Proposed Mixed-Use Development

1188-1200 Canterbury Road, **Roselands**

TRAFFIC AND PARKING ASSESSMENT REPORT

22 April 2015

Ref 15138



Transport, Traffic and Parking Consultants 🔵 🔵 🥏







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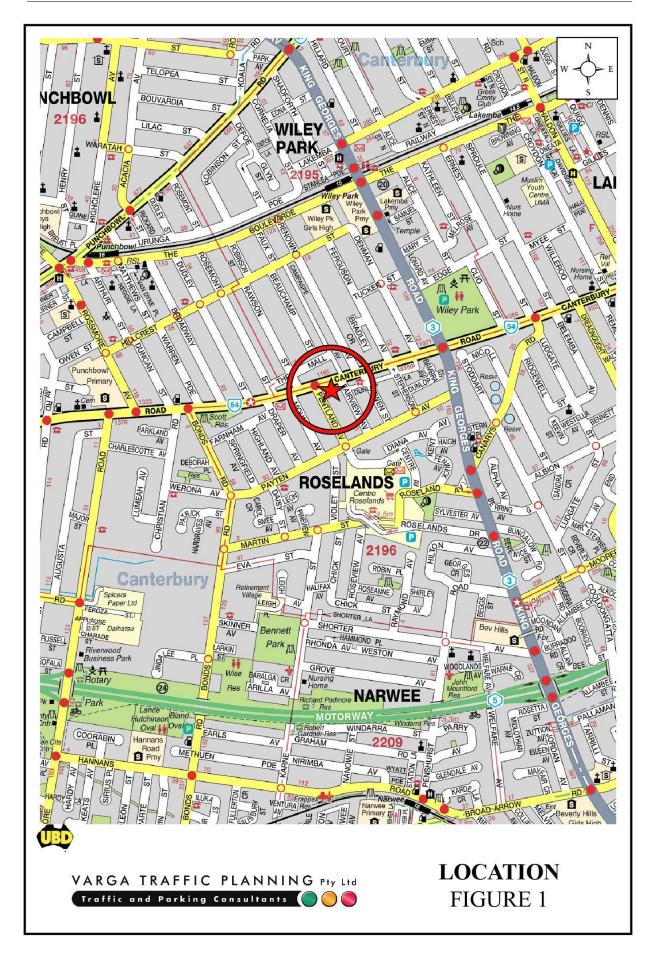
1. INTRODUCTION

This report has been prepared to accompany a Development Application to the City of Canterbury Council for a mixed-use development proposal to be located at 1188-1200 Canterbury Road, Roselands (Figures 1 and 2).

The proposed development will involve the demolition of the existing bulky goods building on the site to facilitate the construction of a new mixed-use residential/commercial development. Car parking is to be provided in a new basement car parking area 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 development proposal
- reviews the road network in the vicinity of the site, and the traffic conditions on that road network
- estimates the traffic generation potential of the development proposal, and assigns that traffic generation to the road network serving the site
- 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.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the southern side of Canterbury Road, in between Pentland Avenue and Fairview Avenue. The site has a street frontage approximately 86m in length to Canterbury Road, approximately 43m in length to Pentland Street and Fairview Avenue. It occupies an area of approximately 4,116m².

The subject site is currently occupied by a bulky goods building with a cumulative floor area of approximately 2,100m².

Off-street parking is currently provided in 2 separate car parking areas, with vehicular access provided via 2 driveways. One driveway is located on the southern end of the Pentland Avenue site frontage and the other driveway is located on the southern end of the Fairview Avenue site frontage.

Proposed Development

The proposed development will involve the demolition of the existing bulky good buildings on the site to facilitate the construction of a new mixed-use residential/commercial development.

A total of 120 residential apartments are proposed in the new development as follows:

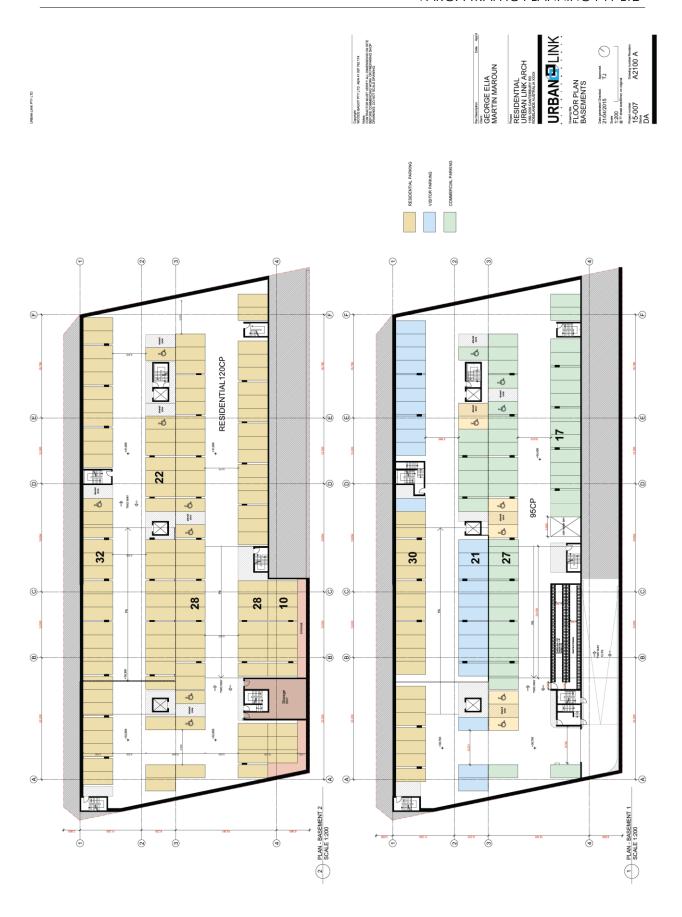
1 bedroom apartments: 27
2 bedroom apartments: 86
3 bedroom apartments: 7
TOTAL APARTMENTS: 120

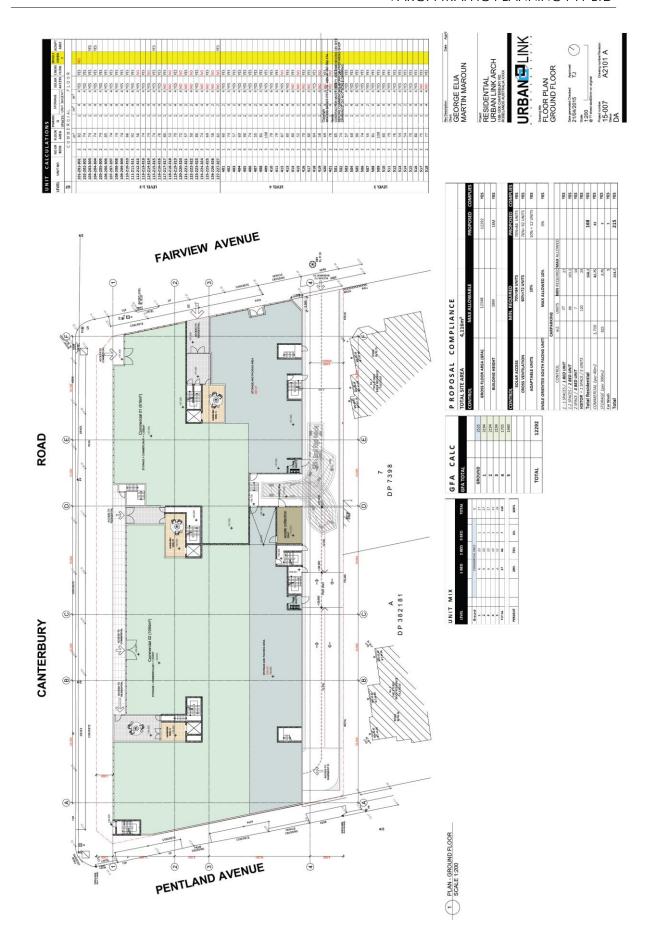
A commercial component is also proposed at ground floor level, with a cumulative floor area of approximately 1,710m². Associated warehouse/storage areas are also proposed with a cumulative floor area of approximately 825m².

Off-street car parking is proposed for a total of 215 cars, comprising 168 residential and visitor spaces, 43commercial spaces, 3 warehouse spaces and a dedicated car wash bay in a new basement car parking areas in accordance with Council's requirements. Vehicular access to the car parking facilities is to be provided via an entry/exit driveway located at the southern end of the Fairview Avenue site frontage.

Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles up to and including 6.4m long small rigid trucks. The loading dock is to be located on the ground floor level, adjacent to the waste storage room. Vehicular access to the loading dock is to be provided via the abovementioned proposed site access driveway.

Plans of the proposed development have been prepared by *Urban Link Architecture* 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.

Canterbury Road is classified by the RMS as a *State Road* and provides the key east-west road link in the area, linking Hurlstone Park and Lakemba. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by line marking.

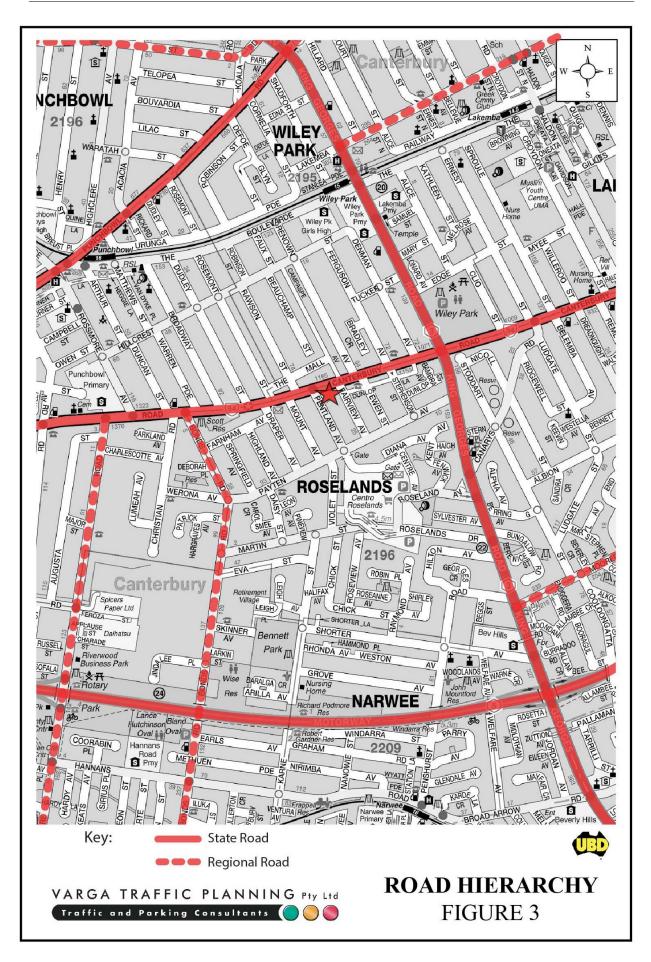
King Georges Road is also classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Willey Park and Blakehurst. It typically carries three traffic lanes in each direction in the vicinity of the site with turning bays provided at key locations. Opposing traffic flows are separated by a central median island.

Pentland Avenue / Fairview Avenue 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 both roads.

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 the Canterbury Road
- a 50 km/h SPEED LIMIT which applies to Pentland Avenue, Fairview Avenue and all other local roads in the area
- TRAFFIC SIGNALS at the intersection of Canterbury Road and Pentland Avenue with all turning movements permitted





• a GIVE-WAY SIGN in Fairview Avenue where it intersects with Canterbury Road.

Projected Traffic Generation

An indication of the traffic generation potential of the development proposal is provided by reference to the former Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RMS *Guidelines* 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:

Commercial Premises

2.0 peak hour vehicle trips per 100m² GFA

Warehouses

0.5 peak hour vehicle trips per 100m2 GFA

High Density Residential Flat Buildings in Sub-Regional Centres

0.29 peak hour vehicle trips per dwelling

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

Definition

A high density residential flat building refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. High density residential flat buildings are usually more than 5 levels, have basement level carparking and are located in close proximity to public transport services. The building may contain a component of commercial use.

Factors

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pick-up/set-down activities.

Application of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of approximately 73 vehicle trips per hour during commuter peak periods as set out below:

Projected Future Traffic Generation

Residential Apartments (120 Apartments):

Commercial Premises (1,710m²):

Warehouse Component (825m2):

4.1 peak hour vehicle trips

TOTAL TRAFFIC GENERATION POTENTIAL:

73.1 peak hour vehicle trips

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 uses of the site, in order to determine the *nett increase* (or decrease) in traffic generation potential of the site expected to occur as a consequence of the development proposal when compared with the previously approved development on the site.

The following traffic generation rates which are applicable to the existing development:

Bulky Goods

2.5 peak hour vehicle trips per 100m² GFA

Application of the above traffic generation rate nominated in the RMS *Guidelines* to the existing bulky goods building on the site (~2,100m²) yields a traffic generation potential of approximately 53 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in an *increase* in the traffic generation potential of the site of approximately 21 vph 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: 73.1 vehicle trips

Less Existing Traffic Generation Potential (Estimated): -52.5 vehicle trips

NETT INCREASE IN TRAFFIC GENERATION POTENTIAL: 20.6 vehicle trips

That projected increase in traffic activity as a consequence of the development proposal is minimal and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 5 and comprise:

- CLEARWAY restrictions along both sides of Canterbury Road during morning and afternoon commuter peak periods
- NO PARKING restriction along various sections on both sides of Canterbury Road, including the site frontage
- NO STOPPING restrictions within the vicinity of the site, including small sections of the site frontages
- BUS ZONES at regular intervals along both sides of Canterbury Road and a bus zone along the eastern side of Pentland Avenue just outside the site frontage
- generally UNRESTRICTED kerbside parking in Pentland Avenue, Fairview Avenue, including along the site frontage, and throughout the local area.

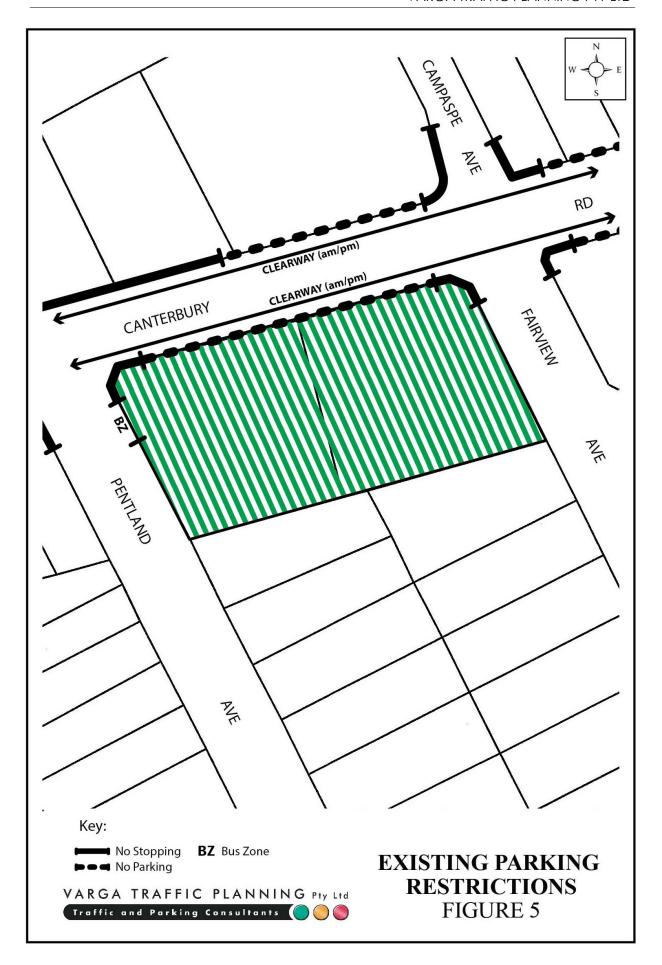
Off-Street Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in Council's *Development Control Plan 2012*, *Part 6.8 – Parking and Vehicular Access* document in the following terms:

Residential Flat Buildings

bedroom apartment:
 space per dwelling
 bedroom apartment:
 spaces per dwelling
 bedroom apartment:
 spaces per dwelling
 spaces per dwelling
 space per 5 dwellings

Carwash: 1.0 dedicated space



Office Premises

1 space per 40m² GFA

1 courier space

Warehouse or Distribution Centre

1 space per 300m²

Application of the above parking requirements to the residential and commercial components of the development proposal yields an off-street parking requirement of 216 parking spaces as set out below:

Residential (120 Apartments): 144.2 spaces
Visitors: 24.0 spaces
Carwash: 1.0 space
Office Premises (1,710m²): 42.8 spaces
Courier: 1.0 space
Warehouse (825m²): 2.8 spaces
TOTAL: 215.8 spaces

The proposed development makes provision for a total of 215 cars, comprising 168 residential and visitor spaces, 43 commercial spaces, 3 warehouse spaces and a dedicated car wash bay, therefore satisfying Council's Parking Code requirements.

The geometric design layout of the proposed car parking facilities have 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* in respect of parking bay dimensions, ramp gradients and aisle widths.

Loading/Servicing Provisions

The proposed new mixed-use building is expected to be serviced by a variety of commercial vehicles up to and including 6.4m long SRV trucks. The loading dock is to be located on the ground floor level. The manoeuvring area has been designed to accommodate the *swept turning path* requirements of these small rigid trucks, allowing them to enter and exit the site in a forward direction at all times.

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in both Council's Parking Code as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking and loading implications.