

## Memorandum

To	<b>Tobias Oellinger</b>	From	<b>s 9(2)(a)</b>
Copy	<b>Nigel D'ath</b>	Reference	<b>500753</b>
Date	<b>21 November 2017</b>	Pages (including this page)	<b>5</b>
Subject	<b>NZTA Minor Efficiency Projects - 16 November 2017 Workshop outcomes</b>		

The following memo outlines the discussions and decisions relating to the options and investigation workshop.

The workshop was split into 3 sessions aligned with the TLA in which the projects lay.

Rough order cost estimates are provided below and the spreadsheet price build up is attached and includes a 15% contingency and estimates for design, MSQA etc

**Out of Scope**

Released under the Official Information Act 1982

# Out of Scope

Released under the Official Information Act 1982

Out of Scope

Released under the Official Information Act 1982

3 Rotorua Lakes City

3.1 Attendees

Nigel D'Ath, Tobias Oellinger, s 9(2)(a)

Darryl Robson, s 9(2)(a)

Mike Russell, Adam Francis, Out of Scope

Out of Scope

# Out of Scope

Released under the Official Information Act 1982

## 3.5 SH 5 Hemo Road VMS

- OPUS design – original issue was power supply

- Aurecon to follow up with Unison as workshop discussion suggested that transfer of streetlight cable to NZTA ownership and street light upgrade to LED would mean that the VMS signs could be run off the street light circuit
- Estimate \$200k based on \$100k per sign

**Out of Scope**

Released under the Official Information Act 1982

s 9(2)(a)