



Ms M Kemp Campbell Brown PO Box 147001 Brown Street, Ponsonby **Auckland 1144** 

25 September 2025

Copy via email:			
Dear Michelle,			

# SPECIALIST COMMENTS RESPONSE – RANGITOOPUNI PROJECT – (COUNCIL REFERENCE BUN60449727)

Further to your recent instructions, we have reviewed the comments received from Auckland Council, Auckland Transport and NZTA on 18 September 2025 and have responded to the transport matters raised.

It is noted that as per Item 270 of the Auckland Council Planning Memorandum dated 17<sup>th</sup> September 2025 that although there are a number of unresolved road safety effects, Auckland Councils Traffic Engineer and Auckland Transport are "satisfied that these are solvable subject to realistic amendments and/or additional conditions of consent..."

# 1 AUCKLAND COUNCIL - MAT COLLINS

The comments within the Auckland Council covering letter prepared by Mat Collins are in general a summary of the traffic / transport reviews undertaken by Auckland Council. As such, the Commute commentary in response to the covering letter generally refers to detailed review of the other two more substantive reviews, provided further below.

It is noted that numbering follows that of the review.

# 1.1.1 ITEM 5.1 - ROAD SAFETY EFFECTS

### Comment:

Multiple rural roads will serve as key access routes to the development. NZTA's CAS database shows that, between 2020 and 2024, 46 injury and fatal crashes occurred on Old North Road between Pinetone Road and SH 16, Deacon Road between Old North Road and Riverhead Road, Riverhead Road between Deacon Road and SH 16, Oraha Road between Old North Road and SH 16, the Deacon Road / Old North Road intersection, the Deacon Road / Riverhead Road intersection, the Old North Road / Oraha Road intersection, the Old North Road / Old Railway Road intersection.

Old North Road has a Collective Risk Band of "High" and Deacons Road and Riverhead Road have a Collective Risk Band of "Medium-High). This medium-high rating indicates that the current environment carries a significant risk of fatal and serious crashes for road users.



As this matter relates to effects on the wider transport network, I have not commented further on the matter as it falls within Auckland Transport scope of interest. However, in later sections of my report I have commented on road safety matters near proposed access points to the site.

### **Commute response:**

Noted.

#### 1.2 ITEM 5.2 - SIGHT DISTANCES FOR ACCESSES

# Comment:

Commute has provided 85th percentile speeds at Access 1 – 5 along Old North Road, ranging from 63km/hr to 76 km/hr. Using these speeds Commute has calculated the required Safe Intersection Sight Distance and compared this to the available sight distance. I have reproduced this information in the table below.

Access	To the West		To the East	
	SISD required	Actual sight distance	SISD required	Actual sight distance
Access 1 (JOAL 1 and JOAL 2)	~165m	181m	~165m	181m <sup>1</sup>
Access 2 (Browns Road)	~165m	~1662	~145m	~147m
Access 3 (Lot 55)	~165m	181m+	~145m	~158m
Access 4 (Lot 68)	~165m	~110m	~131m	~164m
Access 5 (JOAL 4)	~157m	~155m	~157m	~145m

### **Commute response:**

Noted with additional discussion below.

# 1.2.1 SIGHT DISTANCE ACCESS 1 (JOAL 1 AND JOAL 2)

# Comment:

The eastern sightline for Access 1 crosses Lot 50 as shown in Maven Drawing C110-6-1. To protect this sightline a land covenant over Lot 50 is proposed to ensure there is no vegetation is planted or structures/fences erected that obstruct the sight line.

I have concerns about this approach, as it requires the owner of Lot 50 to comply with the control on an ongoing basis, and action by Council should there be non-compliance – there could be significant lead time between non-compliance being reported and Council being able to enforce compliance, during which time the sight line at Access 1 could be compromised.

I recommend that the responsibility for maintaining the sightline is placed on the Residents' Society (or similar legal entity), as per the pedestrian right of way easements over Lots. I consider this will provide greater surety that the sightline will be maintained.



Figure 1: Sight line for Access 1 towards the east, showing grass within the legal road obstructing visibility



Noted and agreed. It is understood that maintenance of the sight line will be placed on the Resident's Society (or equivalent).

# 1.2.2 ACCESS 2 (BROWNS ROAD) INCLUDING ASSESSMENT OF ACCESS 3 BUT WITH RECOMMENDATION FOR CONSOLIDATION

#### Comment:

The western sightline for Access 2 crosses 417 Old North Road as shown in Commute Drawing SD A2, and my additional markups in the Figure below. This site is not owned by the applicant and therefore it is not able to apply land covenant over the property to ensure the sight line is protected. Further, as shown in Figure 3, the fencing for this property along with the horizontal and vertical alignment of Old North Road partially restricts the sight line. I am concerned about the potential safety effects due to:

- The high number of users, as the vehicle crossing serves 122 Country Living Lots. The ITA estimates 83 outbound trips and 21 inbound trips in the morning peak period and vice versa for the evening peak hour.
- Old North Road has a Collective Risk Band of "Medium High" along the site frontage.
- The higher operating speed, which increases the risk of likelihood of death or serious injury when crashes occur. The ITA estimates the operating speed to be 68 km/hr eastbound and 76 km/hr westbound.

In my opinion, these combined factors are point to an outcome that does not provide for safe access, contrary to Objective E27.2(4), and Policies E27.3(20) and (21).

While I acknowledge that there is an existing vehicle crossing in this location (Browns Road), this is likely to have a far lower usage than is proposed. Higher usage will obviously increase the likelihood of a crash occurring (i.e. an increase in negative safety effects), and therefore my opinion is that consideration of existing use rights per Section 10 of the RMA does not apply.



I have considered whether a left in/left out arrangement could be a method to manage the sight line shortfall, however doing so would encourage drivers to undertake U-turn movements on Old North Road, which I consider would introduce unacceptable road safety effects.

To address the sight line shortfall, the exploration of relocating to the shared boundary between Lot 55 and Lot 57 is advised. I have shown the most efficient potential realignment of Browns Road to achieve this outcome in Figure 4, it is noted that this would require consideration of other effects of this change in layout. Access 3 could also be removed, as Lot 55 could gain access from the realigned Browns Road, however I acknowledge that Access 3 has sufficient sight lines in its proposed location and relocation of Access 3 is not necessary.

Figure 2: Sight line for Access 2 towards the west, showing sight line over 417 Old North Road

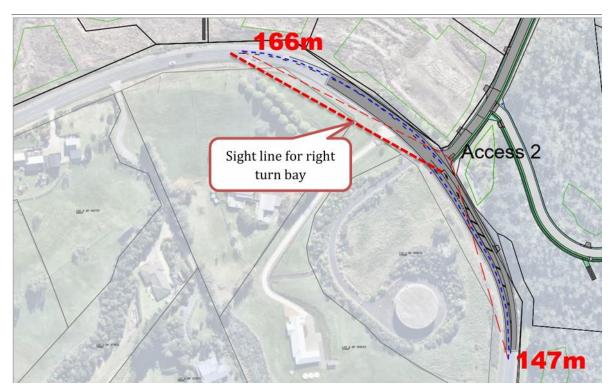
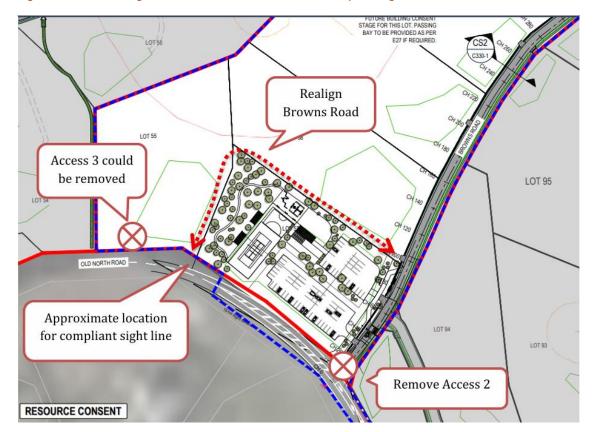




Figure 3: Sight line for Access 2 towards the west, showing sight line obstruction by existing fencing



Figure 4: Potential realignment of Browns Road to achieve a compliant sight line

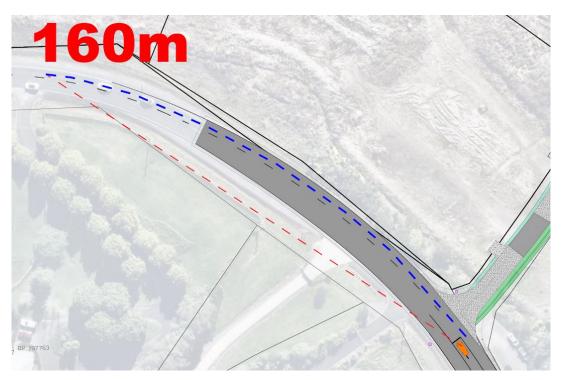




We have reviewed the comment and note:

- This access has been operating for a number of years for users of the Forest (mountain biking / walking) without incident (even before its upgraded to a fully formed right turn bay)
- We generally agree with the comment regarding sight distance from right turn bay. We do
  however consider the diagram provided in the Council review is not quite accurate in that it
  both does not measure the sight distance from the right turn driver and does not measure the
  distance along the curve of the road as per Austroads. The accurate measure using CAD is
  provided in Figure 5 below.

Figure 5: Sight line for Access 2 towards the west, from right turn bay



As such we agree that sight lines from the right turn bay are limited (~158m) vs 166m required due to the curve and neighbouring properties. In this regard:

- The design is for an access not a formal road
- The 166m Austroads requirement is based on the full 3 seconds observation time and 2 seconds reaction time. Austroads does allow observation time to be reduced to 1.5 seconds when driver is alerted (which is considered to be the case in this situation) and / or the observation time reduced to 2.5 or 2.0s under Extended Design Domain (EDD). Applying either of these criteria would mean the sight distance is fully met.
- The right turn entry manoeuvre typically requires less gap for a vehicle to take. In this regard
  Austroads suggest right turn entry requires 4 seconds gap or in this case 83m which is easily
  met.

Additional mitigation measures can be provided to increase alertness and thus to ensure that safe manoeuvres into and out of Access 2 can occur with the limited sight distance. Potential mitigation measures include:

High friction surfacing to assist in further reducing speeds of westbound traffic; and



Additional signage showing a concealed exit for westbound traffic.

It is anticipated that the minor non-compliance with sight distance can be remedied with mitigation measures and movement of access 2 is not required.

# 1.2.3 ACCESS 4 (SERVING LOT 68)

# Comment:

I am concerned about the western sightline for Access 4, which has a significant shortfall. This shortfall is more concerning when the longitudinal gradient of Old North Road is considered, as drivers on the western approach to Access 4 are travelling downhill and therefore will have require longer braking distances (181m and 231m respectively for cars and trucks, assuming a 6% downhill gradient and a 76 km/hr operating speed). Access 4 (servicing Lot 68) should not be approved, to do so will create unacceptable risk. I recommend that access to this Lot should be from JOAL 5 (e.g. with right of way over Lot 67, along the edge of the pedestrian right of way) or JOAL 4 (e.g. with right of way over Lot 71) as potential options to explore, having limited effects on the overall layout of the proposed subdivision from a transport engineering perspective, noting other considerations would need to be taken into account.

Access over Lot 67 to JOAL 5 LOT 7012 - 5068m 77.38 LOT 67 LOT 72 10069m LOT 70 (OY) LOT 69 LOT EG (ED) 109,81 Remove (SC) Access 4 LOT 68 10006m ZZ (EE) 22.77-9 (EH) 59 02 EA 46.76 49.60 18.33 OT 6003 10.064.61 75.52 (EI) ROAD TO **LOT 73** VES (EF) 10026m **LOT 71** OLD NORTH ROAD Access over Lot M 71 to JOAL 4 7011 PROPOSED LAND COVENANT AREA ZZ IS TO BE SUBJECT TO A **LQ€K/4** 10007m BUILDING AND VEGETATION RESTRICTION FOR MAINTENANCE OF SIGHT LINES (EM)

Figure 6: Potential alternative access to Lot 68 to remove sight distance infringement

#### **Commute response:**



As an initial note the Council review in the diagram above has Access 4 in the incorrect position. The actual access position is some 40m north of the position shown above.

Regardless, we do agree (which has been noted in the 19<sup>th</sup> August 2025 response) that there is a short fall in the western sight distance due to the gradient of Old North Road.

As per the 19<sup>th</sup> August response, although Access 4 does not technically meet the AUSTROADs recommended intersection sight distance, Access 4 is proposed to only serve one dwelling and hence is only anticipated to produce a single vehicle trip in the peak hour. It was thus deemed more appropriate to assess Access 4 sight distance against the RTS 6 guide (which assesses accesses rather than intersections) which recommends a sight distance of 105m for an operating speed of 80km/h which Access 4 does comply with.

Further, the measurements assume the forest / trees are still in place (which will be removed).

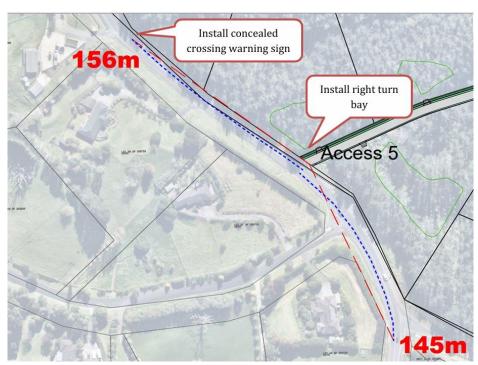
# 1.2.4 ACCESS 5 (JOAL 4)

#### Comment:

Similarly, the shortfall on the western approach to Access 5 is along a downhill gradient requiring 168m and 213m respectively for cars and trucks, assuming a 6% downhill gradient and a 72 km/hr operating speed). Access 5 (JOAL 4) will serve 9 Lots, and therefore will generate a reasonable number of vehicle movements, particularly during peak hours. I have considered whether an alternative location for the access could improve increase the available sightline but have not identified any suitable location.

If the Expert Panel chooses to approve Access 5 in its current location, to address the sight line and ensure turning traffic does not conflict with through movements then I strongly recommend that a right turn bay is provided on Old North Road, per the design for Access 1 and Access 3, and that advanced warning signage alerting drivers to a concealed crossing is installed on the western approach, as indicated in Figure 7.

Figure 7: Mitigations for Access 5



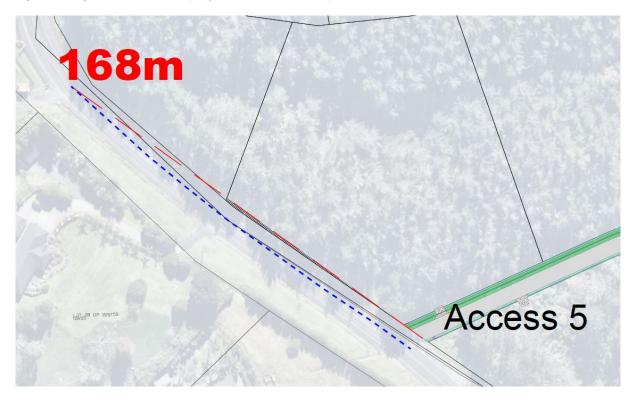


Noted and agree that Access 5 does not meet AUSTROAD sight distance requirements to the east. As per Item G-K of the Commute Specialist Response Dated 19<sup>th</sup> August 2025, Access 5 is only proposed to serve 9 dwellings and therefore we consider Access 5 is to be low volume and find the RTS 6 Guide regarding sight distances to be more appropriate.

The RTS 6 Guide recommends a sight distance of 110m for an operating speed of 80km/h, the provided sight distance easily complies with the above recommendation and is considered to be acceptable.

It is also noted that the 156m sight distance to the west is based on the existing arrangement including the existing trees. When these are removed, a covenant could easily be provided on the adjacent lots (similar to Access 1) to provide the 168m sight distance to the west as suggest by the Council review to fully achieve the Austroads requirements. This is shown in Figure 8 below.

Figure 8: Mitigations for Access 5 (fully Austroads to the west)



In terms of right turn bay we note:

- The access serves only 9 lots, and the users will be familiar with the arrangement.
- The covenant noted above (very small sliver) will mean Austroads sight distance is provided to the west
- None of the other roads / access in the area (some with much greater number of lots) have a right turn bay



### 1.3 JOAL 1 / JOAL 2 / OLD NORTH ROAD INTERSECTION AND JOAL GATES

### Comment:

In my preliminary 's67' memo I identified concerns with the JOAL 1 / JOAL 2 / Old North Road / Pinetone Road intersection. This included:

- Proximity to, and interaction with, Pinetone Road
- Potential for queuing off site, onto Old North Road, due to the limited separation between JOAL 2 and Old North Road, and that heavy vehicles (such as waste collection trucks) are required to use the full carriageway of JOAL 1 and JOAL 2 to negotiate the intersection
- Sightline to the east (which I have discussed previously in this memo).

In response, Commute stated that they consider the arrangement to be acceptable as:

- Access 1 is located approximately 27m from the lot boundary at Pinetone Road and therefore does not infringe the 10m setback Standard E27.6.4.1(3).
- No adverse safety effects are anticipated due to the low volume nature of Pinetone Road.
- The additional of the new turning lane, and the "right-left" stager which means right tuning vehicles do not conflict.

The split JOALs are not anticipated to lead to any queuing concerns. This access serves 21 Country Living Lots creating 14 outbound trips and 4 inbound trips in the AM peak period and vice versa for the evening peak hour. There is also space available to accommodate two cars before queuing onto Old North Road.

Any gates will be set back at least 6m from the JOAL intersection.

Regarding the interaction with Pinetone Road, I remain concerned about the interaction between Pinetone Road and Access 1. To reduce safety risks at this location, I recommend that the applicant provide a right turn bay for Pinetone Road.

Regarding the JOAL 2 tie in with JOAL 1, I am not convinced by Commute's assessment of the potential for queuing off the site. I note that JOAL 1 serves 33 lots, and as such will operate similar to a low volume load public road in terms of traffic volumes. Auckland Transport's Urban and Rural Road design Guide Table 2 requires Local to Arterial Road intersections to accommodate an 8.3m truck to remain within the marked lane when tracking through the intersection. 8m truck tracking provided in the ITA, and reproduced in Figure 9 below, shows an outbound truck needing to occupy the full carriageway of JOAL 1 and JOAL 2. A truck driver undertaking this manoeuvre would not be able to see any car turning right from Old North Road into the site. Further, for an inbound truck movement, an outbound car would need to wait a significant distance within the site to allow the truck to pass. Compounding this matter is the potential for gates to be erected.

I consider that the proposed arrangement is likely to result in queuing onto Old North Road, and conflict between inbound and outbound vehicles. This could be addressed by the applicant by:

- JOAL 2 is widened at the intersection with JOAL 1, to ensure an 8m truck can manourvre through the intersection without tracking across the opposing vehicle lane
- Any gates on JOALs are set back at least 12m from the road boundary, to provide stacking space for one truck or two cars.



This will require deviation from the Scheme Plan as boundary adjustments will be required, as such confirming this redesign now is encouraged and at a minimum a condition of consent that highlights this requirement should be included.

I have shown these recommendations in Figure 10.

Figure 9: 8m truck tracking at JOAL 1 / JOAL 2 / Old North Road intersection

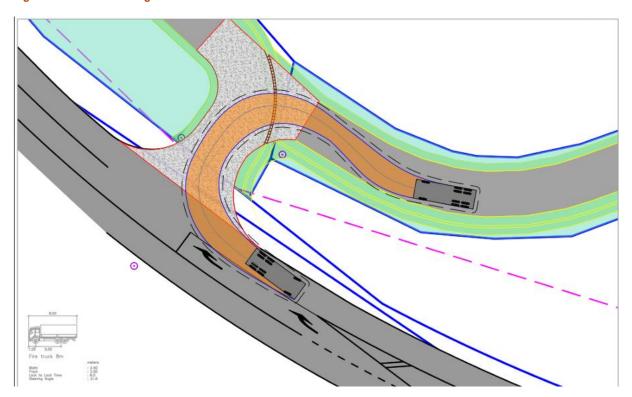
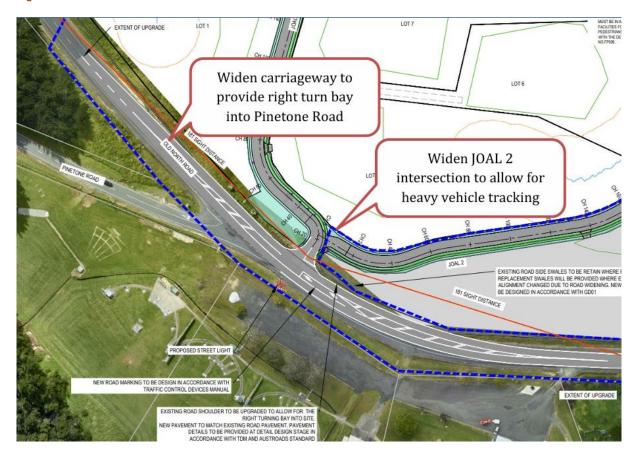




Figure 10: recommended amendments to Old North Road/Access 1



In regard to the above comments:

- Pinetone Road is a low volume, dead end, cul-de-sac road (in the order of 15 dwellings), clear sight lines are provided between each intersection, and the proposed Access 1 is located well outside the vehicle access restriction area of 10m.
- Most of the traffic entering Pinetone Road will be turning left (from Auckland).
- As per the Commute Specialist Response dated 18<sup>th</sup> August 2025, SIDRA intersection modelling of the Access 1 intersection was undertaken in both the AM and PM peaks.
   Modelling highlighted that queuing on all approaches would not exceed an average of 0.5 vehicles across both the AM and PM peak periods
- We agree with the comment regarding the 8m truck and as such the engineering plans have been altered to ensure an 8m truck and 85th % vehicle can use the access simultaneously.
- As per latest plans, no gates are proposed on the JOALs.

A "short" right turn bay is proposed into Pinetone Road which will require minimal widening of Old North Road. Detailed design of the right turn bay can be left to EPA stage due to all works being within the road reserve.

The above have been altered in the latest civil engineering drawings.



#### 1.4 INTERIOR JOAL AND RIGHT OF WAY DESIGN

#### Comment:

In my s67 memo I identified the following concerns:

- A lack of turning heads on JOALs
- Some sightlines conflict with lot boundaries, however restrictions on planting can be included if required.
- Multiple conflicts were shown on the vehicle tracking assessments (e.g. with berms and footpaths)
- Whether sightlines between passing bays were provided.

#### Commute responded, stating that:

- Truck turning facilities have been provided where trucks are required to enter JOALs and turn around
- The lots are all large and any minor conflicts in tracking can be addressed at EPA stage
- Sightlines between passing bays has been assessed and can be seen in section 10.4.2 of the ITA.
- Some sightlines conflict with lot boundaries, however restrictions on planting can be included if required

#### **Commute response:**

Noted see below.

#### 1.4.1 TURNING HEADS WITHIN COUNTRYSIDE LIVING JOALS

# Comment:

I disagree with Commute's assertion that truck turning has been catered for. As an example, JOAL 1 has a "TRUCK TURNING FACILITIES" approximately 120m from the end of the JOAL, as shown on Maven Drawing C300-2-2. This would require the truck to undertake an extensive reversing manoeuvre, which creates a safety risk for vulnerable road users. Further, it appears that the turning facility extends into Lot 15. An easement is proposed in favour of Auckland Council, however it is unclear if easement would also be provided to private waste collection trucks. A similar arrangement occurs for other JOALs.

NZS4404:2010 Land Development and Subdivision Infrastructure Section 3.3.16.1. states "A maximum 3-point turning head in the common area shall be provided at the end of all accesses serving three or more rear lots. Circulate, L, T, or Y shaped heads are acceptable". I therefore recommend that, if the application is approved, a condition of consent is applied that requires all private accessways to provide a turning head in accordance with NZS4404:2010 Land Development and Subdivision Infrastructure Section 3.3.16.1.

For the avoidance of doubt, I do not consider turning heads to be mandatory for the Retirement Village. As the Retirement Village roads and access will be actively managed by the operator, heavy vehicle access (e.g. for waste collection) can be directly managed and heavy vehicles restricted to areas where extensive reverse manoeuvring is not required.

# Commute response:

Noted and agreed regarding the retirement village





Turning areas for trucks has been provided along JOALS. It is proposed for rubbish trucks to use the turning areas provided and have a "runner" collect rubbish from end of JOALs; therefore, it is not anticipated for rubbish trucks to be required to access the end of JOALs and emergency vehicle access will be provided within Lots which is considered to be acceptable.

#### 1.4.2 VEHICLE TRACKING CONFLICTS

#### Comment:

I accept there is sufficient space within the site to address vehicle tracking conflicts. I therefore recommend that, if the application is approved, a condition of consent is applied requiring the consent holder to demonstrate that each JOAL and vehicle access has been designed to accommodate B85 car tracking and 8m truck tracking where refuse collection within the JOAL is proposed.

#### Commute response:

Noted and agree regarding the condition of consent.

#### 1.4.3 SIGHTLINES BETWEEN PASSING BAYS

#### Comment:

Section 10.4.2 of the ITA provides spacing between passing bays, however it does not assess sightlines between passing bays, other than to note that JOAL 5 does not provide a passing bay but has clear lines of site along its length. Furthermore, it is unclear which Lots Commute proposes to apply planting restrictions.

I therefore recommend that, if the application is approved, a condition of consent is applied that requires the consent holder to demonstrate that sight distance is provided between all passing bays. Furthermore, I recommend that passing bays are added to JOAL 7 at not more than 100m spacing, consistent with Commute's recommendation in Section 10.4.2 of the ITA.

# Commute response:

Sightlines between passing bays has been assessed and can be seen in section 10.4.2 of the ITA. In this regard:

Generally, sight lines between passing bays are provided; however, some cases sight lines conflict with Lot boundaries. In this regard:

 These JOALs are low volume and are not anticipated to serve more than 10 dwellings, meaning it is unlikely for vehicle conflict to occur.

# 1.5 WALKING AND CYCLING CONNECTIVITY

#### 1.5.1 COUNTRYSIDE LIVING DEVELOPMENT

# Comment:

The Masterplan and Landscape Concept Plan shows multiple pedestrian paths through the site (refer to Figure 11), easements are shown on the Lot plans, although formation of the connections is not shown in the Engineering Drawings. If these connections are not provided this will significantly limit walking and cycling accessibility, resulting in increased car dependency.



I therefore recommend that, if the application is approved, a condition of consent is applied that requires the consent holder to form these paths to Council's satisfaction.

Furthermore, given the lack of footpath facilities within JOALs, I recommend that traffic calming is provided at not more than 50m spacing along all JOALs.

HIGHD

ONLINE TABLE

ONLINE

STAGE 13

STAGE 12

STAGE 12

STAGE 2

STAGE 3

STAGE 3

STAGE 6

STAGE 6

Figure 11: LOT 1 & 2: TRACK NETWORK, (Source: Rangitoopuni Masterplan)

# **Commute response:**

Noted and agreed that pedestrian footpaths should be confirmed and added to engineering plans; however, the footpath connections will be private but will not restrict access to the public.

We do not agree that the paths will need to be formed to Council requirements as there is no requirement for this as they will be privately managed. Refer to planning response for additional information.

Traffic calming devices are not required on a private rural accessways. They carry low vehicle volumes, operate at naturally reduced speeds due to their rural design and context, and are not part of the public roading network. Introducing engineered calming measures in this environment would provide no material safety benefit, and in some cases could impede services or emergency vehicle access.

# 1.5.2 RETIREMENT VILLAGE SHARED USE PATH

# Comment:

The retirement village includes a shared use path to provide a link to Riverhead via Mill Grove (discussed below). This has a gradient of up to 11.6% as well as potential visibility issues at corners. This creates the potential for high bicycle speeds, leading to crashes and conflicts with pedestrians if the path were to be used for that purpose.



I also understand that the applicant has proposed that the path be available for use by golf carts. I consider it unlikely that a 3m wide shared use path is sufficient to allow a golf cart to safely pass pedestrians and cyclists. Golf carts will require 1.6m – 1.9m width (assuming carts are 1.2m – 1.4m wide and require 0.5m clearance), and a cyclist occupies around 1.5m width3. At higher speeds, users generally need additional width. This indicates the path theoretically may need to be 4m wide if golf cart access were to be provided before considering the acknowledgement below of the feasibility of this access being of significant question in terms of being provided across Wautaiti Stream and Esplanade Reserve, the current 1.8m width of the Mill Grove access and the safety of such methods of transport in the local road network.

# **Commute response:**

# Regarding gradient and corners;

- The site is not flat in nature and gradients up to 11.6% are required in order to practicably provide the pedestrian connection
- We consider that the shared path of 3m width is adequate for pedestrians and cyclists to safely navigate corners when required.

# Regarding the use of golf carts:

- The size of golf carts can be controlled. Typical golf carts are 1.2m in width.
- A 500mm clearance is considered to be excessive as Auckland Transports Technical Design Manual requires 500mm clearance for trucks and heavy vehicles. A golf cart is not considered to be a truck or heavy vehicle.
- A 3m shared path is considered to be wide enough to allow pedestrians and cyclists to pass golf carts when required; however, this is not considered to occur often.

# 1.5.3 MILL GROVE ACTIVE MODES CONNECTION

# Comment:

In my s67 memo I expressed concerns about the proposed shared use path within Retirement Village, that was proposed to connect to Mill Grove (subject to Council undertaking works within the Council reserve). If this connection is not provided this will significantly limit walking and also potentially cycling accessibility, resulting in increased car dependency. Ideally the connection between the site and Mill Grove should to be formed as part of the initial stages of development of the Retirement Village, as it also enables walking and also potentially cycling access to the Countryside Living Development. However, I acknowledge that the shared use path would require capital expenditure and a more pragmatic outcome may be to allow some development to proceed without the shared use path, to allow the applicant to generate cash flow for the development prior to incurring the costs of constructing the shared use path.

In Minute 2 of the Expert Panel, the Panel requested that Council comment on the consent conditions that might be imposed to physically form and/or reinstate the pedestrian access including the bridge and provide access between the site boundary and this bridge.

Regarding the formation of a path within the Wautaiti Stream and Esplanade Reserve, my recommendation is that it is formed to be consistent with path within Lot 2 (noting that may be refined if golf cart access not viable), to provide a consistent level of service for users subject to considerations including the effect of such a path on the esplanade reserve function and the width of bridge design.



Regarding the bridge, I understand that Council has a committed project to reconstruct the bridge with a width of 1.6m. Furthermore, the existing accessway from this proposed bridge to Mill Grove is 1.8m in width, with a legal width of approximately 3m.

Auckland Transport's Engineering Design Code - Cycling Infrastructure 4 recommends a minimum width of 3m for shared use paths. Typically, additional width is typically required for shared use paths where there are "hard edges" (such as fencing and bridge railings) as users will "shy" way from these edges. However, the existing accessway between the proposed bridge and Mill Grove is a fixed constraint. As such, this section will operate with a reduced quality of service for users, but I consider that widening the bridge and existing accessway path to 2.4m – 3m should be explored by the applicant in consultation with the Council and on a reasonable timeline to enable this to establish if a pragmatic solution to provide for cycle access could exist, as shown in the Figure below.

Narrowed section with reduced quality of service

Distance: 3.1 Meters

Figure 12: Section of future shared use path with reduced width

# Commute response:

It is considered that widening the bridge and existing accessway rests with Council and is outside of this application.

It is considered that short sections of narrower width can be managed to not materially affect usability and safety of the path.

# 1.5.4 GOLF CARTS WITHIN COUNCIL RESERVES AND ROADS

# Comment:

NZTA has stated that, as a golf cart doesn't meet general safety requirements, they cannot be operated on a road. They also aren't classified as a mobility device and therefore cannot be used on



the footpath5. Although this may not apply to shared use paths within Council reserves, I consider it would be inappropriate to permit golf carts within the Council reserve as this may conflict with public use of the space. Furthermore, golf carts would not be permitted to access Mill Grove, and it would not be appropriate for the applicant to use the Council reserve to park or manoeuvre golf carts around for their return trip to the retirement village. Furthermore, as noted above, the proposed bridge and connection to Mill Grove are constrained in width, and would not be able to accommodate golf carts. Following this clarification the applicant has a choice as to whether they would want to retain Golf Cart access to the site boundary or would want to confirm the path design within the site without providing for such vehicles.

I therefore recommend a condition of consent is applied that requires the applicant to demonstrate, as part of engineering plan approval, that:

- If golf cart access is to be retained to the site boundary the shared use path within the site would need to be amended to a sufficient width for golf carts (potentially 4m wide).
- That sufficient space is provided within the applicants site for parking and manoeuvring golf carts, without encroaching into Council reserve (Wautaiti Stream tributary) and that a means of control is provided on the boundary to contain these vehicles within the site.
- The shared use path within the site incorporates speed calming measures as required to manage cyclist (and golf cart, if proposed) speeds on steeper sections and at blind corners.
- The applicant will provide for in agreement with the Council for the shared use path connection through the Council reserve (Wautaiti Stream tributary) to Mill Grove, this is stated with an understanding that the Council have a committed project for the reinstatement of the bridge anticipated in 2026. At this point unknowns and uncertainties in respect to the position of the land owner on cycle use from the reserve, consenting uncertainty given characteristics of the reserve, the current design of the replacement bridge and the accessway width are barriers to cycle use which I would encourage the applicant to engage with the Council on to explore if these matters can be addressed.
- Ideally the connection between the site and Mill Grove should to be formed as part of the initial stages of development of the Retirement Village, as it also enables walking and potentially cycling access to the Countryside Living Development. However, I acknowledge that the shared use path would require capital expenditure and a more pragmatic outcome may be to allow some development to proceed without the shared use path, to allow the applicant to generate cash flow for the development prior to incurring the costs of constructing the shared use path.

#### **Commute response:**

Refer to Section 1.5.2.

It is noted that recommended condition can be discussed at future condition conferencing/workshops.

# 1.6 ITEM 7 - RECOMMENDATION

#### Comment:

Based on the information available, I do not support the application in its current form, due to potential safety issues with Access 1, Access 2, Access 4 and Access 5. In my professional opinion, the proposal presents unresolved transport safety risks that are not adequately mitigated. These risks are particularly concerning given the rural context and the high-risk nature of the surrounding road network.

Key concerns include:



- The proposed arrangement of the Old North Road / Pinetone Road / Access 1 intersection is likely to increase risks for existing users of Pinetone Road, compromise sightlines, result in queuing onto Old North Road, and create conflict between inbound and outbound vehicles.
- Access 2 (Browns Road) serving 122 Country Living Lots has a sightline shortfall to the west over third-party land, which cannot be protected by covenant. This creates an unacceptable safety risk for right-turning vehicles.
- Access 4 (servicing Lot 68) has a significant sightline shortfall and is located on a downhill gradient, increasing braking distances.
- Access 5 (JOAL 4) serving 9 Country Living Lots also has a sightline shortfall on a downhill gradient.
- Sufficient passing opportunities and turning heads are not provided within JOALs, which may result in unsafe reversing manoeuvres and vehicle conflicts, particularly for pedestrians/cyclists using JOALs.
- Walking and cycling connectivity and safety are not adequately demonstrated, particularly in relation to the shared use path to Riverhead and its interface with Council reserve land.
- I recommend the following matters, including limited and specific changes to the design of
  accesses, be undertaken prior to the decision in order that transport safety matters can be
  properly reconciled. Should my recommendations be adopted, I would support the proposal,
  with conditions as listed in Section 8 of my memo. But if the Panel is minded conditions of
  consent at a minimum could be imposed to provide the acknowledgement and method to
  address these concerns.
- Advanced warning signage must be installed on the western approach to alert drivers to the concealed crossing.

# Access 1 (JOAL 1 and JOAL 2):

- The land covenant proposed to protect the sightline over Lot 50 must specify that maintenance responsibility lies with the Residents' Society (or similar legal entity).
- JOAL 2 must be widened at its intersection with JOAL 1 to accommodate 8m truck movements without tracking across opposing lanes. This will require deviation from the Scheme Plan as boundary adjustments will be required, as such confirming this redesign now is encouraged and at a minimum a condition of consent that highlights this requirement should be included.
- A right-turn bay must be provided on Old North Road for vehicles turning into Pinetone Road.

# Access 2 (Browns Road):

- This access should be relocated to achieve compliant sightlines, potentially by realigning Browns Road to the shared boundary between Lot 55 and Lot 57.
- Access 3 may be removed, with Lot 55 gaining access via the realigned Browns Road per the above.

# Access 4 (Lot 68):

 This access should be removed. Lot 68 should be accessed via JOAL 5 (e.g. right of way over Lot 67) or JOAL 4 (e.g. right of way over Lot 71).

# Access 5 (JOAL 4):

• A right-turn bay must be provided on Old North Road.

#### JOAL Design:





- All private accessways within the Countryside Living Development must provide a turning head in accordance with NZS4404:2010 Section 3.3.16.1.
- Each JOAL and vehicle access must accommodate B85 car tracking and 8m truck tracking where refuse collection is proposed.
- Sight distance must be demonstrated between all passing bays. Passing bays must be added to JOAL 7 at intervals not exceeding 100m.
- Any gates on JOALs must be set back at least 12m from the road boundary to allow stacking space for one truck or two cars.
- Traffic calming is provided at not more than 50m spacing along all JOALs.

# Pedestrian Connectivity:

• All pedestrian paths shown in the Lot 1 Scheme Plan must be formed to Council's satisfaction.

#### Shared Use Path to Mill Grove:

- If golf cart access is to be retained to the site boundary the shared use path within the site would need to be amended to a sufficient width for golf carts (potentially 4m wide).
- That sufficient space is provided within the applicants site for parking and manourvring golf carts, without encroaching into Council reserve (Wautaiti Stream tributary) and that a means of control is provided on the boundary to contain these vehicles within the site.
- The shared use path incorporates speed calming measures as required to manage potentially cyclist (and golf cart, if proposed) speeds on steeper sections and at blind corners.
- The applicant will provide for in agreement with the Council for the shared use path connection through the Council reserve (Wautaiti Stream tributary) to Mill Grove, this is stated with an understanding that the Council have a committed project for the reinstatement of the bridge anticipated in 2026. At this point unknowns and uncertainties in respect to the position of the land owner on cycle use from the reserve, consenting risks relating to the characteristics of the reserve, the current design of the replacement bridge and the accessway width are barriers to cycle use which I would encourage the applicant to engage with the Council on to explore if these matters can be addressed.
- Ideally the connection between the site and Mill Grove should to be formed as part of the initial stages of development of the Retirement Village, as it also enables walking and potentially cycling access to the Countryside Living Development. However, I acknowledge that the shared use path would require capital expenditure and a more pragmatic outcome may be to allow some development to proceed without the shared use path, to allow the applicant to generate cash flow for the development prior to incurring the costs of constructing the shared use path.

#### **Commute response:**

It is deemed that the above concerns have been addressed in responses in above sections.

It is noted that proposed conditions can be discussed at future conferencing/workshops.



# 2 – AUCKLAND TRANSPORT – SIVA JEGADEESWARAN & MARTIN PEAKE

The comments within the Auckland Council covering letter prepared by Siva Jegadeesawaran & Martin Peake are in general a summary of the traffic / transport reviews undertaken by Auckland Council. As such, the Commute commentary in response to the covering letter generally refers to detailed review of the other two more substantive reviews, provided further below.

It is noted that headers/topics and numbering from the reviews have been used for this response.

Stormwater related comments (8) are not considered to be a traffic engineering matter and therefore have not been addressed as part of this RFI response.

#### 2.1.1 PARAGRAPHS 17-23 - TRIP GENERATION AND DISTRIBUTION

# Comment:

- 17. The Commute Specialist Comments Response highlights that the subject land is already zoned for Rural Countryside Living, and states that "the site could already be generating traffic which is anticipated by the Unitary Plan". However, the current use is forestry, and the proposed housing represents a change of use. Under AUP Rule E27.6.1, residential subdivisions with capacity to accommodate more than 100 dwellings (see activity (T3B) in Table E27.6.1.1) must assess trip generation as a restricted discretionary activity, making it appropriate to consider effects on the transport network.
- 18. The activity has an overall status as Non-Complying, which allows for a comprehensive assessment of the development's trip generation impacts. The Auckland Council Memorandum of Strategic and Planning Matters will address the permitted baseline.
- 19. Commute Specialist Comments Response attempts to establish a kind of baseline by estimating potential trip generation under the site's existing Countryside Living zoning. However, this assessment is considered inaccurate for the following reasons:
  - a. Lot Size Assumption The analysis assumes subdivision into 1-hectare lots, whereas the Auckland Unitary Plan (E39 Subdivision Rural) requires a minimum lot size of 2 hectares in this zone.
  - b. Gross vs Net Area The assessment is based on the gross site area and does not account for land required for supporting infrastructure (e.g., accessways). A more accurate assessment should be based on the net developable area.
- 20. In addition, resource consent would be required. As such, the suggested 'anticipated baseline' presented does not provide a reliable comparison for evaluating the trip generation effects of the proposed development.
- 21. Based on the existing zoning and development controls, the site could generate approximately 152 vehicle trips. In contrast, the proposed development, including the retirement village, is forecast to generate 308 trips, as per the Commute assessment. This suggests that the proposed development would result in approximately double the number of trips compared to what could occur under the current Countryside Living Zone provisions.
- 22. The trip rate used for residential dwellings (0.85 trips/dwelling) is considered low for a rural area with limited access to amenities and public transport. NZTA research report 453 suggests a more appropriate rate is 1.1–1.4 trips/dwelling. A sensitivity test using 1.1 trips/dwelling is considered more reasonable.
- 23. Additional traffic from a community facility at Access 2 (used for recreational access) was also assessed. These trips are accepted and not assigned to the wider network, as they reflect existing usage patterns. Trip distribution assumptions are mostly accepted, except for the assignment of all eastbound SH16 traffic to Old North Road. Google Maps data suggests Coatesville-Riverhead Highway may offer similar or better travel times during peak hours. Therefore, traffic is likely to split between both routes, depending on the origin points (e.g.,



Access 1, Access 2, or Forestry Road). This has implications for the wider network, particularly the SH16/Coatesville-Riverhead Highway intersection.

# **Commute response:**

- 17. See planning response.
- 18. Noted. The proposed developments traffic effects have already been assessed in great detail despite the site being live zoned.
- 19. See planning response.
- 20. See planning response
- 22. As per Section 1.1.1 of the Commute Specialist Response Dated 19<sup>th</sup> August a sensitivity test of 1.1 trips per dwelling has already been conducted.
- 23. Noted.

# 2.1.2 PARAGRAPHS 24-37 - TRAFFIC EFFECTS

#### Comment:

#### Wider Traffic Effects

- 24. The operation of State Highway 16 (SH16)—particularly the SH16 / Coatesville-Riverhead Highway intersection and the stretch between Coatesville-Riverhead Highway and Brigham Creek Road—is identified as a key constraint in terms of transport capacity and network performance.
- 25. While Commute has stated that these constraints are not the developer's responsibility due to the site's distance (approximately 5 km from SH16) and the assumption that wider traffic effects have been accounted for in the Unitary Plan, it is considered that:
  - a. Despite the distance, the SH16 corridor and intersection are critical parts of the wider network and do influence the feasibility of development at this site.
  - b. Development should be coordinated with the timing of necessary roading upgrades to ensure the network can support additional traffic.
  - c. It is agreed that the developer is not responsible for implementing these upgrades, but their timing remains relevant to the overall planning and staging of the development.
- 26. The operation of SH16 is managed by NZTA, who have been invited to comment on the proposal through the Fast Track process, though their position is currently unknown. While NZTA oversees the State Highway network, Auckland Transport is responsible for the non-state highway roads such as arterial, collector and local roads, including Old North Road and Coatesville-Riverhead Highway. The proposed development has the potential to significantly affect the operation of these local roads, but the extent of these impacts has not yet been quantified.
- 27. The Coatesville-Riverhead Highway intersection experiences severe morning peak congestion, with long delays and queues on SH16, Coatesville-Riverhead Highway, and Old North Road. Although SH16 traffic has priority, frequent yielding to turning vehicles disrupts flow. This is further worsened by flow breakdown on SH16 between Coatesville-Riverhead Highway and Brigham Creek Road, where high traffic volumes and road topography create a shockwave effect that compounds congestion at the intersection.
- 28. During the evening peak, westbound traffic experiences delays at the SH16 / Brigham Creek Road roundabout due to a lane merge from two lanes to one. This bottleneck reduces the



- efficiency of the intersection and causes queuing on SH16, Brigham Creek Road, and Fred Taylor Drive approaches.
- 29. The Commute ITA included an initial assessment of the SH16 / Old North Road and SH16 / Coatesville-Riverhead Highway intersections, but this has not been updated in the Commute Specialist Comments Response. The original traffic modelling does not accurately reflect current intersection operations, meaning the effects of the proposed development on these key SH16 intersections remain unquantified. Instead, the response assumes that Stage 2 of the SH16 Waimauku to Brigham Creek Road upgrade will be in place to accommodate the projected traffic.
- 30. The ITA supporting PPC100 similarly assumed future upgrades to the SH16 / Coatesville Riverhead Highway intersection (specifically a roundabout) and did not assess the existing intersection layout due to its known congestion issues.
- 31. Development traffic is likely to use both Coatesville-Riverhead Highway and Old North Road to access SH16, rather than solely Old North Road as assessed by Commute. As a result, both already congested routes would be affected by the proposed development.
- 32. Due to the existing congestion at the SH16 / Coatesville-Riverhead Highway intersection, it is considered that an upgrade of this intersection should be completed prior to the occupancy of dwellings on the subject site. This would help mitigate actual and potential effects on the local road network and align with the proposed Precinct Provisions under PPC100.
- 33. As Mr Peake observes in his Technical Note, there was some discussion during the PPC100 hearing about allowing up to 30 dwellings to be developed prior to the SH16 / Coatesville Riverhead Highway intersection upgrade; however, no specific evidence was provided to justify this threshold.
- 34. The section of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road already experiences operational issues—eastbound in the morning peak and westbound in the evening peak. The proposed development would contribute additional traffic, further exacerbating these existing problems.
- 35. There was disagreement among traffic experts during PPC100 regarding whether any development could proceed before the four-laning of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road. As Mr Peake notes, while some experts supported limited development, others opposed it based on traffic impacts. The analysis did not account for the current proposed development, so cumulative effects remain unclear. Without further assessment, it is considered that no development should occur prior to the upgrade (4 laning), although there may be scope for some development—subject to additional evidence/assessment.
- 36. It is considered that no dwellings should be occupied until Section 1 of NZTA's Stage 2 upgrades— specifically the SH16 / Coatesville-Riverhead Highway intersection upgrade and the four-laning of SH16 from that intersection to Brigham Creek Road—are implemented. Consistency in development thresholds between this proposal and PPC100 is important, and any conditions imposed should not be more restrictive than those applied to PPC100, given the subject site is live-zoned. The Commute Specialist Comments Response also supports the implementation of the Section 1 NZTA Stage 2 improvements prior to development.
- 37. AUP Chapter E21.3(7) requires enabling alternative approaches to site access and infrastructure provision where the occupation, use and development of Treaty settlement land is constrained by access or the availability of infrastructure. Consideration has been given to potential alternative approaches for addressing transport effects on SH16 intersections, particularly Coatesville Riverhead Highway and Old North Road. However, it is concluded that the NZTA Stage 2 project remains the most appropriate solution.

Also see Planner response regarding wider effects, especially relating to SH16.



In terms of the wider SH16 corridor, the Integrated Transportation Assessment confirms that the proposed development will have only a minimal effect. The Coatesville–Riverhead Highway / SH16 intersection is already operating at capacity, however the development does not add turning movements at this location, and generated traffic is expected to avoid it due to existing congestion. Instead, the majority of site traffic will route through the Old North Road / SH16 / Taupaki Road intersection, which generally operates within acceptable standards and has sufficient capacity to accommodate the proposal (noting the interaction between SH 16 intersections in this area is difficult to capture due to let-in behaviour at the SH16 / Coatesville-riverhead Highway intersection which is not reflected in the SIDRA models). Further:

- Stage 2 of the SH 16 safety improvements project includes the upgrade of the Coatesville-Riverhead Highway / SH 22 intersection and four lanes on SH16 (to Brigham Creek roundabout) and has recently been confirmed to now have funding by NZTA.
- The subject site is already zoned as 'Rural Countryside Living' and is considered to be
  a live zone; therefore, it is expected that the site could already be generating traffic
  which has already been considered by the Unitary Plan; and
- This section of Stage Highway is some 5km from the subject site.

While some other intersections onto SH16 (such as Riverhead Road and Oraha Road) already experience delays for vehicles exiting onto the State Highway, the addition of development traffic results in only very minor changes and does not materially worsen existing conditions.

Overall, the ITA concludes that the proposal will only have a minimal impact SH16 and the wider transport network.

#### 2.1.3 PARAGRAPHS 38-41 - LOCAL ROAD NETWORK EFFECTS

#### Comment:

- 38. Traffic modelling using SIDRA was conducted for key local intersections near the development site. The selected intersections and modelling approach are considered appropriate, including scenarios with existing traffic, the proposed development, and cumulative effects with PPC100 (pending approval).
- 39. The modelling calibration is accepted, though the Deacon Road / Riverhead Road intersection layout is not accurately reflected. However, since it is forecast to operate well within capacity, this is not expected to significantly affect the results.
- 40. At the Riverhead Road / Coatesville-Riverhead Highway roundabout, the AM peak is forecast to operate at Level of Service (LOS) C overall, with the Riverhead Road approach at LOS E. Assuming it is approved, PPC100 contributes significantly to this, while the proposed development adds only 31 vehicles. The modelling may overstate cumulative effects, as it does not account for pass-by or diverted trips from the local centre.
- 41. Despite some limitations, the overall traffic modelling does not raise significant concerns for the local network.

# **Commute response:**

Noted and we agree especially relating to Comment 41.

#### 2.1.4 PARAGRAPHS 42-43 - ACCESS OPERATION

# Comment:

42. Vehicle access points on Old North Road (Access 1 and Access 2) were modelled using SIDRA. However, the models do not reflect the proposed engineering layout, which includes a



- right-turn bay. This omission likely overestimates traffic impacts, as vehicles turning right would otherwise delay through traffic.
- 43. Despite this, the modelling represents a worst-case scenario and still forecasts acceptable performance at the access points, with no significant queuing or delays expected.

Noted and agree with overestimates / conservative assumptions.

# 2.1.5 PARAGRAPHS 44-48 – ACCESS 1 (OPPOSITE PINETONE ROAD)

#### Comment:

- 44. The existing site access on Old North Road will be upgraded with a right-turn bay and flush median. However, the design does not fully account for nearby Pinetone Road. It is recommended that right-turn movements to and from Pinetone Road be better integrated into the design. Final details can be resolved during the EA process, and sufficient land appears to be available for any required widening.
- 45. Visibility splays are generally acceptable, with a land covenant proposed to maintain sightlines to the east. To the west, vegetation and embankments may need to be removed or modified.

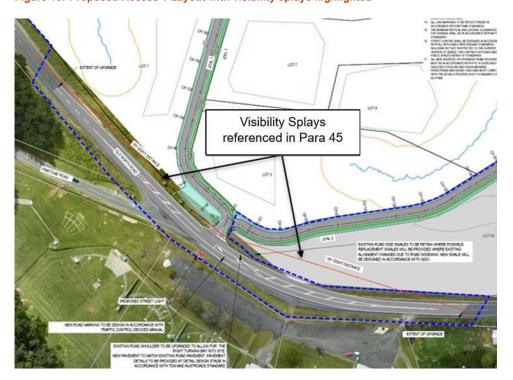


Figure 13: Proposed Access 1 Layout with visibility splays highlighted

- 46. Vehicle tracking shows a 10.3m truck slightly encroaching into the right-turn bay, which will need to be addressed at the EPA stage. The access splits into two JOALs, and while queuing is expected to be minimal, the design should ensure vehicles can enter without being blocked by outbound queues.
- 47. Gates are proposed for both JOALs and will be set back at least 6m, forming a T-shaped turning head to allow vehicles to turn around safely if needed.
- 48. Access 1 is within 10m of Pinetone Road, triggering vehicle access restrictions under AUP Rules E27.6.4.1(2) and (3). While this requires assessment as a restricted discretionary activity, there are no existing safety concerns, visibility is adequate, and the access is not



expected to impact the safe or efficient operation of the road network. Pinetone Road is a low-volume cul-de-sac

# **Commute response:**

Item 44-46: Refer to Section 1.3 regarding revised tracking for Access 1 and a right turn bay for Pinetone Road. Also see revised engineering drawings.

47. It is noted that as per latest plans, no gates are proposed on JOALs.

48. As per Section 1.1.4 of the Commute Specialist Response dated 19<sup>th</sup> August, Pinetone Road is located some 27m from access 1 which does not trigger a vehicle access restriction assessment.

# 2.1.6 PARAGRAPHS 49-51 - ACCESS 2 - BROWNS ROAD

#### Comment:

- 49. Access 2 on Old North Road is to be upgraded with a right-turn pocket, but it is located on the outside of a bend, raising visibility concerns. While sight distances meet AustRoads standards based on surveyed speeds, the visibility splay to the west crosses a neighbouring property where a future fence adjustment could obstruct sightlines. Measures will be needed to preserve visibility, especially given the 80 km/h speed limit. A potential option is to relocate Access 2 to the location of Access 3, with the accessway being diverted around the rear of the proposed community area and parking area.
- 50. A gate is proposed 35m from Old North Road, allowing queuing space for approximately seven vehicles. However, no assessment has been provided on gate operation or potential queuing impacts. A turnaround area should be included for vehicles unable to enter.
- 51. Vehicle tracking shows a 10.3m truck slightly encroaching into the right-turn bay, which will need design adjustments at the EPA stage. The access splits into two JOALs, and while traffic volumes are low, the design should ensure vehicles can enter without being blocked by outbound queues.

# **Commute response:**

- 49. Refer to Section 1.2.2 regarding sight distance at Access 2.
- 50. Refer to Section 2.2.3 of the Commute Specialist Response dated 19<sup>th</sup> August. Vehicle queuing at access 2 is not anticipated to exceed a single vehicle in the peak hour.
- 51. Noted and agreed.

#### 2.1.7 PARAGRAPHS 52 - ACCESS 3 - OLD NORTH ROAD

# Comment:

52. The location of Access 3 and an assessment of visibility is provided in the Commute Specialists Comments Response. Visibility from the access meets the AUSTROADS standard. Any gates would need to be set back sufficiently far into the site to enable a vehicle to wait clear of Old North Road for the gate to be opened

#### **Commute response:**

Noted, as per latest plans, no gates are proposed on Access 3.

#### 2.1.8 PARAGRAPHS 53-54 - ACCESS 4 - OLD NORTH ROAD



# Comment:

- 53. Access 4 has been assessed for visibility, with sightlines to the east meeting AUSTROAD standards. However, visibility to the west falls short only 110m is available versus the 131m required. This constraint is due to the vertical alignment of Old North Road.
- 54. There may be potential to adjust the access location to improve western visibility while maintaining adequate eastern sightlines. An alternative would be for this single residential lot to be accessed from either JOAL 4 of JOAL 5. This would remove the safety risk associated with the shortfall in visibility from Access 4. Any gate installed at Access 4 should be set back far enough to allow vehicles to wait off Old North Road while waiting for entry.

# **Commute response:**

Refer to Section 1.3.

It is noted that as per latest plans, no gates are proposed on Access 4.

#### 2.1.9 PARAGRAPHS 42-43 - ACCESS 5 - OLD NORTH ROAD

# Comment:

- 55. Sightlines to the west are slightly below AustRoads standards (157m required, 156m available), and the downhill gradient of Old North Road may further reduce visibility. To the east, visibility is also below standard (145m available vs. 157m required). However, the Commute Specialist Comments Response applies RTS-6 guidelines, which require only 105m for low-use crossings serving fewer than 200 movements per day as this access is serving nine dwellings.
- 56. Due to constraints from road alignment and property boundaries, relocating the access is unlikely to improve visibility. Mitigation measures, such as warning signage, and the provision of a right turn bay should be considered. Any gate at Access 5 should be set back far enough to allow vehicles to wait off Old North Road while waiting for entry.

#### **Commute response:**

Refer to Section 1.3.

It is noted that as per latest plans, no gates are proposed on Access 5.

# 2.1.10 PARAGRAPHS 57-58 - FORESTRY ROAD / DEACON ROAD ACCESS

### Comment:

- 57. The intersection of Deacon Road and Forestry Road will serve as a key access point for the retirement village and some Countryside Living dwellings. Currently, there is partial lane widening that allows westbound vehicles to pass others turning right into Forestry Road. However, the proposed development will significantly increase right-turning traffic—around 90 vehicles per hour during the PM peak.
- 58. Although a specific assessment has not been provided, AustRoads guidelines indicate that a channelised right-turn bay is warranted based on traffic volumes. For safety and operational efficiency, it is recommended that a dedicated right-turn bay be implemented as part of the development (refer to Figure 14).



Figure 14: Forestry Road / Deacon Road Intersection



Noted and agreed that right turn bay is required (noting it is likely required with or without the development).

A right turn bay is now proposed into Forestry Road which will require minor widening to Deacon Road. Detailed design of the right turn bay will be left to EPA stage as all works will occur within road reserve. See latest engineering plan.

Figure 15: Proposed Right Turn Bay





### 2.1.11 PARAGRAPHS 59-60 - DEACON ROAD / RIVERHEAD ROAD

# Comment:

- 59. The ITA has reviewed the safety record of the Deacons Road / Riverhead Road intersection and identified a crash trend, particularly involving right-turning movements. Visibility from Deacons Road to the west is limited—only about 120m is available versus the 181m required for an 80 km/h design speed. This shortfall is likely contributing to the crash trend.
- 60. Although the proposed development does not directly affect visibility, it would triple the volume of right-turning traffic from Deacons Road during the AM peak, increasing crash risk exposure. Mitigation measures such as advisory speed signs or speed-activated warning signs on the western approach are recommended to improve safety (refer to Figure 16).

Figure 16: Deacon Road / Riverhead Road Intersection



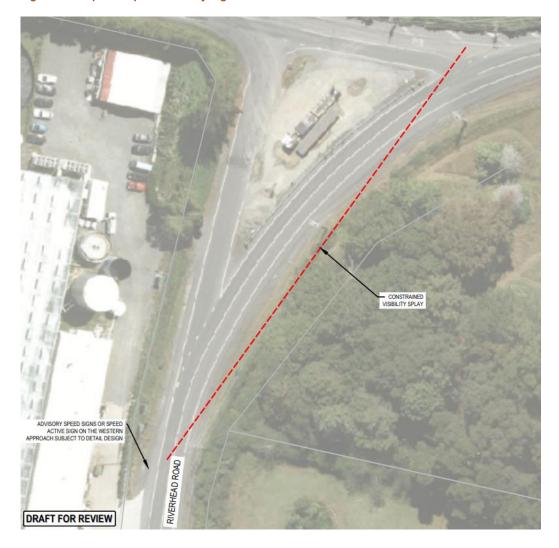
#### **Commute response:**

Noted and agree regarding mitigation.

Speed advisory signs are now shown on the engineering plans and put in place on the western approach to mitigate potential safety impacts of the development. As per MOTSAM 1 Section 6 a PW-17 sign consisting of a PW-25 curve advisory speed sign is erected as seen in Figure 17.



Figure 17: Proposed Speed Advisory Sign Location



#### 2.1.12 PARAGRAPHS 61-64 - NETWORK SAFETY

# Comment:

- 61. The Commute Specialist Comments Response includes a safety analysis of the local road network near the site, focusing on key routes connecting to the wider network. A pattern of crashes related to speed and loss of control was identified, influenced by road geometry (e.g., curves and crests) as well as driver behaviour.
- 62. Risk ratings from KiwRap show that Old North Road (near Access 1 and 2) and Riverhead Road have Medium-High risk, while Old North Road between Riverhead Road and SH16 has a high risk rating. These roads will serve as primary access routes, increasing crash exposure as traffic volumes grow.
- 63. Although Commute suggests risk may reduce with urbanisation, the area is predominantly zoned Countryside Living, and urban upgrades like kerb and channel are not proposed. Therefore, road conditions are unlikely to change significantly, and risk ratings may increase over time.
- 64. Specific locations—intersections and accesses—have been identified where the proposed development could affect the safe operation of the local road network.

#### **Commute response:**



Noted. We assume the locations mentioned relate to the previous items (right turn bay and speed advisory) which we agree with and have been incorporated into the engineering plans.

#### 2.1.13 PARAGRAPHS 65-67 - UPGRADE TO FORESTRY ROAD

#### Comment:

- 65. Forestry Road is proposed to be upgraded and partially vested with Council. The upgrade includes vertical and minor horizontal realignment, with retaining walls and batters required in some areas. The proposed 6.0m carriageway (including channels) meets Auckland Transport's minimum lane width requirements but falls short of the preferred width. Road grades are all below 8%.
- 66. Vehicle tracking confirms that a 6.3m van and a 10.3m truck can pass without conflict. Retaining walls exceed 4m in height in some sections and will require either building consent (for walls over 1.5m) or Auckland Transport PA 1A–4A certification (for walls under 1.5m).
- 67. Several vehicle crossings will need to be modified to align with the new road profile, requiring adjustments within private properties. Property owner approval will be necessary where access ways are affected.

# **Commute response:**

Noted.

# 2.1.14 PARAGRAPHS 68-71 – SHARED PATH BETWEEN RETIREMENT VILLAGE AND RIVERHEAD

#### Comment:

- 68. A shared path is proposed to connect the retirement village to the eastern boundary of the site, linking to an existing pedestrian access from Mill Grove. The path is expected to be in private ownership but would have an easement in favour of Council for public access.
- 69. The path has a steep gradient of 11.6% over 362m, which may pose challenges for less mobile users, including those with mobility scooters, unless rest areas are incorporated. A four-wheel drive golf cart is proposed to use the path, raising safety concerns for pedestrians at the public connection near Mill Grove and the adjacent reserve. It is unclear whether the golf cart can legally travel on public roads to reach Riverhead town centre.
- 70. Mill Grove connects to Duke Street, but neither road has footpaths between Mill Grove and Coatesville-Riverhead Highway. If the shared path connection is built, there will be a gap in the pedestrian network, limiting safe walking access to the Riverhead centre.
- 71. The provision of the footpath is supported but there are concerns over the deliverability of the facility within the site and the suitability of the existing active mode network to accommodate active modes travelling between Riverhead and the site.

### **Commute response:**

Refer to Section 1.5.

Regarding the gap in the pedestrian network (Duke Street from Wautaiti Dr to Coatesville-Riverhead Highway), we consider this to be an existing issue and not the responsibility of the applicant. We are aware of the local board progressively upgrading roads in Riverhead to include footpaths.

#### 2.1.15 PARAGRAPHS 72 - CONSTRUCTION

# Comment:



72. The ITA states that construction traffic will be managed via a Construction Traffic Management Plan (CTMP), with main access routes via Old North Road and Forestry Road. Given the expected increase in traffic, including heavy vehicles, it is recommended that Accesses 1 and 2 on Old North Road be upgraded to their final design before construction begins. Commute agrees with this recommendation to ensure safe and efficient access during construction.

#### Commute response:

We note that the previous interim statement was provided on the basis of the current environment, with no consideration around standard TMP procedures that will ultimately ensure safe construction access to the site is provided.

We note that there are various options which will be explored with the contractor and the TMP process to ensure a suitable outcome can be achieved. The following is not an exhaustive list, but demonstrates that we have flexibility to ensure access can be provided. The development will be staged (so only one construction entrance from Old North Road at a time eg. Access 1 will be used for civil construction for Stages 1-3 a total of 33x lots, no requirement to use any other access), the speed limit could be reduced, the existing crossings will be widened and visibility improved, signage confirming access will likely also be required. We can also limit traffic movements (trucks to and from the site or crossing as/if needed). Finally, we note that access from Forestry Road and via other haul roads is possible. Ultimately, we can provide construction traffic without requiring the final upgrades of the intersection which will need EPA approval from Auckland Transport before they are constructed.

The final construction access will be subject to contractor engagement, the provision of a finalised Construction Traffic Management Plan (CTMP) and the required TMP via Auckland Transport to enable construction access. This process will be administered through standard conditions of consent and provides sufficient certainty to Council and AT that the construction access arrangement will be fit for purpose and will mitigate risk as required before construction commences.

# 2.1.16 PARAGRAPHS 73-86 - STORMWATER

# Comment:

Stormwater related comments are not considered to be traffic engineering related matters and therefore no specific responses have been prepared as part of this RFI response.

#### **Commute response:**

Noted.

#### 2.1.17 PARAGRAPHS 87-88 - RECOMMENDATION

# Comment:

- 87. Based on the information provided, additional mitigation measures are required to support this application, and to ensure that:
  - (a) The proposal's adverse traffic effects are adequately mitigated; and
  - (b) There is appropriate integration between land use and infrastructure.
- 88. The specific issues have been addressed under executive summary / principal issues.

#### **Commute response:**

Noted.



# 3 AUCKLAND TRANSPORT – MARTIN PEAKE

Auckland Transport has commissioned Progressive Transport Solutions Limited to undertake a review of the Fast Track Application – Rangitoopuni Developments Limited Partnership for development at Old North Road and Forestry Road, Riverhead. The land is primarily zoned Countryside Living and the proposed development is for 208 vacant lots and for a retirement village of 260 retirement units and 36 care beds. As part of the works Forestry Road is to be upgraded and vested in Auckland Council. This review is on the traffic engineering and road safety aspects of the application.

It is noted that Auckland Transports comments include Martin Peaks review and therefore additional responses to Martin Peakes comments are considered to be provided in above sections.

#### 3.1 SECTION 4 - TRIP GENERATION AND DISTRIBUTION

# 3.1.1 PARAGRAPHS 4.1 – 4.14 TRIP GENERATION AND DISTRIBUTION

# Comment:

- 4.1 The Commute Specialist Comments Response emphasises that the subject land is already live zoned for Rural Countryside Living and that the traffic generation from the site has already been anticipated on the road network. However, whilst the land is live zoned, its current use has been for forestry and the application will introduce housing on that land, which is a change of use. The Auckland Unitary Plan Chapter E27.6.1 Trip Generation identifies that resource consent applications for residential subdivisions with capacity to accommodate more Application Site PPC100 Technical Note Page 5 of 28 than 100 dwellings should consider the effects on the transport network of that development as a Restricted Discretionary activity. Therefore, although the land is already live zoned, it is considered appropriate that the trip generation effects of the development on the road network should be considered.
- 4.2 The Auckland Council Memorandum of Strategic and Planning Matters will address the permitted baseline, but it is understood that the activity has an overall activity status of NonComplying which, even taking into account Schedule 5, S17(1)(b) of the FTAA provides an assessment which enables a full consideration of the trip generation / transport effects of the development.
- 4.3 Notwithstanding that I disagree that there is a baseline, the Commute Specialist Comments Response assesses the possible trip generation that could occur from the existing zoning rules as a kind of baseline to demonstrate that the trips from the proposed development would be less than could occur from the site under the Countryside Living Zone. There are issues with this analysis and therefore it is considered that this assessment is incorrect for the following reasons:
  - a) The baseline on trip generation that Commute is attempting to establish would be subject to a resource consent and is not a permitted activity as of right.
  - b) The Commute assessment is based on the site being subdivided into 1 Hectare lots, however, E39 Subdivision Rural1 requires a minimum lot size of 2 Hectares as a discretionary activity requiring resource consent.
  - c) The assessment is based on the gross land area and does not take into account land required for infrastructure to support that development, such as access ways. Any assessment should be based on the net developable area.



- 4.4 Taking the above factors into account, the existing land could generate around 152 trips2 compared to the 308 trips forecast by Commute for the proposed development (including the retirement village). This high-level analysis shows that the proposed development would result in twice the number of trips, and in any event, a resource consent would be required for the baseline scenario.
- 4.5 The ITA sets out the trip generation rates forecast.
- 4.6 The trip rates for the retirement village and the care units are accepted.
- 4.7 However, the trip rate for the residential component of the development (0.85 trips per dwelling) based on the RTA Guidelines for single dwellings is considered to be low. This is because this site is in a rural area (Countryside Living Zone), it has no access to amenities within the development or in the surrounding area that are reasonably accessible by public transport, bicycle, or on foot.
- 4.8 The NZTA Research Report 453 provides trip rates for rural dwellings that range from 1.1 trips per dwelling (50th percentile) to 1.4 trips per dwelling (85th percentile). A higher trip rate in this range for the residential component of the development is considered more appropriate.
- 4.9 The Commute Specialist Comments Response has undertaken a sensitivity test using a trip rate of 1.1 trips per dwelling for the Countryside Living component of the development. This is considered a more reasonable trip rate for the assessment of the effects.
- 4.10 The design for the Community Facility at Access 2 includes a car park for non-residents to access walking tracks, therefore, there will be non-development traffic movements associated with the access. The Commute Specialist Comments Response has undertaken a sensitivity test with additional traffic assigned to Access 2. The traffic volumes used for the sensitivity test are accepted. It is agreed with the assessment that these trips do not need to be assigned to the wider network, as many of these will already be on the network as they use the existing informal parking area adjacent to Access 2 for exercise and recreation in the forest area.
- 4.11 The ITA Section 5.4 briefly summarises the trip distribution. The directional split (in/outbound movements) used in the assessment is considered appropriate. Updated distribution diagrams were provided in the Commute Specialist Comments Response and are generally accepted, except assignment of traffic to Old North Road for citybound vehicles along SH16.
- 4.12 The distribution has assigned all traffic destined for eastbound SH16 to use Old North Road. This is based on analysis of travel times and distances from Google Maps. The time of day when the assessment was undertaken is not stated.
- 4.13 From a review of Google Maps on weekdays in August, during the critical AM peak for SH16 and the SH16/Coatesville-Riverhead Highway intersection in particular, Google Maps indicates that the route to SH16 via Coatesville-Riverhead Highway has similar or lower travel times than using Old North Road (as summarised in Attachment 1). Therefore, it is considered that development traffic would be split between Old North Road and Coatesville-Riverhead Highway, particularly when the trip origin is taken into account (e.g. Access 1 or 2, or from Forestry Road).
- 4.14 As the Coatesville-Riverhead Highway / SH16 intersection is a critical intersection in the wider network, the routing of traffic is important. The wider network effects are discussed further below.

Refer to Section 2.1.1.



### 3.2 SECTION 5 - TRAFFIC EFFECTS

#### 3.2.1 PARAGRAPHS 5.1 - 5.20 WIDER TRAFFIC EFFECTS

#### Comment:

- 5.1 For the wider road network, State Highway 16 (SH16), and in particular the SH16 / Coatesville Riverhead Highway intersection and the operation of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road are key transport capacity and operational constraints.
- 5.2 Commute considers that the operation of SH16 and the SH16 / Coatesville-Riverhead Highway intersection is not the developer's responsibility, as the site is some 5km from the State Highway and the wider traffic effects of the development have already been accounted for by the Unitary Plan.
- 5.3 I have already noted in Section 4 above my disagreement with Commute's comments suggesting that the proposed traffic has already been considered by the Unitary Plan. As to Commute's comments concerning the distance of the site from the State Highway, the extent of the area that needs to be considered as being potentially affected by adverse traffic effects is a matter which needs to be decided in the context of each particular application. In this instance, whilst the distance of the site from SH16 is acknowledged, the Coatesville-Riverhead Highway / SH16 intersection and operation of SH16 is a constraint on the wider network, and in my opinion, a constraint for the development of this site. The traffic distribution analysis I have undertaken demonstrates that development traffic will utilise Coatesville-Riverhead Highway as a primary route to SH16, directly impacting both the Auckland Transport local road network (as discussed further below) and the critical SH16 intersection, meaning that physical distance is less relevant than the direct impact on both networks. Given the nature of this roading network and the potential for flow-on effects from a development of this scale, it is considered that development should be coordinated with the timing of the necessary roading upgrades to support that development. I agree that it is not the developer's responsibility to implement the upgrade.
- 5.4 The operation of State Highway 16 is the responsibility of the NZTA. NZTA has been invited to comment on the proposals as part of the Fast Track process. At the time of writing, NZTA's position on the effects on SH16 is unknown.
- 5.5 Whilst NZTA is responsible for the State Highway, Auckland Transport is responsible for the local road network, including Old North Road and Coatesville-Riverhead Highway, and as discussed below, this development has the potential to notably impact the operation of both of these roads, although the effect has not been quantified.
- 5.6 The Coatesville-Riverhead Highway intersection is acutely congested in the morning peak period with lengthy queues and delays eastbound (towards the city), on SH16, CoatesvilleRiverhead Highway and Old North Road. Eastbound motorists on SH16 who have priority over Coatesville-Riverhead Highway frequently give way to vehicles turning to and from CoatesvilleRiverhead Highway. These conditions are exacerbated by the operation of the eastbound SH16 between Coatesville-Riverhead Highway and Brigham Creek Road where flow breakdown occurs due to a combination of the volume of traffic and the topography of the road. This flow breakdown has a shock wave effect back to the SH16 / Coatesville-Riverhead Highway intersection, further impacting its operation.
- 5.7 In the evening peak, there are constraints on westbound capacity on the exit from the SH16 / Brigham Creek Road roundabout where there is a merge from two lanes to one lane. This impacts the efficient operation of this intersection resulting in queues and delays on the westbound SH16, Brigham Creek Road and Fred Taylor Drive roundabout approaches.



- 5.8 The Commute ITA included an assessment of the SH16 / Old North Road and SH16 / Coatesville-Riverhead Highway intersections, but this has not been updated in the Commute Specialist Comments Response; the ITA analysis cannot be used to understand the effects on SH16 as the traffic modelling does not reflect the actual operation of these key intersections. Therefore, the effects of the development on these SH16 intersections have not been quantified, rather, the Commute Specialist Comments Response has relied on Stage 2 of the SH16 Waimauku to Brigham Creek Road project being in place to accommodate the forecast traffic.
- 5.9 I note that the ITA that supported PPC100 applied a similar approach based on the assumption that the SH16 / Coatesville-Riverhead Highway intersection would be upgraded to a roundabout; no analysis was undertaken on the existing intersection arrangement in that ITA due to the acknowledged existing congested nature of the existing intersection.
- 5.10 As outlined in paragraphs 4.12 and 4.13, I consider that development traffic would likely be split between Coatesville-Riverhead Highway and Old North Road, rather than solely confined to Old North Road, when travelling to SH16 (as assessed by Commute). Therefore, both of these congested routes would be affected by development traffic.
- 5.11 Given the congested nature of the existing SH16 / Coatesville-Riverhead Highway intersection I consider that the intersection will be required to be upgraded prior to the occupancy of dwellings within the subject site. This would address the actual and potential effects on the Auckland Transport road network on Old North Road and Coatesville-Riverhead Highway and would be consistent with the current proposed Precinct Provisions for PPC100.
- 5.12 I do note that there was some discussion at the PPC100 hearing that a threshold of 30 dwellings could occur prior to the upgrade, however, there was no specific evidence presented to support this threshold.
- 5.13 With regard to the section of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road, as outlined above, there are operational issues for the eastbound SH16 in the morning peak and westbound in the evening peak. Development traffic would add to these operational issues.
- 5.14 The subject of the four-laning of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road was a key point of discussion for PPC100 and expert conferencing as to whether any or some development could occur prior to the implementation of this part of the Stage 2 project. There was disagreement between the traffic experts on this matter, with some experts considering some development could occur prior to the four-laning and others considering, on the basis of the assessment provided, that there should be no development. The analysis that was undertaken for PPC100 did not take into account this proposed development, and therefore, the cumulative effects are not understood. In my view, without further analysis, I consider that no development should occur prior to the four-laning. There Technical Note Page 9 of 28 may be some scope for development before these upgrades, however, I do not have sufficient information to recommend such a threshold.
- 5.15 Based on the above analysis, I consider that dwellings should not be occupied prior to the implementation of the NZTA Stage 2 project, both the SH16 / Coatesville-Riverhead Highway intersection upgrade and the four-laning of SH16 between Coatesville-Riverhead Highway and Brigham Creek Road (i.e. Section 1 of the Stage 2 project as depicted in Figure 2 above). The limit on dwellings should also apply to the retirement village, as although they have a lower trip rate than the Countryside Living dwellings, the proposed number of units is greater (296 units (including care beds) compared to 208 dwellings).
- 5.16 In stating the above recommendation, I acknowledge that the application does not actually seek consent to construct dwellings at this time, rather it provides for the land use activity for the 260





retirement village units and 36 care beds as an Integrated Māori Development, and proposes vacant lots for the residential component of the development. I am aware that the dwellings will become a permitted activity once each lot is established by subdivision and that the application includes a consent notice and other controls around the form of the development. Therefore, the precise wording of any condition to achieve the recommendation of the dwelling / retirement village unit not being occupied prior to the completion of the NZTA Stage 2 Project would need careful consideration.

- 5.17 I consider that there should be consistency in the thresholds adopted for the timing of the NZTA Stage 2 improvements and the occupation of dwellings for this development and any dwellings for PPC100. However, should the position on PPC100 change, I consider that any conditions limiting the quantum of development for the subject application should not be more onerous than those for PPC100 as the subject site is live-zoned land.
- 5.18 The Commute Specialist Comments Response agreed that the Section 1 of the NZTA Stage 2 Improvements should be implemented prior to development.
- 5.19 I am aware of the provisions of AUP Chapter E215 in relation to development of Treaty settlement land and infrastructure. I have given consideration to potential alternative approaches to addressing the transport effects of the development on the SH16 intersections (and in particular Coatesville-Riverhead Highway and Old North Road) but I consider that the NZTA Stage 2 project is most appropriate.
- 5.20 In coordinating the development with the NZTA project, it is noted that the Stage 2 project is funded although the exact timing of construction has yet to be confirmed.

# **Commute response:**

Refer to Section 2.1.2.

#### 3.2.2 PARAGRAPHS 5.21 – 5.28 LOCAL ROAD NETWORK EFFECTS

- 5.21 Traffic modelling using the software package SIDRA has been undertaken for key intersections in the vicinity of the site, with results presented in the Commute Specialist Comments Response. The local road intersections selected for modelling are considered appropriate
- 5.22 The modelling has been undertaken for the existing traffic volumes, with the forecast development volumes, and a test with the forecast development volumes with PPC100.
- 5.23 Whilst PPC100 has yet to be approved, as it is currently going through a hearing, it is considered appropriate that the cumulative effects should be assessed with PPC100 in place, should it be approved.
- 5.24 The Commute comments on the calibration of the local road intersections are accepted.
- 5.25 For the Deacon Road / Riverhead Road intersection, this intersection is an unusual layout, and this is not reflected in the traffic model. While the model may not accurately represent the true operation of the intersection, it is forecast to operate well within capacity and thus amendments to the model layout are unlikely to make a substantial difference to the analysis outcomes in this instance.
- 5.26 The assessment of the Riverhead Road / Coatesville-Riverhead Highway roundabout forecasts that the intersection, with the development and PPC100 traffic, would operate in the AM peak at a Level of Service (LOS) C, with the Riverhead Road approach operating over capacity (LOS E). It is noted that PPC100 adds a significant volume of traffic to the intersection, including the Riverhead





Road approach, whereas the proposed development adds a relatively small volume of traffic (31 vehicles).

5.27 As noted in the ITA, the PPC100 forecast flows did not take into account pass-by or trip diversion for the local centre zoning, and therefore, the traffic volumes have not been discounted and thus the cumulative effects may be overrepresented. It is also noted that the modelling for PPC100 forecast that the intersection would operate with a satisfactory level of performance (LOS C). The key difference appears to be the base traffic volumes used in the analysis for PPC100 and for this development.

5.28 Overall, the traffic modelling for the local network intersections does not raise any significant concerns

#### **Commute response:**

Noted and agree especially with paragraph 5.28.

#### 3.2.3 PARAGRAPHS 5.29 - 5.31 ACCESS OPERATION

#### Comment:

- 5.29 The vehicle accesses on Old North Road have been modelled in SIDRA.
- 5.30 The modelled layouts of Access 1 and Access 2 do not reflect the layout proposed in the engineering drawings, which include a right-turn bay into the site. This will result in the models overestimating the effects on Old Road North as vehicles waiting to turn right into the site will delay other through vehicles. Whilst the models should include the right turn bay, the assessment represents a worst case.
- 5.31 The modelling of the vehicle accesses into the site forecast that they would operate with an acceptable level of performance and with no significant queuing or delay.

## **Commute response:**

Noted.

## 3.3 SECTION 6 - PROPOSED ACCESSES

- 6.1 New or upgraded accesses are proposed onto the existing road network to provide access to the site.
- 6.2 Layout drawings of Access 1 (opposite Pinetone Road), and Access 2 (via Browns Road) have been provided. No layout plans are available for the other proposed access points from Old North Road but the Commute Specialist Comments Response provides drawings of their location and visibility splays.
- 6.3 All the vehicle crossings would need to comply with Auckland Transport standards. Whilst exact detail can be determined through the vehicle crossing application process, it will be important that the designs also comply with the Auckland Unitary Plan Standards for Vehicle Crossings set out in Chapter E27 including width at the site boundary and gradients.
- 6.4 The following comments are made on each access.

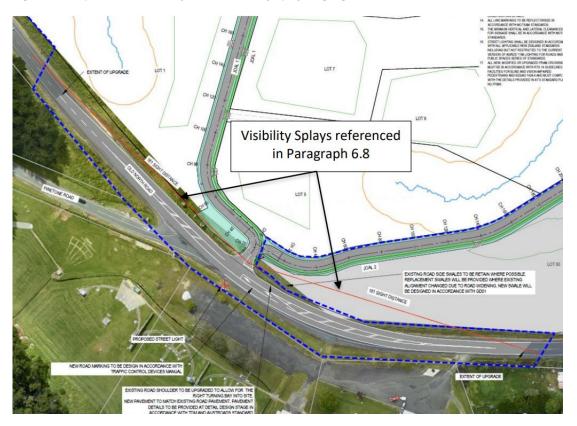


Noted.

#### 3.3.1 PARAGRAPHS 6.5 - 6.12 ACCESS 1

- 6.5 The existing access to the site is to be upgraded with a right-turn bay and flush median markings on Old North Road.
- 6.6 The design does not sufficiently take into account Pinetone Road. Whilst a matter of detail, the intersection will need to consider how right turn movements to and from Pinetone Road will be accommodated within the proposed intersection. As the proposed access is to be a private JOAL, it may be more appropriate to provide the right turn pocket for movements to and from Pinetone Road whilst providing a space within the flush median markings for vehicles to turn right into the site.
- 6.7 The drawings show an access is feasible. The exact detail can be determined during the Engineering Plan Approval (EPA) process. Widening for the intersection is to be undertaken along the site frontage, and if additional land is required to form the access, then this should be available along the site frontage.
- 6.8 The visibility splays for the intersection extend over the berms either side of the access. The Scheme Plan drawings indicate that the land to the east of the vehicle crossing would be subject to a land covenant to maintain the sight lines east of the access. This is considered appropriate as vegetation may grow over time that could block the sight lines to the east. To the west of the vehicle crossing, there is a berm and embankment. It is considered that the bank and vegetation would need to be removed or modified to maintain the sight lines. This is highlighted in Figure 18.

Figure 18: Proposed Access 1 Layout with visibility splays highlighted





- 6.9 The Scheme Plans show that some of the land along the site frontage either side of the vehicle crossing will be vested. The extent or form of any modifications for this land to create the vehicle access is not clear.
- 6.10 Vehicle tracking for the vehicle access shows that a 10.3m truck extends slightly into the right turn pocket. The design will need to be adjusted so that the truck will not conflict with a vehicle waiting in the right turn bay. This is a matter of detail that can be addressed at EPA stage.
- 6.11 The vehicle access splits into two JOALS just north of the vehicle crossing. The traffic modelling forecasts a short queue, and this would not block back to where the JOAL splits. Whilst this is the case, and the forecast volume of traffic using this access is low, consideration needs to be given to the design so that vehicles turning into the site to travel to the eastern JOALS are not impeded from entering the JOAL should there be a queue exiting the site. This is necessary to avoid traffic queuing back onto Old North Road.
- 6.12 Gates are proposed on both the JOALs. As stated in the Commute Specialist Comments Response, these would be set back at least 6m from the intersection of the two JOALs. The exact location of the gates can be determined at EP stage. The proposed formation of the JOALS and locations of the gates effectively form a T-shaped turning head, which could allow a vehicle to turn around should it not be able to enter the site. This would prevent the vehicle from reversing out onto Old North Road, causing a safety hazard. It is considered that Access 1 is within 10m of Pinetone Road, therefore, E27.6.4.1(2) and (3) Vehicle Access Restrictions would apply due to the change in use of the site. The vehicle crossing should therefore be assessed as a restricted discretionary activity. Notwithstanding, there does not appear to be any specific existing safety issues associated with this location (including Pinetone Road intersection), there would be adequate visibility from the site access (subject to the recommended conditions to keep visibility splays clear), and there is no existing transport infrastructure (footpaths, cycle lanes or bus lanes) affected by the access. The traffic modelling shows that the intersection would operate efficiently. Furthermore, Pinetone Road has low traffic volumes and is a cul-de-sac. Therefore, it is considered that the proposed vehicle crossing should not affect the safe or efficient operation of the adjacent road network.

Refer to Section 1.2.1.

#### 3.3.2 PARAGRAPHS 6.13-6.17 ACCESS 2

- 6.13 This existing access is to be upgraded with a right-turn pocket. The access is located on the outside of a bend.
- 6.14 The ITA has considered the sight distances and has reported that these meet the relevant AustRoads Standards. Further detail is provided in the Commute Specialist Comments Response based on surveyed vehicle speeds and this concludes visibility meets the standard. However, the visibility splay to the west from the site access extends across the property boundary on land south of Old North Road. This existing fence line is set back from the property boundary. There is a risk that the fence line could be adjusted in the future, into the visibility splay from Access 2, although, this would impact the visibility from the vehicle crossing for the property to the south.
- 6.15 Considering a vehicle turning right into the site, the visibility splay to the west also extends across the property boundaries to the south but will be impaired due to the existing fence line. This would restrict visibility to motorists approaching from the west. Measures will be required to mitigate the shortfall in visibility, particularly given the posted speed limit of 80km/h. A potential option is to relocate



Access 2 to the location of Access 3, with the accessway being diverted around the rear of the proposed community area and parking area.

- 6.16 A gate is proposed on Access 2, 35m from Old North Road. Delivery vehicles, such as couriers, would need access from time to time. An assessment has not been provided of the operation of the gate or potential for queuing back from the gate to Old North Road. However, 35m provides space for around 7 vehicles to queue. A suitable area should be provided to enable vehicles to turn around should they be unable to pass through the gate (e.g. no-one is home to let them through the gate).
- 6.17 Vehicle tracking for the vehicle access shows that the 10.3m truck extends slightly into the right turn pocket. The design will need to be adjusted so that the truck will not conflict with a vehicle waiting in the right turn bay. The vehicle tracking is a matter of detail that can be addressed at EPA stage.

# **Commute response:**

Refer to Section 1.2.2.

#### 3.3.3 PARAGRAPHS 6.18 - 6.19 ACCESS 3

#### Comment:

- 6.18 The location of Access 3 and an assessment of visibility is provided in the Commute Specialists Comments Response. Visibility from the access meets the AustRoads standard.
- 6.19 Any gates would need to be set back sufficiently far into the site to enable a vehicle to wait clear of Old North Road for the gate to be opened.

# **Commute response:**

Noted, as per latest plans no gates are proposed on Access 3.

# 3.3.4 PARAGRAPHS 6.20 - 6.24 ACCESS 4

- 6.20 The location of Access 4 and an assessment of visibility is provided in the Commute Specialists Comments Response.
- 6.21 Visibility from the access meets the AustRoads standard for visibility to the east.
- 6.22 There is a short fall in visibility to the west against the AustRoads standard (131m required, but only 110m available). The Commute Specialist Comments Response has assessed the visibility to the west against RTS-6 Guidelines for Design of Vehicle Crossings on the basis that the access only serves one dwelling. RTS-6 requires visibility of 105m for an operating speed of 80km/h. The constraint on visibility is the vertical alignment of Old North Road.
- 6.23 There may be scope to adjust the location of the vehicle crossing to improve visibility to the west whilst maintaining sufficient visibility to the east, but the vertical alignment of Old North Road is still likely to be a constraint. An alternative would be for this single residential lot to be accessed from either JOAL 4 or JOAL 5. This would remove the safety risk associated with the shortfall in visibility from Access 4.
- 6.24 Any gates would need to be set back sufficiently far into the site to enable a vehicle to wait clear of Old North Road for the gate to be opened.



Refer to Section 1.2.3.

#### 3.3.5 PARAGRAPHS 6.25 - 6.29 ACCESS 5

#### Comment:

- 6.25 The location of Access 5 and an assessment of visibility is provided in the Commute Specialist Comments Response.
- 6.26 Visibility from the access to the west is just short of the AustRoads standard (157m required, 156m provided). However, the assessment against the AustRoads sight distance has not taken into account the downhill gradient of Old North Road on the approach to the access which would increase the shortfall in visibility.
- 6.27 There is a short fall of visibility to the east against the AustRoads standard (157m required, but only 145m available). The Commute Specialist Comments Response has assessed the visibility to the west against RTS-6 Guidelines for Visibility at Driveways on the basis that the access serves nine dwellings and is a low use vehicle crossing (less than 200 movements per day). RTS6 requires visibility of 105m for an operating speed of 80km/h. The constraint on visibility is the horizontal alignment of Old North Road and property boundaries. Adjustments to its location would be unlikely to result in improvements to visibility.
- 6.28 Mitigation should be considered such as signage highlighting the presence of the vehicle access and the provision of a right-turn bay; these measures would highlight the presence of the vehicle access.
- 6.29 Any gates would need to be set back sufficiently far into the site to enable a vehicle to wait clear of Old North Road for the gate to be opened.

#### **Commute response:**

Refer to Section 1.2.4.

#### 3.3.6 PARAGRAPHS 6.30 - 6.31 FORESTRY ROAD / DEACON ROAD ACCESS

- 6.30 This intersection will be the main access route from the retirement village as well as some of the Countryside Living dwellings. The ITA notes that the existing intersection has some lane widening on the south side of Deacon Road that allows westbound vehicles to pass another vehicle waiting to turn right into Forestry Road. The proposed development will increase the volume of right-turning traffic. An assessment was requested to determine whether further upgrades are required to provide a right-turn bay with the proposed development. A specific assessment has not been provided.
- 6.31 AustRoads6 sets out when a right-turn bay is warranted (Channelised Right Turn treatment) based on the major traffic volumes on the priority road and right-turning flows. From the traffic volumes used in the traffic modelling, a right-turn bay is warranted. The proposed development is forecast to add around 90 vehicles per hour to the movement in the PM peak. It is considered that a channelised right-turn bay should be provided for safety and operation (refer to Figure 19).



Figure 19: Forestry Road / Deacon Road Intersection



Refer to Section 2.1.10.

#### 3.3.7 PARAGRAPHS 6.32 - 6.34 DEACON ROAD / RIVERHEAD ROAD

# Comment:

6.32 The ITA has assessed the safety record of the intersection. The assessment identifies that there is a crash trend at the intersection. No physical changes at the intersection are proposed.

6.33 The ITA identifies that the visibility from Deacon Road to the west along Riverhead Road is limited due to the alignment of Riverhead Road. The deficiency is not reported but from a review of aerial mapping and based on an 80km/h design speed, 181m of visibility is required but only around 120m is available. It appears that this limited visibility could be a contributory factor to the existing crash trend, as there were a number of crashes that involved rightturning movements at this location. Whilst the development itself does not impact on the visibility at the intersection, it does triple the right turn volume from Deacon Road in the AM peak8 thereby increasing the crash risk exposure.

6.34 Mitigation measures may be appropriate, such as advisory speed signs or speed-activated warning signs on the western approach to the intersection (refer to Figure 20 in this memo).



Figure 20: Deacon Road / Riverhead Road Intersection



Refer to Section 2.1.11.

# 3.3.8 PARAGRAPHS 6.35 – 6.39 NETWORK SAFETY

# Comment:

6.35 The Commute Specialist Comments Response provides analysis of the safety performance of the local road network in the vicinity of the site, particularly the key routes connecting the site to the wider road network. These reveal a pattern of crashes associated with speed and loss of control.





Whilst driver behaviour is a contributory factor, the nature of the roads is also a factor (including horizontal and crest curves).

- 6.36 Examination of the KiwRap-Urban Collective and Personal Risk ratings for these rural roads show that the Old Road North Road, adjacent to Access 1 and 2, and Riverhead Road have a Medium-High risk rating and Old North Road between Riverhead Road and SH16 has a High risk rating. All these roads will be used as the primary routes to access the site from the wider road network and will increase the exposure of crashes on these rural roads.
- 6.37 The Commute Specialist Comments Response states that as the area is gradually urbanised, there will be lower risk ratings. Commute also considered that as the land is already live zoned for Countryside Living it could already be generating traffic and therefore development is anticipated and aligns with the Unitary Plan.
- 6.38 The predominant zoning within the area is Countryside Living. Therefore, it is considered that the roads are unlikely to be urbanised with kerb and channel when it is gradually developed. This is evident in the subject application where kerb and channel is not proposed along the site frontages along Old North Road. Therefore, whilst there are some upgrades in relation to turning bays at accesses, the overall nature of the roads is unlikely to change substantially from what is currently present. Therefore, it is considered that the risk rating is unlikely to reduce over time, rather it will increase as traffic volumes increase with development.
- 6.39 Specific locations have been identified in the assessment at intersections and accesses, where the proposed development is assessed to affect the safe operation of the local road network in the vicinity of the site.

# **Commute response:**

Noted. Refer to Section 2.1.12

# 3.4 SECTIONS 7 FORESTRY ROAD

# 3.4.1 PARAGRAPHS 7.1-7.5 UPGRADE TO FORESTRY ROAD

- 7.1 Forestry Road is proposed to be upgraded and the northern part of the road vested with Council. The upgrade includes altering the vertical alignment of the road and some minor horizontal realignment. Some retaining walls and batters are required.
- 7.2 The carriageway is proposed to have a width of 6.0m (including channels) which provides for 2.7m wide lanes. These would meet the minimum lane width requirement in Auckland Transport's Transport Design Manual (TDM) but would be less than the preferred width. The proposed grades along the road are all less than 8%.
- 7.3 Vehicle tracking has been provided along the upgraded sections of Forestry Road to demonstrate that a 6.3m van and a 10.3m truck would be able to pass without conflicting.
- 7.4 The proposed retaining walls vary in height along the length of the road and are in excess of 4m in places. Auckland Transport should confirm the acceptability of these retaining walls and other structures or embankments for vesting.
- 7.5 Several vehicle crossings will need to be modified to tie in with the modified vertical alignment of Forestry Road. The civils drawings show that the access ways associated with these vehicle crossings





will need to be adjusted some way into the properties. Property owner approval will be required where alterations to vehicle access ways are proposed.

# **Commute response:**

Noted.

#### 3.5 SECTION 8 SHARED PATH

# 3.5.1 PARAGRAPHS 8.1-8.5 SHARED PATH BETWEEN RETIREMENT VILLAGE AND RIVERHEAD

# Comment:

- 8.1 A shared path is proposed to connect between the retirement village and the eastern boundary of the site. A connection would be provided from the boundary through to an existing pedestrian access way from Mill Grove.
- 8.2 It is understood that the proposed shared path would be a private path but that there would be an easement in favor of Auckland Council for public access; the footpath is a matter for Council to assess. Notwithstanding, it is noted that the footpath has a gradient 11.6% over a distance of 362m. This would present challenges for some pedestrians due to the grade if there are no rest areas incorporated into the design. This is of particular relevance as the path could be used by less mobile pedestrians or those with mobility scooters from the retirement village.
- 8.3 It is understood that the path is proposed to be used by a four-wheeled drive golf carts that would not be used beyond the site boundary. This is considered appropriate, as the use of golf carts beyond the site potentially poses a hazard to pedestrians on the public footpath connection from Mill Grove across the bridge and in the reserve area, and there is uncertainty as to the legality of using such a vehicle on the public roads to connect to the centre of Riverhead. I consider a condition of consent should be imposed to prevent golf carts being used beyond the site.
- 8.4 Mill Grove connects to Duke Street. There are no footpaths on Mill Grove or on Duke Street between Mill Grove and Coatesville-Riverhead Highway. Therefore, if the connection to Mill Grove is constructed, there will be a gap in the walking network for pedestrians to walk to the centre of Riverhead.
- 8.5 The provision of the footpath is supported but there are concerns over the deliverability of the facility within the site and the suitability of the existing active mode network to accommodate active modes travelling between Riverhead and the site.

# **Commute response:**

Refer to Section 1.5.2.

# 3.6 SECTION 9 JOAL DESIGN

#### 3.6.1 PARAGRAPHS 9.1-9.2 JOAL DESIGN

9.1 The design of the JOALs is in the remit of Council to comment. However, it is noted that several of the JOALs are proposed to have easements over them for pedestrian Right of Ways in favour of Auckland Council. The purpose of the pedestrian ROWs or what they connect to is not stated. There are no pedestrian facilities proposed along these JOALS and therefore pedestrians would be sharing them with traffic.



9.2 For the JOALS accessed from Access 1, there is no car parking for the public adjacent to the road reserve. If there is anticipated demand for the public to access walking tracks via the JOALS, then parking will be required in the vicinity of Old North Road; the JOALS are intended for private vehicle use only with gates preventing public access. There is no suitable location within the road reserve for motorists to park, which could cause a safety hazard if vehicles park along Old North Road.

#### **Commute response:**

Refer to Section 1.5.1.

#### 3.7 SECTION 10 CONSTRUCTION

#### 3.7.1 PARAGRAPHS 10.1-10.3 CONSTRUCTION

- 10.1 The ITA states that construction traffic can be managed through a CTMP and that the main accesses will be via Old North Road and Forestry Road.
- 10.2 The construction is likely to include earthworks and the use of heavy vehicles. It is considered that Accesses 1 and 2 on Old North Road should be upgraded to their final form to allow for construction within the site. This is due to the increased traffic movements at these locations compared to the existing situation and the fact that this traffic will include heavy vehicle movements.
- 10.3 Commute concur that Access 1 and 2 should be upgraded before construction begins on site.

#### **Commute response:**

Refer to Section 2.1.15.

# 4 NEW ZEALAND TRANSPORT AGENCY WAKA KOTAHI (NZTA) – NICOLA FORAN

# Comment:

NZTA thanks the Panel for their invitation to comment on the substantive application for the Rangitoopuni development in Riverhead, Auckland.

NZTA is neutral in regard to the proposed development. The proposed location of the 210-lot subdivision and 296-unit retirement village is setback approximately 2km from State Highway 16 (SH16) and accessed by local roads which are under the jurisdiction of Auckland Transport (AT).

The development is expected to influence traffic volumes at several intersections along SH16, which is the main arterial road, connecting the area to Auckland. In the lodged Integrated Transport Assessment (ITA), it is anticipated that most of the traffic generated from the proposed development will use the Coatesville – Riverhead Highway/SH16, and Old North Road/SH16/Taupaki Road intersections.

The ITA also anticipates that the majority of trips that will be generated will be by private vehicles with no dedicated walking and cycling facilities to SH16. There are currently no public transport services connecting to the proposed development.

NZTA has plans to upgrade the Coatesville – Riverhead Highway/SH16 intersection as part of Stage 2 of the Brigham Creek to Waimauku safety improvements. These improvements include a two- lane roundabout with walking and cycling facilities around the perimeter including a shared path on the southern site of SH16 between Brigham Creek and Kumeū. The project also involves the four laning of





the highway from Brigham Creek Rd roundabout to Taupaki Rd roundabout. Additional funding for the project has been approved from the NZTA board, but the timeframe for the construction of this project is not yet confirmed.

NZTA has discussed transport matters in relation to the proposed development with Auckland Transpot (AT). AT raised concerns about Stage 2 of the Brigham Creek to Waimauku improvements.

After receiving NZTA's response, AT provided NZTA a copy of their specialist response to Auckland Council. In their specialist response, AT highlighted the potential impact of the proposed development on traffic volumes at the SH16/Coatesville - Riverhead Highway and SH16. AT recommended a condition be included in the consent that 'no dwellings shall be occupied until the Stage 2 of Brigham Creek to Waimauku improvements are completed and operational'.

To manage the traffic impacts from the proposed development on State Highway 16, NZTA requests that a condition be included which prevents the implementation of the consent until the SH16 upgrade, referred to above is complete. NZTA can provide input to condition wording when the panel circulates draft conditions for comment.

In summary, NZTA's position on the substantive application is neutral, subject to the condition that NZTA has requested (as mentioned above) is imposed and seeks the Panel to include the condition mentioned above in their decision, if granted.

# Commute response:

Refer to planning response.

Yours sincerely

**Commute Transportation Consultants** 

