Option Development Post MCA2

Report No. MMA-DES-RPT-819

Opportunities for Cost Reduction Post MCA2

20 July 2017
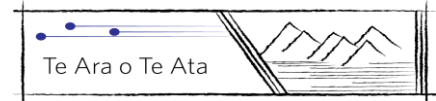
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1. Introduction

There was general agreement at the board meeting held on 5 July 2017 that Route Option E was the preferred option, but the cost lay outside the affordability threshold.

The board requested that the following be undertaken;

- A review of the possibilities of significantly reducing the cost of Options A, E, F, P and Z, i.e. the five options assessed at MCA2 and summarised to the board on 5 July;
- Identify a scheme that could be provided with a cost not exceeding $150 million.

Additionally, the board asked that the overall scope of work be confirmed together with details of the problem(s) to be addressed by the project.

This report summarises the scope of work, details the work undertaken since 5 July, outlines the opportunities for cost savings and provides revised estimates for Options E and Z.

2. Work Scope & Project Objectives

1.1 Scope

The scope of the project has evolved through a number of iterations as summarised in the Indicative Business Case (IBC) in 2015. Prior to the IBC a Strategic Case and a Programme Business Case were developed through extensive consultation and involvement of key stakeholders.

The IBC relates to the length of SH3 between Awakino Gorge and Mount Messenger. It makes a number of recommendations for improvements including 'Programme E' previously investigated in a 2002 scheme assessment. Programme E comprised a 4.7km long 'realignment' to the west of SH3 avoiding the worst of Mt Messenger and shortening the route by 3.6km.

Prior to the alliance being appointed Opus prepared preliminary designs for a number of bypass options as well as on-line safety improvements. The public was consulted on two bypass options and the on-line improvements in late 2016/early 2017. The options summary booklet available at the consultation meetings noted one of the bypass options presented the best solution of the three options presented.

The request for Statements of Interest issued by the agency in November 2016 indicates the project objectives would be optimally achieved through the development and construction of a bypass of the Mt Messenger tunnel and approaches noting the alliance contract is for the design

and construction of a bypass up to 7km long and likely to consist of a four lane highway including passing/slow vehicle lanes.

In the light of the above, the primary focus of the alliance has been to consider route options that bypass the existing road. Given the topography of the area and the major landslide feature north of Mount Messenger any bypass of the existing route needs to start in the rolling farmland south of the hills that include Mt Messenger and terminate in similar terrain to the north. However, in recognition of the potential challenges in obtaining a consent for a bypass solution an on-line option largely within designation (Option Z) has also been developed.

2.2 Objectives

The IBC defines the SH3 problems between Awakhino and Mt Messenger as:

- Narrow lanes and poor geometric alignment causing a high number of crashes resulting in deaths, serious injury and road closures;
- Natural events causing a high number of road closures causing significant delays;
- Lack of passing opportunities leading to poor driver frustration and poor journey experience.

In the context of the Mt Messenger Bypass the project objectives can be summarised as follows:
- To enhance safety of travel on SH3;
- To enhance resilience and journey time reliability of the state highway network;
- To contribute to enhanced local and regional economic growth and productivity for people and freight by improving connectivity and reducing journey times between Taranaki and Waikato regions;
- To manage the immediate and long term cultural, land use and other environmental impacts by so far as is practicable avoiding, remedying or mitigating effects through design.

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Appendices