



Empirical
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Advisory

Lakeside Goolwa Code Amendment

4-16 Banfield Road, Goolwa North

Transport Impact Assessment

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DATE

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1 INTRODUCTION

An amendment to the Planning and Design Code is being sought relating to land located at Goolwa North to change the land use zones.

Empirical Traffic Advisory was commissioned to prepare a transport impact assessment of the proposed development.

This report sets out an assessment of the anticipated transport implications of the Code Amendment, including consideration of the following:

- Anticipated uses in the Affected Area
- Existing traffic and parking conditions surrounding the Affected Area
- Traffic demands of the anticipated uses
- Possible access arrangements for the Affected Area
- Transport impact of the Intended Policy on the surrounding road network
- Suitability of the policy framework to cater for anticipated uses

2 AFFECTED AREA

The Affected Area is located at 4-16 Banfield Road, Goolwa North and is in the Alexandrina Council area. The Affected Area is located between Fidock Road (to the north) and Banfield Road (to the south), and to the east of Currency Creek in the Lower Murray. The adjacent roads are under the care and control of Council.

The Affected Area is irregular in shape with a frontage of approximately 257.5 metres to Banfield Road and frontage of approximately 58.5 metres to Fidock Road. The Affected Area has a total land area of approximately 9 hectares.

Land to the north and west of the Affected Area, located within the Rural Living Zone, comprises semi-rural living allotments with associated dwellings and low scale rural activities. Existing residential development in the locality to the south of the land within the Neighbourhood Zone comprises primarily one and two storey detached dwellings at relatively low densities. The eastern portion of the Affected Area and beyond, encompassing the waterfront and Currency Creek inlet of the Murray River, is located within the Conservation Zone

The location of the Affected Area and the surrounding environs is shown in Figure 2.1.

Figure 2.1: Affected Area



(Source: SAPPA)

3 EXISTING CONDITIONS

3.1 Road Network

3.1.1 Banfield Road

Banfield Road is a local road under the care and control of Alexandrina Council. It comprises a single carriageway approximately 7.7 metres wide with kerbing on the southern side of the road. A footpath is located on the southern side of the street. Banfield Road continues into the existing Lakeside Goolwa residential park to the east.

Figure 3.1: View West on Banfield Road (Affected Area on right)



3.1.2 Noble Avenue

Noble Avenue is a local road under the care and control of Alexandrina Council. It comprises a single carriageway approximately 6.2 metres wide with no kerbing on either side of the road.

3.1.3 Fidock Road

Fidock Road is a local road under the care and control of Alexandrina Council. Adjacent the Affected Area, the road comprises a single unsealed carriageway approximately 6.0 metres wide with verges on each side of the road. Fidock Road is a No Through Road to the east, but connects to Cutler Road to the west, and provided access to a number of local streets on the northern side.

Figure 3.2: View North on Noble Avenue



3.2 Traffic Volumes

Traffic volumes have been estimated for the existing road network based on traffic surveys undertaken in December 2023. The estimated daily traffic volumes are shown in Figure 3.3.

Figure 3.3: Existing Daily Traffic Volumes



(Source: ETA Traffic Surveys, Dec 2023)

3.3 Crash History

In the vicinity of the subject, only two crashes have been recorded in the 5 years from 2018 to 2022 (most recent available data). Both crashes resulted in property damage only. The crash locations are shown for type and severity in Figure 3.4 and Figure 3.5.

Figure 3.4: Road Crashes – Type 2018-2022



Figure 3.5: Road Crashes – Severity 2018-2022



3.4 Pedestrian Access

A footpath exists on the southern side of Banfield Road to the west of Noble Avenue up to Saratoga Drive. No other footpaths are located in the general vicinity.

3.5 Cycling Access

In the vicinity of the subject site there are no dedicated cycle lanes.

The Encounter Bikeway is located on Liverpool Road in close proximity to the affected area, and links to the west to Victor Harbor (a journey of 26 km) via on-street routes and off-street paths.

3.6 Public Transport

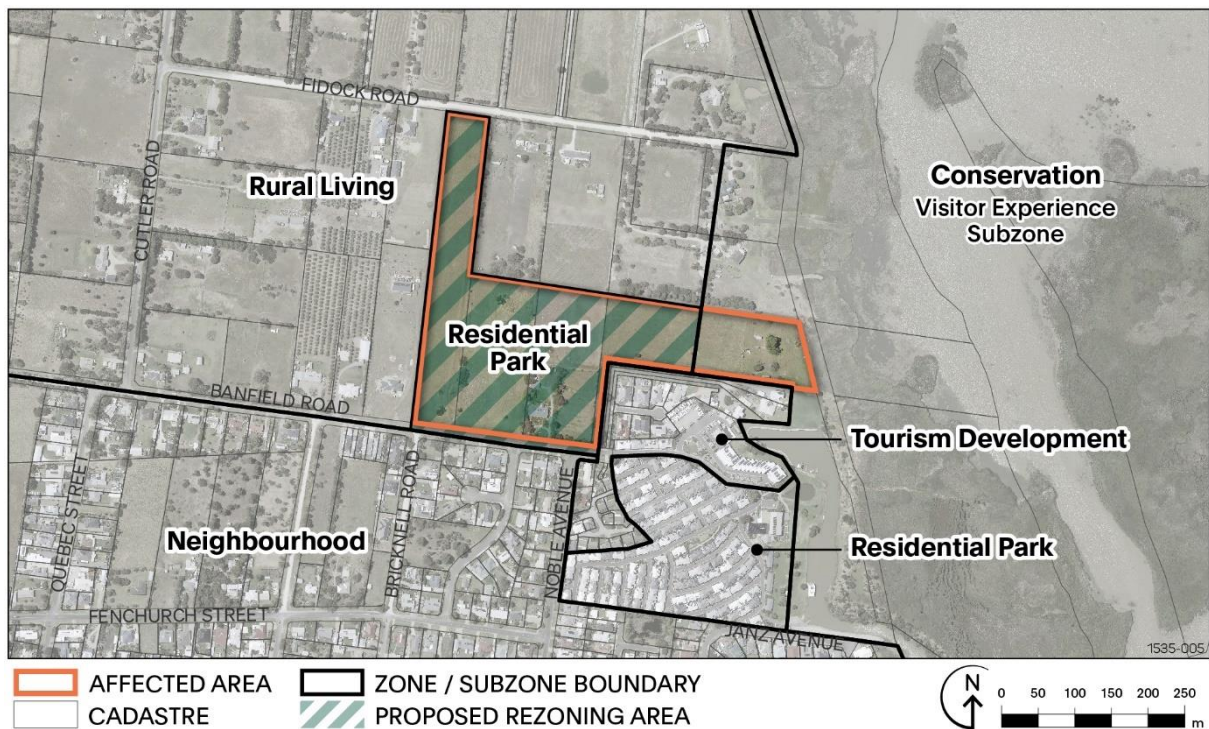
There are no regular public transport services (i.e. Adelaide Metro) in Goolwa North.

4 INTENDED POLICY

The Code Amendment intends to replace the existing Rural Living zone with the 'Residential Park Zone', and maintain the Conservation Zone (at the eastern end).

The intended policy is shown in Figure 4.1

Figure 4.1: Intended Policy



Source (Ekistics)

With regards to Traffic and Transport, the relevant parts of the P&D Code include:

Part 4 – General Development Polices

Design

Land Division

Transport, Access and Parking

5 ANTICIPATED USES

It is anticipated that land uses within the Affected Area, based on the intended 'Residential Park Zone', will be predominantly residential (in the form of a 'residential park') along with ancillary communal and recreational activities.

The anticipated use could include approximately 170 to 200 dwellings for senior living, in a similar form and density to the existing neighbouring Lakeside Goolwa site.

The anticipated uses could have primary access on Banfield Road, with emergency access available on Fidock Road if required.

6 TRAFFIC ASSESSMENT

6.1 Traffic Generation

Traffic generation estimates for the proposed development have been sourced from New South Wales Roads and Maritimes Services 'Guide to Traffic Generating Developments' (2002 Road Traffic Authority as updated), and 'Updated Traffic Surveys' (2013). These documents indicate rates for Senior Living as follows:

<i>Weekday daily vehicle trips</i>	<i>2.1 per dwelling</i>
<i>Weekday peak hour vehicle trips</i>	<i>0.4 per dwelling</i>

Based on a total of approximately 200 dwellings, the traffic generation of the site would be 420 vehicles per day and 80 trips per hour during the peak hour.

It is understood that community facilities could be included in the anticipated uses including leisure activities, health and fitness and function room. These would be ancillary in nature with regards to traffic generation as they would be used by residents in the affected area and would not add to the typical daily traffic volumes generated by the site.

6.2 Traffic Impact

Based on observations of existing patterns of traffic on the adjacent road network, it is likely that most traffic to and from the Affected Area will use Noble Avenue or Quebec Street to travel to and from the area. This assumes access will be provided on Banfield Road.

The addition of the predicted 420 vehicles per day will have a very minor impact on existing traffic volumes in the adjacent road network. It has been assumed that traffic will be split 50:50 to the east and west on Banfield Road, and use either Noble Avenue or Quebec Street to travel to and from either Fenchurch Street or Liverpool Road.

The predicted traffic volumes are shown in Figure 6.1.

Figure 6.1: Predicted Daily Traffic Volumes



All streets will remain well below 1,000 vehicles per day except for Liverpool Road which is a main collector road for the area and already above 1,000 vehicles per day. Given the existing residential park traffic patterns where the daily vehicle trips are spread throughout the day, and do not typically occur in the road network peak periods (i.e. 8-9am and 5-6pm), the predicted traffic volumes will not be noticeable within the existing traffic using the streets.

The existing and predicted low traffic volumes will not require any upgrades from the existing capacity available in the road network, or at any of the existing intersections which can remain in existing form (unsignalised). There is ample spare capacity within the existing road network to accommodate the predicted traffic volumes.

6.3 Pedestrians and Cyclists

The low volume of traffic on the road network in this area will enable use of the roads by cyclists as required. The adjacent streets link to the Encounter Bikeway which extends between Goolwa North and Victor Harbor.

It is understood that a footpath network for pedestrians and cyclists could be developed to link to the existing Lakeside Goolwa residential park, via a route to the east along the creek frontage. This would enable safe access between the sites without the need to use public roads.

7 PARKING

The Planning and Design Code provides parking requirements for land divisions and specific land uses in Part 4 General Development Policies:

- Design
- Land Division
- Transport, Access and Parking

A review of these policies has not found any specific policies which would be problematic for the anticipated uses in the Affected Area. Given the size and layout of the Affected Area, it is likely that these policies can generally be satisfied with development in the Affected Area.

Parking for residential and commercial uses in the Affected Area would be assessed with any development application based on actual land use and built form layouts. The parking rates provided in the Planning & Design Code will be suitable for consideration of the anticipated uses in the Affected Area.

8 CONCLUSIONS

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The Affected Area is located on the northern side of Banfield Road, and south of Fidock Road, at 4-16 Banfield Road in Goolwa North.
2. The Code Amendment intends to replace the existing Rural Living Zone with a 'Residential Park Zone', and maintain the Conservation Zone (at the eastern end).
3. Access is envisaged directly to Banfield Road, with emergency access from Fidock Road.
4. Traffic surveys of the existing road network indicates there is ample spare capacity in the road network and intersections for traffic associated with the Affected Area.
5. The anticipated uses in the Affected Area will generate up to 420 vehicles per day which will be distributed between Banfield Road and Noble Avenue. This will have a very minor impact on traffic volumes on the local road network, with no changes or upgrades to the local roads required as a result of rezoning.
6. The close proximity of the Affected Area to the Encounter Bikeway provides opportunity for people to use bicycles for access to townships to the west, including Middleton, Port Elliot and Victor Harbor.
7. A review of the Planning and Design Code policies relevant to the likely zoning has not found any specific policies which would be problematic for the anticipated uses in the Affected Area. Given the size and configuration of the Affected Area, it is likely that these policies can generally be satisfied with development in the Affected Area.

Overall the development that will be facilitated by the proposed rezoning will only have a very minor impact on traffic volumes on the adjacent road network.



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