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15 February 2016

Jason Hewson  
Whangarei

**PROPOSED SUBDIVISION, SH 1, KAURI (JEROME LUITEN).  
WHANGAREI DISTRICT COUNCIL REF. SD1500115.  
RESPONSE TO REQUEST FOR FURTHER INFORMATION (ITEM 6)**

Item 6 of the request for further information is as follows:

*Please provide plans showing that the proposed entrance upgrade (including drainage works) can fit within the existing State highway corridor and will not require works within private property outside of the subject site.*

To determine this, the northern and southern survey pegs have been located on the road frontage of the subject site. The distance from those pegs to the painted line on the edge of the State highway carriageway is 4.3 metres (northern peg) and 5.7 metres (southern).

It has not been possible to locate pegs on the frontage of the property to the immediate south. However, when measurements of its southernmost gatepost (9.7 metres from the edge of the marked carriageway) are combined with aerial photography and other site measurements, the boundaries coincide with a high degree of accuracy. A sufficiently accurate plan has been able to be produced on this basis. A left-turn lane layout has then been super-imposed over this. The result is shown in Figure 1.

This shows a left-turn lane 110 metres long, including 50 metre taper, as recommended in the original traffic report for the proposal and in accordance with the *Manual of Traffic Signs and Markings*. The lane is 2.0 metres wide lane at its full width, outside which is a 1.0 metre sealed shoulder throughout (including through the taper). At the full width of the lane, this gives a total of 3.0 metres of sealed carriageway outside the edge of the State highway through lane.

This results in a minimum clearance to the private property immediately south of the subject site, of 1.6 metres in the location shown. At this location, the road is on a small (less than 0.5m high) fill embankment and has no side drainage. The necessary widening will also not necessitate side drainage. The most that might be required is a short length of a low retaining wall to support the new shoulder.

On this basis, it is concluded that the proposed left-turn lane and associated earthworks will everywhere be located within the State highway road reserve.

It is noted that the existing seal shoulder on the western (site) side of State highway 1 is 1.1 metres wide. A left turn lane plus 1.0 metre shoulder is a significant overall improvement on this.

**Figure 1.** Plan showing the clearance to the adjoining private property from the proposed left-turn lane and new edge of carriageway.



Yours Sincerely

Dean Scanlen  
*Engineering Outcomes Limited*