Proposed Residential Subdivision

11, 21, 23, 25 & 33 Owlpen Lane, Farley

TRAFFIC AND PARKING ASSESSMENT REPORT

2 September 2022

Ref 22337



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1. INTRODUCTION

This report has been prepared to accompany an application to Maitland City Council for the proposed residential subdivision of 11, 21, 23, 25 & 33 Owlpen Lane, Farley (Figures 1 and 2).

The subject site is zoned *R1 General Residence* and residential subdivision is permissible with development consent. The subject site is also zoned *RU2 Rural Landscapes* along a small section at the eastern portion of the site.

The proposed development will involve the subdivision of the land into 130 lots, comprising 127 standard residential allotments, a superlot and two residue lots.

The subject site is located within the *Farley Urban Release Area (URA)*, forming part of *Maitland Development Control Plan – Part F: Urban Released Areas*. The Farley URA is a regionally significant development area which aims to achieve the dwelling targets for population growth in the Lower Hunter region.

The "Farley URA" also involves the construction of a new local road network which connects to the existing road network in several locations.

The purpose of this report is to assess the traffic and parking implications of the subdivision development proposal and to that end this report:

- describes the site and provides details of the subdivision proposal
- reviews the road network in the vicinity of the site and estimates the traffic generation potential of the subdivision proposal
- assesses the traffic implications of the subdivision proposal in terms of road network capacity
- reviews the geometric design features of the proposed new road network
- assesses the off-street parking implications of the subdivision proposal.



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2. PROPOSED DEVELOPMENT

Site

The subject site is located on the eastern side of Owlpen Lane, approximately 300m south of Wollombi Road. The site has a street frontage of approximately 360m and occupies an area of approximately 11.5ha.

A recent aerial image of the site and its surroundings is reproduced below.



The subject site is currently occupied by four dwelling houses with ancillary outbuildings and off-street parking.

Vehicular access to the site is provided via respective entry/exit driveways off Owlpen Lane.

Streetview images of the Owlpen Lane site frontages are reproduced on the following page.

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Farley Urban Release Area

The site is situated within the Farley URA which is located immediately south of the Main Northern Railway Line. It has been identified as a regionally significant development area to achieve the dwelling targets for population growth in the Lower Hunter region. The new revitalised community at Farley URA is envisaged to benefit from up to 1,500 new homes and the delivery of local amenities close to transport options, including:

- minor upgrades in water and wastewater infrastructure
- active and passive recreation areas
- community facilities and open space areas
- improved connections to encourage walking and cycling
- upgrades to major roads

Plan extracts from *Maitland Development Control Plan 2011 – Part F: Urban Release Areas* document illustrating the Farley URA Locality Plan, Farley URA Area Plan, and Farley URA Proposed Road Network, Treatments and Road Widening, are reproduced on the following pages.

Proposed Development

The proposed development involves the subdivision of the site into a total of 130 lots, comprising 127 standard residential allotments ranging in size from 450m² to 706m², with an average lot size of approximately 472m², a superlot with an area of 3,980m², and two residue lots.

The intent for the proposed superlot is currently unknown and will be subject to a separate development application.

Off-street parking for the 127 new residential lots and superlot will ultimately be accommodated within each of the future lots and will comply with Council's requirements.

Vehicular access is to be provided directly off Owlpen Lane as well as future new local roads to be constructed by others when neighbouring properties are developed.

The servicing needs of the proposed residential subdivision are expected to be minimal and are likely to comprise the kerbside garbage collection services using Council's 12.5m long garbage trucks, as well as irregular visits by removalist trucks when future residents are moving house.

The servicing needs for the proposed superlot will be subject to a separate development application.

The proposed development also includes the construction of the new internal local roads generally in accordance with Council's *Proposed Road Network, Treatments and Road Widening*. These new local roads will comprise a minimum typical road reservation width of 17m with a minimum typical carriageway width of 8m, consistent with the *Maitland City DCP 2011 – Part C: Design Guidelines*.

Temporary cul-de-sac heads are also proposed at the ends of the new local roads, to allow loading/servicing trucks to turn around until such time that the neighbouring properties are developed.

Plans of the proposed subdivision layout have been prepared by *The Bathla Group* and are reproduced in Appendix A.

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Transport for New South Wales is illustrated on Figure 3.

New England Highway is classified by the TfNSW as a *State Road* and provides the key eastwest road link in the area, linking Muswellbrook and Hexham. It typically carries two traffic lanes in each direction in the vicinity of the site. Additional lanes are provided at key intersections to accommodate left/right-turning movements.

Wollombi Road is currently classified as a local, unclassified road which performs the function of an east-west *collector route* through the local rural area. Kerbside parking is generally permitted on both sides of the road.

Owlpen Lane is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is permitted on both sides of the road. In the future, Owlpen Lane will be upgraded to a *collector road*.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Wollombi Road
- a 50 km/h SPEED LIMIT which applies to Owlpen Lane
- a ROUNDABOUT in Wollombi Road where it intersects with Regiment Road and Green Street.

Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network.

An indication of the traffic generation potential of the development proposal is provided by reference to the TfNSW' publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS *Technical Direction* (TDT 2013/04a) document.

The TDT 2013/04a document states that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaking trip generation and/or parking demand assessments.

The RMS *Guidelines* and the updated *TDT 2013/04a* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

Low Density Residential Dwellings (Regional)

- AM: 0.71 peak hour vehicle trips per dwelling
- PM: 0.78 peak hour vehicle trips per dwelling

The intent for the proposed superlot is currently unknown and the traffic generate rate will be subject to a separate development application.

Application of the above traffic generation rates to the 127 residential lots yields a traffic generation potential of approximately 90 vehicle trips per hour (vph) during the weekday AM commuter peak period and 99 vph during the weekday PM commuter peak period.

This is likely to comprise approximately 18 vph IN/72 vph OUT during the *morning* peak period and 79 vph IN/20 vph OUT during the *afternoon* peak period.

In any event, that projected increase in traffic activity as a consequence of the subject site is consistent with the zoning objectives of the site and will clearly not have any unacceptable traffic implications in terms of road network capacity or traffic-related environmental effects.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

Given the current rural nature of the local area in the vicinity of the subject site, there are generally no kerbside parking restrictions which apply along either side of Owlpen Lane, including along the site frontage.

Off-Street Parking Provisions

The off-street parking rates applicable to the development proposal are specified in Council's *Maitland City Council DCP 2011 - Part C: Design Guidelines, Vehicular Access & Car Parking* document in the following terms:

Dwelling House

1 space per dwelling minimum

Whilst the design layout of the future 127 new residential dwellings is not yet known, the size of each new allotment will be sufficient to accommodate the off-street parking requirements specified in Council's *DCP 2011*.

The intent for the proposed superlot is currently unknown and the off-street parking requirements will be subject to a separate development application.

The geometric design layout of the future car parking facilities will be designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1:2004* in respect of parking bay dimensions, internal garage dimensions, driveway gradients and widths.

Loading/Servicing Provisions

The proposed new residential subdivision development is expected to be serviced by a variety of commercial vehicles up to 12.5m long HRV trucks including Council's garbage truck and irregular visits by removalist trucks when future residents are moving house. The proposed

new local roads have been designed to allow these commercial vehicles to enter and exit the site in a forward direction at all times, as indicated by the swept turning path diagrams reproduced in Appendix B.

Internal Local Road Layout Considerations

The proposed residential subdivision includes the construction of new local roads with 17m wide road reservation minimum, an 8m wide road carriageway minimum, consistent with the *Maitland DCP 2011 – Part C: Design Guidelines, DC.6 Roads & Access, Pedestrian & Cycleways* document and the *Manual of Engineering Standards – Part 4. Road Design.* An extract from is reproduced below:

ROAD	TYPES	AND	DIMENSIC	NS

ROAD TYPE	MAX NO. LOTS	RESERVE WIDTH (m) ^a	CARRIAGEWAY / KERB-KERB (m) ^b	ON-ROAD BICYCLE FACILITY	FOOTWAY VERGE (m) ^c	KERB ^d	FOOTPATH (1.5m WIDE) ^e	DESIGN ESA ^f
Local – Place ^I	10	17	8	Mixed	4.5	Rolled	As Required	1 ×10 ⁵
Local – Access	20	17	8	Mixed	4.5	Rolled	One side	1 x10 ⁵
Local – Secondary	50	17	8	Mixed	4.5	Rolled	One side	2 ×10 ⁵
Local - Primary	100	17	8	Mixed	4.5	Rolled	One side	5 ×10 ⁵
Collector - Secondary	200	17	8	Mixed (Parking)	4.5	Upright	One side	1 ×10 ⁶
Collector - Primary ¹	300	20	11	Mixed (Parking) ^p	4.5	Upright	One side	1.5 x10 ⁶
Distributor –Secondary ^v	400	23	14	Mixed (Parking) ^p	4.5	Upright	Both sides	2 ×10 ⁶
Distributor - Primary ^{m v}	500	24	15 ^q	1.5m Lane	4.5	Upright	Both sides	5 x10 ⁶
Sub-Arterial ⁿ	3500	24.4	15.4 ^r	1.7m Lane ^s	4.5	Upright	Both sides	1 x10 ⁷ min
Industrial - Secondary	10 ^g	22	13	Mixed	4.5	Upright	As Required	5 x10 ⁶
Industrial - Primary	> 10	22	13	Mixed	4.5	Upright	As Required	1x10 ⁷
School Bus/Public Route °			9min / 12min					2/5 x10 ⁶ min
Business / School Precinct			15.4	1.7m Lane	5.5 min ^h	Upright		1 x10 ⁷ min

Conclusion

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

- the proposed development involves the subdivision of the subject site into 130 lots, comprising 127 standard residential allotments, a superlot and two residue lots
- the proposed subdivision is consistent with the zoning objectives of the site and will not have any unacceptable traffic implications in terms of road network capacity

- the proposed future internal/local road layout is consistent with the requirements of the *Maitland DCP 2011* road network hierarchy
- the future local roads within the subdivision will have a minimum typical road reservation width 17m, and a minimum typical carriageway width of 8m, facilitating two-way traffic flows and allowing kerbside parking, consistent with the *Maitland DCP 2011*
- temporary cul-de-sac heads are also proposed at the ends of the new local roads to allow loading/servicing trucks to turn around until such time that the neighbouring properties are developed
- the proposed new road will accommodate two-way traffic and will satisfactorily allow service vehicles such as garbage truck or a removalist truck to circulate through the site in a forward direction
- the future off-street parking requirements of the subdivision will be subject to separate development applications however it is clear that the size of the proposed allotments can accommodate the *DCP* parking requirements.

APPENDIX A

PROPOSED SUBDIVISION PLAN



AM

APPENDIX B

SWEPT TURNING PATHS

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