

To: Ben Mah-Chut  
 From: Neill Miller  
 Email: nmiller@urbis.com.au  
 Date: 29<sup>th</sup> October 2019  
 Subject: Kariong Transport Advice – Stage 1 Rezoning Report Entry Location and Options

## OVERVIEW

Urbis has undertaken a desktop assessment of the subject site to provide advice relating to site access on Woy Woy Road. The purpose of this advice is to inform the preparation of the master plan for the proposed residential development in Kariong. This advice includes the following:

1. Recommendations from a desktop assessment of suitable locations for a new intersection for access to the site.
2. Intersection treatment considerations for future design development and master planning.

This advice is guided by the provisions set out in the Austroads *Guide to Road Design, Part 4A: Unsignalised Intersections* and observations from a desktop assessment.

## 1. SITE ACCESS LOCATION

The recommendations in this section are based on the site distance requirements outlined in the Austroads *Guide to Road Design, Part 4A: Unsignalised Intersections* and the following environmental factors:

- The speed limit along Woy Woy Road near the site; which is 60km/h.
- Existing street environment, including roadside vegetation, as observed via Google Street View.

### 1.1 Site distance requirements

The safe intersection site distance is the minimum distance which should be provided on the major road at any intersection. This distance has been used to inform suitable locations for a new intersection providing access to the site.

Based on the environmental factors of the site location a minimum of 151 metres is required to provide a safe intersection site distance.

The site distance is most affected by the approach from the north as motorists travel southbound through the bend in Woy Woy Road. Based on a desktop assessment using Google Street View the following diagram indicates where a new intersection could be accommodated in accordance with the site distance requirements.

Due to the length of the site frontage, as well as site distance constraints, only one access point can be provided.

Figure 1 – Potential Site Access Locations



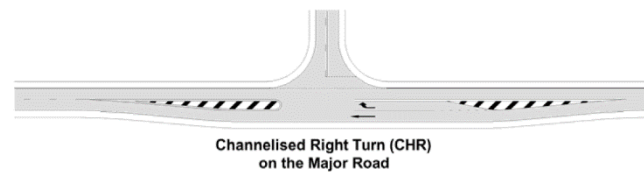
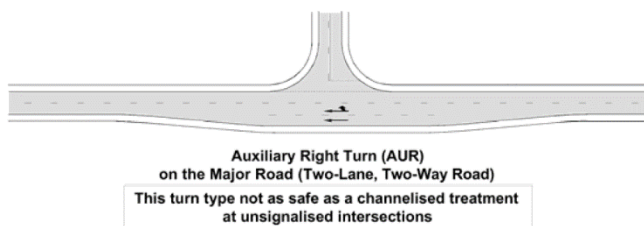
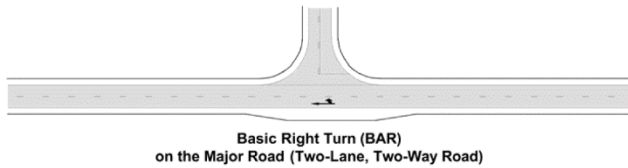
Base Map Source: NearMap

## 2. INTERSECTION TREATMENT CONSIDERATIONS

The recommendations in this section are based on the Austroads *Guide to Road Design, Part 4A: Unsignalised Intersections*. This advice does not address the detailed design requirements for the intersection.

The three types of intersection treatments to consider for site access include:

- Basic turn treatment – consists of a widened shoulder that allows through vehicles to pass.
- Auxilliary turn treatment – consists of a short lane to allow that allows through vehicles to pass more easily than a basic turn treatment.
- Channelised turn treatment – has conflicting vehicle travel paths separated by raised, depressed, or painted medians and/or islands.



Based on the street environment, road safety factors and anticipated traffic generation of the proposed development the following is recommended:

- It is anticipated that the proposed development will not generate a significant volume of peak hour traffic i.e. in the order of 60 vehicles in the peak hour. Due to the low turning volumes it is unlikely that a channelised turn treatment will be required.
- Due to the limited site distances for motorists approaching from the north it is recommended that an auxiliary left turn treatment is provided to reduce the likelihood of rear-end collisions.
- An auxiliary right turn treatment is provided to minimise the interaction with through moving vehicles as motorists travelling northbound due to the rural character of the street environment and limited access points to the south.
- A discussion with Roads and Maritime to understand their expectations is required prior to lodging the planning proposal.

### **3. SUMMARY OF RECOMMENDATIONS**

This advice has been prepared to inform the preparation of the master plan for the proposed residential development in Kariong. This has been based on a desktop assessment. Further work is required to inform the planning proposal documentation.

A summary of the recommendations includes:

- To provide sufficient visibility for motorists in accordance with *Austroads Guide to Road Design* the access point will need to be located at the southern end of the site as illustrated in Figure 1.
- Due to the length of the site frontage, as well as site distance constraints, only one access point can be provided.
- An auxiliary left and right turn treatment are required at the intersection to reduce the likelihood of rear end collisions.
- A discussion with Roads and Maritime to understand their intersection design requirements.
- Further assessment will be required during the preparation of planning proposal documentation to provide more detail on the most appropriate access location and design.