 10,024 vpd and up to 11,304vpd. Mr Church also notes Friday volumes are on average higher than other days of the week (by approximately 18%).

2.6 In this regard I would note:

(a) Typically, no roads / driveways / carparks in New Zealand are ever designed to absolute peak periods.

(b) I acknowledge that there are periods where traffic volumes will be higher than we surveyed (and indeed some will be lower).

(c) Mr Church does not appear to have considered my further sensitivity test in Paragraph 6.7 of my EIC where I added 30% additional traffic on SH2 and increased the traffic using the driveway to 75% of all entering supermarket traffic. This analysis essentially increases the daily traffic to 12,298vpd (30% above 9,460vpd). Critically this still showed only two cars queuing into the site.

SIDRA analysis

2.7 Mr Church is critical of my SIDRA analysis (specifically at paragraph 9.26).

2.8 Mr Church considers that the SIDRA model is not appropriate for predicting delay to turning traffic giving way to pedestrians. It is unclear as to why Mr Church considers this to be the case (and if this is based on the original modelling in the TIA rather than my revised modelling) however I would note that in the revised modelling:

(a) The SIDRA model specifically has all cars giving way to pedestrians on the footpath and is based on surveys of traffic and pedestrian volumes;

(b) The SIDRA model has taken into account the wider crossing; and

(c) The SIDRA model has taken into account the walking speed of pedestrians (note it uses 1.3m/s rather than 1.2m/s as Mr Church suggests however I consider that would make little difference to the results).

2.9 As such the SIDRA analysis specifically takes into account vehicles giving way to pedestrians and thus, I consider it to be an accurate representation of delay / queuing on SH2.

Additional Conflicts

2.10 Mr Church notes the additional conflicts that the proposal may create in the area (specifically at paragraphs 9.14-9-18 and Figure 3).

2.11 I do not disagree that the driveway will create localised additional conflicts (any new / increase in use at a driveway). Mr Church does not appear to have considered the reduction in conflicts elsewhere on the network that will also occur as a result of the proposal.

2.12 As noted in the TIA and my EIC, the proposal is not to increase the size of the supermarket and thus the number of traffic movements created by the proposal is unlikely to change (I do recognise in paragraph 6.6 of my EIC that there is potential for a small increase relating to pass-by traffic).

2.13 What Mr Church has not addressed is the “additional” potential points of conflict he is concerned about are already occurring in the network and in particular occurring as turning movements at the SH2 / Hastwell Street intersection. So, while there are additional conflicts, especially at the proposed driveway, there are also reduction in conflicts at the nearby intersection (and supermarket driveways). This is demonstrated in Figure 1 below with the dotted line showing the existing routes from SH2 and solid line showing the proposed routes.

Figure 1: Change in Conflicts

Manoeuvring over centreline

2.14 Mr Church, in paragraph 9.33, is concerned about left turning traffic stopping for a pedestrian and the following vehicle then travelling on the wrong side of the road.

2.15 In this regard, this same situation occurs at basically every driveway along SH2 in Greytown and most of the other supermarket driveways I have reviewed in the area in paragraph 6.6 of my EIC. Essentially, rather than cross the centreline and collide with on-coming cars, following cars simply wait for the car to enter the driveway and continue. If this were a significant issue (which I do not consider it to be) then the majority of driveways in Greytown would need to be altered by removing all on-site parking and access.

Visibility

2.16 In paragraph 9.36 Mr Church is critical of the Commute report not assessing RTS-6 in regards to "*The District Plan, through the RTS-6 guideline strongly discourages high volume driveways on high volume rural arterial roads*[1]". The reason why the Commute report does not assess RTS-6 is simply due to the site not being rural. Rather, the site is urban mainstreet with 40km/hr posted

1 Paragraph 9.26 Mr Church evidence (emphasis added).

speed limit and thus I am unsure why Mr Church considers this matter to be of relevance.

2.17 With respect to RTS-6 more broadly, it primarily relates to visibility at driveways (its title is “Guidelines for visibility at driveways”). In this regard the driveway is entry only on a straight / flat section of 40km/hr urban road and as such RTS-6 visibility requirements are easily met (see section 4.2 of the original Commute report).

2.18 In paragraphs 9.53-9.56 Mr Church considers the visibility of the entrance and considers it particularly difficult when approaching from the north. Mr Church provides a photograph of this (Photo 1) however I would note:

(a) This photo includes a large van parked in a location where the proposal intends to remove the carpark (ie no stopping lines). Mr Church does correctly acknowledge this.

(b) The photo appears to have been taken on the footpath across the road (given the southbound lane is visible in the photo) and some distance back from the actual proposed access.

2.19 I have provided the image below (from Google) showing a more realistic arrangement of the access from near the centreline of the road showing a much clearer view of the driveway than Mr Church’s photo suggested.

Figure 2: Google street view of access

Treatment of access including cycling

2.20 Mr Church (paragraph 9.51) questions the ability to provide a driveway that is continuous in grade / colour for pedestrian priority. The applicant's intention is

to provide a driveway similar to the existing one, with a continuous asphalt surface with a concrete ramp at the kerb. This is similar to a number of driveways in Greytown.

2.21 Mr Church is also concerned about the driveway strength[2] . This will be a matter for detailed design by a Civil engineer, however I do note that while South Wairarapa District Council does not appear to have detailed design drawings for vehicle crossings, there is a Wellington City Council driveway standard (R-24-722) which includes an option for concrete ramp and asphalt footpath (at same level and grade). I am also aware of examples where the base under the asphalt has been strengthened (using concrete) rather than basecourse to improve structural integrity.

2.22 This treatment appears to have been used in a number of locations in Greytown already. The Google images below show two examples and I have updated the proposed driveway design as per Figure 5 below for further clarity.

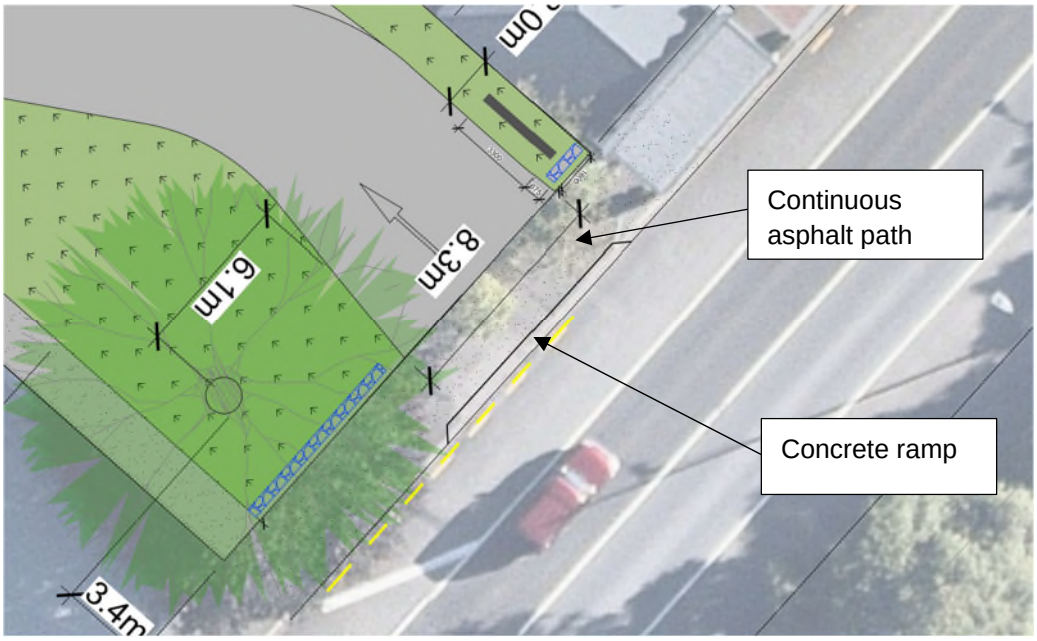
2.23 I note Mr Church has (paragraph 11.14b) recommended extension of the cycle lanes on both side of Main Street (in additional to the Waka Kotahi proposed upgrade), with markings across the frontage of the access, reflecting that it is a high-volume access. I do not have an issue with extending these marking across the driveway as part of the Waka Kotaki proposed upgrade.

Figure 3: Google street view of access (No 124 Main Street)

2 Mr Church paragraph 9.51.

Figure 4: Google street view of access (74/76 Main Street)

Figure 5: Proposed crossing arrangement



Need for right turn bay

2.24 Mr Church discusses the need for a right turn bay in paragraphs 9.41-9-46. I agree with Mr Church's technical analysis in this regard. I would however note:

(a) Mr Church fails to acknowledge that the right turning vehicles (which relate to the need for the right turn bay) already exist on SH2 and are currently turning right at SH2 into Hastwell Street (without any apparently safety issue or record).

(b) The warrant / graph Mr Church uses (Figure 6) is used for all roads with speeds under 70km/hr. In my opinion there is a significant difference between the need for a right turn bay in a 70km/hr environment vs a 40km/hr environment.

(c) As Mr Church correctly notes (paragraph 9.44), none of the intersections along SH2 in the area have this right turn treatment. In fact the nearby intersection of Hastwell Street does not have such a treatment even though it caters for the same amount of through traffic and two to three times greater right turn volumes than expected at the proposed driveway.

(d) The SIDRA analysis shows little delay and / or queuing on the state Highway as a result of the proposal.

2.25 Overall, in my opinion a right turn bay is not necessary and is not in keeping with the existing environment.

Other trucks using the access

2.26 In paragraph 9.47 Mr Church is concerned with one large truck a day turning right into the site rather than left and also suggests "*trucks not serving the site may still use the access*".

2.27 In this regard:

(a) The one large truck a day will be subject to a loading management plan and will be controlled by Woolworths which I consider appropriate.

(b) I am unsure as to why Mr Church considers large trucks not associated with the site would be entering the site. Any other large trucks already have the option of nearby public roads and I therefore do not consider it feasible to suggest that large trucks not associated with the supermarket would use this access.

Extension of footpath to West Street

2.28 In paragraph 9.70 Mr Church notes the proposed new internal footpath should extend to West Street. While I agree with Mr Church that extending the path to West Street may be ideal from a potential pedestrian desire line perspective, I do not consider it to be required by the application as:

(a) The site is private and should not be required to provide public through site links.

(b) There is an alternative public route some 60m north of the internal footpath (Hastwell Street).

Overall safety assessment / Safe System Assessment Framework

2.29 I disagree with Mr Church that I have not assessed safety at the driveway. While I may not have explicitly assessed the proposal against the District Plan assessment criteria in the way Mr Church might have, I have assessed the proposal comprehensively.

2.30 Mr Church has provided a Safe System Audit ("**SSA**") appended to Ms Hilliard's evidence. In this regard:

(a) I note a previous SSA was provided to by Mr Church however the new one appended to Ms Hilliard's evidence has been revised (with higher numbers). This appears to be (according to paragraph 9.30 of Mr Church's evidence) based on new information such as traffic volumes. However the traffic volumes of the proposal have not changed (if anything, the truck numbers proposed to be using the access have reduced).

(b) I disagree with Mr Church's assumption that intersection crashes will be "Highly Likely" in this location. The same turning manoeuvres are already occurring at SH2 / Hastwell Street intersection (with 2-3 times the turning movements than expected at this driveway). In the last 5 years there has been one crash at the intersection (non injury). One non injury crash in 5 years does not in my opinion result in a high likelihood of a crash occurring.

(c) In this regard, the previously SSA assessment provided by Mr Church to the applicant had the same intersection crash assumption as being "**Highly Unlikely**". Mr Church appears to have subsequently completely changed this to **Highly likely**. Based on the nearby intersection crash rate, I consider the previous assessment by Mr Church of "Highly Unlikely" to be more appropriate.

(d) I disagree with Mr Church's comment that "*Vehicles will be turning right from Main Street to enter the accessway could crash into pedestrians at the far end of their turning manoeuvre at speeds either*

30km/hr or higher". I have reviewed the crossing width / layout in relation to vehicle tracking and can confirm the absolute fastest a car could enter the site is 25km/hr. With the detailed design as I have provided previously (ramp adjacent to kerb) this entering speed would be substantially less (15-20km/hr).

(e) The SSA that Mr Church has undertaken only includes the proposed driveway. It does not include any assessment of the positive benefit of removing some turning movements at the SH2 / Hastwell Street intersection or the existing supermarket driveways (I would consider this change to be minimal). Indeed, critically in my view, the SSA that Mr Church has undertaken has not included any assessment of the positive benefit of the revised internal loading arrangement which removes trucks reversing on-site within a supermarket carpark.

3. CONCLUSION

3.1 Overall, there is nothing within the Waka Kotaki evidence that changes my opinion. I continue to consider that there are no traffic engineering or transport planning reasons that would preclude the application as proposed.

Leo Hills
29 September 2023