

**Before a Board of Inquiry  
Northern Corridor Improvements Project**

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Under the Resource Management Act 1991 ('the Act')

In the matter of a Board of Inquiry appointed under section 149J of the Act to consider notices of requirement for designations and resource consent applications by the New Zealand Transport Agency for the Northern Corridor Improvements Project

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**Summary statement of Robert John Schofield for the New Zealand Transport Agency (Alternatives Assessment)**

Dated 17 July 2017

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## **SUMMARY STATEMENT OF ROBERT JOHN SCHOFIELD FOR THE NEW ZEALAND TRANSPORT AGENCY**

### **1 Introduction**

1.1 This summary statement provides a summary of my Evidence In Chief ('**EIC**'), dated 20 April 2017, and my rebuttal evidence, dated 15 June 2017.

### **2 Summary of evidence in chief<sup>1</sup>**

2.1 After reviewing the assessments of alternatives undertaken in the design of the Project, I consider that a robust analysis of the alternatives to achieve the Transport Agency's objectives for the Project has been undertaken, in accordance with best practice. This process has been outlined in Chapter 7 of the AEE.

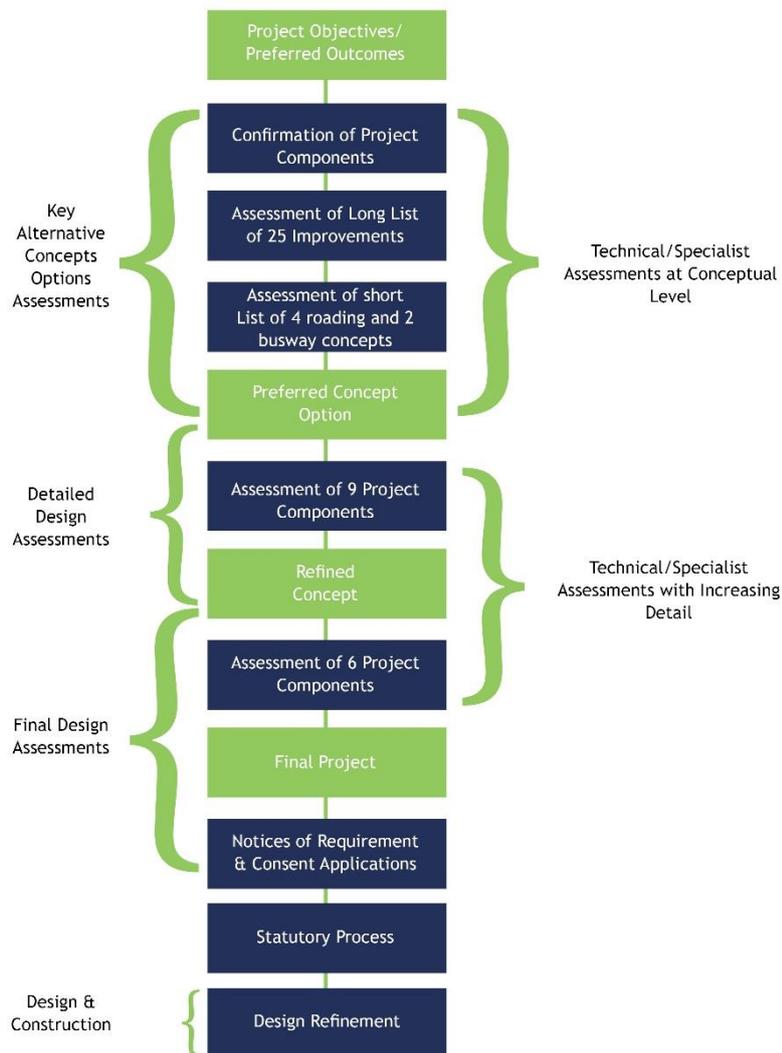
2.2 A rigorous multi-criteria assessment ('**MCA**') was undertaken at various stages to assess various options against a suite of criteria agreed by a panel of experts as being appropriate to address the statutory requirements of the RMA, as well as the Land Transport Management Act 2003 ('**LTMA**'). The criteria addressed both cost and non-cost aspects; the non-cost aspects being movement, built environment, cultural/heritage, natural environment, social/community, economic, and implementation timeframe, while cost-related aspects were costs and benefit/cost ratios. The options were evaluated against these criteria by a range of experts with relevant technical knowledge and experience and a good understanding of the study area. Sensitivity testing was also undertaken to determine the robustness of the findings.

2.3 The MCA process was applied at several stages of the Project development, as shown in Figure 1 below:

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<sup>1</sup> EIC, section 5.

**Figure 1: Alternatives' Assessment Process for the Northern Corridor Improvements Project**



2.4 In summary, following the Project's inception in 2014 and an initial stage of consultation, a process was undertaken by which the overall preferred Project concept was confirmed. A long list of concept options was first identified and assessed to derive four motorway improvement options and two Busway options. These options were put out for public and stakeholder consultation. Following feedback, the options were then assessed using the MCA process, and a preferred overall Project Concept was identified.

2.5 At this stage, a draft Walking and Cycling Network Plan was also developed, with walking and cycling connections consistent between

options and recommended to be considered further in developing the subsequent concept design phase.

- 2.6 While the majority of design elements were confirmed as part of the above assessments, a number of design elements of the Project were left unresolved at the time the concept design assessment was completed. These five design elements were investigated and considered as part of the next phase, the preliminary design process, including the consideration of alternative designs where there were potential property impacts or significant adverse environmental effects. All these various assessment stages have resulted in the confirmed motorway improvement and Busway extension scheme.
- 2.7 Based on this assessment and my knowledge of, and involvement in, the identification, design and evaluation of the route and alignment options for the Project, I am of the opinion that a robust analysis was undertaken and that the most appropriate option has been chosen.
- 2.8 In my EIC, I also specifically addressed the alignment of the SH18 SUP in response to the submission of Auckland Council, concluding that the proposed northern alignment was preferable over a southern alignment for construction, environmental and cost reasons.

### **3 Summary of rebuttal evidence**

- 3.1 In my rebuttal evidence, I outlined the findings of the multi-criteria assessment ('**MCA**') that was undertaken in response to the submission from AC in regard to possible additional shared use path ('**SUP**') crossings of SH18. This process had not been concluded at the time of writing my evidence-in-chief.<sup>2</sup>
- 3.2 From that assessment, I concluded that<sup>3</sup> there are significant issues with providing a further crossing without impacting on property or without requiring reliance on a lift tower, which has greater operational and maintenance requirements than ramps.

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<sup>2</sup> Rebuttal evidence, section 4.

<sup>3</sup> Rebuttal evidence, section 7.

- 3.3 The most suitable location for a future SUP crossing would be in the location of the current Unsworth Drive/SH18 intersection. However, this option would severely impact on the commercial property on the northern side, and would require this property to be acquired. In my opinion, the project does not foreclose this crossing to be pursued in future, and it could possibly be reconsidered at later date, such as if a western busway extension is investigated.
- 3.4 In my rebuttal evidence, I also addressed the results of a MCA that was undertaken of alternative underpass designs to that proposed at Alexandra Stream, concluding that, while a new underpass of some form would have improved CPTED outcomes, the existing underpass retains the current level of connectivity across SH18 and the current pedestrian and cyclist counts are too low to warrant a significant upgrade.
- 3.5 I also addressed matters raised in the evidence of:
- a Stephen Brown and Maylene Barrett, for Auckland Council ('AC');
  - b Ian Kennedy and Andrea Brabant, for Waste Management NZ Limited ('WMNZ');
  - c David Willmott, for the Centre for Urban and Transport Studies ('CUTS'); and
  - d Peter Fogarty, for his own submission.

#### **4 Updates to my evidence**

- 4.1 I have no updates or amendments to make to my evidence.



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**Robert John Schofield**

**17 July 2017**