

Traffic Engineer Referral Response

Application Number:	DA2023/0374
Proposed Development:	Construction of a studio and car parking structure
Date:	26/05/2023
Responsible Officer	
Land to be developed (Address):	Lot 4B DP 361236 , 18 The Serpentine BILGOLA BEACH NSW 2107 Lot 4A DP 361236 , 20 The Serpentine BILGOLA BEACH NSW 2107 Lot 5 DP 13497 , 20 The Serpentine BILGOLA BEACH NSW 2107

Officer comments

This application is regarding construction of a parking structure, carport and an under-croft studio/office space.

Access and Parking Design

The development proposes a combined entry/exit driveway with a width of 3.8m. The car parking spaces are provided in the form of a double vehicle carport, having an opening width of 5.7m, an internal width of 5.7m and internal length of 5.7m. The use of a mechanical turntable is acceptable noting the site constraints.

The traffic and parking statement prepared by PDC Consultants, included a swept path analysis for the proposed driveway access using a B85 Design Vehicle, however swept paths for a B99 vehicle should be used in the design of access driveways. The results using the B85 vehicle analysis show the wheel paths on the edge of the double dividing line and driveway for the left turn manoeuvre off The Serpentine to access the property. A swept path analysis using a B99 vehicle is required for driveway access, and it is likely that the layback would need to be widened to accommodate the movements for a B99 vehicle.

Sight Distance

Concerns regarding traffic safety were originally raised at the Pre-Lodgement meeting due to the proximity of the driveway to the road bend. A sightline analysis was requested and included as part of the traffic and parking statement. Drawing No.S 001 - Car Platform Driveway Sight Distance Analysis, shows the line of sight to achieve the minimum 35m Stopping Sight Distance, east of the driver's position. However, to achieve the unobstructed sightlines, Tree 8 and 9 will need to be removed as well as canopy pruning for Tree 11.

The recommendation of the Arboriculture Impact Assessment (AIA) only appears to consider the impacts the location of the driveway and structures have on the existing trees and not any consideration of their effects on sight distance. The AIA recommends tree protection fencing a minimum 1.5m from the stem of Tree 8. It also advises that no canopy pruning is necessary for Trees 9 and 11, with only 10% pruning of the total live canopy and a maximum of 80mm branch diameter at the branch/stem junction.

The Transport Network continues to have concerns regarding visibility exiting the driveway and restricted sight distance due to the existing trees and vegetation. It is noted that the Landscape referral response accepts the recommendations of the AIA, and therefore provision of a traffic calming device to reduce approach speeds, located mid-way between the curve and proposed access driveway, could be considered as an acceptable alternative to the additional tree removal and pruning.

The proposal is not acceptable in its current form due to access and sightline issues. The additional swept path analysis for access to the driveway using a B99 vehicle is required as well as consideration to provide a traffic calming device on the northern approach to the driveway in lieu of further tree removal and pruning to achieve the minimum Stopping Sight Distance requirements.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Traffic Engineer Conditions:

Nil.