

Before the Board of Inquiry  
Waterview Connection Project

---

*in the matter of:* the Resource Management Act 1991

*and*

*in the matter of:* a Board of Inquiry appointed under s 149J of the Resource Management Act 1991 to decide notices of requirement and resource consent applications by the NZ Transport Agency for the Waterview Connection Project

Expert Caucusing Joint Report to the Board of Inquiry – Topic Transport

---

Dated: 3 February 2011

Due: 7 February 2011

---

## Waterview Board of Inquiry: Final Joint Transport Experts Caucusing Report

The following preliminary draft sets out the positions reached following meetings held on 21 and 28<sup>th</sup> January 2011 and 3<sup>rd</sup> February 2011.

All sessions were facilitated by Ross Rutherford (Transport Planning Consultant), as provided by the EPA.

The report sets out:

- all areas of disagreement that have been resolved
- all areas of disagreement that are not resolved and succinct details of why these have not been resolved

### 21 January Meeting Attendees

Expert	Representing
Andrew Murray, Beca – Technical Director Transportation (Transport Expert)	NZTA
Rob Mason, Beca - Project Design Manager (Traffic Expert)	NZTA
Andre Walter, Construction Manager (able to provide clarity in terms of the project and construction methods)	NZTA
Ian Clark, Flow Transportation Specialists (Transport Expert)	Auckland Council & Auckland Transport
John Parlane (Transport Expert)	Sir Harold Marshall (resident)
Duncan McKenzie (Resource Management Planner)	Living Communities (Auckland) Inc

Meeting commenced at 10.00am and ended at 2.00pm. Duncan McKenzie was present from 11.00am. John Parlane left at 10.30am. John Gottler and Max Robitzsch were not available for the first session.

### 28 January Meeting Attendees

Expert	Representing
All of above	
Max Robitzsch (Transportation Engineer)	Cycle Action Auckland
John Gottler (Traffic Expert)	NZTA

Meeting commenced at 8.00am and ended at 1.30pm. John Gottler left at 8:15am after discussing temporary traffic management conditions. Max Robitzsch and John Parlane left at 12.30pm. Rob Mason left at 1.00pm.

### 3 February Meeting Attendees

Expert	Representing
All of above except John Gottler	As above

John Parlane left at 10:45am. Andre Walter left at 2.15pm. The session ended at 3:30pm.

### Involvement of individual experts

John Parlane's involvement relates solely to issues relating to SH20 Local Ramp Connections and he was not involved in discussions on the other matters. Duncan McKenzie is not a recognised transport expert but is properly included as a signatory to those matters of direct relevance to his evidence. Max Robitzsch was unable to attend the 21 January

Meeting but was requested by the caucus to attend the 28 January Meeting and 3 February Meeting to contribute to the discussion on matters of relevance to cycling. John Gottler's involvement relates only to the proposed Temporary Traffic conditions.

The relevant signatories are listed under each item below. Those persons not given as a signatory for a specific item do not have an expert opinion on the particular item.

## **Local Ramp Connections to SH20**

[Evidence of Sir Harold Marshall and John Parlane requesting local connections to SH20]

### ***Areas of disagreement that have been resolved***

The following sets out the jointly agreed positions reached during the meeting:

1. In principle it is desirable to have connections from SH20 to provide access to the local communities and to assist with the operation of the motorway network by taking pressure off the adjacent interchanges (especially St Lukes Road and Maioro Street) [but note disagreement on the desirability of these specific ramps below].
2. Previous investigations and decisions have ruled out local connections at New North Road and at Great North Road in the vicinity of the intersection with Blockhouse Bay Road, limiting the options for providing such local connections to the Waterview/ Point Chevalier/ Carrington/ Unitec communities to the vicinity of the Great North Road Interchange.
3. It is desirable that such (south-facing) local connection include both an on-ramp and an off-ramp. However, there are no strict requirements to have both, and there are examples in the Auckland network where only one is provided.
4. It is agreed that travel times accessing SH20 from Point Chevalier, Carrington and Waterview are likely to be improved with provision of the ramp(s).
5. It is agreed that a new interchange could adversely affect other local movements passing through the Great North Road/Carrington Road intersection and northern end of Carrington Road (potentially requiring consideration of mitigation).
6. In the context of the accessibility implications of providing local connections, it is agreed that accessibility can be measured in various ways, but generally involves a combination of both travel time and distance travelled.
7. It is agreed that preliminary indications show that the ramp connections to/from SH20 at Carrington Road/Great North Road Interchange may be geometrically feasible (but see below on opinions on specific desirability).

**Note:** The modelled traffic flows on the local on-ramp and off-ramp connections were reported by Andrew Murray to be 3,400vpd and 2,300vpd respectively for the year 2016.

These projected flows were accepted by the caucus members, as were projections on the resulting changes in traffic flows elsewhere on the network.

### ***Areas of disagreement that have not been resolved***

1. It is not agreed whether the Project is expected to adversely affect accessibility to the Waterview, Point Chevalier and Carrington communities.

Reasons:

- John Parlane considers that the project is likely to reduce existing traffic through these communities, but it does nothing to address the future needs of traffic generated by these communities. There is insufficient information for him to conclude that the local areas are not adversely affected.
- Andrew Murray considers that there are not adverse accessibility effects because the Project does not restrict existing access and the detailed analysis undertaken shows that with the Project, accessibility is either not affected or improved.

2. It is not agreed that there is sufficient information to judge the safety and operation concerns with both the on and off-ramps.

Reasons:

- Rob Mason considers that sufficient design has been undertaken to determine that, in his opinion there are significant safety issues with the design, as well as non-transport constraints.
- John Parlane considers that if the ramps were designed as an integral part of the Project rather than added at the end, these issues might be addressed. No designs have been circulated in evidence, and the design that has been tabled in caucusing may not be optimal.
- Andrew Murray considers that the modelling undertaken showed operational problems with the proposed on-ramp intersection on Carrington Road

3. It is not agreed about the overall need for, or desirability of providing these specific ramps at Carrington Road/Great North Road Interchange.

Reasons:

- John Parlane considers that if they can be provided then they should be provided. He considers that if they are not provided the distance between interchanges will be greater than they should be and the matter may need to be revisited in the future.
- Andrew Murray considers they are not needed and should not be provided as they are not required to mitigate effects, would have an overall detrimental effect on the operation of the wider network and hence overall are contrary to the project objectives.
- Ian Clark considers there may be advantages to local communities in providing these ramps but there may also be adverse effects adjacent to the proposed interchange. He did not state an opinion on the need for the ramps.
- Rob Mason considers that the ramps are not needed and should not be provided due to the significant adverse safety impacts on the ramps and on Carrington Road.

- Max Robitzsch considers that the ramps would likely have adverse effects on the local cycling and pedestrian connectivity especially on Carrington Road. He did not state an opinion on the need for the ramps.
- Andre Walter considers that the ramps are not needed and should not be provided due to the significant implications of relocating the northern tunnel portal further south along with the associated relocation of ventilation building and stack.

Signatories: John Parlane, Andrew Murray, Rob Mason, Ian Clark, Andre Walter and Max Robitzsch<sup>1</sup>.

## **Northern Tunnel Portal Location**

[Evidence of Duncan McKenzie regarding the selection of the ramp configuration at the Waterview Interchange]

### ***Areas of disagreement that have been resolved***

1. Duncan McKenzie has expressed concerns at the environmental effects on the Waterview area of the northern tunnel location and has suggested that the relocation northward of the portal would reduce these effects. He was concerned that there had not been a sufficiently rigorous assessment of the effects of the portal location. Following a discussion between Duncan McKenzie, Andrew Murray, Rob Mason and Andre Walter, it was accepted by Duncan McKenzie that relocating the portal a sufficient distance northwards to reduce identified effects would require shifting the Great North Road Interchange a similar distance northwards with significant effects on the area north of the existing interchange. Consequently, Mr McKenzie stated that he could see the rationale and reasoning behind the selected portal location and accepted that a more rigorous assessment was unlikely to come up with a different result.

Signatories: Duncan McKenzie, Rob Mason, Andre Walter.

## **Great North Road Bus Lane**

[Evidence of Ian Clark requesting Bus and Cycle lanes being added to Great North Road as part of reinstatement of this section of road]

### ***Areas of disagreement that have been resolved***

1. It was agreed that this issue can be resolved through amendments to the Proposed Operational Traffic Condition OT.1 Integration with Local Road Network, which refers to preparation of a Network Integration Plan (NIP) by the NZTA.

---

<sup>1</sup> Max Robitzsch was not present at the discussion on points of agreement, but attended the later part of the discussion.

The recommended amendments are as follows:

- 1) Replace 'consultation' with 'collaboration' in the first line and replace 'Auckland transport agencies' with 'Auckland Transport'. The effect is that the NIP then becomes a joint document of the NZTA and Auckland Transport.
- 2) Remove the last paragraph starting with "The NIP....." on the basis that the NIP is now a collaborative document.
- 3) Last line clause (a), delete 'existing designation' replace with 'final project designation' to remove ambiguity.

The recommended proposed condition OT.1 is attached.

For the sake of clarity, the experts understand this to mean that if adopted the NZTA would provide this facility, as long as the works remain within the final project designation and that the works can be implemented as part of the reinstatement of Great North Road.

Signatories: Andrew Murray, Rob Mason, Ian Clark, Andre Walter.

## **St Lukes Interchange**

[Evidence of Ian Clark requesting upgrades to the St Lukes Interchange as part of the Project]

### ***Areas of disagreement that have been resolved***

1. It is agreed that there are existing deficiencies at the St Lukes Rd/ SH16 Motorway ramp terminals/ Great North Rd intersection and that it would be desirable for the NZTA and Auckland Transport to work together to resolve these deficiencies (with appropriate funding arrangements to be determined)
2. It is agreed that the Waterview project may slightly increase delays at the Interchange during the weekday morning peak period, and reduce delays during the weekday evening peak period.
3. It is agreed that any extra delays are unlikely to affect bus operations on Great North Road in the morning peak.

### ***Areas of disagreement that have not been resolved***

1. There was no agreement on whether the Waterview project creates an overall adverse effect which needed to be mitigated.

Reasons:

- o Ian Clark considers that the extra delay expected at the Interchange in the morning peak constitutes an adverse effect.
- o Andrew Murray considers there is not an adverse effect because of reduced delays outside the morning peak and because his analysis showed that of the

vehicles passing through the Interchange, only 6% had a material increase in delay, when their complete journey was considered<sup>2</sup>.

Signatories: Andrew Murray, Ian Clark.

## **SH16 and SH20 Bus Facilities**

[Reference Section 42a Report paragraph 13.1.15, requesting consideration of the proposed use of bus shoulder lanes on SH16].

1. There is agreement that provision of bus shoulder lanes are an appropriate treatment for bus priority on SH16 in the Project area. This is consistent with the PTNP<sup>3</sup> and the RPTP<sup>4</sup> which indicate that this section of SH16 forms part of the Quality Transport Network, not the existing or future Rapid Transit Network.
2. It is agreed that bus facilities on SH20 in the Project area are not identified in the PTNP or the RPTP and they were not previously requested by ARTA.

Signatories: Ian Clark and Andrew Murray

## **Sector 8 Cycleway**

[Evidence of Ian Clark (and others), seeking provision of a cycleway through Sector 8 as part of the Project]

### ***Areas of disagreement that have been resolved***

1. There is agreement that both Auckland Transport and NZTA have policy directives and responsibilities in providing cycling facilities and it would be desirable for the NZTA and Auckland Transport to work together to progress the provision of such a cycleway (with appropriate funding arrangements to be determined).
2. There is agreement that such a cycleway would advance some of the Project objectives.
3. It is agreed that the Waterview Project does not create an adverse transport effect that requires such a cycle link as a mitigation measure. It is noted that other issues (e.g. access to open space) that may be addressed by provision of the cycleway or parts of the cycleway are being considered by other caucuses.
4. It is agreed that the optimal route for a Sector 8 cycleway (and connections to it, and its form, whether on-road or off-road) has not been determined. Consequently it is not possible to determine a position on the need for or appropriateness of specific elements.

---

<sup>2</sup> Note that this information was presented to the first caucusing session and that information requested by Ian Clark on the St Lukes Interchange forecast flows in 2026 without and with the project were provided prior to the second caucusing session.

<sup>3</sup> Passenger Transport Network Plan 2006

<sup>4</sup> Regional Passenger Transport Plan 2010

### ***Areas of disagreement that have not been resolved***

1. There is not agreement about whether the Sector 8 cycleway is needed to be included as part of the Project to meet its objectives:

Reasons:

- Max Robitzsch, Duncan McKenzie and Ian Clark consider that the cycleway is necessary to meet objectives related to supporting mobility and modal choices by providing a multi-modal corridor linking SH16 and SH20.
- Andrew Murray and Rob Mason consider that other elements of the Project substantially contribute to meeting those objectives, and hence the Sector 8 cycleway is not reasonably necessary to meet the Project Objectives.

Signatories: Duncan McKenzie, Andrew Murray, Rob Mason, Ian Clark, Max Robitzsch

### **Waterview to Point Chevalier Pedestrian Cycle Links**

[Evidence of Duncan McKenzie (and others), requesting a cycle/pedestrian bridge over SH16 between Waterview and Point Chevalier]

### ***Areas of disagreement that have been resolved***

1. There is agreement that a pedestrian/cycle link over SH16 between Waterview and Point Chevalier (known as the Eric Armishaw Bridge) is unlikely to be appropriate mitigation of any adverse traffic effects created by this Project (but see below about disagreement on whether there is an adverse effect).

### ***Areas of disagreement that have not been resolved***

1. There is not agreement about whether the Project creates an adverse effect on pedestrian/cycle links between Waterview and Point Chevalier.

Reasons:

- Duncan McKenzie considers that an adverse effect is created by the removal of houses on Great North Road, thereby reducing passive surveillance of the existing pedestrian/cycle link.
- Andrew Murray considers that visibility and surveillance would remain high due to the high traffic flows, and that any adverse effects would be mitigated by the significant reduction in traffic flows on all the at-grade crossings and the availability of the alternative off-road route



2. If there was adverse effect, there is not agreement about whether a connection from Waterview to Unitec (such as via the 'Oakley' Bridge<sup>5</sup>) would constitute appropriate mitigation.

Reasons:

- o Duncan McKenzie considers that such a link has the potential to provide a higher quality connection between Waterview and Point Chevalier.
- o Andrew Murray considers that, given the good quality connection via the existing cycleway at Great North Road, such a link would not be a more attractive connection between Waterview and Point Chevalier.

Signatories: Duncan McKenzie, Andrew Murray

## **SH16 Cycleway Design Issues (2m 'Pinchpoint')**

### **Areas of disagreement that have been resolved**

1. Following further investigation by the NZTA, it is confirmed that a minimum clear width of 2.4m can be provided on the cycleway between road chainages 3520 and 3610. Further it is agreed that the distance with a minimum clear width of 2.2m between road chainages 3350 and 3380 at the cellphone tower be kept to the shortest length possible during the detail design of the shared pedestrian/ cycleway.

Signatories: Max Robitzsch, Andre Walter

## **Te Atatu Interchange Cycleway Design**

[Evidence of Cycle Action Auckland , requesting grade-separation of the cycleway at Te Atatu to avoid delays at the traffic signals]

### **Areas of disagreement that have been resolved**

1. Following discussion between Andre Walter and Max Robitzsch after the caucusing meeting of 28 January it was agreed that the increase in the number of traffic signals and increase of traffic and the number of traffic lanes at the signals is likely to lead to a level of additional delay for cycling traffic at this location.
2. It was agreed that the Network Integration Plan required as part of proposed condition OT.1 should be expanded to specifically consider opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimise delays to all users, including cyclists on the SH16 cycleway.

---

<sup>5</sup> Oakley Bridge refers to a connection from Great North Road in the vicinity of Oakley Avenue, Alford Road or Alverston Street to the Unitec Campus.

3. As part of proposed condition OT.1, the NIP should consider whether or not improvements to the cycle connections (such as underpasses or overbridges) would be feasible to reduce the number of signalised cycle crossings at the Te Atatu Interchange.

The recommended amendments to OT.1 are attached.

Signatories: Max Robitzsch, Andrew Murray, Andre Walter, Ian Clark.

## **Predictions of Induced Traffic (related to Issues raised in the Section 42a Air Quality Report)**

### **Areas of disagreement that have been resolved**

There is agreement that the modelling process has followed standard procedures and that the modelling is generally responding reasonably, including the prediction of induced traffic.

Signatories: Andrew Murray, Ian Clark.

## **Temporary Traffic Conditions**

### **Areas of disagreement that have been resolved**

1. Ian Clark and John Gottler met separately and discussed the proposed amendments sought by Auckland Transport to the conditions relating to temporary traffic operations. Ian Clark is satisfied that the amendments from John Gottler address his expert concerns, subject to:
  - Auckland Transport's acceptance of the Traffic Management Governance Group as the appropriate forum for approval of SSTMPs<sup>6</sup>.
  - The explanations to be provided in the rebuttal evidence of John Gottler and others in relation to the Education Liaison Group being able to positively input into SSTMPs that affect school related travel during the afternoon traffic peak (thereby demonstrating that the extension of the defined evening peak to 3pm rather than 4pm, suggested in the evidence of Ian Clark, is not necessary).
  - Auckland Transport and Auckland Council's support for the agreed detailed wording used in the proposed consent conditions.
2. It was agreed that the amended conditions developed by John Gottler and Ian Clark be provided to Auckland Transport and NZTA for final approval for submission in rebuttal evidence. These recommended amendments to Conditions TT.1 to TT.11 are attached.

Signatories: Ian Clark, John Gottler

---

<sup>6</sup> Site Specific Traffic Management Plans

Signed & Dated:

 3/2/11	 3/02/11
Andrew Murray	Rob Mason
 3/2/11	Jan Clark 3/2/11
Andre Walter	Ian Clark
 3/2/11	 03/02/11
John Parlano	Duncan McKenzie
 3/2/11	 3/2/2011
Max Robitzsch	John Gottler

Ross Rutherford  
Facilitator, Waterview Transport Caucus  
3 February 2011

## Proposed Operational Traffic Conditions

	Integration with Local Road Network
OT.1	<p>The NZTA shall prepare in <del>consultation</del> <u>collaboration</u> with Auckland Transport <del>agencies</del> a Network Integration Plan (NIP) to demonstrate how the Project integrates with the existing local road network and with future improvements (identified in the Western Ring Route (Northwest) Network Plan) planned by the Auckland Council. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycle ways, lane configuration, traffic signal co-ordination, signage and provision for buses.</p> <p>In addition, the NIP will consider and identify:</p> <ul style="list-style-type: none"> <li>(a) Opportunities to progress bus priority measures (<u>northbound</u>) and <u>a pedestrian/cycle way</u> on Great North Road between Oakley Avenue and the Great North Road Interchange (<del>northbound</del>) <del>and to the existing pedestrian/cycle bridge over Great North Road</del> (where these can be achieved in the <u>existing final Project</u> designation).</li> <li>(b) Opportunities to provide a 2m footpath on Richardson Road Bridge, subject to confirming appropriate bus stop locations; <del>and</del></li> <li>(c) Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland Transport;</li> <li>(d) <u>Opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimising delays to all users, including cyclists on the SH16 cycleway; and</u></li> <li>(e) <u>As part of detailed design, whether or not improvements to the cycle connections (such as underpasses or overbridges) would be feasible to reduce the number of signalised cycle crossings at the Te Atatu Interchange.</u></li> </ul> <p><del>The NIP, for either the Project or relevant Project stage, shall be submitted for review to the Manager, Auckland Transport.</del></p>

## PROPOSED TEMPORARY TRAFFIC CONDITIONS

The NZTA's amendments to Ian Clark's amended conditions are shown as **blue bold** text (underlined or strikethrough).

TT.1	<p>The NZTA shall update and finalise the Construction Traffic Management Plan (CTMP) submitted with this application, in accordance with these conditions, and implement it through the CEMP.</p> <p>In finalising the CTMP, the NZTA shall:</p> <p>(a) Provide simulation modelling demonstrations to better understand the effects of construction of the Project on the affected road network; and</p> <p>(b) As far as practicable, include measures to avoid road closures and also restrictions of vehicle, <u>bus, cycle</u> and pedestrian movements, <u>noting the particular vulnerabilities and sensitivities of pedestrian diversions and restricted conditions.</u></p> <p>(c) <del>Prior to finalisation of the CTMP, the Manager, Auckland Transport shall review and determine whether measures to avoid road closures and restrictions are being pursued by NZTA as far as practicable.</del></p>
TT.2	<p>The CTMP shall require the development of Site Specific Traffic Management Plans (SSTMPs) and approval by the <b>Traffic Management Project Governance Group</b> <del>Manager, Auckland Transport</del>, for each construction activity that may affect traffic or transportation infrastructure and services. The SSTMPs shall be provided <b>to the Traffic Management Coordinator(s) for the relevant Road Controlling Authority</b> at least <b>10 20</b> working days prior to each construction activity. <del>and allow sufficient time for amendments to measures and publicity about the measures to be made.</del></p>
TT.3	<p>Each SSTMP shall describe the measures that will be undertaken to address as far as practicable methods of avoiding, remedying or mitigating the local and network wide effects of construction of the Project, as far as practicable. In particular, the SSTMP shall include the following matters:</p> <p>(a) Traffic management measures to address and maintain, traffic capacity, including bus services, at traffic peak <del>traffic periods</del> <u>hours</u> during weekdays (6:00 to 9:00 and <del>15:00 to 19:00</del>) and <u>peak traffic periods</u> at weekends (in <u>including</u> Te Atatu Road, Great North Road and Richardson Road);</p> <p>(b) Methods to manage the effects of traffic during construction including the requirement to detour or divert traffic. These methods shall seek to avoid, remedy or mitigate effects on access to and from businesses and other organisations in the area;</p> <p>(c) Any road closures that will be required and the nature and duration of any traffic management measures that will result, including any temporary restrictions, detours or diversions for general traffic and buses;</p> <p>(d) Methods to avoid, remedy or mitigate the local and network wide effects of the construction of individual elements of the project (e.g. intersections/ overbridges) and the use of staging to allow sections of the Project to be opened to the traffic while other sections are still under construction;</p>

	<p>(e) Methods to manage the effects of the delivery of construction material, plant and machinery (including cranes and oversized trucks) during construction;</p> <p>(f) Any routes where construction traffic movements will be restricted (either for particular times for construction periods);</p> <p>(g) Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner; and</p> <p>(h) Measures to maintain pedestrian access with thoroughfare to be maintained on all roads and footpaths adjacent to the construction works, where practicable. Such access shall be safe, clearly identifiable, provide permanent surfacing and seek to minimise significant detours.</p>
TT.4	The SSTMPs shall include traffic management measures developed in consultation with the Auckland Transport Authority (ATA), Bus and Coach Association and the Auckland Council, to address and maintain, where practicable, <u>traffic capacity, a satisfactory existing levels of service for buses, particularly at peak hours periods (6:00 to 9:00 and 15:16:00 to 19:00) on weekdays to provide for passenger transport services on the road network.</u>
TT.5	The NZTA shall consult with the <u>Traffic Operations Manager, Auckland Transport</u> Auckland Transport with regard to the most appropriate means for providing access on Council roads within and adjacent to the designation. The NZTA shall also coordinate and consult directly with the proponents of any major construction occurring concurrently with, and in the vicinity of the Project.
TT.6	<u>The SSTMPs shall include measures developed in consultation with Auckland Transport to, as far as practicable, enable</u> The NZTA shall maintain, as far as practicable, continued walking and cycling passage along the existing Northwestern Cycleway (between Te Atatu Interchange and St Lukes Interchange) and along Great North Road and the Oakley Creek walkway.
TT.7	The NZTA shall undertake construction works so as to avoid <u>significant or long duration impacts or the full closure of Te Atatu Road</u> for all road users heading to or from residents on the Te Atatu Peninsula.
TT.8	<p>The NZTA shall restrict construction truck movements during peak hours (6:00 to 9:00 and <u>15:16:00 to 19:00</u>) on weekdays and during the peak periods at weekends to avoid the following:</p> <p>(a) Te Atatu Road Interchange, during both morning and afternoon peak hours</p> <p>(b) Great North Road Interchange, city bound during the morning peak hours</p> <p>(c) Great North Road Interchange, west bound and onto Great North Road during the afternoon peak.</p> <p>Construction truck movements during these hours shall only be allowed under exceptional circumstances agreed in advance with the <u>Traffic Management Project Governance Group Traffic Operations Manager, Auckland Transport</u>. Auckland Council <u>noting that restrictions on truck movements outside these hours may also be restricted as part of noise management.</u></p>
TT.9	The NZTA shall maintain at least the existing <u>active traffic lane and</u> configuration capacity on SH16, at the Te Atatu Interchange area, <u>Te Atatu Road, Richardson Road</u> and on Great North Road during peak periods being 6:00 to 9:00 and <u>15:16:00 to 19:00 on weekdays and during the</u>

	<u>peak periods on weekends</u> , for the duration of the temporary construction programme.
TT.10	<p>The NZTA shall monitor the impact of construction traffic in terms of traffic speeds and volumes on SH16, Great North Road, Te Atatu Road and Richardson Road throughout the construction period to confirm the expected traffic effects as set out in the Temporary Traffic Assessment (Technical Report G.16) submitted with this application.</p> <p>(a) This monitoring will be undertaken <u>on a daily, weekly and monthly basis [monthly / weekly / daily]</u>; and</p> <p>(b) Monitoring results will be made available <u>to the Traffic Operations Manager, Auckland Transport</u> on request.</p>
TT.11	If monitoring undertaken pursuant to Condition TT.109 indicates that traffic volumes or <u>traffic conditions</u> are significantly different from those expected, the SSTMPs will be reviewed and as appropriate amended to the satisfaction of the <u>Traffic Management Project Governance Group. Traffic Operations Manager, Auckland Transport.</u>