

27. Stage 2 road safety audit

The Stage 2 Road Safety Audit site visit was undertaken on Tuesday 21 August 2007 by GHD.

27.1 Road safety audit findings and design team response

Table 27-1 provides a summary of the major safety issues raised in the Road Safety Audit including a description of their relevant risks.

Table 27-1 Summary of major road safety audit findings

Hazard	Identified risks	Response to identified risks
Crash barriers	There are a number of safety barriers that currently appear to be positioned so as to protect vehicles from culvert headways and 2:1 embankments. It is noted that significant portions of the barriers require longer development lengths. Barriers should protect vehicles that leave the carriageway significantly prior to the hazard rather than starting at the hazard itself.	Barrier length adjacent to hazards has been extended throughout the project to provide protection for vehicles leaving the carriageway prior to the hazard.
Acceleration lanes	There are a number of acceleration lanes that are designed at length lower than that recommended by the RTA Road Design Guide. It is presumed that the shorter lengths have been used due to the low traffic volumes on side roads entering the Pacific Highway. There is a risk that vehicles will use the shortened acceleration lanes to gain speed only to find that there is a significant speed differential between themselves and vehicles traveling at 110 km/h on the Pacific Highway.	Shortened (30 m) acceleration lanes have been provided in accordance with RTA standard intersection designs for the Pacific Highway.
Side road vertical and horizontal alignments	A number of the vertical curves provided on the side/ link roads are less than for the design speed of 70 km/h.	The two lesser vertical curves are noted in Section 31 - Departures from design criteria. The curves have been adopted to minimise earthworks and reduce costs.
Culvert Headwalls	There are a number of culvert headwalls are currently positioned on the trafficable side the proposed safety barriers. The culvert headwall locations should be rectified during the detail design process.	Culvert headwalls were shown in incorrect locations. The drawings have been adjusted to show the correct location of headwalls behind the safety fencing.