

Specific safety issues with the MRPV design

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1. Roundabouts are inherently safer than signalised intersections as demonstrated by study after study. Importantly, they are far safer in terms of fatal and serious injury crashes – which is why signals are NOT a recommended treatment under Safe Systems (see ARRB report).
2. Signalised approaches to an intersection are made significantly more hazardous if on downhill grades – due to possible over-running of the holding line, and particularly in wet conditions.
3. Signalised approaches to an intersection are made significantly more hazardous if on 'low design speed' curves due to both the added potential for loss of control when braking, and often the difficulty in viewing the relevant signal heads.
4. Signalised approaches to an intersection on 'low design speed' curves AND on steepish downgrades are made even more hazardous by the combination of effects of the curve and the grade. Loss-of-control crashes become even more likely, and exacerbated in wet conditions.
5. Approach speed limits of 70 km/h and 80km/h are riskier for signals compared to roundabouts (roundabouts rely on 'poor' geometry).
6. Triple lane right turn and left turn movements are likely to have significantly higher crash rates (crashes/10m entering vehicles) than on double or single lane turns.
7. The rapid rate of adding lanes on the southern approach (3 lanes added inside 60 m) will lead to numerous lane-changing (mostly side-swipe) crashes (I have never seen a design like this before – possible exception Montague St interchange area).
8. No 2-lane approach should require 7 stand-up lanes at the intersection.
9. The triple lane left turn design does not assist the lane discipline issue for traffic wishing to turn right into Bolton St.
10. There is no apparent provisions for on-road cycling – although the design shows a bicycle lane along the NE side of the left turn island.
11. The double and triple right turn movements have no lane widening within the intersection to provide for turning trucks.
12. Jayson Avenue is too close to the signalised intersection for safe operation.