

28 February 2017

17-393

Mr Peter Sinton

Kumeu – Huapai Residents and Ratepayers Association

PO Box 687

Kumeu



Dear Mr Sinton

### **Kumeu and Huapai Future Traffic and Transportation Issues**

As requested I have reviewed the various emails regarding future traffic and transport changes for the Kumeu/Huapai area. The issues in your brief range in scale from a major bypass of Kumeu through the extension of the motorway from its current terminus at Brigham Creek through to quite specific proposals to install wire barriers on the existing highway to improve traffic safety. As discussed I have set out my views of the issues currently facing the area. I have started with the larger issues and worked down to the more detailed matters set out in the brief.

### **Previous Structure Planning for Kumeu/Huapai**

There have been several structure planning exercises carried out in the Kumeu Huapai area over the last 20 years which have attempted to reconcile the transport infrastructure that will be needed with the expected future growth. The most current Structure Plan which was developed by the Rodney District Council has largely been overtaken by recent changes to land use zoning established in the Auckland Unitary Plan. As you are aware the Auckland Unitary Plan has confirmed residential expansion in the area which will lead to a significant increase in demand for travel.

In order to address that travel demand at a high-level Auckland Transport and the NZTA jointly produced a Preferred Network as part of their Delivering Transport Networks project. I have attached a copy of their Preferred Network diagram below.

## Supporting Growth – Delivering Transport Networks

### PREFERRED NETWORK

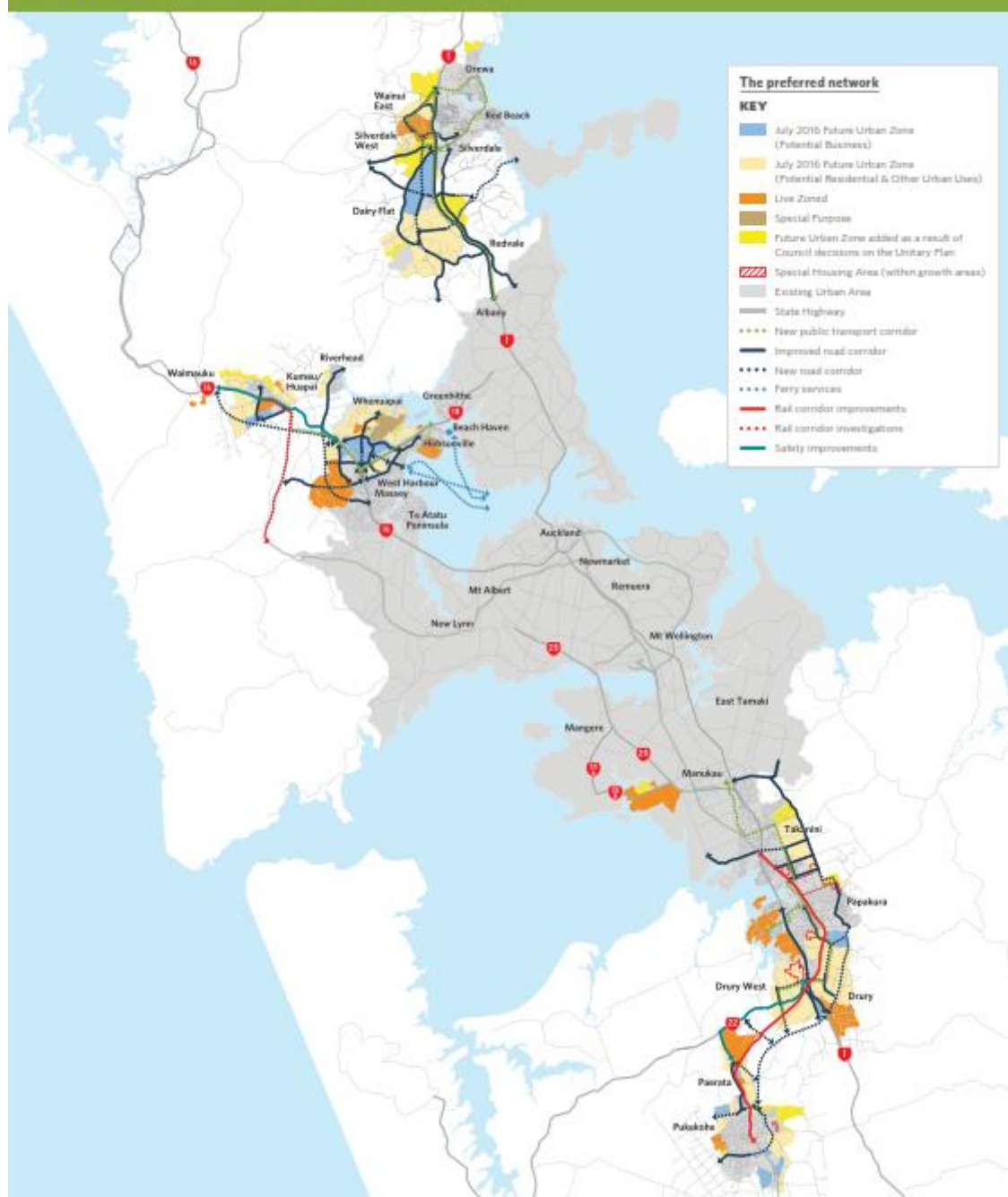


Figure 1 NZTA and AT Preferred Network.

This network for the Auckland Region brought together the area by area analysis carried out as part of the Supporting Growth studies that were done throughout 2016 at the time the Unitary Plan was being heard by the Independent Panel.

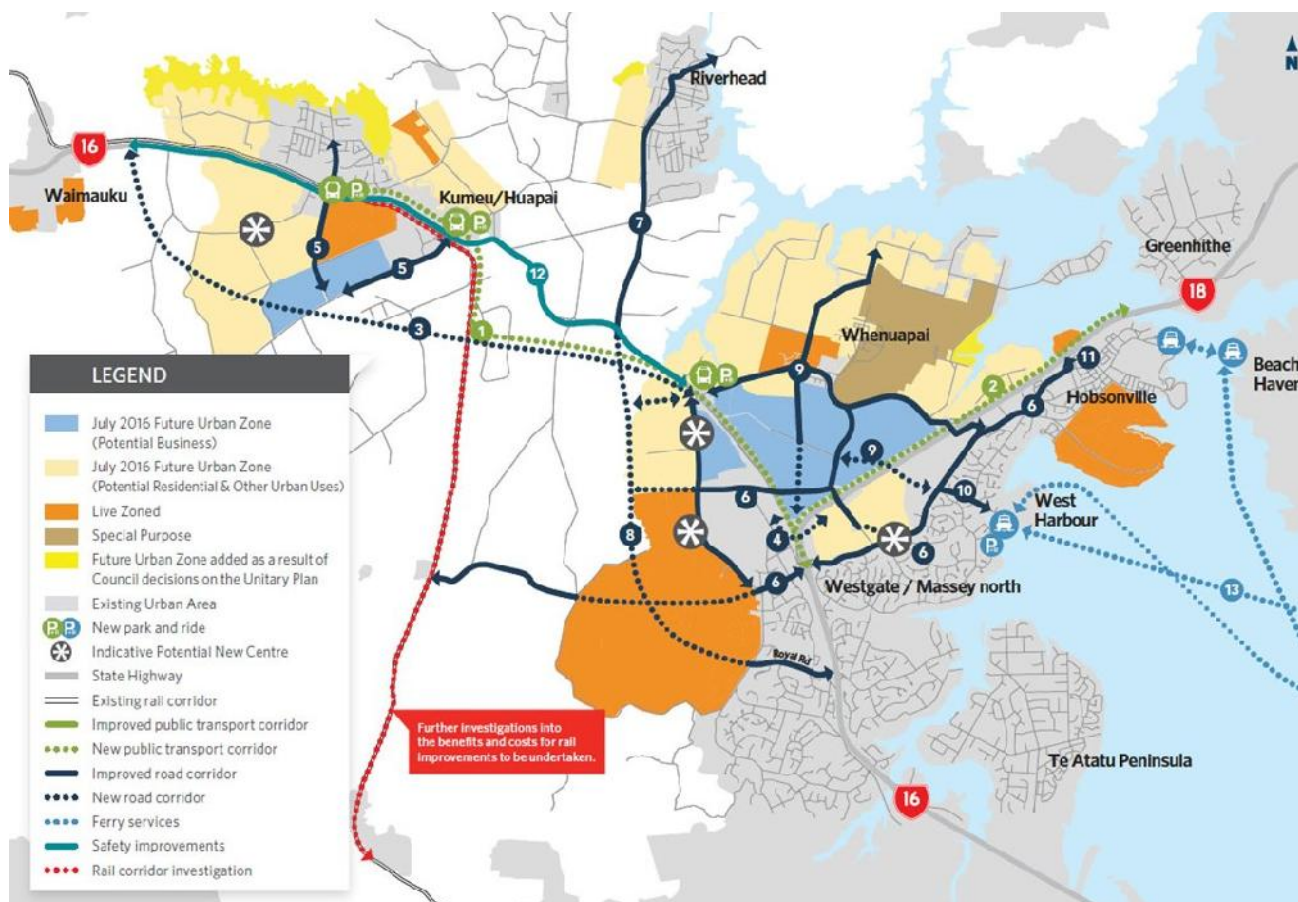


Figure 2 Map of the preferred transport network for the north west (Auckland Transport)

There are clearly a number of elements of this preferred network that will impact on Kumeu and Huapai.

These include the following projects:

- 1/ Rapid transit network route connecting Huapai and Kumeu to Westgate.
- 3/ Alternative corridor, parallel to State Highway 16.
- 5/ Improved connections to Kumeu.
- 7/ Improved connections to Coatesville, Riverhead and the North Shore.
- 8/ New Redhills north-south connection.
- 12/ Safety improvements on State Highway 16.

The preferred plan also shows new park and ride facilities in Kumeu and a new town centre.

## Motorway Extension

Although not shown specifically as a motorway extension it is reasonable to assume that the alternative road corridor parallel to SH16 will be an extension of the North-western motorway to Waimauku. If that occurs then past experience with other motorway extensions indicates that the NZTA would be likely to hand the existing section of SH16 back to Auckland Transport once the new motorway has been opened. That was the case with Kirkbride Road in Mangere and with the Dairy Flat Highway in Albany.

Of all the proposed transport changes, it is this project that has the greatest potential to impact on Kumeu and how it will develop. Currently the existing SH16 through Kumeu has the dual function of providing a through route for longer distance traffic as well as providing for access to the local business centre. The former Transit New Zealand was never particularly successful in achieving both of those functions where a state highway passed through a built-up area in the Auckland Region. They tended to favour the through traffic function of the highway even in cases where the access function generated very high traffic flows. NZTA as an agency has been more successful in providing traffic management measures more suitable to town centres including traffic signals, roundabouts and lower speed limits.

If the existing state highway eventually becomes an Auckland Transport road, then it will be important that the current road is improved to enhance accessibility to local businesses and to provide for a higher level of amenity for other road users such as pedestrians and cyclists.

Just prior to Christmas 2016 they released their Supporting Growth – Delivering Transport Networks report. That committed them to the bypass of Kumeu in the longer term but also to the proposed safety improvements to the existing SH16 which I address in the section below. However the assumption incorporated into this work is that Auckland Council will prepare Structure Plans for the Future Urban Zoned Land<sup>1</sup>. In my view that should be made a necessary condition not only for the Future Urban areas but also for the zoned areas where significant changes have occurred. In my view the existing Preferred Network is a good starting point but has too little detail to be able to usefully inform future growth in the area.

## Safety Improvements to SH16

I understand from the consultation documents that NZTA would like to install median barriers on the existing SH16 between Brigham Creek and Waimauku. The reason for this is the current poor safety record of 21 fatal and serious crashes over the last 10 years. The

---

<sup>1</sup> NZTA, Supporting Growth -Delivering Transport Networks page 27



NZTA has been consulting on a number of options which are shown on their website at the following link: <http://www.nzta.govt.nz/projects/sh16-brigham-creek-and-waimauku/publications> . I have reviewed these options and while it is difficult to give specific advice that covers each location along SH16 I do have some general advice for your committee.

In the past, it has been common for the road controlling authority to favour the needs of through traffic over the needs of local people and local businesses on state highways. This has at times resulted in higher speeds than are desirable and access controls that serve to reinforce the through traffic function. My experience with NZTA is that through their Safe Systems Approach they have been more willing to take account of the needs of all road users than was sometimes common in the past.

In general, my advice is to avoid the installation of median barriers unless they are absolutely necessary. It is usually better to try and design a road where traffic speeds will be lower and where turning traffic can be accommodated safely. Median barriers constructed where there is a significant level of roadside businesses and other accesses, can result in traffic having to find places to turn around or U-turn and can lead to longer trips which increases traffic volumes if drivers have to go past a driveway and then come back the other way. A barrier can also create a safety issue itself.

However an exception is where there have been high speed crashes involving turning traffic or head-on crashes where there is a significant level of fatalities and serious injuries. I have looked at crash statistics for parts of the existing SH16 and that does appear to be the case in some locations.

My understanding of the current proposals is that the NZTA are still considering wider median lanes, wider shoulders and flexible barriers. My advice is that they should be encouraged to implement flush medians where possible and restrict the use of flexible barriers to locations where there is no other safe alternative.

## **Structure Planning and Integrated Transportation Assessments**

Because the current transport plan is really a very high level diagram and includes no details of how the transportation network will develop to support the new land use activities, I consider it essential that the Structure Planning exercise that is assumed by NZTA is actually carried out by Auckland Council. There will be a need as part of that to carry out transport modelling using the ART3 model held by Auckland Transport as well as some limited detailed modelling to determine appropriate intersection treatments. Sometimes the Structure Plans prepared by the council will also be reasonably high level and leave details to be sorted out via later Integrated Transportation Assessments. My

view is that given the operative zones that have been confirmed through the Unitary Plan process it would not be sensible to follow that approach in the Kumeu area as development could now occur quite rapidly. Separate ITA's prepared for each development could result in a piece-meal result or worse leave out parts of the network which are essential to the whole.

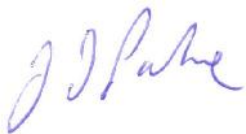
My view is that it would be better and more cost effective if a single ITA were prepared by the Council and their consultants as part of a Structure Plan. This would enable all of the issues to be addressed in one go and ensure that development contributions made in this area are allocated to projects within this area.

## Conclusions

The brief covered a number of varied transportation issues. I have worked my way through these and my conclusions are as follows:

- 1/ The Committee should support the Preferred Network set out in the Supporting Growth report.
- 2/ The single biggest issue within that Preferred Network is the proposed road parallel to SH16. That has the potential to unlock the existing SH16 road through Kumeu which could be developed as a main street for the town.
- 3/ Because the Preferred Network contains very little detail and because the development potential of the area has been confirmed through the Unitary Plan I consider it essential that Auckland Council develop a Structure Plan for the area. Because of the number of developers and limited time frame I recommend that the Council prepare an overall ITA for the area that incorporates all known and likely developments.
- 4/ The proposed safety improvements on SH16 should focus on providing safe access to properties as well as providing for through traffic. Median barriers should only be used as a last resort where required for safety.

Yours faithfully



John Parlane BE(Civil), BApplEcon, M.IPENZ

Consulting Traffic Engineer