

## APPENDIX C

Traffic Peer Review by Gray Matter Limited

8 April 2021

Waikato District Council  
Attention: Milan Covic  
[Milan.Covic@waidc.govt.nz](mailto:Milan.Covic@waidc.govt.nz)



Gray Matter Ltd  
2 Alfred Street  
PO Box 14178  
Hamilton, 3252  
Tel: 07 853 8997

17\_147

Dear Milan

## 68-72 GREAT SOUTH ROAD, POKENO – TRANSPORT PEER REVIEW, RESPONSE TO SUBMISSIONS (TRANSPORT) AND RECOMMENDED CONDITIONS OF CONSENT

### 1. Introduction

Gull New Zealand Limited (the Applicant) propose to develop a 24-hour service station at 68-72 Great South Road, Pokeno. Gull New Zealand Limited's resource consent application was notified and a total of 14 submissions were received. Waikato District Council (WDC) has requested Gray Matter Ltd review and respond to submissions related to transport and recommend conditions of consent.

This letter presents our assessment to support WDC's planner's report. It includes:

- = Summary of submissions relating to transport;
- = Comments on submissions;
- = Our evaluation of the nature and extent of traffic effects from the proposal;
- = Relative impacts compared to the expected environment taking into account the District Plan permitted and consented activities, and likely network changes; and
- = Recommended conditions of consent.

### 2. Background

We have previously provided the following:

- = Transportation Peer Review, letter to Milan Covic, Gray Matter, Issue 1, 30 July 2020;
- = Gull Pokeno – Comments on Updated Consent Plans, memorandum from Melanie Parsons to Milan Covic, 15 December 2020;
- = Transport Peer Review Addendum, letter to Milan Covic, Gray Matter, Issue 1, 26 November 2020; and
- = Request for further information, email from Melanie Parsons to Milan Covic, 4 March 2021.

This review is based on:

- = Site visit (24 June 2020);
- = Site Plans, Gull Pokeno, Resource Consent Application Issue – 09-12-2020 (Technitrades Architecture) "2998 Gull Pokeno-Resource Consent Issue-201209.pdf";
- = Assessment of Environmental Effects (Hayson Knell, April 2020);
- = Traffic Impact Assessment (TIA), Proposed Fuel Facility, 68-72 Great South Road, Pokeno (Traffic Solutions Ltd, 4 June 2020);
- = Letter, Gull Fuel Facility at 68-72 Great South Road, Pokeno, Sight Distances at Access Points (Traffic Solutions Ltd, 18 August 2020) "Applicants ResponseToTrafficPeerReview-18.08.2020\_LUC0329-20.pdf";
- = Letter, Gull Fuel Facility at 68-72 Great South Road, Pokeno, Fuel Tanker Left Turn Access, Letter (Traffic Solutions, 8 March 2021) "979-210308Let.pdf"; and

- = Great South Road Improvements, Intersection Schematic, Draft Design (WSP, 17 March 2021) "XR005 - 2D DESIGN (POKENO 4 LANING UP TO ROUNDABOUT) Layout1.pdf".

### **3. Submissions Received**

A total of 14 submissions were received, with many raising issues related to transport. The transport issues raised in the submissions are summarised as follows:

- = Traffic volumes;
- = Traffic safety;
- = Vehicle crossings;
- = Pedestrian facilities, safety, and amenity;
- = Heavy traffic / truck stop;
- = Trimming or removal of existing trees for sightlines; and
- = Relocation of the memorial.

Our comments on each of the transport issues raised in the submissions are provided in Appendix 1. The sections below respond to each of the issues as summarised above.

Our review considers the effects of the proposal in relation to the existing road layout. We have also considered effects relative to likely network changes, specifically the signalisation of the Great South Road and Pokeno Road intersection, and formation of Church Street (north), as described in section 4 below.

#### **3.1. Traffic Volumes**

The Applicant's Traffic Impact Assessment (TIA) notes that the traffic volume on Great South Road is likely to be higher than the published data<sup>1</sup>, estimating the current traffic to be about 4,500 vehicles per day. Several submitters commented that the baseline traffic volume of 4,500 veh/day used in the TIA was too low, noting the changes they have observed in traffic in the town centre since the Countdown supermarket opened.

There is no recent traffic count data available to confirm the current traffic volumes. We note that the traffic volume on Great South Road south of Market Square is about 4,400 vehicles per day<sup>2</sup>.

The Integrated Transport Assessment for the Countdown supermarket estimated the additional traffic on Great South Road to be 213 vehicles in a peak hour, approximately 1,800 vehicles per day.

If the total traffic on Great South Road is currently about 6,300 vehicle per day (existing 4,500 vehicles per day plus the 1,800 vehicles per day for Countdown), then the proposal is expected to increase the traffic volume on Great South Road by about 5% (300 veh/day new trips as estimated in the TIA). We do not consider an increase of 5% to be a significant change in traffic volume.

We consider the effects of the increased traffic on Great South Road, related to traffic generated by the proposal, to be acceptable.

---

<sup>1</sup> 3,995 veh/day as published on <https://mobileroad.org> as at January 2020

<sup>2</sup> Mobile Road, January 2020

### 3.2. Traffic Safety

Our peer review included comparison of the trip generation for the proposal with published trip generation rates and concluded that the trip generation of 60 trips per hour used in the TIA to be a reasonable basis for the assessment. As discussed above, we do not consider the estimated 5% increase in traffic on Great South Road to be a significant change in traffic volume.

Submitters are concerned that at peak times vehicles could queue on the road during Gull's fuel "Discount Day" promotions. We understand that there is generally one discount day per month. The potential for queuing is a concern given that there is no available shoulder space for vehicles to safely wait to enter the site. On-road queuing could restrict visibility for vehicles exiting the site and increase the likelihood of crashes for vehicles approaching the site from the north. Figure 1 shows that at a collision speed of 50km/h there is a low risk (approx 10%) of fatality from a vehicle-vehicle side impact crash. Crashes are more likely to involve some minor injuries and damage to vehicles and property.

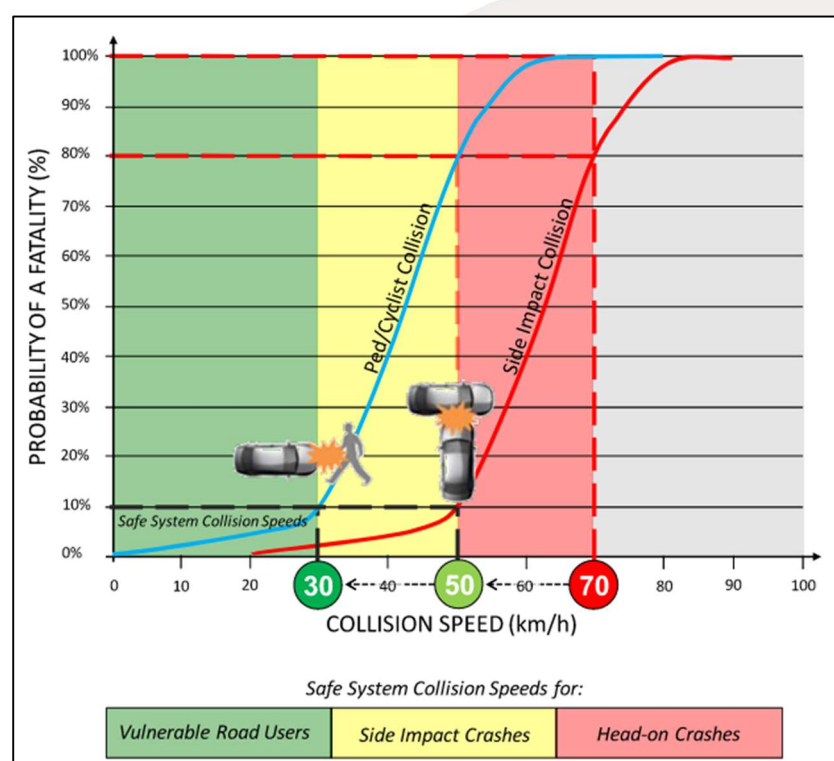


Figure 1: Probability of a Fatality vs. Collision Speed

Based on the information presented in the TIA, the likelihood of queuing is low and likely to be of short duration (during morning and evening peak periods, 1 day per month). We considered the transport effects (low frequency of queuing and low risk of a fatality) to be no more than minor.

We acknowledge submitters' concerns and in order to better understand the extent of effects and address those concerns, we requested the Applicant provide records from a similar size and type of Gull site to confirm the average vehicles per day and peak vehicles per hour for both a standard trading day and a "Discount Day". This could be collated from existing pump transaction data.

### 3.3. Vehicle Crossings

Four submitters made comments regarding the vehicle crossings, including:

- = Two vehicle crossings for one site:  
We addressed this in our peer review (Appendix 1: Assessment Against Requirements of District Plans, item 29.5.8 Vehicle Crossings and Driveways). Two vehicle crossings are permitted for this site.
- = Proximity of crossings to other activities (bus stop, pedestrian movements, and vehicle traffic):

We addressed this in our peer review (section 4.3.2 Separation Distance), and our addendum (section 2.2.1 Great South Road Merge). Due to site constraints, there does not appear to be any practicable alternative locations for the vehicle crossings. Acknowledging submitters concerns, we have provided additional comments in section 3.3.1 below.

- = Sight distance deficiencies at the vehicle crossings:  
We addressed this in our addendum (section 2.1 Sight Distance) and concluded that with mitigation the effects could be reduced to be no more than minor. We understand that the Applicant has agreed to the recommended mitigation and has incorporated these changes into their updated proposal.

### **3.3.1. Separation Distance**

Our peer review was based on the estimated 60 trips per hour in the TIA, which appears to be a reasonable assessment. However, as noted above in section 3.2, there is concern that peak hour queuing effects could be more significant than indicated in the TIA. If the actual trip generation for the proposal is higher than estimated, the non-compliance in separation distance could increase the frequency of crashes which cannot be effectively mitigated.

The additional information requested in section 3.2 will help us better understand the likelihood of crashes.

### **3.4. Pedestrian Facilities, Safety and Amenity**

Some submitters raised concerns with pedestrian facilities, safety, and amenity in the vicinity of the proposal. The existing berm in front of the subject site does not include pedestrian facilities. Pedestrians may use this part of Great South Road to access the four residential properties to the north of the subject site (80-108 Great South Road). The existing pedestrian demand in this area is likely to be low and the proposal does not sever any existing facilities, nor does it include any shop or retail component that would attract new pedestrian activity. The effect on pedestrian access is low and we do not consider it necessary for the proposal to include pedestrian facilities as there are no existing facilities to link to.

However, the proposal does not preclude the future addition of pedestrian facilities as the area is developed. The proposed berm will be at least 2m wide and does not preclude the future construction of a footpath along the front of the site. Any future pedestrian facilities should prioritise pedestrian safety at the proposed vehicle crossing locations.

### **3.5. Heavy Traffic / Truck Stop**

Two submitters raised concerns about trucks visiting the site, the increase in heavy vehicle traffic on Great South Road, the site being used as a “truck stop” and the lack of on-site parking for trucks.

We understand that the proposal is to provide for the refuelling of light vehicles such as passenger cars, utes and light trucks. The application does not include mention of “high flow” diesel pumps which would usually be provided for refuelling of large trucks. The Applicant has confirmed they do not have any service contracts (fuel cards for companies) and will not be providing high flow pumps or high boom hoses at this site. The Applicant considers it *“highly unlikely that a heavy vehicle would try and refuel at a site like this given these constraints”* (email from Milan Covic to Melanie Parsons, 18/03/2021). We note there is a more suitable truck stop facility located further south on Great South Road.

Based on the information in the ITA, heavy vehicle visits (fuel delivery tanker) for the proposal are expected 2-3 times per week. The effects of the increase heavy vehicle traffic from the proposal are considered no more than minor and no specific mitigation is required.

### **3.6. Trimming or Removal of Existing Trees for Sightlines**

Submitters raised concerns about the removal or trimming of the large trees on the corner of Market Square and 80 Great South Road in relation to improving sight distance. Our peer review recommended “removing roadside vegetation opposite Pokeno Road” to improve sight distance for vehicles exiting the site. We do not require any trimming or removal of the significant trees on Market Square or at 80 Great South Road to improve sight distance.

The removal of roadside vegetation opposite Pokeno Road is required mitigation.

### **3.7. Relocation of Memorial**

Our peer review suggested that *“Council considers relocating the memorial and simplifying the Market Street intersection layout as part of any centre streetscape works within Pokeno Village, irrespective of the proposed development at 72 Great South Road.”*

Several submitters objected to any relocation of the memorial and others raised concerns about safety during events held at the memorial on Market Square – Anzac Day and Bastille Day events were mentioned specifically. We are concerned that people accessing the memorial are required to cross traffic lanes and there is limited pedestrian space provided at the memorial.

Our suggestion relates to the safety at the intersection of Great South Road and Market Street and is not directly related to the proposed fuel station.

## **4. Effects Related to Future Transport Environment**

In the context of the existing transport network, the proposal has adverse effects which can be effectively mitigated to be no more than minor. We have considered effects of the future transport environment which is likely to include the signalisation of the Great South Road and Pokeno Road intersection, and formation of Church Street (north).

The signalisation of the Pokeno Road intersection is likely to increase the number of lanes on Great South Road to four (two lanes in each direction). We understand that southbound traffic will merge into a single lane in front of the subject site. Based on the current concept provided to us by Council, it appears that the road widening will decrease the berm width in front of the subject site to less than 1m wide. A raised median island will also be included along Great South Road south of the intersection (towards the Market Street right turn bay), to separate opposing traffic.

Church Street (north) is currently unformed and functioning as a vehicle crossing for access to 80 Great South Road and the unoccupied residence on the subject site. The area between Great South Road north of the subject site and Market Street (north) is zoned residential. The development of this area (indicated by the dashed red line in Figure 2 below) is likely to require formation of the paper roads.

Church Street (north) could be formed as a road for access to these residential properties. Given that Church Street (north) is in close proximity to Pokeno Road / Great South Road intersection, it is likely that access to Church Street (north) would be restricted to left-in, left-out movements.

Alternatively, Church Street (north) could be formed as a cul de sac at Great South Road with access provided via Market Street and an extension of Albert Street (as indicated by the grey dashed line on Figure 2).



Figure 2: Zoning from Operative District Plan. Orange areas are zoned Residential 2)

#### 4.1. Site Access

We understand that the signalisation of the Pokeno Road / Great South Road intersection is likely to include a raised median island on the southern leg of the intersection, extending south on Great South Road towards the right turn bay for Market Street (south).

This raised median island would restrict access to the site to left-turn in and left-turn out. Due to the multi-lane layout of the signalised intersection, and the curved road geometry we agree it is appropriate to provide a physical divider between opposing traffic on Great South Road. The raised median island increases the likelihood of vehicles attempting to u-turn at the signalised intersection to access the service station, increasing the likelihood of crashes.

In our addendum (section 2.2.1 Great South Road Merge) we commented on the effects of the entry being located where Great South Road will merge from two lanes to one lane, *“locating the vehicle crossing near the merge point has the effect of an increased risk of vehicle-vehicle collisions. Conflict may arise from some vehicles accelerating through the intersection not anticipating other vehicles to then slow to enter the service station resulting in rear-end crashes.*

*The dual southbound lanes also present an issue due to the limited weaving distance for vehicles that approach the site from the Pokeno Road / Great South Road intersection positioned in the inner lane, but need to move to the outer lane to enter the site.*

At a travel speed of 50km/h a driver would require 81m to change lanes.<sup>3</sup> The proposed vehicle crossing A (entry) is located approximately 45m from the intersection. We are concerned that the short distance between the intersection and the entrance to the proposed site will result in an increase in crashes.”

The Applicant has provided further information in their letter “Fuel Tanker Left Turn Access” (Traffic Solutions, 8 March 2021). Figure 3 shows the swept path of a fuel delivery tanker. We note that no additional body clearance envelope has been included. RTS 18 On-road Tracking Curves for Heavy Vehicles (Waka Kotahi NZ Transport Agency, August 2007) recommends a minimum of 0.5m be added to each side of the tracking curve, with greater clearances being desirable whenever possible.

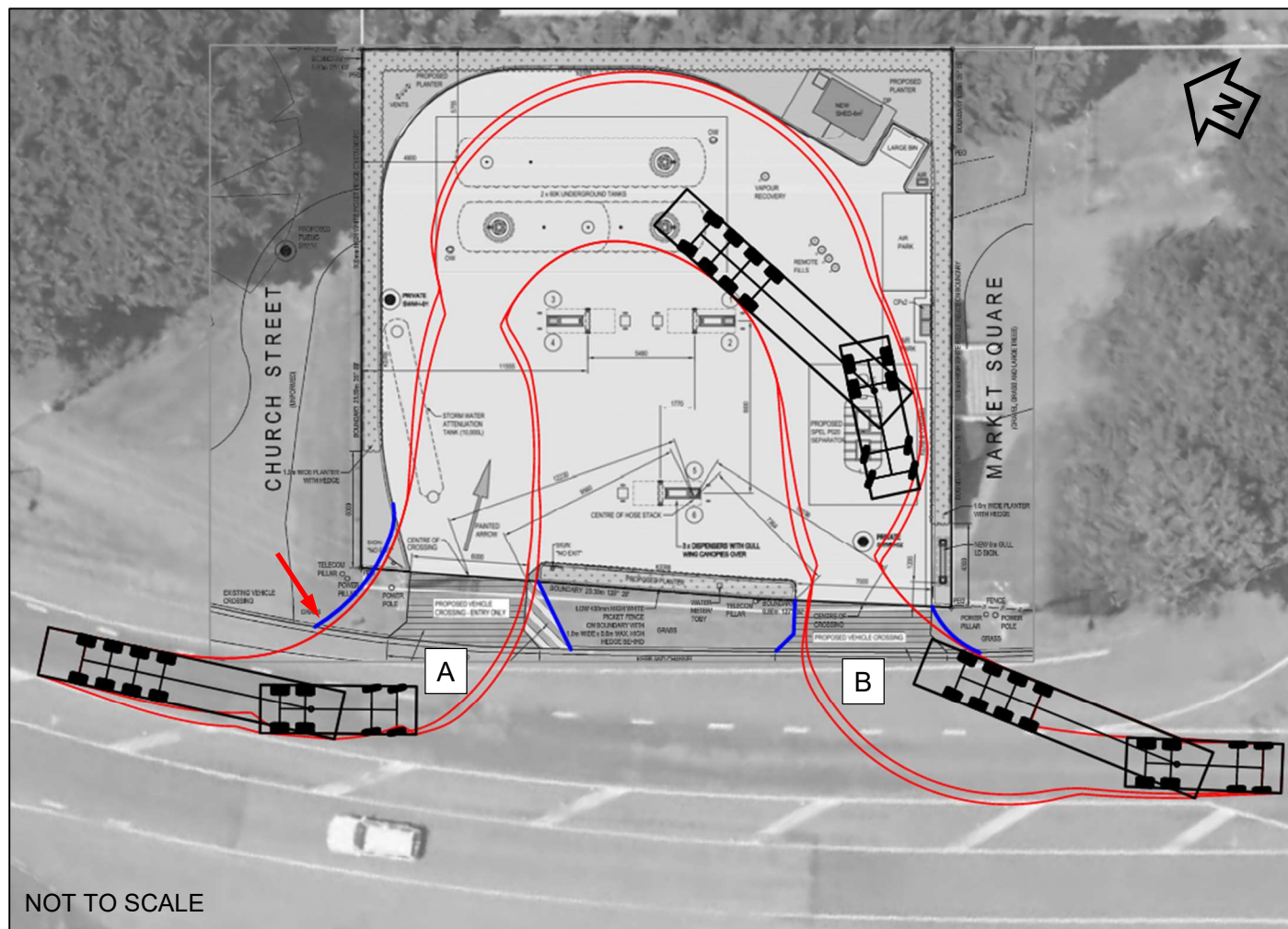


Figure 3: Updated swept path for fuel delivery tanker left-turn entry and exit only (Traffic Solutions, 8 March 2021)

Whilst the manoeuvre appears to be physically possible, we note that extra width is required at the vehicle crossings (blue lines in figure 3) to accommodate the fuel delivery tanker left-turn manoeuvres. This makes the vehicle crossings significantly wider than the maximum allowed in the District Plan.

We note that the splay for Crossing A would cross into the Church Street (north) road reserve and the likely alignment of the intersection if a connection was formed (indicated by red arrow on Figure 3).

We have checked the swept paths using the draft design of the Pokeno Road signalised intersection (WSP, 17 March 2021), as shown in Figure 4 and Figure 5 below. The blue lines indicate the vehicle crossing splay required to accommodate the swept path of the fuel delivery tanker.

As noted above, the splay for Crossing A crosses the likely alignment of an intersection with Church Street (north). If the vehicle crossing is unable to be sufficiently widened, the fuel delivery tanker may have to make

<sup>3</sup> Based on the maximum rate of lateral movement of 0.6m/s for a through lane merge as per Austroads Part 4A, Commentary 3.

the left-turn manoeuvre by starting in the right-hand lane and turn across the left-hand lane and merge area (Figure 5).

We note that the left-turn exit is constrained between the raised median island and the kerb and channel where the merge taper is narrowing to a single lane width. This requires Crossing B to have a long splay area across the proposed footpath (refer Section 4.4 for discussion).



Figure 4: Fuel delivery tanker left turn manoeuvres, from left lane start position (Gray Matter, 18 March 2021)



Figure 5: Fuel delivery tanker left turn manoeuvres, from right lane start position (Gray Matter, 18 March 2021)

As previously noted in our peer review (section 4.3.1 Vehicle Crossing Dimensions) the areas “for tanker only” should be constructed with raised textured surfacing to narrow the vehicle crossing to a single lane width. The raised textured surfacing is intended to be uncomfortable for light vehicles to traverse, encouraging lower speeds and a more channelised entry, whereas the large fuel delivery tanker can track over the raised sections without issue.

The detailed design of the vehicle crossings will need to include measures to lower vehicle entry speed and channelise the site access. Example layouts are shown in the figures below.

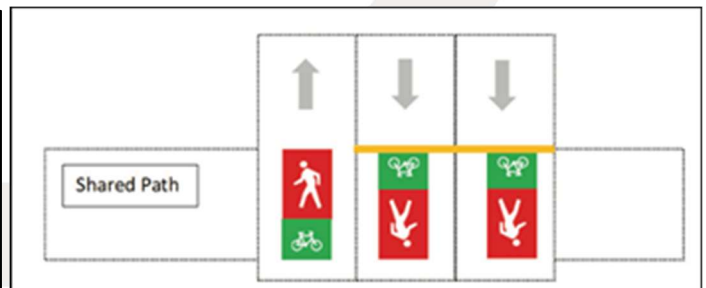


Figure 6: Example of raised textured surfacing (left) and use of pedestrian symbols (right)

The extent of raised textured surfacing needs to consider the shape of the vehicle crossings, the splays and potential for high-speed vehicle entry, the location of the footpath and berm width. Vehicle tracking checks should be carried out to ensure an 85<sup>th</sup> percentile vehicle can use the vehicle crossings without encroaching on the raised texture surfacing. We have provided example layouts in the figures below.

We understand that there are urban design elements to consider regarding the selection of surface treatments for the vehicle crossings. We understand Council wishes for the forecourt and vehicle crossings to be visually distinctive from any future footpaths. We strongly recommend the footpath surfacing is continuous across the vehicle crossing and there are no visual breaks or disruption in the footpath surfacing.

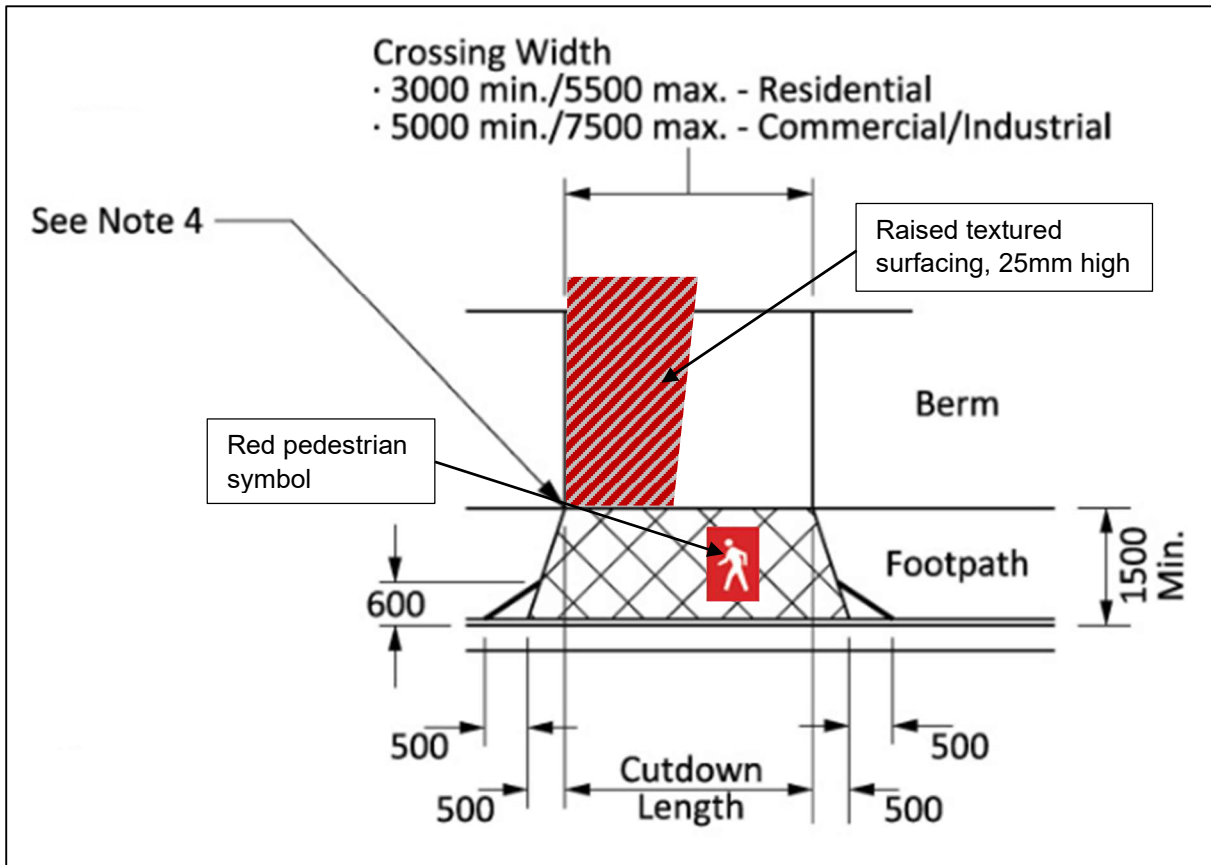


Figure 7: Example layout of mitigation for Crossing A (Entry only), based on RITS Drawing 3-13

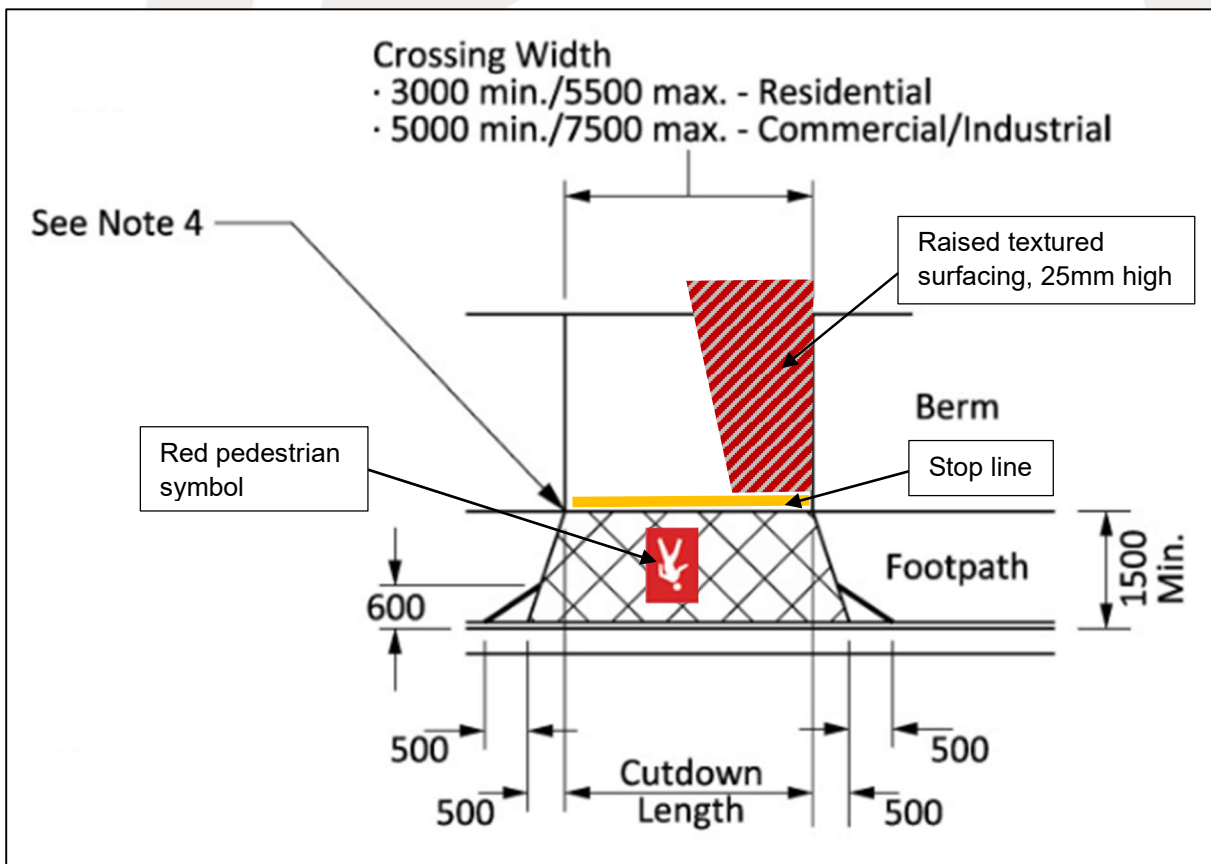


Figure 8: Example layout of mitigation for Crossing B (recommended exit only), based on RITS Drawing 3-13

The signalisation of the Pokeno Road intersection or formation of Church Street (north) would disrupt access to the subject site, and it is uncertain if the additional widening can be provided at the vehicle crossings. The safety effects of wide vehicle crossings, vehicles turning at the merge taper, vehicles u-turning at the



point 5m back from the centre of the lane assumes a driver eye position about 1m behind the kerb (as indicated by the yellow dot in Figure 9).

To achieve at least 90m sight distance to the north from Crossing B, the setback from Great South Road along the Church Street boundary for any signage for the proposed development and height restriction for vegetation may need to be increased. We estimate the increase in setback could be about 1-2m, but this will need to be confirmed at detailed design.

With the above mitigation, the effects on sight distance would be reduced to no more than minor.

#### **4.3. Vehicle Queuing**

We noted in our addendum that *“if vehicles are only able to access the site via left-turn entry from Great South Road (due to the raised median island), on-road queuing space is limited to the north approach to the site. The likelihood of on-road queuing is increased, and the resulting queue length is approximately doubled. Queues extending to the north towards the Pokeno Road / Great South Road intersection could extend into the intersection, reducing efficiency and increasing the likelihood of crashes. The likelihood of on-road queuing is increased during Gull’s promotional days when a fuel discount is offered.*

*The Gull promotional days are expected to occur about 12 days per year (approximately one per month). Any queuing effects would likely occur at peak times, say during morning, afternoon, and evening peaks, and would likely be of limited duration. However, given the proximity of the signalised intersection at Pokeno Road / Great South Road and the merge taper in front of the site, we consider the effects to be more than minor.”*

If Church Street (north) is formed, any on-road queuing related to the proposal is likely to block the Church Street intersection, exacerbating the safety effects and increasing the likelihood of queues extending into the Pokeno Road intersection.

The additional information requested in section 3.2 will help us better understand the likelihood of crashes.

#### **4.4. Pedestrian Facilities**

We understand that signalisation of Pokeno Road will include widening of Great South Road to at least four lanes. The road widening is likely to alter the existing kerb alignments, positioning the kerb much closer to the boundary of the subject site, effectively reducing the berm width. It appears from the draft design plans (WSP, 17 March 2021) that there is provision for a 2m wide footpath between the boundary of the subject site and the new kerb alignment.

As discussed in section 4.1, the vehicle crossings for the proposal would need to be considerably wider to accommodate the swept path of a fuel delivery tanker turning left-in and left-out of the site. The wide vehicle crossings increase the crossing distance and time taken for pedestrians to cross the vehicle crossings. The recommended raised textured surfacing on the vehicle crossings would not be an appropriate treatment on the areas of vehicle crossing that would be used by pedestrians.

Mitigation will be required to ensure reduced vehicle speeds and channelised entry and exit. It may be possible to apply the raised textured surfacing to the forecourt area, just inside the property boundary, to ensure the pedestrian route is accessible and step-free but also achieve the desired reduction in vehicle speed and channelised entry.

We are concerned that the wide vehicle crossings could compromise pedestrian safety and accessibility. We recommend that the detailed design of the vehicle crossings is subject to approval by Waikato District Council.

### **5. Summary of Effects and Required Mitigation**

The table below outlines the transport effects in the existing transport environment and compares them to the transport effects in the future transport environment including the likely network changes (as discussed in section 4.)

Table 1: Summary and Comparison of Effects Related to Transport

Effect	Existing Transport Environment			Future Transport Environment		
	Issue and Description	Significance and Extent of Effects	Comments and Recommendations	Issue and Description	Significance and Extent of Effects	Comments and Recommendations
Safety and Efficiency – increased traffic	The TIA estimates the proposal will generate 600 trips per day, with 300 trips per day being new trips on Great South Road. The TIA estimates peak hour generation to be 60 trips per hour (average of 1 trip per minute).	Low. Effects impact all road users.	Based on trip generation estimates in TIA, effects of increased traffic are considered to be <u>no more than minor</u> . Trip generation equates to a 5% increase in traffic on Great South Road and is not considered a significant change in traffic volumes. Efficiency affected by vehicles slowing and turning into the site. Efficiency effects are likely to be noticeable during peak periods, but infrequent. Request Applicant confirms trip generation by supplying data from a similar site (as outlined in section 3.2).		Low	No change in effects compared to existing transport environment.
Safety – vehicle crossings	The proposed vehicle crossings are on the major road frontage. The PDP requires property access to be from the minor road.	Low. Effects impact all road users.	Unlikely to be practical to modify vehicle crossing locations for the proposed development. Effects of crossings on major road are <u>no more than minor</u> .		Low	No change in effects compared to existing transport environment.
	The proposed crossings do not meet the separation distance requirements. The proposed development will significantly increase the turning movements to/from Great South Road in the length between Pokeno Road and Market Street, increasing the likelihood of vehicle-vehicle collisions.	Low. Effects impact all road users.	Based on peak hour trip generation estimates in TIA (60 trips per hour), effect is considered to be <u>no more than minor</u> . Unlikely to be practical to modify vehicle crossing locations for the proposed development. Request Applicant confirms trip generation by supplying data from a similar site (as outlined in section 3.2).	Turning movements restricted to left-in, left-out. The vehicle crossings are located where southbound vehicles will be merging from two-lanes to one-lane resulting in increased likelihood of rear-end crashes.	<b>Moderate</b>	<b>Increased effects</b> due to turning manoeuvres within merge taper and adjacent to Church Road (north) intersection increasing risk of crashes. Unlikely to be practical to modify vehicle crossing locations for the proposed development. Effects <u>could be more than minor</u> . May require additional mitigation at Pokeno Road signalised intersection, such as raised safety platforms. Could require contribution from Gull New Zealand. The additional information requested in section 3.2 will help us better understand the extent of these effects.
	The wide vehicle crossing (to accommodate swept path of fuel delivery tanker) encourages vehicles to exit at crossing A.	Moderate. Effects impact all road users.	With mitigation the effects can be reduced to <u>no more than minor</u> by: = Delineate crossings (as indicated in Figure 9 of our peer review) with raised and textured coloured surfacing (min. 25mm high). = Suggest using signage and markings to make crossing B “Exit Only”. = Include condition of consent requiring detailed design of vehicle crossing to be subject to approval by Waikato District Council Roading Manager.	The wide vehicle crossing (to accommodate swept path of fuel delivery tanker) encroaches on likely Church Road formation alignment and increases risk to pedestrians.	Moderate	<b>Increased effects</b> due wide vehicle crossings increasing risk to pedestrians. Effects <u>could be more than minor</u> . May require alternative access to surrounding residential zone via Market Street and extension of Albert Street, with cul de sac at Great South Road end of Church Street (north). Require Waikato District Council approval of vehicle crossing detailed design.
	The proposed vehicle crossings have sight distance deficiencies which increases the likelihood of vehicle-vehicle collisions.	Moderate. Effects impact all road users.	With mitigation the effects can be reduced to <u>no more than minor</u> , by: = Ensure proposed ID signage is setback 1m along the Market Square boundary. <u>Complies</u> . = Restrict on-site landscaping planting to 600mm height for a setback of 6m along the Church Street (north) boundary. <u>Complies</u> . = Remove vegetation from roadside berm (opposite Pokeno Road). = Relocate the fence at 80 Great South Road onto the property boundary.		Moderate	<b>Increased effects</b> due to the driver being positioned further back into the site when checking for approaching vehicles. With mitigation the effects can be reduced to <u>no more than minor</u> , by: = Ensure proposed ID signage is setback 4m along the Market Square boundary. = Restrict on-site landscaping planting to 600mm height for a setback of 15m along the Church Street (north) boundary. = Remove vegetation from roadside berm (opposite Pokeno Road). = Relocate the fence at 80 Great South Road onto the property boundary.

Effect	Existing Transport Environment			Future Transport Environment		
	Issue and Description	Significance and Extent of Effects	Comments and Recommendations	Issue and Description	Significance and Extent of Effects	Comments and Recommendations
	If on-road queuing occurs, safety risk is significant due to no on-road queuing space and sight distance could be obstructed for vehicles exiting the site.	Low. Effects impact all road users.	Based on peak hour trip generation estimates in TIA, queuing only expected to occur during peak periods, 1 day per month. Effects of on-road queuing are considered to be <u>no more than minor</u> . Request Applicant confirms trip generation by supplying data from a similar site (as outlined in section 3.2).		Low-Moderate.	May result in <b>increased frequency and extent</b> of on-road queuing due to single direction approach to site meaning increased likelihood of vehicles queuing across Church Road (north) intersection and signalised intersection at Pokeno Road. If on-road queuing occurs, effects <u>could be more than minor</u> . The additional information requested in section 3.2 will help us better understand the extent of these effects.
Safety – u-turns				The raised central median island will restrict access to the proposal to left-in, left-out only and increases the likelihood of vehicles u-turning at the Pokeno Road signalised intersection.	Low-Moderate.	<b>Increased effects</b> due to limited access options. “No U-Turn” signage is often ineffective. If u-turning occurs at Pokeno Road signalised intersection, the effects <u>could be more than minor</u> . With additional mitigation at the Pokeno Road signalised intersection (e.g. raised safety platform for speed management) the risk of fatality should be low.
Safety - pedestrians	No pedestrian facilities included in proposal.	Low. Effects impact all people using active transport modes.	Existing pedestrian demand is low. Proposal does not include aspect which would increase pedestrian demand. The proposal does not preclude the future addition of pedestrian facilities along Great South Road.	Pokeno Road signalisation includes 2m wide pedestrian footpath in front of subject site.	Low.	If safety effects at the wide vehicle crossings are addressed (refer vehicle crossing comments above), there is no change in effects compared to existing transport environment.
Construction effects	The potential for adverse effects from construction related traffic include delays, crashes, dust, and noise. These effects could be mitigated through implementation of an approved construction traffic management plan that includes temporary traffic management.  The trip generation and traffic effects from construction activities are expected to be of short-term duration and not considered significant.	Low. Temporary effects related to traffic impact all road users.	Require a Construction Traffic Management Plan and a Temporary Traffic Management Plan.		Low.	No change in effects compared to existing transport environment.

## **6. Conclusions and Recommended Conditions of Consent**

### **6.1. Existing Transport Environment**

We have assessed the effects of the proposal within the existing transport environment and consider that with mitigation the transport effects can be reduced to be no more than minor. We recommend the mitigation be required through conditions of consent:

- = Ensure proposed ID signage is setback 1m along the Market Square boundary.
- = Restrict on-site landscaping planting to 600mm height for a setback of 6m along the Church Street (north) boundary.
- = Remove vegetation from roadside berm (opposite Pokeno Road).
- = Relocate the fence at 80 Great South Road onto the property boundary.
- = Delineate and channelise crossings (as indicated in Figure 7 and Figure 8) with raised and textured coloured surfacing (min. 25mm high).
- = Suggest using signage and markings to make crossing B "Exit Only".
- = Require the detailed design of the proposal to be subject to approval by Waikato District Council Roading Manager.
- = Require a Construction Traffic Management Plan, including a Temporary Traffic Management Plan.

If consent is granted, we recommend conditions of consent to require the mitigation outlined above. Draft conditions of consent are included in Appendix 2.

### **6.2. Future Transport Environment**

We have also assessed the effects of the proposal with regard to the future transport environment (new signalised intersection) and consider that some of the adverse effects relating to transport could be more than minor and may not be able to be effectively mitigated. These effects include:

- = Increased risk of crashes due to Crossing A being located at the Pokeno Road signalised intersection merge taper and immediately adjacent to Church Street (north);
- = Increased risk to pedestrians due to wide vehicle crossings required to accommodate fuel delivery tanker left turns;
- = Increased risk of crashes if on-road queuing occurs; and
- = Increased risk of crashes if vehicles u-turn at Pokeno Road signalised intersection to access the site.

The additional traffic survey information requested in section 3.2 will help us better understand the extent of these effects.

We have provided draft conditions of consent for the future transport environment at Appendix 3, based on the information supplied to date.

Please contact us if you have any questions.

Yours sincerely



Melanie Parsons  
Transportation Engineer

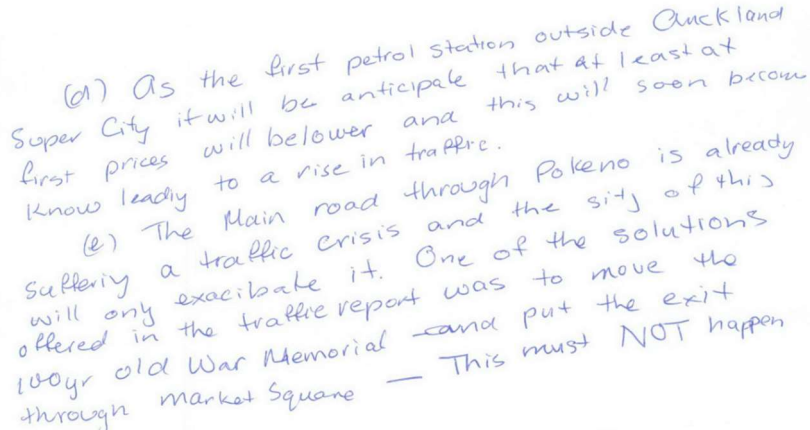


Alastair Black  
Transportation Engineer

## APPENDIX 1 – COMMENTS ON TRANSPORT ISSUES RAISED IN SUBMISSIONS

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
001	Ronel Jacobs	57 Mark Ball Drive Pokeno	Support Not Heard	None	
002	Pink Lotus Holdings Ltd	25 Market Street Pokeno	Support Not Heard	None	
003	Pokeno Community Committee (Ric Odom, Chair)	6 McNeish Place Pokeno	Oppose Heard	<p><b>4. Traffic Management and Safety.</b></p> <p>a. We contend that the Traffic Impact Assessment by Traffic Solutions Ltd (Appendix 3 to the Gull submission) is flawed. Traffic volumes along Great South Road in this report are based on 2015 council traffic counts of 3,995 per day which the traffic engineer has estimated will have increased to around 4,500 per day. No updated accurate data was provided and it is not clear from the proposal where the traffic counter was situated on Market Road East to count the 40 vehicles per day that has been alluded to. For instance, did this count also include the vehicles accessing the existing GAS station though the Market Road slip lane? There is considerable scope for underestimating the traffic volumes experienced and indeed the Pokeno Community Committee is of the view that traffic volumes along Great South Road Pokeno have increased substantially. Developments in Tuakau have led to higher volumes of traffic entering Pokeno from the west and the new Countdown supermarket in Pokeno has certainly generated significantly more traffic<sup>2</sup>.</p> <p>b. The peer reviews of the Traffic Impact Assessment – and especially the Addendum dated 26 November 2020 and the Memorandum dated 15 December 2020 – cast significant doubt on the safety and practicality of locating a fuel station on the site. The November addendum raises some serious concerns regarding sight lines and traffic flow concluding in part that “Without mitigation, these potential safety effects would be unacceptable.” The review also raises concerns around:</p> <ol style="list-style-type: none"> <li>Pedestrian safety even to the point of recommending the War Memorial be moved (something the Pokeno Community Committee and residents would adamantly oppose).</li> <li>The proposed signage, fencing and hedging.</li> <li>Traffic movement into, out of and within the proposed site.</li> <li>Queuing traffic, especially on days where fuel discounts are offered, will be a hazard with increased likelihood of vehicle accidents occurring.</li> </ol>	<p>4(a) <i>Traffic volumes/congestion</i> Published traffic data has been used. Trip generation estimates indicate the proposal results in a 5% increase in traffic on Great South Road.</p> <p>We have requested trip data from similar existing site (e.g. Tuakau) to better quantify effects.</p> <p>4(b) <i>Traffic safety/vehicle crossings onto Great South Road</i> Non-compliance with separation distances cannot be mitigated. Increased likelihood of crashes due to increased turning movements in close proximity. Effects are no more than minor.</p> <p>With mitigation the adverse effects related to sight distance can be reduced to no more than minor.</p>

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
				<p>c. It must be noted that the impact on traffic movement following the opening of the new supermarket appears not to have been factored into the proposal or the traffic plans. The Pokeno Community Committee, through direct observation, feels that traffic volumes have increased markedly. As the town grows, so will these volumes.</p> <p>d. There has already been a notable increase in heavy traffic movement at the Pokeno Road/Great South Road intersection. The planned widening of Pokeno Road does not include this intersection and while there has been discussion around placing traffic signals at this intersection (as noted by the traffic engineers), there are as yet no firm plans or time frames for this to occur (if it does); though there are plans to close Ford Street to through traffic which will result in all traffic having to transit this intersection. Given that this is a major intersection and that the distance from the proposed Gull station and sight lines from it to this intersection are below the recommended distances, this is likely to result in significant traffic issues, especially on days of increased volumes to the proposed fuel station (such as fuel discount days).</p> <p>e. On the issue of pedestrian safety, it is the view of the Pokeno Community Committee that the impact of a fuel station at the proposed location would adversely impact pedestrian safety – especially that of the young and the elderly. The proposed location, close to the major intersection of Pokeno and Great South Roads, is already a major pedestrian thoroughfare for those going to and from the shopping precinct and the Pokeno School. The additional traffic movement – and especially the impact of reduced sight lines as described by the traffic peer reviews - would exacerbate this.</p> <p>5. <b>Trees.</b> One of the recommendations contained in the proposal was the recommendation to remove or severely trim the trees to improve sight lines. These trees were planted as part of the Beautify Pokeno programme to enhance the look and ambience of the area - not for developers to trim or remove them if the developer felt they were unnecessary. Additionally, we are of the view that these trees are designated as Notable Trees by the Waikato District Council. Therefore, the Pokeno Community Committee strongly opposes any action that would remove or seriously deplete these trees. Given the trees location in the area of the war memorial, it is useful to point out that 300 or more people attend ANZAC services at the memorial – and of course, these attendees also cross the Great South Road to attend this service and to attend the subsequent morning tea at the Pokeno Hall.</p>	<p>4(c) Addressed above in 4a.</p> <p>4(d) <i>Truck Stop</i> Heavy vehicle visits (fuel delivery tanker) expected 2-3 times per week. Effects of increase heavy vehicle traffic are considered no more than minor.</p> <p>4(e) <i>Pedestrian Safety</i> Not a formed pedestrian route. Low pedestrian numbers expected. Sightlines for vehicles entering and exiting site do not relate to pedestrians.</p> <p>5 <i>Trimming/removal of trees for sightlines</i> Our peer review recommendation is to remove trees <u>opposite Pokeno Road</u> to improve sight distance, and maintain vegetation on site to no higher than 600mm to ensure drivers have clear view over border plantings.</p>
004	Wendy & Shane Harrod	13a Pokeno Road Pokeno	Oppose Not Heard	<p>The Centopah which is a memorial to our fallen heroes is sitting on the edge of this new proposal along with the very large old Oak Trees. With the new development of this site we feel this will most definitely affect our future plans for this area.</p> <p>The very old Oak trees could possibly have to be removed with this huge development. In the proposal there are plans to remove or severely trim the trees to improve sight lines. If they were not removed the digging to create large pits for petrol tanks to be placed underground will most definitely affect the root system of these old trees and will kill them over time. Trimming them to suit the proposed new GULL site we are definitely opposed to.</p> <p>The Centopah is a main feature in Pokeno and where the development of market square was going to make this a focal point. On Anzac Day every year we have 100s of people gathering at this site to honour our fallen comrades. We are extremely opposed to this area a huge part of the history of Pokeno being overlooked to allow a Gull fuel stop.</p>	<p><i>Trimming/removal of trees for sightlines</i> Refer comment on submission 003 above.</p> <p><i>Relocation of memorial</i> Our peer review suggested Waikato District Council consider relocating the memorial as part of any streetscape works on Market Street/Market Square. This is not required mitigation for the proposal. We do not recommend the exit from the proposal be through Market Square.</p>

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
				<p><b>3/ Traffic Management and Safety.</b></p> <p>With increased traffic utilizing the proposed GULL Fuel Stop this is of a huge concern to the safety of pedestrians and also the large number of cars exiting the proposed site and crossing Pokeno Road. The increase in traffic with the new Countdown has already caused a lot of stressful situations with cars crossing over Pokeno Road. The Z Fuel stop with the large trucks entering and exiting this spot only adds to the congestion already in the main street.</p> <p>(Submissions includes section 4 of Community Committee submission above)</p>	<p><i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p>
005	Kenneth & Patricia Graham	PO Box 179 Pokeno	Oppose Heard/Not Heard (not ticked)		<p>(d) <i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p>(e) <i>Relocation of memorial</i> Refer comment on submission 004 above.</p>
006	Amarpal Singh Khara	62 Great South Road Pokeno	Oppose Heard	None	
007	Donald Ian McIntosh	PO Box 85 Pokeno	Oppose Not Heard	<p>I <input type="checkbox"/> support <input checked="" type="checkbox"/> oppose <input type="checkbox"/> am neutral to the part/s named above. Give details: I oppose this submission on the grounds that traffic congestion with vehicles turning in and out of the property in close proximity to the Pokeno/Tuakau intersection and near a bend in the road affecting visibility of approaching traffic.</p>	<p><i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p><i>Traffic safety/vehicle crossings onto Great South Road</i> Refer comment on submission 003 above.</p>
008	Dominic Toon	1 Ulcoats Lane Pokeno	Support Not Heard	None	

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
009	Todd Kenneth McIntosh		Oppose Not Heard	<ul style="list-style-type: none"> <li>- This is a very small site to operate a multi-fuel Truckstop from, as there is an existing Truckstop and Petrol Station already in the Town.</li> <li>- The existing Truckstop operates from a much larger site and can cater for up To 20 Trucks and Trucks with trailers parking on site or queuing when necessary for fuel.</li> <li>- The recent opening of the Countdown Supermarket has increased traffic congestion and with the potential of another 600 vehicle movements per day on top of that should necessitate a review.</li> </ul> <p>For these reasons and more , We Strongly oppose this application.</p> <ul style="list-style-type: none"> <li>- Double access crossings Non Complying</li> <li>- Large on Site Signage on such a restricted site without any Buildings</li> <li>- The crossings look to me like they are over the Deceleration lane for vehicles turning left into Market Rd Pokeno</li> <li>- The potential demolition of a "Historical House" which has been an iconic landmark in our Town.</li> <li>- The impact of waiting Trucks and Vehicles may have on School Children Walking to the Bus Stop, which is directly opposite, at Pokeno Community Hall , twice a day.</li> <li>- The lack of onsite parking for Trucks queuing to get fuel.</li> </ul>	<p><i>Truck Stop</i> Refer comment on submission 003 above.</p> <p><i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p><i>Traffic safety/vehicle crossings onto Great South Road</i> Refer comment on submission 003 above.</p> <p><i>Pedestrian Safety</i> Refer comment on submission 003 above.</p>

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
010	Michael & Amanda Holroyd	73 Great South Road Pokeno	Oppose Heard	<p>2. <u><b>Traffic Management and Safety.</b></u> We believe traffic estimates contained within the submission are not consistent with reality, particularly since the opening of Countdown Pokeno.</p> <p>a. The junction of Pokeno Road and Great South Road experiences congestion due to southbound traffic turning right into Great South Road and would be further impacted by any traffic turning into the proposed Gull Station. Furthermore, northbound traffic turning left into the proposed Gull Station, would need to queue further because of traffic flow. This is particularly prevalent during the school rush (8am-9am &amp; 2:30pm-3:30pm), which also coincides with an increase of children walking through this area. Should raised medians be used, what consideration has been given to northbound traffic – where will they attempt to U-Turn in order to access the site? This can only be only heavily trafficked sections of Pokeno/Great South Road.</p> <p>b. No consideration is offered for pedestrians coming into Town Centre, and as a family with young children who attend Pokeno School, this area is already hostile to pedestrians, and would be exacerbated by the proposed development.</p> <p>c. The roading surface along Great South Road (through the Town Centre), and along Pokeno Road (up to Helenslee Road) is substandard due to heavy traffic flows currently. There is no indication that this would improve with increased traffic.</p> <p>d. In a time where towns across New Zealand are taking steps to divert traffic away from Town Centres, decisions for Pokeno appear to be focus on increasing industry and private traffic. We <u>strongly oppose</u> activity that prioritises traffic over people.</p> <p>3. <u><b>Increased risk to traffic incidents</b></u></p> <p>a. We have personally witnessed traffic incidents due to poor design and poor driving at the intersection of Great South Road and Pokeno Road (always southbound right turning traffic)</p> <p>b. In December 2019 a medical event resulted in a heavy transport vehicle colliding into 3 properties along this intersection. Our property at 73 Great South Road, was the most heavily affected, with substantial property destruction, and heavy contents loss. This created significant trauma for our family. Whilst such events cannot be anticipated, we strongly oppose increased heavy traffic (as per point 2.d)</p>	<p>2a <i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p>b <i>Pedestrian Safety</i> Refer comment on submission 003 above.</p>
011	Emma Louise Tucker	53 Mark Ball Drive Pokeno	Oppose Not Heard	<p><i>The location will bring excess traffic to the road which has homes nearby, which will increase pollution - fumes and noise/light, also it poses a danger to children with cars entering/leaving site.</i></p> <p><i>This would be better located to the Industrial estate nearby</i></p>	<p><i>Pedestrian Safety</i> Refer comment on submission 003 above.</p> <p><i>Traffic safety/vehicle crossings onto Great South Road</i> Refer comment on submission 003 above.</p>

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
				<p>The location with the corner, T-Junction and surrounding roads is dangerous and with an increase in traffic the location isn't well thought out and will also pose a risk to people paying their respects on Anzac Day at the Memorial.</p>	
012	Ravinder Tikur	31 Halberg Street Papakura Auckland	Oppose Heard	None	

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
013	John & Helen Clotworthy	59a Pirrit Road Pokeno	Oppose Heard/Not Heard (not ticked)	<p><b><u>Community Safety</u></b> Pedestrians crossing to/from Market Rd East, especially our school children. Did the vehicle count include pedestrians?</p> <p><b><u>Anzac Day</u></b> Our last Anzac Service(2018, - 2019 Mosque shooting, 2020 Covid) saw over 300 residents come to pay their respects to those who died for us to live in a free world. A proposal to remove our Cenotaph for the convenience of a proposed Fuel Outlet, is outrageous. Our Market Square is where Pokeno Community, visitors and families of those named on our Cenotaph come to remember and pay their respects. Removal of this Cenotaph is non negotiable. Our Pokeno Community has expanded by thousands since then and we would expect our Anzac Service to grow as well.</p> <p><b><u>Increased Traffic</u></b> The vehicle data is outdated, our Pokeno Community is now over 5000 residents, this was not factored in, also wider travelling vehicles were not accounted for. Since the opening of Countdown in Pokeno the traffic generated has increased substantially, not accounted for in your application. . The location of this proposal, ON A BEND, is incredulous. I know because I work on the Great South Rd, at Pokeno and every day I witness .truck and vehicle maneuvers which "Beggars Belief"</p> <p><b><u>Market Square</u></b> Attached are the plans for our proposed Market Square, the proposed location, entrance and exit does not fit with our Community Plans. Also , the trees planted to Beautify Pokeno are there for our Community to enjoy, they are not to be chopped down (Includes copy of Pokeno Village Market Square Options, Draft May 2014)</p>	<p><i>Pedestrian Safety</i> Refer comment on submission 003 above.</p> <p><i>Relocation of memorial</i> Refer comment on submission 004 above.</p> <p><i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p><i>Trimming/removal of trees for sightlines</i> Refer comment on submission 003 above.</p>
014	Allen Raymond Grainger	11 McIntosh Drive Pokeno	Oppose Heard	(Includes detailed hand-written discussion of issues)	<p><i>Traffic volumes/congestion</i> Refer comment on submission 003 above.</p> <p><i>Pedestrian Safety</i> Refer comment on submission 003 above.</p>

No.	Name	Address	Support? Heard?	Submission Points Relevant to Traffic Matters	Comments on Issues Raised
					<i>Relocation of memorial</i> Refer comment on submission 004 above.  <i>Trimming/removal of trees for sightlines</i> Refer comment on submission 003 above.



## APPENDIX 2 – DRAFT CONDITIONS OF CONSENT FOR EXISTING TRANSPORT ENVIRONMENT

- 1) Prior to commencing any construction works the consent holder must submit for the approval of Waikato District Council, engineering design details and plans, prepared by a suitably qualified and experienced Traffic Engineer, including but not limited to:
  - a) Vehicle crossing design, including the raised and textured coloured surfacing as indicated in Figure 7 and Figure 8, or as approved by Waikato District Council Development Engineering Manager.
  - b) Proposed ID signage location, being a minimum setback of 1m from the boundary on Great South Road, along the Market Square boundary.
  - c) Landscape planting layout, ensuring that planting does not exceed 600mm in height in the following zones:
    - i) along the site frontage boundary with Great South Road;
    - ii) over a 6m length along the Church Street boundary measured from the Great South Road boundary;
    - iii) over a 1m length along the Market Square boundary measured from the Great South Road boundary; and
    - iv) in berm areas adjacent to the zones identified in i) to iii).
  - d) Removal of existing vegetation from roadside berm in front of 80 Great South Road (opposite Pokeno Road).
  - e) Relocation of the fence at 80 Great South Road onto the property boundary.
  - f) Signage and markings on site to mark Crossing B as “Exit Only”.

The design plans must be in accordance with the Waikato Regional Infrastructure Technical Specifications (RITS), to the satisfaction of the Waikato District Council.

- 2) The consent holder shall arrange for an independent detailed design road safety audit of the proposed vehicle crossings to be undertaken in accordance with the ‘Road Safety Audit Procedures for Project Guidelines, May 2013’. A copy of the road safety audit shall be provided to Waikato District Council’s Development Engineering Manager. Any audit recommendations and design changes arising from the road safety audit shall be agreed with the Waikato District Council’s Development Engineering Manager prior to construction being undertaken.
- 3) At least twenty (20) working days prior to the Commencement of Construction, the consent holder shall prepare a Construction Traffic Management Plan (CTMP) relative to the construction being undertaken and submit it to the Waikato District Council Development Engineering Manager (or nominee) for certification.
- 4) The CTMP shall include (but not be limited to) the following matters:
  - a) Details of the works, intended construction timetable and hours of operation;
  - b) An approved temporary traffic management plan in accordance with COPTTM;
  - c) Details of a single access point from Great South Road for construction vehicles and measures to be adopted at the access point to ensure a safe traffic environment for other road users, including pedestrians and cyclists.

- d) Specific construction site traffic management measures (such as ensuring sufficient space is maintained within construction site(s) to prevent vehicles queuing on the street (or other publicly accessible spaces) and avoiding deliveries and heavy vehicles during peak traffic periods) to ensure that construction traffic does not affect the efficiency and safety of other vehicles, pedestrians, cyclists and other users within the vicinity of the works;
- e) Methods to provide for the safe movement of vehicles and pedestrians to and from all surrounding properties on Church Street (north) and Market Street (north);
- f) Measures to manage vehicle traffic and reduce parking demands associated with construction staff. Contractor parking shall not take place on Great South Road;
- g) Methods to control dust, debris on roads and silt laden runoff during construction, such as the erection of silt fence, stabilised entranceways and cut off drains as necessary.



## APPENDIX 3 – DRAFT CONDITIONS OF CONSENT FOR FUTURE TRANSPORT ENVIRONMENT

*Underlined or ~~strikethrough~~ text indicates changes to the conditions suggested in Appendix 2, or additional conditions required that are specific to the future transport environment.*

- 1) Prior to commencing any construction works the consent holder must submit for the approval of Waikato District Council, engineering design details and plans, prepared by a suitably qualified and experienced Traffic Engineer, including but not limited to:
  - a) Vehicle crossing design, including the raised and textured coloured surfacing as indicated in Figure 7 and Figure 8, or as approved by Waikato District Council Development Engineering Manager.
  - b) Proposed ID signage location, being a minimum setback of 1m from the boundary on Great South Road, along the Market Square boundary.
  - c) Landscape planting layout, ensuring that planting does not exceed 600mm in height in the following zones:
    - i) along the site frontage boundary with Great South Road;
    - ii) ~~over a 6m length along the Church Street boundary measured from the Great South Road boundary;~~
    - iii) over a 1m length along the Market Square boundary measured from the Great South Road boundary; and
    - iv) in berm areas adjacent to the zones identified in i) to iii).
  - d) Removal of existing vegetation from roadside berm in front of 80 Great South Road (opposite Pokeno Road).
  - e) Relocation of the fence at 80 Great South Road onto the property boundary.
  - f) Signage and markings on site to mark Crossing B as “Exit Only”.
  - g) Demonstrating that at least 90m sight distance is provided from Crossing B to the north.

The design plans must be in accordance with the Waikato Regional Infrastructure Technical Specifications (RITS), to the satisfaction of the Waikato District Council.

*Conditions 2) to 4) are the same and are not repeated here for brevity.*