

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Peter Thomson, Engineering Manager

REFERENCE: RD3544

DATE: 31 January 2008

SUBJECT: **MOUTERE HIGHWAY REALIGNMENT – GEORGE HARVEY ROAD**

1 PURPOSE

This purpose of this report is to gain the Committee's approval to include realignment of the Moutere Highway at George Harvey Road in the 2008/2009 Draft Annual Plan.

2 BACKGROUND

This subsidised road reconstruction project was previously included in Council's 2006 LTCCP and 2007/2008 Annual Plan to be completed in the current financial year with a total capital budget estimated at \$816,000.

Difficulties with land acquisition and approvals have delayed the construction of this project and required a re-consideration of the project design. This year additional options have been investigated for realigning and reconstructing the Moutere Highway near the intersection of Kelling Road and George Harvey Road.

The Moutere Highway is currently classified as a rural arterial in the TRMP, and has a traffic volume of approximately 2,000 vehicles per day in the section under study and carries about 15% heavy vehicles with higher concentrations in the fruit season. The current land use is a mix of grazing, residential, recreation and the Moutere sports complex. The road has a regulatory speed of 100km/ in the study section. The topography is flat with two sharp horizontal curves with design speeds of 65 km/h.

A fatal and several high profile injury crashes have occurred on the reverse curves on the Moutere Highway at the intersections of Kelling and George Harvey Roads. Realignment options have been investigated, costed and analysed for LTNZ subsidy.

The geotechnical assessment found that the area was once a flax swamp. The area under any new road would require digging out to a depth of 0.5m to 1.0m to remove topsoil and swamp deposits. An engineered fill embankment would be required to lift the new road sections above the surrounding ground plane to align it with the existing sections.

Several options have been investigated and two possible realignment and reconstruction options are discussed below. Site photographs and preliminary drawings are attached.

3 DISCUSSION - OPTIONS

3.1 Options Investigated

Three options were investigated however option one had significant impact on the recently constructed Upper Moutere Sports Complex and was discounted.

Option 2 is a significant realignment with a 95km/h design speed, a new bridge across the company ditch, and turning bays into the two side roads. Significant land purchase is required from three land owners.

Option 3 involves minor curve easing with carriageway and bridge widening. Option 2 has a design speed of 80km/h. Minor land purchase required from three land owners.

Findings

Option 2 BCR = 3.0. Capital Cost \$2.23M

Option 3 BCR = 2.3. Capital Cost \$1.05M

Option 2 would have the best safety and efficiency performance. An economic comparison tool also indicates that from LTNZ's perspective option 2 is preferred.

All options require land purchase from 2 adjacent farms and the Lot owned by Telecom that the exchange is housed in.

We have had some contact with the land owners requesting access for survey purposes but no discussions regarding the amount of land required or compensation has taken place.

Land purchase costs have been included in the preliminary cost estimate based on \$60,000 per hectare.

4 RECOMMENDATION

THAT the Committee recommends that Council approve inclusion of Option 2 to realign the Moutere Highway at the intersections of George Harvey Road and Kelling Road, with an estimated capital cost of \$2.23M, as a subsidised roading project in the 2008/2009 Draft Annual Plan.



Peter Thomson
Engineering Manager