PROPOSED AGED CARE FACILITY FOR THOMPSON HEALTH CARE

23-33 BASSETT STREET EAST, MONA VALE

Traffic and Parking Assessment

11th March 2020

Ref: 19061

Prepared by

Terraffic Pty Ltd
Traffic and Parking Consultants

Terraffic Pty Ltd ABN 83 078 415 871
PO Box 563 Sylvania Southgate NSW 2224 Mob: 0411 129 346
Email: logan@terraffic.com.au Web: www.terraffic.com.au

TABLE OF CONTENTS

APPENDICES

LIST OF ILLUSTRATIONS

1. INTRODUCTION

This report has been prepared to accompany a Development Application to Northern Beaches Council for the construction of a new aged care facility located on a consolidated site at 23-33 Bassett Street East, Mona Vale (Figures 1 and 2).

The subject site is located on the southern side of Bassett Street East approximately 40m east of Barrenjoey Road. It has a total site area of 6,503m^2 with a frontage of 106.68m to Bassett Street East.

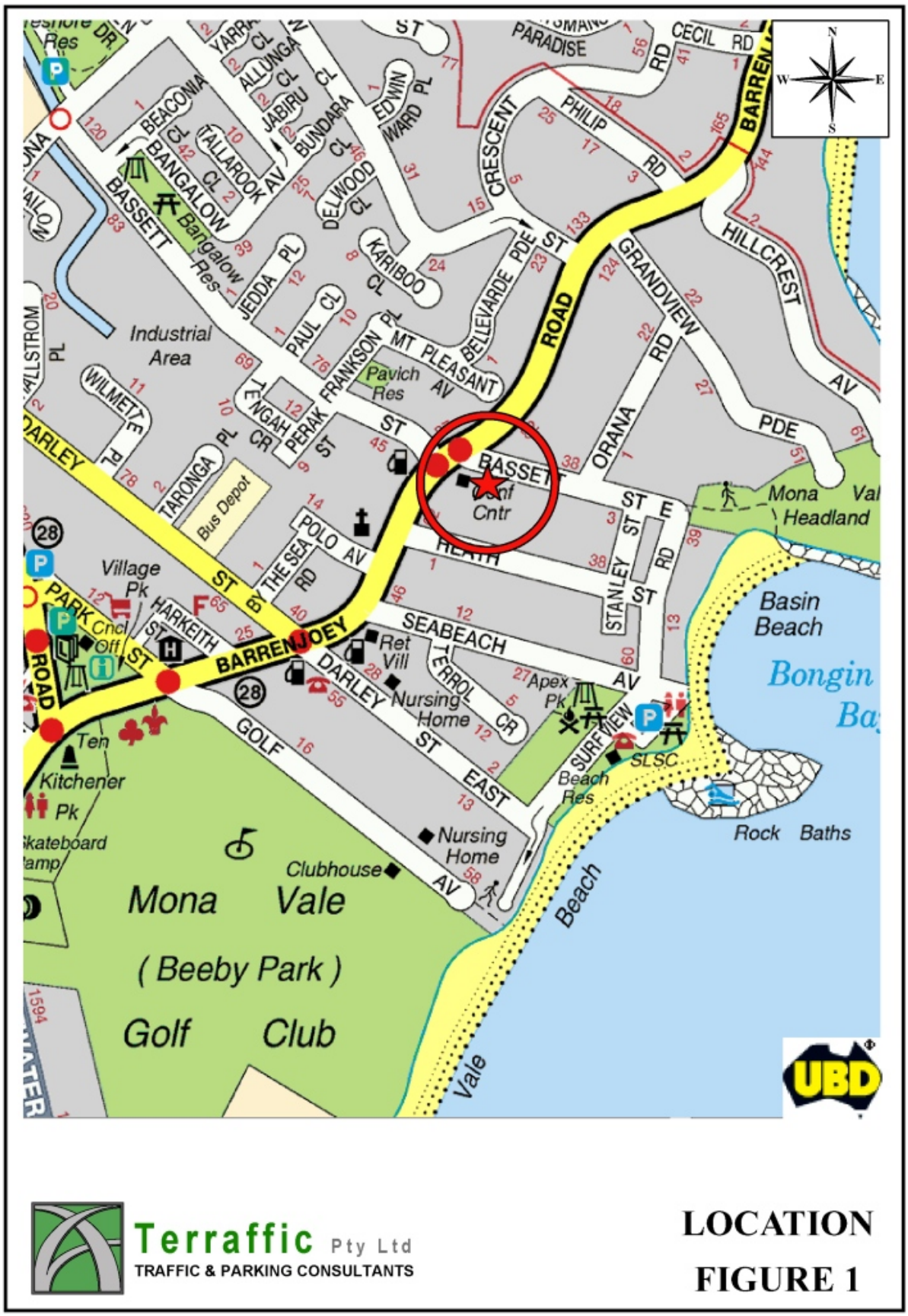
Existing Site Development

The existing site development comprises:

23 Bassett Street East — A single dwelling with vehicular access to Bassett Street via a single width driveway

25-33 Bassett Street East — A 62 bed aged care facility comprising 28 single wards and 12 double wards. The facility is operated by Thompson Health Care and is known as *Mona Vale House Nursing Home*. The development is staffed by a total of 28 employees including management, administration, nursing staff and external contractors. The facility is served by a 34 space at-grade carpark at the rear of the site that gains vehicular access via separate entry and exit driveways. A port cochere is also provided along the site frontage that includes parking for an ambulance. Vehicles enter the port cochere via the main entry driveway and exit via a separate access driveway.

A site survey prepared by Bee & Lethbridge Pty Ltd is reproduced in the following pages.

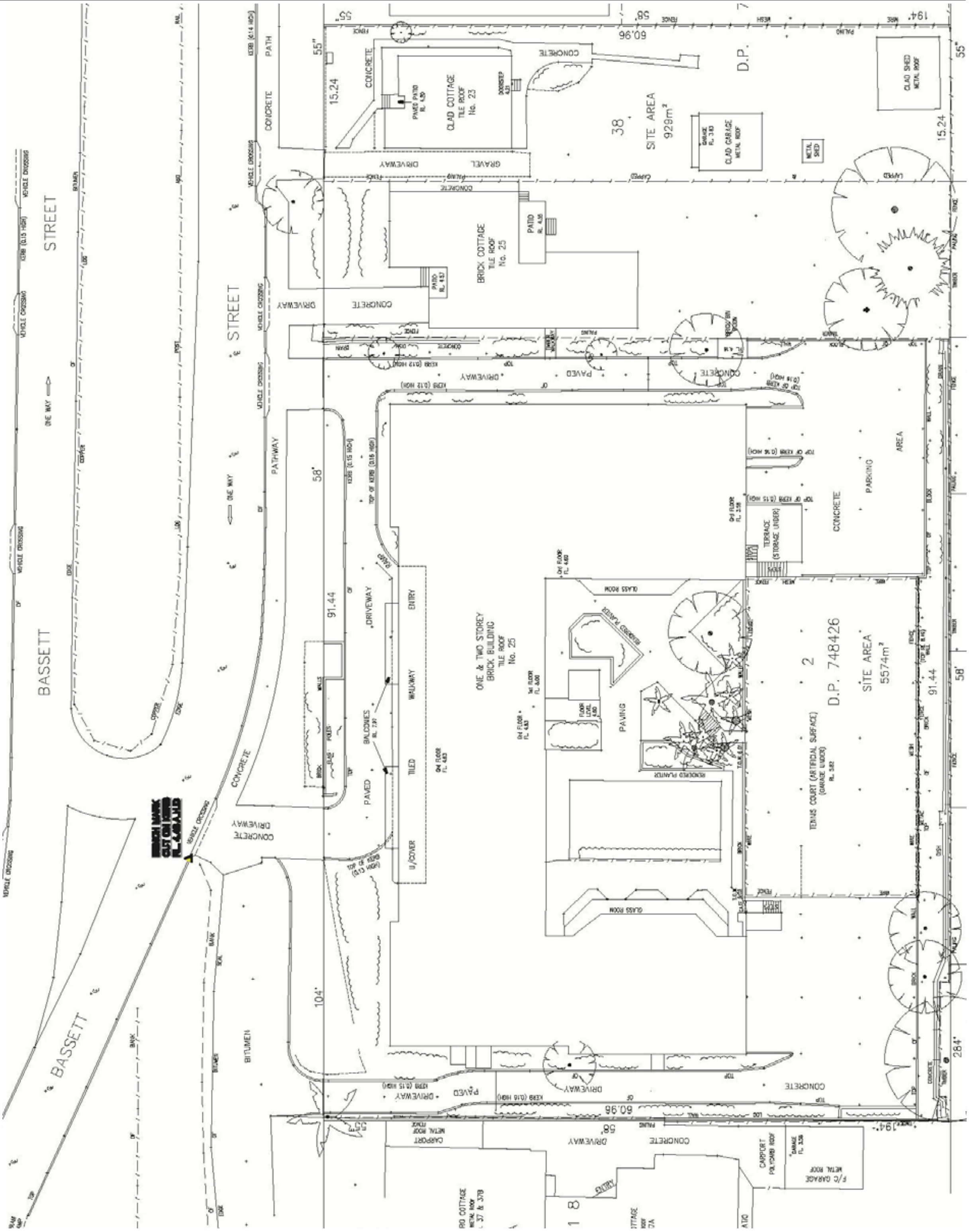


Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS

LOCATION

FIGURE 1


N
W
E
S
BARRENJOEY RD
ORANA ROAD
BASSETT STREET
BARRENJOEY ROAD
HEATH STREET
SEABEACH AVENUE
Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS
SITE
FIGURE 2


BASSETT
STREET
STREET
BASSETT
ONE WAY
PATHWAY
CONCRETE
DRIVEWAY
BITUMEN
ONE & TWO STOREY
BRICK BUILDING
TILE ROOF
No. 25
ENTRY
WALKWAY
TILED
BALCONIES
PAVED
U/COVER
GLASS ROOM
PAVING
RENDERED PLANTER
TENNIS COURT (ARTIFICIAL SURFACE)
(GARAGE UNDER)
2
D.P. 748426
SITE AREA
5574m²
91.44
58°
60.96
104°
284°
194°
PARKING
AREA
CONCRETE
TERRACE
(STORAGE UNDER)
BRICK COTTAGE
TILE ROOF
No. 25
PATIO
CLAD COTTAGE
TILE ROOF
No. 23
38
SITE AREA
929m²
D.P.
CLAD GARAGE
METAL ROOF
CLAD SHED
METAL ROOF
METAL SHED
GRAVEL
15.24
55°
CARPORT
METAL ROOF
F/C GARAGE
METAL ROOF

Site Survey

Development Proposal

The proposed development comprises the demolition of the existing site development and construction of a 118 room/118 bed residential aged care facility under the controls of the State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. The facility will employ a maximum of 50 staff during the day as follows:

Position title	**Number**
Director of Nursing	1
Deputy Director of Nursing	2
Administration Officer	2
Registered Nurse	4
Nursing Assistant	18
Cleaners	4
Chef and Cook	2
Catering Attendant	5
Laundry Attendant	2
Recreational Activities Officer	3
Educator	1
Maintenance Officer	2
External Contractors	
Physiotherapist, Doctor, Handyman, Entertainer, etc.	4
Total	**50**

The proposal will be served by a total of 40 parking spaces as follows:

Basement Carpark (39 spaces)

- 27 x staff parking spaces
- 12 x visitor spaces

Ground Level Port Cochere

- 1 x ambulance bay

A parking space for a mini bus is also provided in the basement carpark. It is anticipated that the minibus will be similar to the 21 seat Toyota Coaster.

Vehicular access to the basement carpark is via a 9.0m wide combined entry/exit driveway off Bassett Street located adjacent to the eastern site boundary.

The access driveway will also serve an off-street loading area on the ground level in the north-eastern corner of the site. The loading area has been designed to accommodate a standard 8.8m long Medium Rigid Vehicle (MRV). A turn bay is proposed to facilitate forward entry and exit to the site.

A 6.5m wide port cochere is also proposed off Bassett Street with access via separate 4m wide entry and exit driveways. The port cochere includes an ambulance bay to comply with the SEPP.

Public Transport Accessibility

The subject site has convenient access to the following bus service operated by Sydney Buses:

Route 188 Avalon Beach to City QVB via Mona Vale, Narrabeen, Dee Why, Brookvale, Mosman, Neutral Bay and Wynyard Station (operates daily)

Route E88 North Avalon Beach to City Wynyard (Express Service) via Mona Vale, Narrabeen, Mosman and Neutral Bay (operates weekday peaks only)

Route E89 Avalon Beach to Wynyard Station (Express Service) via Mona Vale, Narrabeen, Mosman and Neutral Bay (operates weekday peaks only)

Route 199 Palm Beach to Manly Wharf via Avalon, Newport, Mona Vale, Narrabeen and Brookvale (operates daily)

Route L90 Palm Beach to City Wynyard (Limited Stops) via Avalon, Newport, Mona Vale, Narrabeen, Brookvale, Mosman and Neutral Bay (operates daily)

Bus stops for these services are located on Barrenjoey Road to the south of Bassett Street.

Local Bus Services

Plans of the proposed development prepared by Gartner Trovato Architects are reproduced in Appendix A.

The purpose of this report is to assess the traffic, parking and servicing implications of the development proposal.

2. PARKING AND SERVICING ASSESSMENT

SEPP Parking Requirement

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 specifies the following car parking requirement for Residential Care Facilities:

> **48 Standards that cannot be used to refuse development consent for residential care facilities**
>
> A consent authority must not refuse consent to a development application made pursuant to this Chapter for the carrying out of development for the purpose of a residential care facility on any of the following grounds:
>
> (d) parking for residents and visitors: if at least the following is provided:
>
> (i) 1 parking space for each 10 beds in the residential care facility (or 1 parking space for each 15 beds if the facility provides care only for persons with dementia), and
>
> (ii) 1 parking space for each 2 persons to be employed in connection with the development and on duty at any one time, and
>
> (iii) 1 parking space suitable for an ambulance.

Application of those requirements to the proposed residential care facility yields a total parking requirement of 38 spaces calculated as follows:

118 beds @ 1 space per 10 beds	12 car spaces
50 staff @ 1 space per 2 staff	25 car spaces
1 x ambulance bay	1 ambulance space
Total Requirement	***38 spaces***

The proposed development exceeds the SEPP requirement with the provision of 40 parking spaces comprising 27 staff spaces, 12 visitor spaces and an ambulance bay in the port cochere.

Car Park Compliance

The basement carpark and access arrangements have been designed to satisfy the following requirements contained in the Australian Standard *AS/NZS2890.1-2004:"Off-Street Car Parking"*:

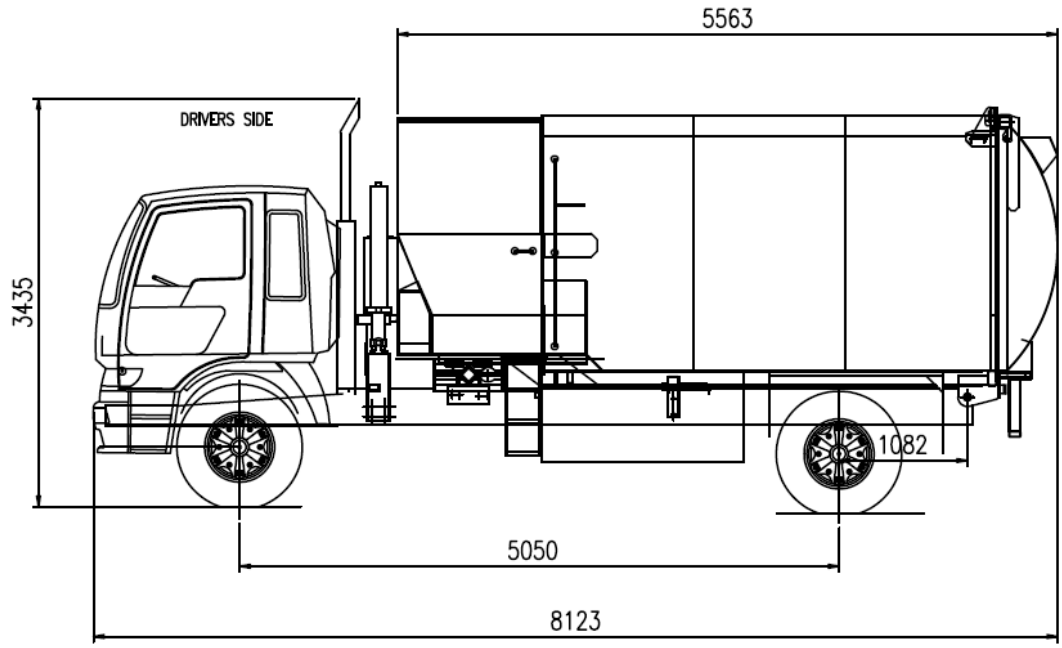
- Car spaces are a minimum 2.7m x 5.4m
- An additional 300mm has been provided to spaces adjacent a wall or obstruction
- A minimum manoeuvring aisle width of 6.14m has been provided
- Columns have been located in accordance with Clause 5.2 of the Standard
- The two-way access ramp has a minimum width of 6.1m comprising a 5.5m wide roadway and 2 x 300mm wide kerbs
- The first 6m of the access ramp from the property boundary does not exceed 5% (1 in 20)
- Ramp grades do not exceed 20% (1 in 5)
- Ramp transitions do not exceed 12.5% (1 in 8) over a distance of 2.0m
- A minimum headroom clearance of 3.0m has been provided in the basement
- Pedestrian sight line triangles have been provided

The disabled parking spaces have also been designed in accordance with the Australian Standard AS/NZS2890.6:2009 – *"Off-street parking for people with disabilities"* as follows:

- A 5.4m long x 2.4m wide dedicated *(non-shared)* parking space
- An adjacent *shared* area that is also 5.4m long x 2.4m wide
- A minimum headroom of 2.5m above the disabled spaces
- Pavement cross-falls in disabled spaces do not exceed 2.5% (1 in 40) in any direction

Servicing Arrangements

The proposed residential care facility will be served by a dedicated loading dock in the north-eastern corner of the site measuring 9m in length and 4.1m in width. The loading area incorporates a raised platform to facilitate rear loading and can accommodate a waste collection vehicle similar in size to the Australian Standard AS2890.2:2002 Medium Rigid Vehicle (MRV). Specifications for a waste collection vehicle similar to the MRV are reproduced below.



Dimensions of a typical medium sized waste collection vehicle

Vehicular access to the loading bay is via the main 9.0m wide combined entry/exit driveway with a turn bay proposed to facilitate forward entry and exit to the site. The swept path of the Australian Standard AS2890.2:2002 8.8m long Medium Rigid Vehicle (MRV) accessing the loading bay is reproduced in Appendix B. As can be seen, this vehicle will manoeuvre in the turn bay, reverse into loading dock and depart the site in a forward direction.

In the circumstances, it can be concluded that the proposed development has no unacceptable parking, access or servicing implications.

3. TRAFFIC ASSESSMENT

Existing Road Network

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services (RMS) is illustrated on Figure 3 and comprises the following:

State Roads	**Regional Roads**
Barrenjoey Road	Darley Street
Pittwater Road	

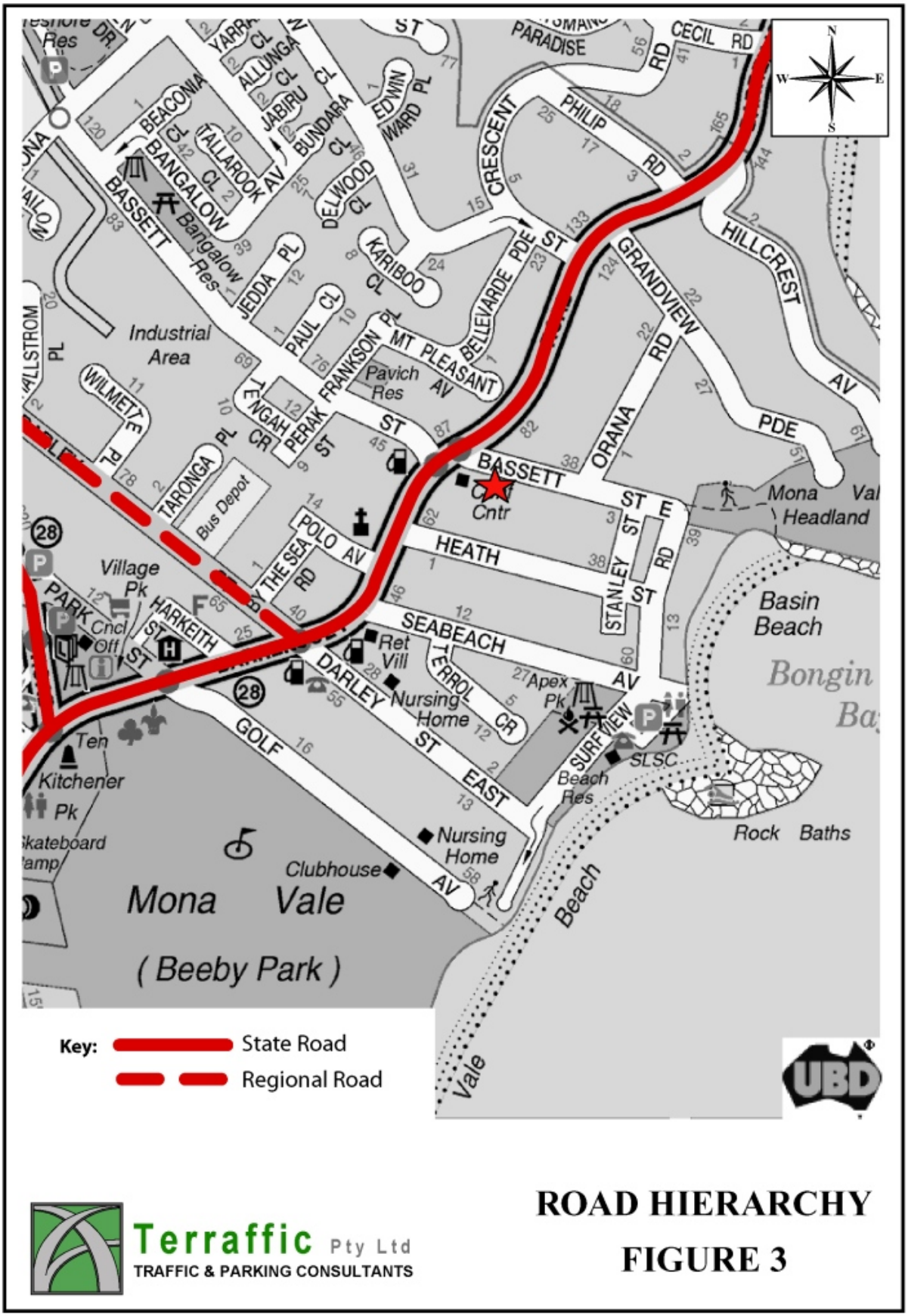
As can be seen, Barrenjoey Road is a classified State Road performing an arterial road function. It typically carries 6 traffic lanes through Mona Vale with traffic separated by a raised median island.

Bassett Street East is an unclassified *Local Road* that connects Barrenjoey Road to Surfview Road. The section of Bassett Street along the site frontage has a 10m wide centre median that separates eastbound and westbound traffic flow. Both the eastbound and westbound roads have a pavement width of approximately 5.5m comprising a kerbside parking lane and travel lane.

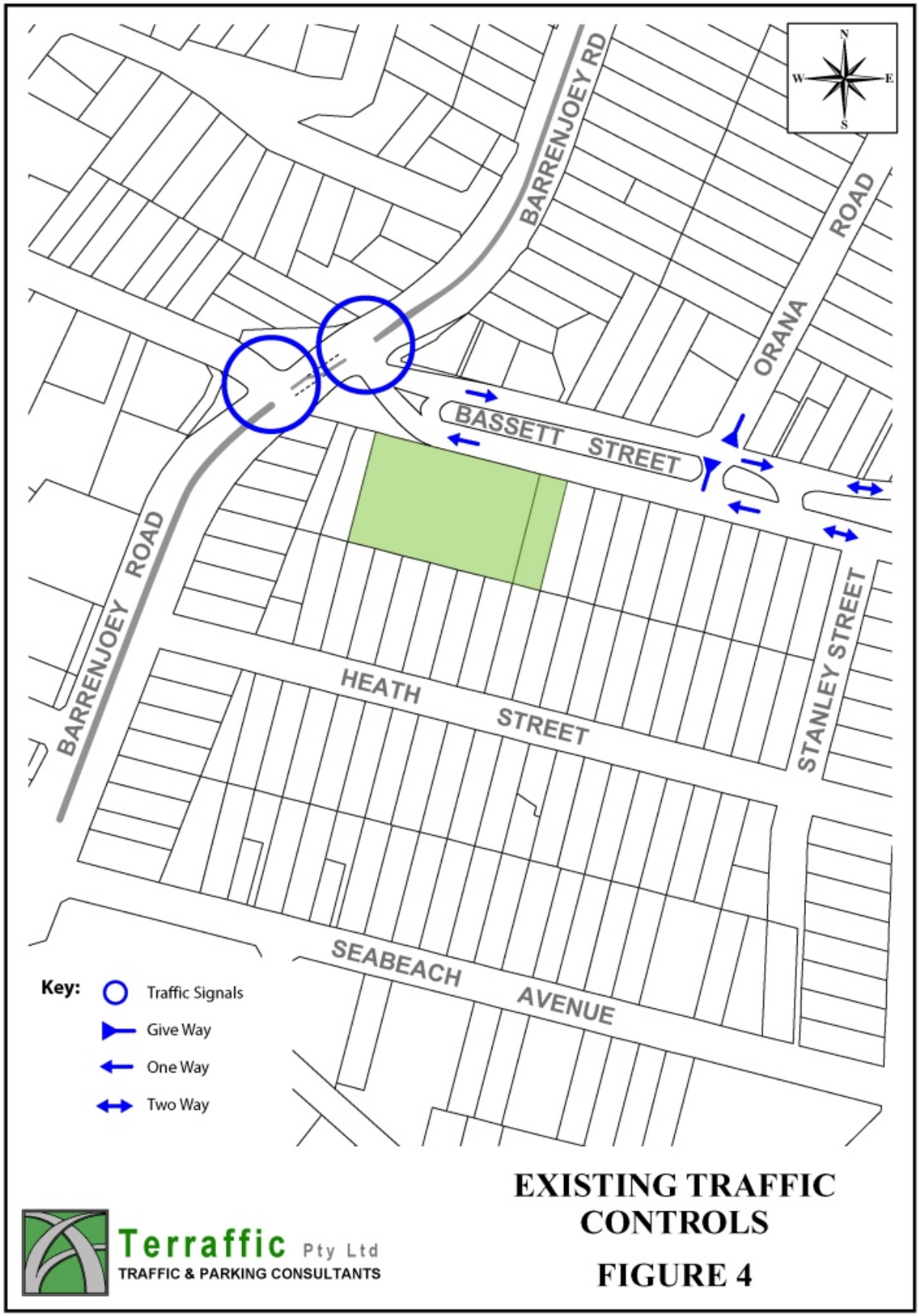
The existing traffic controls are illustrated on Figure 4 and include the traffic signals at the intersection of Barrenjoey Road and Bassett Street East. All turns are permitted at the traffic signals.

Traffic Generating Potential

An indication of the traffic generation potential of the existing and proposed development is provided by reference to the Roads and Maritime Services *Guide to Traffic Generating Developments (October 2002).* The traffic generation rates specified in the Guidelines are based on extensive surveys of a wide range of land uses throughout Sydney and regional NSW and nominate the following traffic generation rates that apply to the subject development:



Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS


N
W
E
S
BARRENJOEY RD
ORANA ROAD
BASSETT STREET
BARRENJOEY ROAD
HEATH STREET
STANLEY STREET
SEABEACH AVENUE
Key:
Traffic Signals
Give Way
One Way
Two Way
Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS
EXISTING TRAFFIC CONTROLS
FIGURE 4

Housing for Aged and Disabled 0.1-0.2 trips per dwelling

While the RMS rate refers to dwellings, this assessment will adopt a conservative rate of 0.2 trips per bed that will comprise vehicle movements generated by staff and visitors.

Application of this rate to the proposed aged care facility yields a traffic generating potential in the order of 24 vehicle trips per hour (vtph) calculated as follows:

118 beds @ 0.2vtph per room 24vtph

As can be appreciated, the majority of that traffic will comprise staff arriving in the morning and departing in the evening. To that end, the likely breakdown of traffic will be as follows:

	Morning Peak Period			**Evening Peak Period**		
	Inbound	**Outbound**	**Total**	**Inbound**	**Outbound**	**Total**
Staff	17	3	20	3	17	20
Visitors	2	2	4	2	2	4
Total	**19**	**5**	**24**	**5**	**19**	**24**

The traffic generation of the proposed development should be discounted by the traffic generating potential of the existing 62 bed aged care facility on the site. Application of the RMS traffic generation rate to the existing site development yields a traffic generation potential in the order of 12vtph during the weekday peak periods calculated as follows:

62 beds @ 0.2vtph per room 12vtph

Based on these projections, the proposed development will generate up to 12 additional vehicle trips on the road network during peak periods as follows:

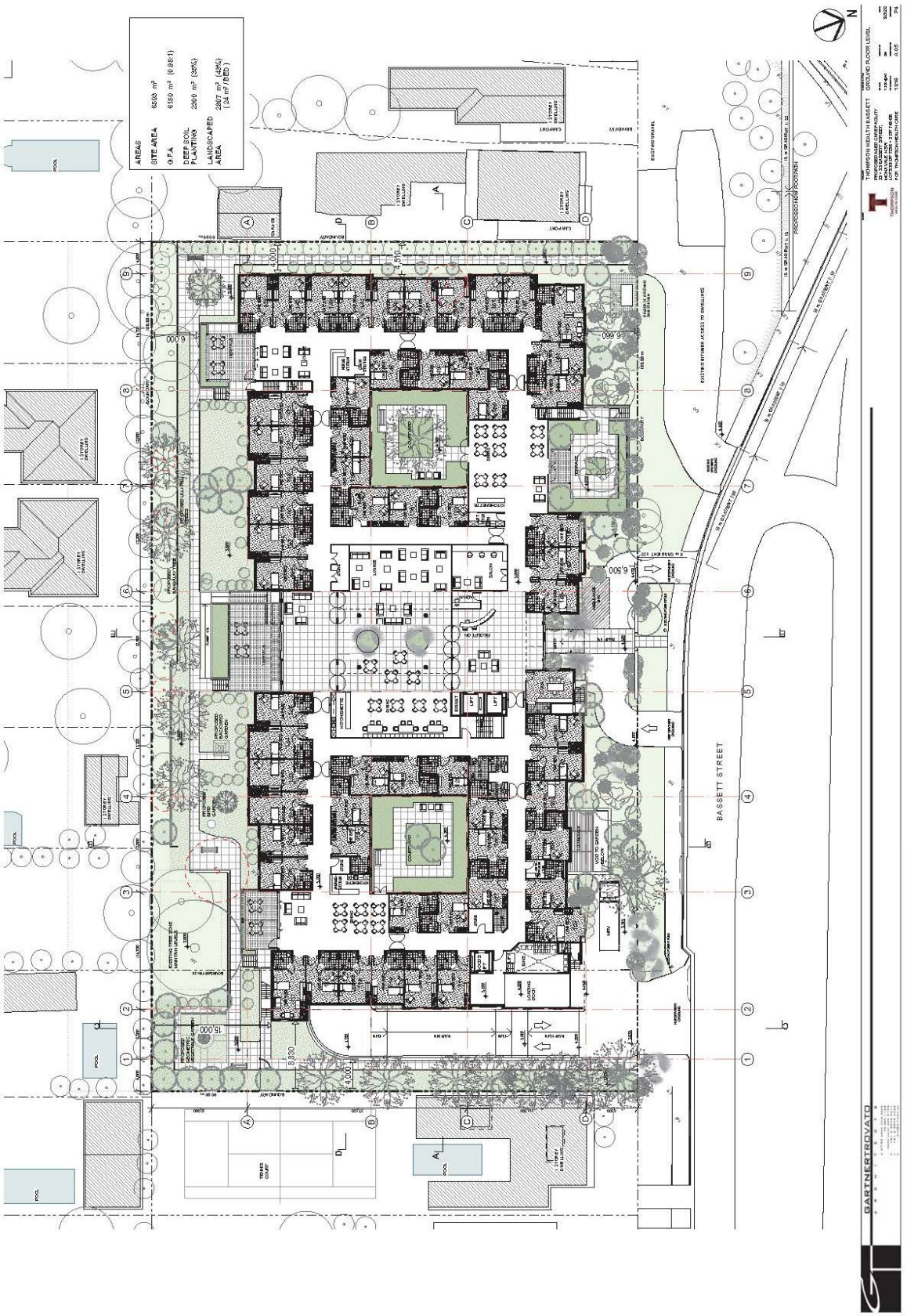
Proposed site development	24vtph
Existing site development	12vtph
Nett increase in traffic	**12vtph**

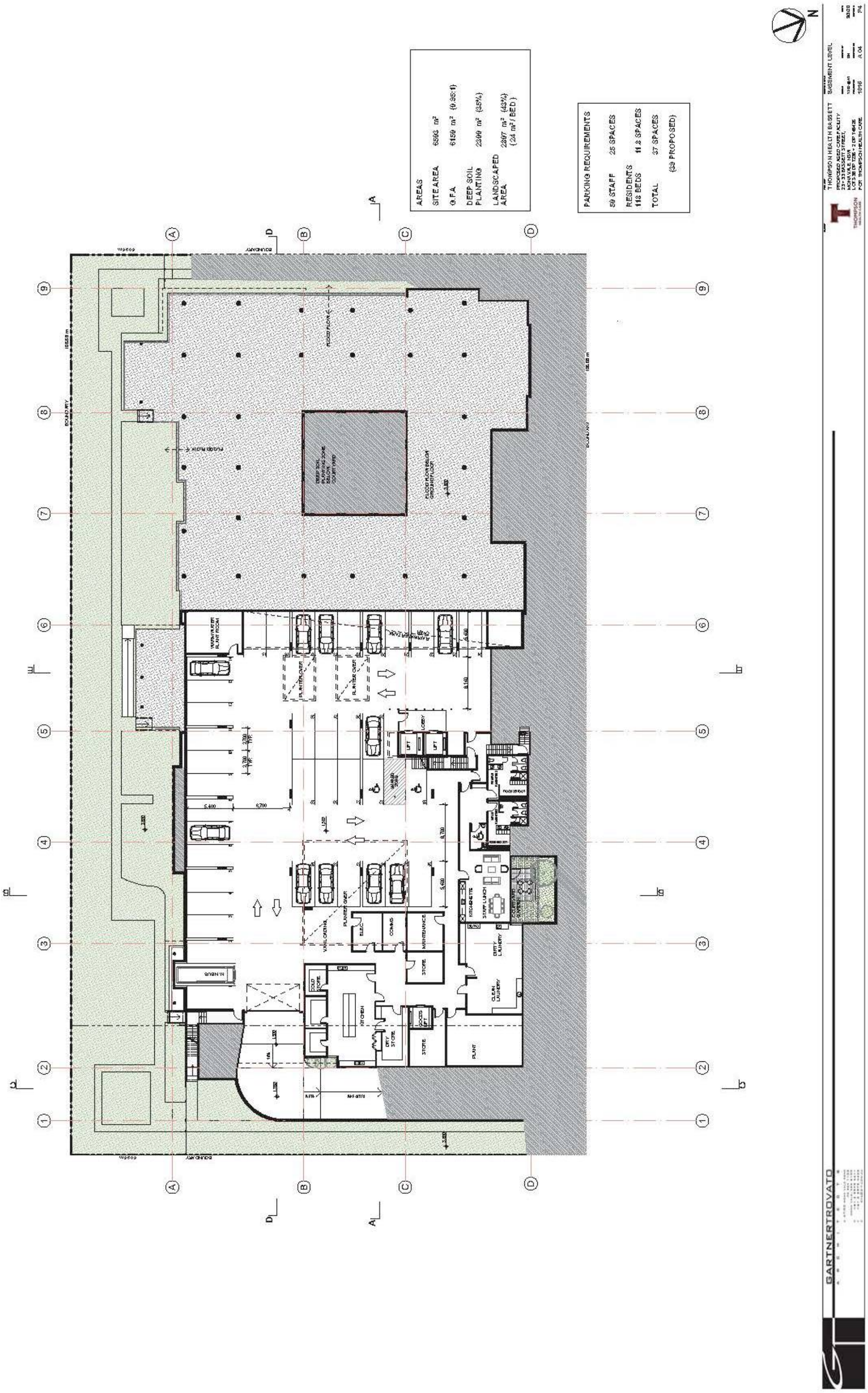
It will be readily appreciated that the additional traffic generated by the proposed development during peak periods is relatively minor (12vtph) which will not have any noticeable or unacceptable effect on the road network serving the site in terms of road network capacity or traffic-related environmental effect.

In the circumstances, it can be concluded that the proposed development has no unacceptable traffic implications.

APPENDIX A

PLANS OF THE PROPOSED DEVELOPMENT


AREAS
SITE AREA 6503 m²
G.F.A 6150 m² (0.95:1)
DEEP SOIL PLANTING 2360 m² (36%)
LANDSCAPED AREA 2807 m² (43%) (24 m²/BED)
BASSETT STREET
THOMPSON HEALTH BASSETT
GROUND FLOOR LEVEL
BARTNERTROVATO

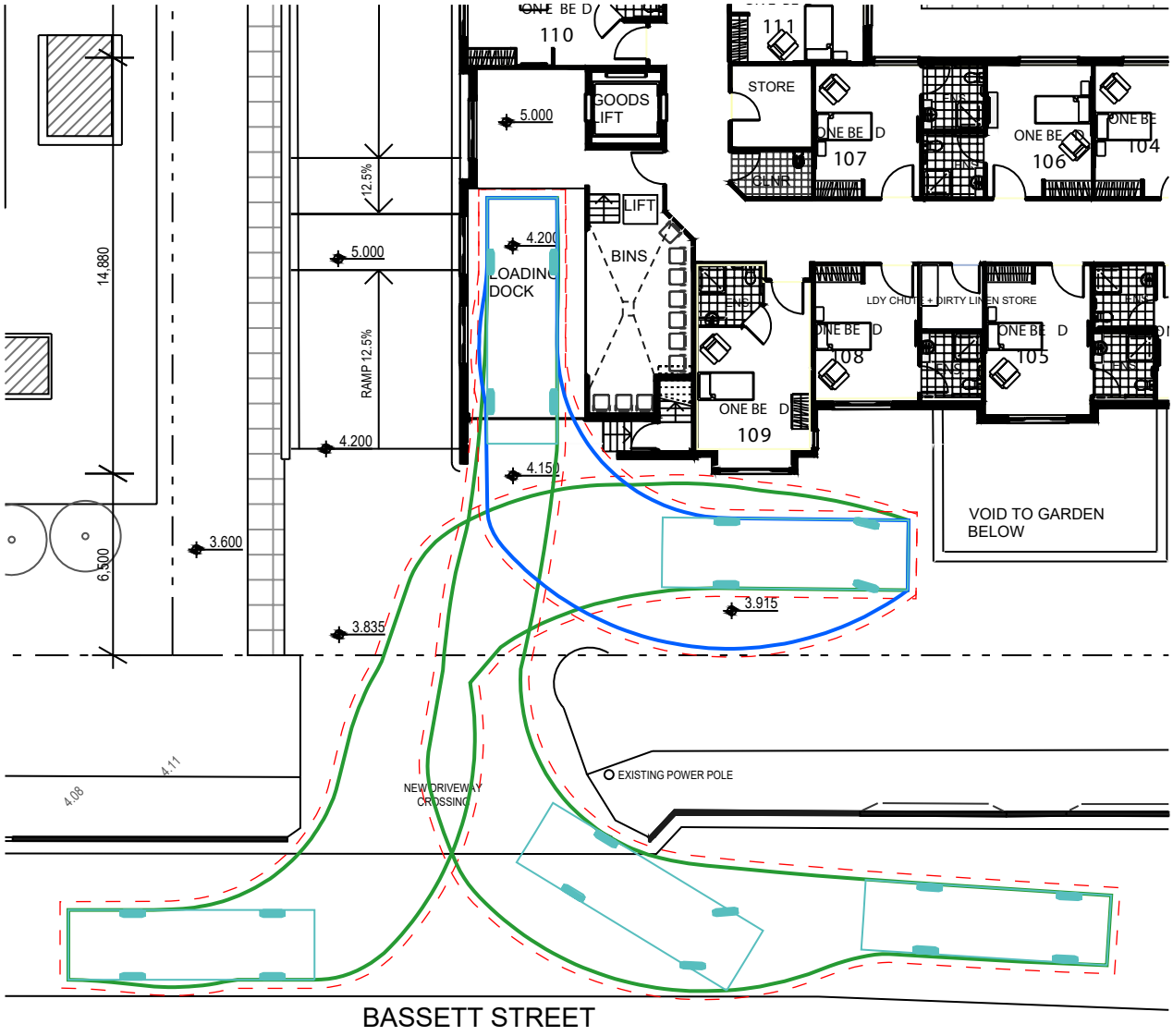

AREAS
SITE AREA 6503 m²
G.F.A 6150 m² (0.95:1)
DEEP SOIL PLANTING 2300 m² (35%)
LANDSCAPED AREA 2807 m² (43%) (24 m²/BED)
PARKING REQUIREMENTS
50 STAFF 25 SPACES
RESIDENTS 118 BEDS 11.8 SPACES
TOTAL 37 SPACES
(39 PROPOSED)
GARTNERTROVATO
BASEMENT LEVEL

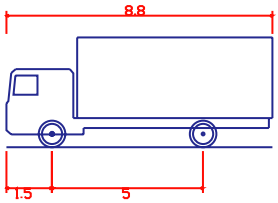
APPENDIX B

MEDIUM RIGID VEHICLE (MRV) SWEPT PATH

Path prepared using
Autodesk Vehicle Tracking

0 2 4 6 8 10 20
METRES
SCALE 1:250





Forward Vehicle Path
Reverse Vehicle Path
300mm Clearance Path

MRV - Medium Rigid Vehicle

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

Manoeuvring Path of Australian Standard AS2890.2:2018 8.8m Medium Rigid Vehicle (MRV) Accessing Loading Bay

Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS