

## STAFF REPORT

**TO:** Chairman and Members of Engineering Services Committee

**FROM:** Steve Elkington, Road Asset Engineer

**REFERENCE:** RD3499

**DATE:** 31 August 2006

**SUBJECT: LORD RUTHERFORD ROAD SOUTH - SPEED LIMIT AND BRIDGE SAFETY REVIEW**

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### 1 PURPOSE

To further report on the speed limit review previously undertaken on Lord Rutherford Road South and also review the safety at Telenius Bridge in terms of signage and markings.

### 2 BACKGROUND

The Speed Limit warrant undertaken for Lord Rutherford Road South, extended from the current 50/100 kph speed limit change point to Telenius Bridge, near the intersection of Telenius Road, a distance of 860 metres.

Lord Rutherford Road South is classified as a Collector Road with an average traffic count recorded from the two recent speed counts of 390 vehicles per day. The road is straight and wide at 8.2 metres, this width is slightly wider than that recommended in Council's engineering standard of 7.2 metres.

#### **Crash History**

From Land Transport NZ Crash Analysis Database (CAS), there were no reported crashes on Lord Rutherford Road South in the last five years. The only reported crash involving Telenius Bridge occurred when a north-bound driver was temporarily blinded by sun strike and hit the end of the bridge.

### 3 COMMENT

#### **Speed Warrant**

A review of the previously undertaken Speed Limit Warrant unfortunately did not lead to a change in the calculated rating of 2.6. The reason for this is that firstly, the proposed three lot subdivision will only impact on the warrant when the subdivision is developed. Secondly, the community hall which is used for all sorts of community activities is set well back off the road, and whilst the hall was given additional consideration in the original evaluation, unfortunately this was not sufficient to affect the overall rating.

Therefore the rating for Lord Rutherford Road South between the existing 50/100 kph speed limit and Telenius Road remained at 2.6, below the minimum threshold of 3 for consideration of an 80 kph Speed Limit.

#### **Speed Survey**

Both speed surveys undertaken in April and July 2006, over a seven day period for each, had 85 percentiles of 90 kph. Therefore, should the speed limit be lowered to 80 kph,

then there will need to be enforcement to encourage acceptance of a lower speed limit. It should be noted that these surveys showed speeding not to be an issue. I believe the local concern is the speed on this road; however from the recent speed surveys an average of 10 vehicles were recorded as travelling above 100 kph out of an average daily vehicle count of 390.

### **Telenius Bridge**

Only one crash has occurred at this bridge and that was due to the driver being temporarily blinded by the sun.

This bridge is in good structural condition and unfortunately does not justify replacing under LTNZ's economic evaluation procedures.

A recent resource consent granted to the Hannah's for a three lot subdivision near the bridge requires the upstream concrete parapet of the bridge to be removed and replaced with appropriate guard rail and end terminals. Ideally, the downstream parapet needs treating similarly and undertaken at the same time. This work would need to be paid for by Council most likely out of its Minor Safety Budget.

The bridge could be made safer by installing the following additional signs and road markings to make the single lane nature of the bridge more conspicuous and, signage to warn of the hidden Telenius Road intersection when travelling from Higgins Road direction.

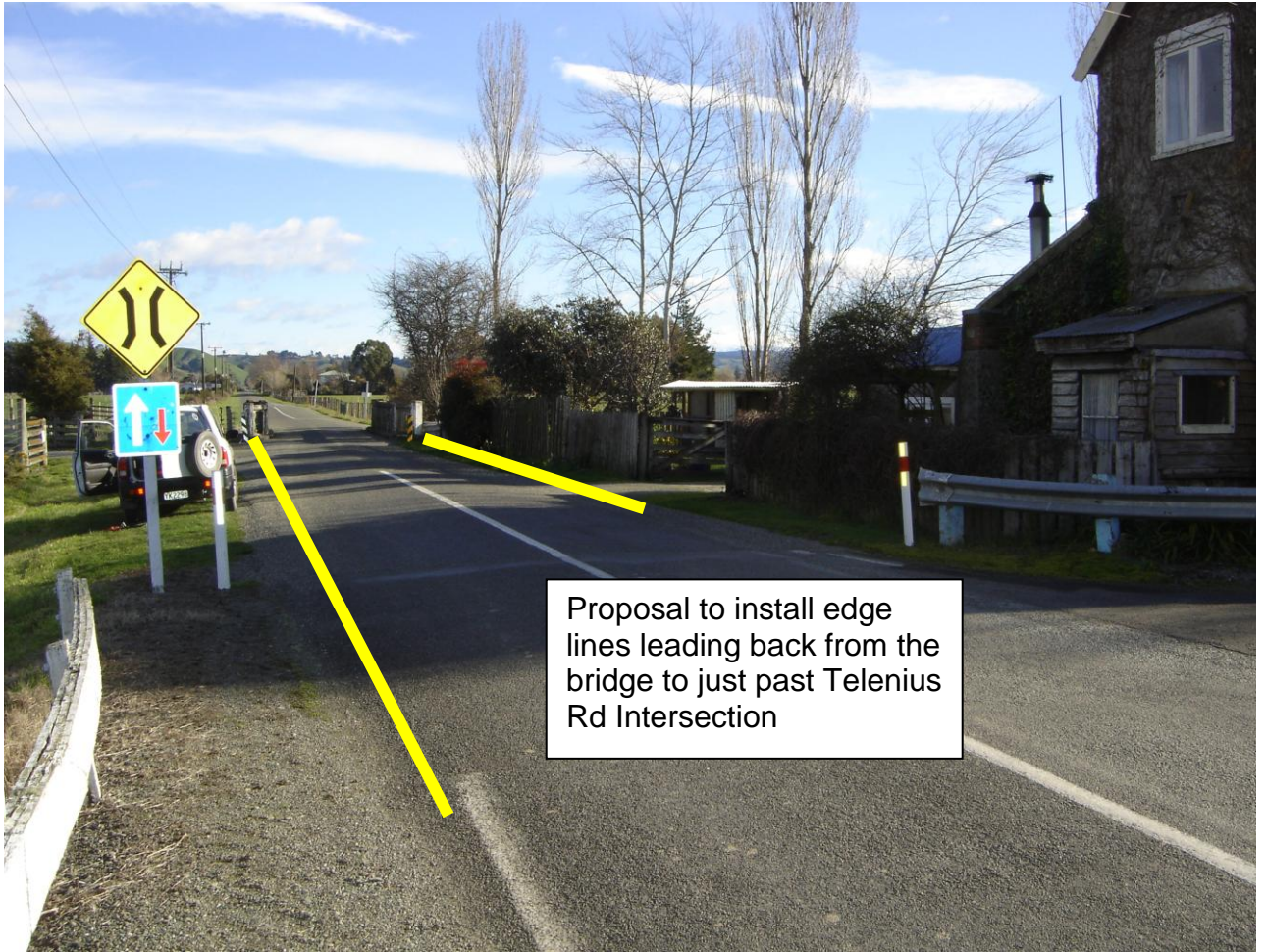
- 3.1 Install on Higgins Road on the southern side of Telenius Bridge for drivers travelling towards Brightwater, a Permanent Warning Sign with supplementary plate with the words "Concealed" underneath, indicating the hidden intersection of Telenius Road ahead.
- 3.2 Install edge lines leading up to both abutments of the bridge as per the Manual of Traffic Signs & Markings Manual (MOTSAM).
- 3.3 Mark on Lord Rutherford Road South on the northern side of the bridge in the South bound lane the words " ONE LANE BRIDGE" similar to the message in the North bound lane.
- 3.4 A further advanced single lane bridge warning sign installed on Lord Rutherford Road South, at the correct position approximately 160metres north of the bridge.

## **4 SUMMARY**

The low rating achieved for the Speed Limit Warrant was due to the lack of roadside development.

From the recent speed surveys undertaken in both April and July this year, these indicate that speed is not an issue and that the existing rural road speed limit of 100 kph is appropriate.

**Telenius Bridge** – Only one crash has occurred at this bridge and that was due to the driver being temporarily blinded by the Sun. The bridge could be made safer by installing additional signs and road markings to make it more conspicuous and, a permanent warning sign to indicate the concealed Telenius Road intersection ahead when travelling from the South.



Proposal to install edge lines leading back from the bridge to just past Telenius Rd Intersection

Looking South



Looking South with Telenius Rd Intersection on Right



Telenius Bridge on Higgins Road – Looking North

## 5 RECOMMENDATION

**THAT the current speed limit of Lord Rutherford Road South remain unchanged for now, and that the proposed improvements to markings and signs at Telenius Bridge be undertaken as well as investigation into replacing the downstream parapet with guardrail and end terminals.**

Steve Elkington  
**Road Asset Engineer**