Proposed Residential Development for NSW Land & Housing Corporation

## 77-79 Trafalgar Street, Peakhurst

TRAFFIC AND PARKING ASSESSMENT REPORT

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Ref 17629



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## 1. INTRODUCTION

This report has been prepared to accompany a development application to Georges River Council for a residential development proposal to be located at 77-79 Trafalgar Street, Peakhurst (Figures 1 and 2).

The subject site is owned and developed by the *NSW Land and Housing Corporation*, and is therefore to be assessed as an *affordable housing* development in accordance with *Division 6* of the *State Environmental Planning Policy* (*Affordable Rental Housing*) 2009.

The proposed development will involve the demolition of the existing residential dwellings on the site to facilitate the construction of a new residential apartment building. Off-street car parking is to be provided in a single-level basement car parking area in accordance with *State Environmental Planning Policy (Affordable Rental Housing) 2009* requirements.

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

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- reviews the public transport services in the vicinity of the site
- estimates the traffic generation potential of the development proposal and assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.



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## 2. DEVELOPMENT PROPOSAL

### Site

The subject site is an amalgamation of two lots located on the southern side of Trafalgar Street, between Jacques Avenue and Lawrence Street. The site has street frontages approximately 35 metres in length to Trafalgar Street, approximately 30 metres in length to Lawrence Street, approximately 37 metres in length to Jacques Avenue and occupies an area of approximately 1,300m<sup>2</sup>.

The subject site is owned by the *NSW Land & Housing Corporation* and is currently occupied by two residential dwellings each with a vehicular entry /exit driveway off Trafalgar Street. One of the dwellings has a second vehicular access driveway in Lawrence Street which is to be retained.

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



**Courtesy of Nearmap Imagery 2018** 

### **Proposed Development**

The proposed development will involve the demolition of the two existing residential dwellings on the site to facilitate the construction of a new residential apartment building in accordance with the *State Environmental Planning Policy* (*Affordable Rental Housing*) 2009.

A total of 15 residential apartments are proposed as follows:

1 bedroom apartment:	3
2 bedroom apartment:	12
TOTAL APARTMENTS:	15

Vehicular access to the car parking facilities is to be provided via the existing site access driveway (located at the southern end of the Lawrence Street site frontage) which is to be widened. The other two existing vehicular crossovers in Trafalgar Street will be demolished and replaced with kerb / gutter in accordance with Council's engineering specifications, allowing on-street parking to be reinstated.

Off-street parking for residents is proposed for a total of 16 cars in a single-level basement car parking area beneath the building in accordance with *State Environmental Planning Policy (Affordable Rental Housing) 2009* requirements.

Visitor parking will be accommodated in on-street kerbside locations around the perimeter of the site, noting the site has 3 street frontages which will have the capacity to accommodate up to 15 kerbside parking spaces.

Garbage collection for the proposed development is expected to be undertaken by Council's waste contractor with bins to be placed out for kerbside collection as presently occurs.

Plans of the proposed development have been prepared by *Hely Home Perry Architects* and are reproduced in the following pages.



## 3. TRAFFIC ASSESSMENT

## **Road Hierarchy**

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Henry Lawson Road and Forest Road are classified by the RMS as *State Roads* which provide the key east-west road link in the area, linking Villawood to Arncliffe. They typically carry three traffic lanes in each direction in the vicinity of the site with opposing traffic flows separated by a central median island. Kerbside parking is generally permitted along both sides of the road

Bonds Road, Boundary Road and Belmore Road are classified by the RMS as *Regional Roads* which provide key north-south *collector routes* through the area. They typically carry one traffic lane in each direction with kerbside parking generally permitted.

Trafalgar Street, Jacques Avenue and Lawrence Street are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of the 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 Henry Lawson Road and also Forest Road
- a 50 km/h SPEED LIMIT which applies to Trafalgar Street and all other local roads in the area
- TRAFFIC SIGNALS in Henry Lawson Road / Forest Road where it intersects with Jacques Avenue.



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### **Existing Public Transport Services**

The existing public transport services available in the vicinity of the site are illustrated in Figure 5a & 5b.

Bus route M91 currently passes through Henry Lawson Driveway and operates between Parramatta to Hurstville via Chester Hill & Padstow. It is part of a high frequency, high capacity bus network in Sydney that links key employment and growth centres. It typically operates at 10-minute intervals during weekday peak periods, 15 minute-intervals during weekday off-peak periods and 20-minute intervals on weekends and public holidays.

Bus route 944 operates currently passes through Trafalgar Street and operates between Mortdale to Bankstown via Peakhurst Heights. It typically operates at 30-minute intervals on weekdays and 1-hour intervals on weekends and public holidays.

### **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 during the morning and afternoon commuter peak periods.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services' 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 RMS *Technical Direction* document specifies that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaken trip generation and/or parking demand assessments.

The RMS *Guidelines* and *Technical Direction* 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:





#### Medium Density Residential Flat Building

Up to 2 bedrooms:	0.4-0.5 peak hour vehicle trips per dwelling
3 bedrooms or more:	0.5-0.65 peak hour vehicle trips per dwelling

The RMS *Guidelines* also make the following observation in respect of medium density residential flat buildings:

#### Definition

A *medium density* residential flat building is a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing.

Application of the above traffic generation rates to the 15 residential apartments outlined in the development proposal yields a traffic generation potential of approximately 7 vehicle trips per hour (vph) during both the AM and PM peak hour.

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the previously approved uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the development proposal.

The RMS *Technical Direction* nominates the following traffic generation rates which are applicable to the residential dwellings that currently occupies the site:

#### Low Density Residential Dwellings

- AM: 0.95 peak hour vehicle trips per dwelling
- PM: 0.99 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the 2 existing residential dwellings on the site yields a traffic generation potential of approximately 2 vph during both the AM and PM peak hour.

Accordingly, it is likely that the development proposal will result in a *nett increase* in the traffic generation potential of the site of approximately 5 vph during both the AM and PM peak hour, as set out below:

Projected Nett Increase in Peak Hour Traffic Generation Potential of the site as a consequence of the development proposal			
Projected Future Traffic Generation Potential:	7.2 vph	7.2 vph	
Less Existing Traffic Generation Potential:	-1.9 vph	-2.0 vph	
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	5.3 vph	5.2 vph	

That projected increase in the traffic generation potential of the site as a consequence of the development proposal is minimal, is consistent with the zoning objectives of the site and will clearly not have any unacceptable traffic implications in terms of road network capacity.

## 4. PARKING IMPLICATIONS

#### **Existing Kerbside Parking Restrictions**

Given the current low density residential nature of the local area, there are generally no kerbside parking restrictions that apply in Trafalgar Street, Lawrence Street and Jacques Avenue, including along the site frontages.

#### **Off-Street Car Parking Provisions**

The off-street car parking requirements applicable to the development proposal are specified in *Hurstville Development Control Plan 1, Section 4.1 – Residential Flat Buildings* document in the following terms:

#### DS7.1 Carparking is provided on site in accordance with the following rates:

- a. 1 resident space for every studio, 1 or 2 bedroom dwelling
- b. 2 resident spaces for every 3 or more bedroom dwelling
- c. for developments of 4 dwellings or more, one visitor space per 4 dwellings or part thereof

Application of the above DCP parking requirements to the development proposal yields an off-street car parking requirement of 15 resident parking spaces plus 4 visitor parking spaces.

As a guide, reference is also made to the off-street car parking requirements provided in the RMS *Guidelines* as well as the *State Environmental Planning Policy* (*Affordable Rental Housing*) 2009 as follows:

#### **RMS** Guidelines

#### Medium Density Residential Flat Building

1 space for each unit, plus an additional 1 space per each  $5 \times 2$  bedroom unit or part thereof. Also, an additional 1 space per each  $2 \times 3$  or more bedroom unit or part thereof is recommended. An additional one space per each five units for visitor parking or part thereof is recommended.

Application of the above parking requirements to the development proposal yields an offstreet parking requirement of 17.4 resident spaces plus 3.0 visitor parking spaces.

#### State Environmental Planning Policy (Affordable Rental Housing)2009

#### Part 1 Preliminary

#### 6 Affordable housing

(2) In this Policy, residential development is taken to be for the purposes of affordable housing if the development is on land owned by the Land and Housing Corporation.

#### **Division 6 Residential development – Land and Housing Corporation**

#### 40 Development may be carried out without consent

- (1) This clause applies to development for any of the following purposes where that development may be carried out with consent:
  - (a) Residential development, if any building will have a height of 8.5 metres or less and the development will result in 20 dwellings or less on a single site and the provision of not less than the following parking spaces:
    - (i) for development on land in an accessible area 0.4 parking spaces for each dwelling containing 1 bedroom. 0.5 parking spaces for each dwelling containing 2 bedrooms and 1 parking space for each dwelling containing 3 or more bedrooms, or
    - (ii) for development that is not in an accessible are a 0.5 parking spaces for each dwelling containing 1 bedroom. 1 parking space for each dwelling containing 2 bedrooms and 1.5 parking spaces for each dwelling containing 3 or more bedrooms.

Application of the SEPP parking requirements to the development proposal yields an offstreet parking requirement of 13.5 resident parking spaces. There is no requirement to provide visitor parking under the SEPP.

A comparison of the various parking requirements is set out in the table below.

	Hurstville DCP 1	<b>RMS Guidelines</b>	<b>SEPP (ARH) 2009</b>
Residents:	15.0 spaces	18.0 spaces	13.5 spaces
Visitors	3.8 spaces	3.0 spaces	N/A
TOTAL:	<b>18.8. spaces</b>	21.0 spaces	13.5 spaces

A comparison of the above parking rates indicates that 13 to 17 resident parking spaces are required, with 3 to 4 visitor spaces. However, the SEPP does not require any visitor parking spaces to be provided.

It is proposed to provide 16 resident parking spaces which satisfies the SEPP and DCP parking requirements. The *SEPP* does not require the provision of visitor parking and in this instance, it is considered appropriate to accommodate the visitor car parking in kerbside parking areas because:

- the site is unusual in that it has 3 street frontages
- two of the three existing vehicle crossings serving the site are to be *closed*, with kerb and gutter to be reinstated
- up to 15 kerbside parking spaces could be accommodated around the perimeter of the site
- the car ownership rates of LAHC tenants and their visitors tend to be lower than the general community.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 - 2004* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6 - 2009* in respect of parking bay dimensions and aisle widths.

### Conclusion

In summary, the proposed parking facilities satisfy the relevant requirements specified in the *State Environmental Planning Policy (Affordable Rental Housing) 2009* document as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking implications.