Proposed Residential Rezoning Application

37-39 Pavesi Street, West Guildford

REVISED TRAFFIC AND PARKING ASSESSMENT REPORT

24 October 2016

Ref 15535

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Document Verification

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1. INTRODUCTION

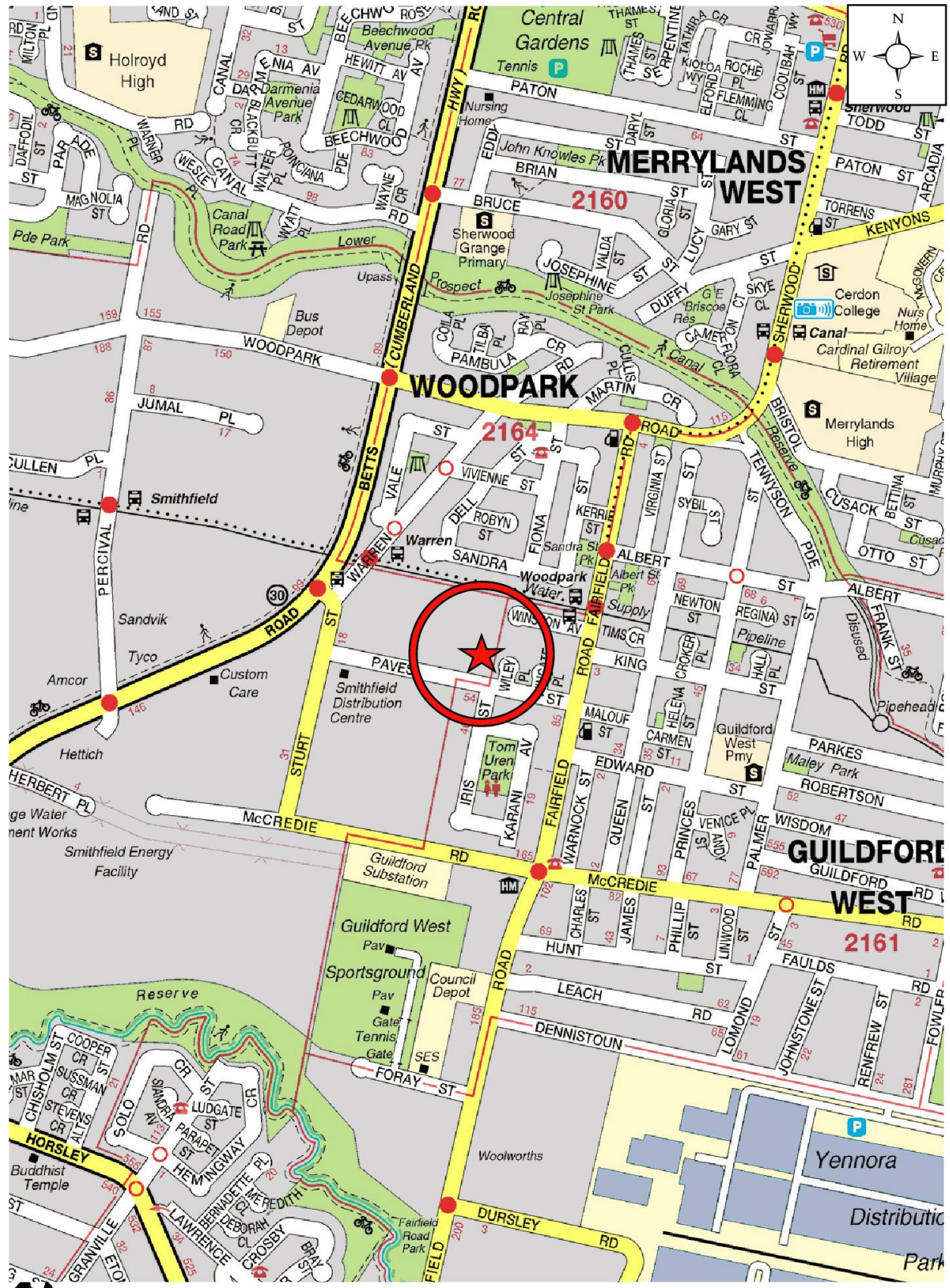
This revised report has been prepared to accompany an amended Rezoning Application to Cumberland Council for a residential development to be located at 37-39 Pavesi Street, West Guildford (Figures 1 and 2).

The proposed amendments to the design have been made to address a number of Council's comments however the proposal ultimately still involves the rezoning of the site from *IN2 Light Industrial* to *R2 Low Density Residential*, with the creation of 10 new allotments, each capable of accommodating dual occupancy dwellings.

The proposal also seeks approval for the construction of a new road within the site which will service the future dwellings, extending north from Pavesi Street. The proposed new road will be dedicated to Council (i.e. will be a public road) and designed in accordance with Council's 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 subdivision proposal
- reviews the road network in the vicinity of the site
- 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 for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.



UBD

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LOCATION
FIGURE 1

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SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located midway along the northern side of Pavesi Street, opposite Iris Street. The site has a street frontage approximately 40 metres in length to Pavesi Street and occupies an area of approximately 8,099m^2.

The subject site is currently occupied by a warehouse building and ancillary office block, with a cumulative floor area of approximately 2,200m^2. A recent aerial image of the site is reproduced below.

Informal off-street parking is currently provided at several locations throughout the site for staff and visitors. Vehicular access is provided via a 10.5m wide entry/exit driveway located at the eastern end of the Pavesi Street site frontage, which widens to 15.0m at the kerbline.

Loading/servicing for the existing warehouse development is currently undertaken by a variety of commercial vehicles up to and including articulated semi-trailers, with vehicular access provided via the abovementioned entry/exit driveway located in Pavesi Street.

Source: Nearmap

Proposed Development

The proposal involves the rezoning of the site from *IN2 Light Industrial* to *R2 Low Density Residential*, with the creation of 10 new allotments, each capable of accommodating dual occupancy dwellings – i.e. achieving a total of 20 future dwellings.

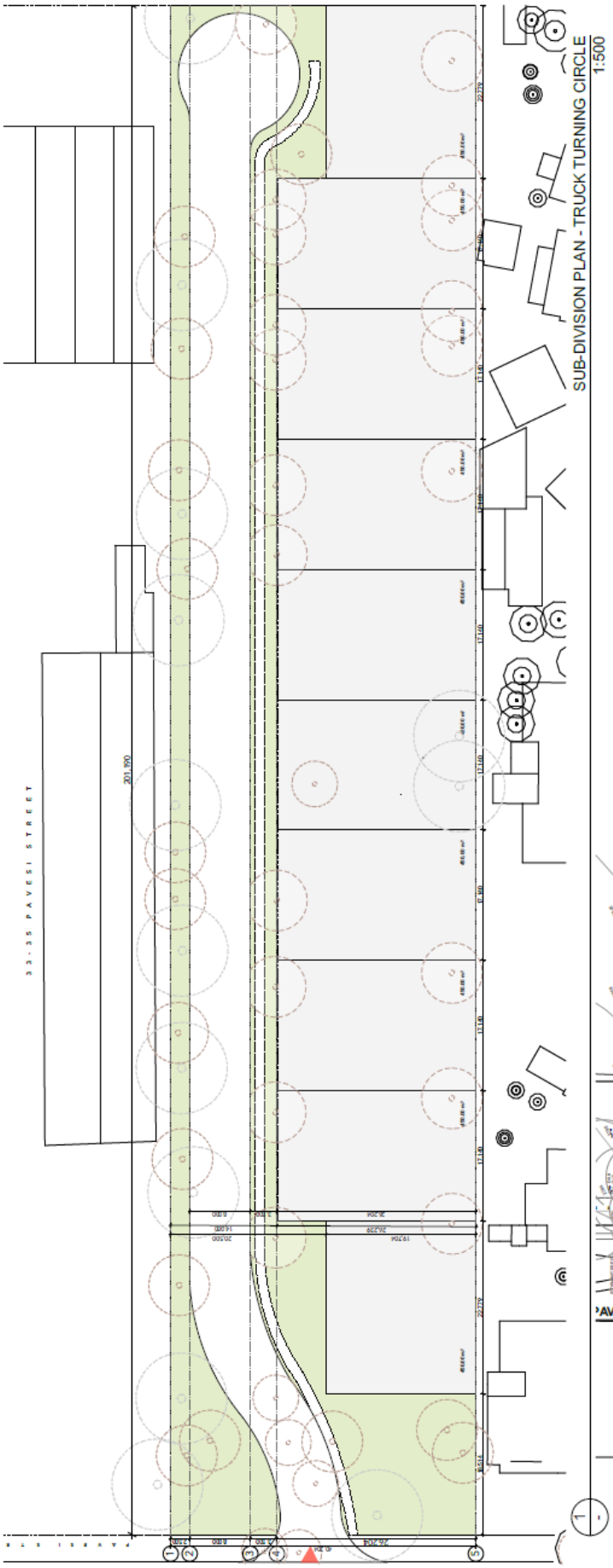
Off-street parking for the low density allotments is to be accommodated within each of the respective lots and will ultimately comply with Council's requirements, subject to a separate development application for each new development.

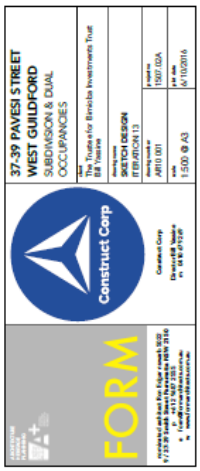
This application also involves the construction of a new road within the site which will service the future dwellings. The new road will extend north from Pavesi Street, midway along the existing site frontage, and terminate at the far northern end at a 16m diameter cul-de-sac turning head. The new road, which will be dedicated to Council, will have a road reservation width of 14m, comprising a 3.5m wide verge, an 8m wide carriageway (allowing for two-way traffic flow plus kerbside parking), and a 2.5m wide landscaping strip.

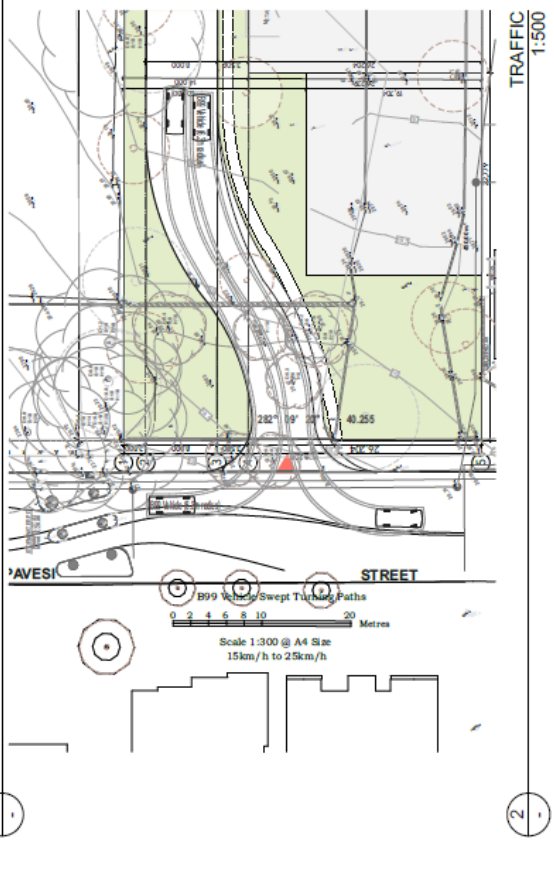
The existing central linemarking in Pavesi Street on approach to the chicane, directly outside the site frontage and the future new intersection currently consists of unbroken lines. Whilst the NSW Road Rules permits turning movements across unbroken lines when turning at an intersection, it is recommended that the central lines are broken to remove any uncertainty for motorists turning into and out of the subdivision. It is pertinent to note that up until recently the central lines were in fact broken.

The servicing needs of the proposed residential subdivision are expected to be minimal and are likely to comprise the twice-weekly kerbside garbage collection services using Council's 10.5m long garbage trucks, as well as irregular visits by removalist trucks when future residents are moving house.

A plan of the proposed subdivision and new road has been prepared by *FORM Architects* and is reproduced on the following page.


SUB-DIVISION PLAN - TRUCK TURNING CIRCLE
1:500
33 - 35 PAVESI STREET
201.990


37-39 PAVESI STREET
WEST GUILDFORD
SUBDIVISION & DUAL
OCCUPANCIES
SKETCH DESIGN
Construct Corp
FORM


TRAFFIC
1:500
PAVESI
STREET
B99 Vehicle Swept Turning Paths
0 2 4 6 8 10 20
Metres
Scale 1:300 @ A4 Size
15km/h to 25km/h
40.255

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.

The Cumberland Highway is classified by the RMS as a *State Road* and provides the key north-south road link in the area. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a centre median island. Clearway restrictions apply during commuter peak periods.

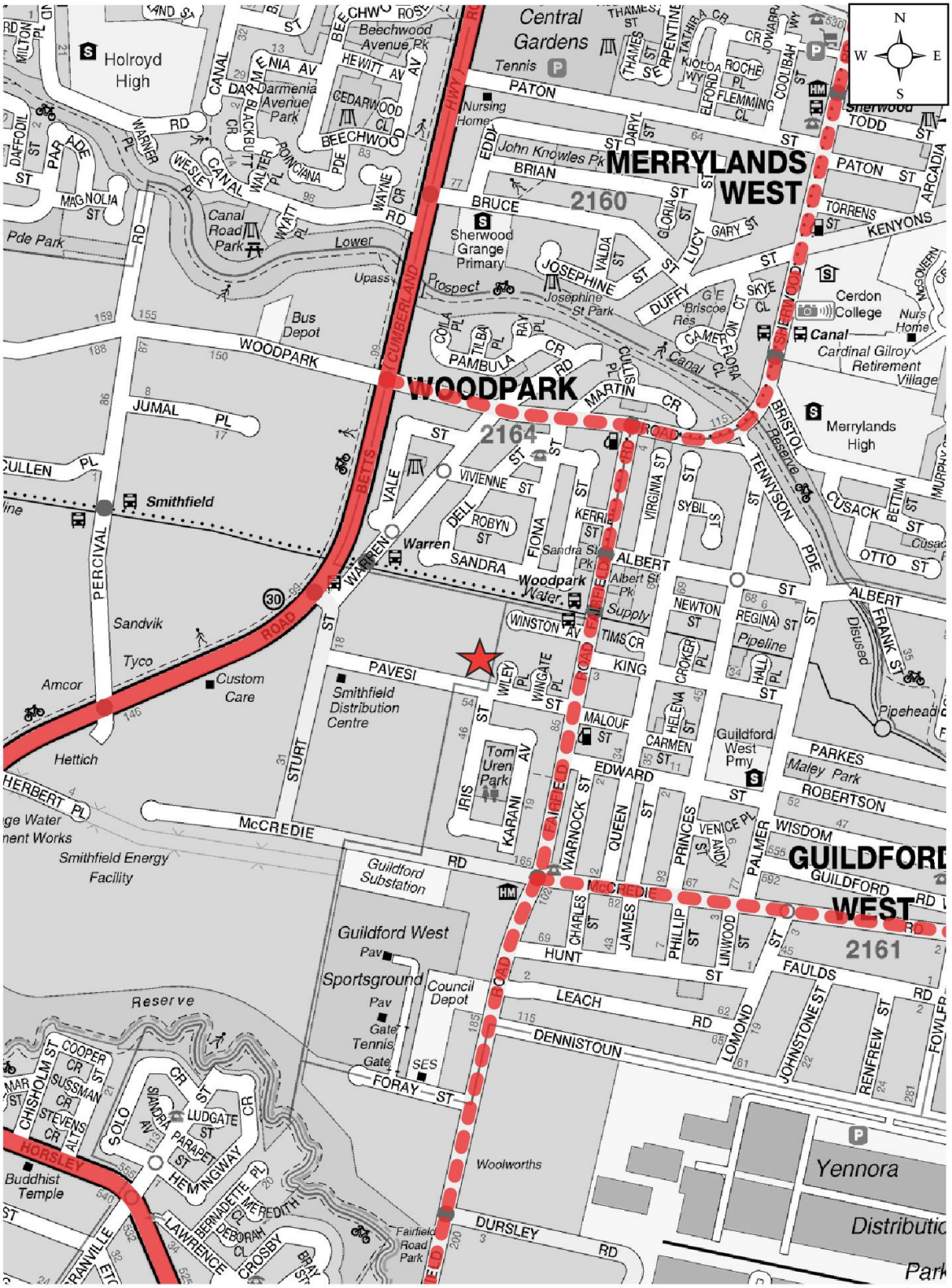
Fairfield Road is classified by the RMS as a *Regional Road* and provides another key north-south road link in the local area. It typically carries one traffic lane in each direction in the vicinity of the site, with kerbside parking generally permitted.

Pavesi Street is a local, unclassified road which is 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 Fairfield Road
- a 50 km/h SPEED LIMIT which applies to Pavesi Street and all other local roads in the area
- TRAFFIC SIGNALS in Fairfield Road where it intersects with the Transitway and also Albert Street



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ROAD HIERARCHY
FIGURE 3


N
W
E
S
ROBYN ST
DELL ST
FIONA ST
SANDRA ST
KERRIE ST
SANDRA ST
T-WAY
BUS ONLY
T-WAY
RD
BUS EXCEPTED
WINSTON AVE
60
KING ST
PAVESI ST
WILEY PL
WINGATE PL
50
IRIS AVE
KARANI
FAIRFIELD
MALOUF ST
EDWARD ST
Key:
Give Way Sign
Traffic Signal
School Zone
No Right-Turn
Pedestrian Crossing
50 Speed Limit
VARGA TRAFFIC PLANNING Pty Ltd
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EXISTING TRAFFIC CONTROLS
FIGURE 4

- a CHICANE located in Pavesi Street, directly outside the site, which precludes heavy vehicle access to/from Fairfield Road.

Existing Public Transport Services

There are a number of bus services located in close proximity of the site. Most notably, the site is located within approximately 450m walking distance of the Transitway and the high-frequency *T80* service. The *T80* service operates between Liverpool and Parramatta Railway Stations seven days per week with weekday services every 10 minutes (every 5 minutes during the morning and afternoon peak) and weekend services every 20-30 minutes. An additional 3 bus routes are also available within approximately 300m walking distance from the site including the 802, 820 & 821 services.

The site is therefore considered to be well served by public transport services.

Projected Traffic Generation

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).*

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

Dwelling Houses

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

Application of the above traffic generation rates to the 20 residential dwellings in the development proposal yields a traffic generation potential of approximately 19 to 20 vehicle trips per hour during commuter peak periods (IN and OUT combined).

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 existing industrial uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential of the development proposal.

The RMS *Guidelines* nominates the following traffic generation rate which is applicable to the existing development:

Warehouse
0.5 peak hour vehicle trips per 100m^2 GFA

Application of the above traffic generation rate to the existing industrial building on the site (~2,200m^2) yields a traffic generation potential of approximately 11 vehicle trips per hour during commuter peak periods.

Accordingly, it is likely that the proposed development will result in a *negligible* change in the traffic generation potential of the site as set out below:

Projected Nett Change in Peak Hour Traffic Generation Potential of the Site as a consequence of the development proposal

Projected Future Traffic Generation Potential:	20.0 vehicle trips
Existing Traffic Generation Potential:	-11.0 vehicle trips
NETT CHANGE IN TRAFFIC GENERATION POTENTIAL:	**9.0 vehicle trips**

Reference to the RMS *Guidelines* also indicates that approximately 25% of trips will be *internal* to the area, involving local shopping, schools and local social visits. Thus the volume of traffic associated with the proposed subdivision will likely be even *less* than what is noted above.

In any event, that projected increase in traffic activity as a consequence of the subdivision proposal is minimal 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

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site comprise:

- NO STOPPING restrictions along both sides of Pavesi Street in the vicinity of the chicane
- generally UNRESTRICTED kerbside parking elsewhere throughout the local area
- BUS ZONES located at regular intervals along both sides of Fairfield Road.

Off-Street Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in Council's *Development Control Plan 2013, Part A, Section 3 – Car Parking* document in the following terms:

	Minimum Spaces Required	**Maximum Spaces Required**
Dwelling houses (other than on small lots), semi-detached dwellings, dual occupancies.	2 per dwelling	n/a

Application of the above parking requirements to the 20 future residential dwellings outlined in the subdivision proposal yields an off-street parking requirement of 40 spaces.

Off-street car parking for the future dwelling houses will be ultimately be provided on each of the individual allotments and will be the subject of separate development applications. There is no doubt however, that the size of the allotments will be sufficient to accommodate vehicular access and off-street car parking being provided on each of the allotments in accordance with Council's current parking requirements.

Whilst the precise geometric design layout of the proposed car parking facilities are not yet known, they will ultimately be designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* in respect of parking bay dimensions, including internal garage dimensions.

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 to create 10 new dual occupancy residential allotments, resulting in a total of 20 dwellings

- the proposed residential subdivision will not have any unacceptable traffic implications in terms of road network capacity

- Pavesi Street is flat and straight with excellent visibility in both directions for vehicles entering/exiting the site

- the future public road servicing the subdivision will have a road reservation width of 14m in accordance with Council's requirements

- the future public road will have a road carriageway width of 8m wide with roll kerbs on both sides, facilitating two-way traffic flows and allowing kerbside parking for visitors

- the future public road will terminate at its far northern end with a 16m diameter cul-de-sac turning head, in accordance with Council's requirements

- all vehicles, including service vehicles, will be able to enter and exit the site whilst travelling in a forward direction at all times once the local road and turning head are complete

- the future off-street parking requirements of the subdivision will be subject to separate development applications however there are not expected to be any unacceptable parking implications.