

Our Reference: J1074_traffic letter

Ben Fawcett
70 Montecollum Road
Wilsons Creek, NSW, 2484

14th May 2019

Re: DA 10.2018.483.1, Montecollum Road traffic safety issues

Dear Ben,

I refer to our meeting today and correspondence to date regarding the Development Application for 8 rural tourist cabins at 58 Montecollum Road in Wilsons Creek, and in particular your concerns regarding traffic safety issues associated with this proposal.

Reference literature

The *Austroads Guide to Road Safety Part 5 – Road Safety for Rural and Remote Areas* provides a number of factors that contribute to vehicle crash risk in rural and remote areas. These are:

- At-risk groups
- Vehicle types
- Environmental crash risk factors
- Behavioural crash risk factors
- Post-crash risk factors

Risk factors of particular relevance to this project are:

- Environmental crash risk factors, which include:
 - Road condition (e.g. shoulders, surface, alignment, etc.)
 - Road design (e.g. divided/undivided, number of lanes, sight distance, delineation, etc)
 - Roadside environment (e.g. trees, culverts, embankments)
 - Speed limits (i.e. inconsistent or inappropriate).
- Behavioural crash risk factors, which include:
 - Driving under the influence of alcohol and other drugs

- ☐ Speeding
- ☐ Fatigue
- ☐ Failure to wear seat belts
- ☐ Failure to wear helmets

I will address these issues in this letter as I discuss the road condition of Montecollum Road.

Road condition

Montecollum Road falls under the speed de-restricted zone, signposted by the relevant sign and advisory sign to drive to conditions at the intersection of Wilsons Creek Road and Coolamon Scenic Drive. The effectiveness of these types of de-restricted speed zones to reduce crash risk relies heavily on the experience drivers have with the road conditions in a certain area.

Montecollum Road is a rural no-through road in an area with steep topography and dense vegetation. The pavement width is generally narrow (around 2 to 3 metres) and limited verge width is available. An example of this is shown in Figure 1, taken using a screen shot from dashcam footage. Along this narrow and unsealed section of Montecollum Road, sight distances are limited and the pavement width is suitable only for single-lane use. The example shown is one of several sections of road where there is insufficient space to pass an opposing vehicle, and there is insufficient sight distance to achieve sufficient advance warning of a vehicle approaching from the opposite direction.

Figure 2 shows the location where in May 2018 a vehicle ran off the road and rolled down the embankment. This crash was the result of the vehicle swerving around potholes and losing control on the soft and narrow verge. Only one pothole was present during today's inspection, but I understand this is because the road was recently regraded by Council. Prior to that this section of road contained many potholes. Upon inspection of this section of road, it was apparent that there is insufficient roadside drainage available. Combined with the surface not being sealed, it is likely that potholing will re-appear after extended periods of rain.

The pavement condition of Montecollum Road was generally poor. Unsealed sections of road with steep grades showed signs of scour (Figure 3) and sealed sections were patchy, in poor condition, and do not adequately seal the underlying granular pavement from rainwater ingress (Figure 4). Roadside drainage was generally inadequate or non-existent.



Figure 1 | Example of limited sight distance



Figure 2 | Location of recent vehicle crash



Figure 3 | Signs of scour on steep unsealed sections



Figure 4 | Pavement seal in poor condition

Cedar Road intersection

Figure 5 shows the intersection of Montecollum Road and Cedar Road. This photo was taken from the western approach to this intersection. When driving along Montecollum Road in a westbound direction towards Wilsons Creek Road, it was impossible to see oncoming traffic from Cedar Road. The priority arrangements were also unclear.



Figure 5 | Cedar Road intersection

Assessment

From our inspection it is evident that Montecollum Road is in a poor condition and generally unsafe. In particular due to the following issues:

- Sections with one-lane width, no passing opportunity and limited sight distance
- Poor pavement condition resulting in dangerous manoeuvres
- Dense roadside vegetation blocking sight lines, hide narrow verges and steep embankments
- Infrangible objects (power poles and trees) close to edge of pavement
- Inappropriate speed controls
- Insufficient sight distance at the intersection of Montecollum Road and Cedar Road
- Unclear priority arrangements at the intersection of Montecollum Road and Cedar Road

It is stressed that these conditions may not be exhaustive, but are based on a once-off inspection of the road, without available survey, geotechnical and traffic data.

These existing road conditions are problematic, but due to the awareness of local residents (who comprise the majority of road users) of these issues, local residents generally manage to navigate Montecollum Road relatively safely, albeit that there have been reported incidents along this road.

Referring back to the *Austroads Guide to Road Safety Part 5 – Road Safety for Rural and Remote Areas*, it is evident that there are significant environmental risk factors associated with Montecollum Road, most of which are mitigated by responsible driver behaviour by the locals.

Tourist facilities generate traffic by drivers unfamiliar with the area and road safety issues. It is likely that road safety risks are increased as a result of the proposed development at 58 Montecollum Road. These reasons for the likely increased road safety risk are:

- Driver behaviour – visiting tourists are unfamiliar with the terrain and are more likely to crash when environmental risk factors are as significant as they are on Montecollum Road.
- Increased traffic volumes – adopting the trip generation rate of 3 trips per cabin per day (as I understand you have sighted from the Greg Alderson and Associated Traffic Safety Assessment for this proposal), eight cabins producing an average of 24 trips per day, approximately doubling the traffic volume on Montecollum Road. This increased traffic volume increases the crash risk, in particular as the frequency of two-way traffic along single-lane stretches of road will increase.

Conclusion

Based on this assessment, I conclude that any development proposal that results in increased traffic volumes and altered driver behaviour on Montecollum Road should address the environmental crash risk factors which are presented by Montecollum Road and demonstrate how crash risks can be mitigated satisfactorily.

Yours sincerely,



Michiel Kamphorst , MSc, BSc, RPEng, NER, RPEQ
Registered Professional Engineer