



Proposed Medical Centre and Office Development

**Lot 9631 (14) Part A, Blackberry Drive,
Ashby**

Transport Impact Statement

**PREPARED FOR:
Endeavour Properties Pty Ltd**

October 2018

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1.0 Introduction

This Transport Impact Statement Report (TISR) has been prepared by Transcore on behalf of Endeavour Properties Pty Ltd with regard to the proposed medical centre and office development to be located at Lot 9631 (14) Part A, Blackberry Drive, Ashby, City of Wanneroo.

The subject site is located at the northwest corner of Pinjar Road / Blackberry Drive intersection in Ashby as shown in **Figure 1**. The site is bound by Pinjar Road to the east, Nero Lane to the north and Blackberry Drive to the south and west. The subject site is currently vacant.

The key issues that are addressed in this report include the traffic generation and distribution of the proposed development, parking access and egress, and access to the site for alternative modes of transport.



Figure 1: Location of the subject site

2.0 Proposed Development

The development proposal is for a medical centre and office development at the subject site – Lot 9631 (14) Part A, Blackberry Drive, Ashby, in the City of Wanneroo.

Double-story building is proposed to be constructed for the development which will incorporate 11 consulting rooms for medical practitioners and additional 408 square meters of office space.

It is proposed to provide vehicular access and egress via four crossovers, one on Blackberry Drive at the southern side of the site and the other three crossovers are on Nero Lane at the northern side of the site.

A total of 69 car bays including one ACROD bay are proposed to serve the development. A separate loading bay is provided within the site.

Also, there are two on-street parking bays available within the eastern verge of Blackberry Drive, west of the of the subject site. These public car parking bays can also be used by the proposed development patrons when available.

Pedestrian access to the development is available via existing external pedestrian footpaths along the frontage roads.

Waste collection will be scheduled maximum twice per week and outside of the peak operating periods of the Medical Centre.

Detailed development plans are included for reference in **Appendix A**.

3.0 Vehicle Access and Parking

3.1 Access

According to the plans prepared by Oldfield Knott Architects Pty Ltd, the proposed vehicular access to the proposed development car park is proposed via four crossovers, one on Blackberry Drive and the other three crossovers are on Nero Lane, those crossovers lead to 56 on-site parking bays (including one ACROD bay).

Additionally, 13 on-site parking bays will be available at the northeast car parking module which will be accessed via planned new eastbound laneway extension of Nero Lane.

3.2 Parking Demand and Supply

The City of Wanneroo District Planning Scheme No.2 car parking standards provides parking requirements for various land uses. Review of the Scheme indicates that a total of 69 parking bays should be provided for the proposed development. The required parking provision includes:

- ✚ 5 bays per practitioner, that means 11 practitioners require 55 bays for the proposed Medical Centre (Table 2 – Clause 4.14); and,
- ✚ 1 bay per 30 m² NLA of office space, that means that 14 bays are required for the proposed 408 m² NLA of office space (Table 2 – Clause 4.14).

The proposed development provides a total of 69 on-site car parking bays (including one ACROD bay) with the option of use of additional two public parking bays in the immediate vicinity on Blackberry Drive. Accordingly, the proposed parking supply is considered to be sufficient to cater for the needs of the proposed development.

4.0 Provision for Service Vehicles

A service bay is proposed within the site for rubbish collection and delivery operations.

The bay is marked as “loading bay” and located within the northeast car park and next to bin store area located at the northern side of the building for convenience. Rubbish collection is anticipated to occur twice a week and typically outside of the peak operating periods of the proposed development.

5.0 Daily Traffic Volumes and Vehicle Types

In order to assess the potential traffic impact from the proposed development, a traffic generation and distribution exercise was undertaken. The aim of this exercise was to establish the traffic that would be generated from the proposed development and to establish the level of traffic increases on the surrounding road network.

5.1 Traffic Generation/ Distribution

The traffic volumes that will be generated by the proposed Medical Centre has been estimated using trip generation rates derived from the *Institute of Transportation Engineers Trip Generation, 9th Edition* document and the traffic volumes that will be generated by the proposed office space has been estimated using trip generation rates derived from the *Institute of Transportation Engineers Trip Generation, 10th Edition* document.

Accordingly, it is estimated that the proposed development would generate a total of approximately **418** daily vehicle trips with about **48** trips during the morning peak hour period and **52** trips during the afternoon peak hour period. These trips include both inbound and outbound vehicle movements. It is anticipated that most of the vehicle types would be passenger cars and to the lesser extent 4WDs. Please refer to **Table 1** for more details on peak hour trips for the proposed development.

Land Use	IN%	Out%		Trip Rates		Trip Generation	IN	OUT
Daily Rate								
Medical Clinic	50%	50%	11	31.5	Per full time doctor	347	173	173
Small Office Building	50%	50%	4392	16.19	Per 1000 (sq.ft) GFA	71	36	36
Total Daily Trips						418	209	209
AM								
Medical Clinic	50%	50%	11	3.6	Per full time doctor	40	20	20
Small Office Building	83%	17%	4392	1.92	Per 1000 (sq.ft) GFA	8	7	1
Total AM Trips						48	27	21
PM								
Medical Clinic	41%	59%	11	3.78	Per full time doctor	42	17	25
Small Office Building	32%	68%	4392	2.45	Per 1000 (sq.ft) GFA	11	3	7
Total PM Trips						52	20	32

Table 1: Peak hour trips for the proposed development

The distribution of traffic to and from the proposed development has been evaluated by considering the catchment area served by the proposed development as well as the available access and egress routes to and from the site. Consequently, the directional split of traffic to and from the site is assumed as follows:

- 45% of all traffic to/from the north/northwest (Pinjar Road/Blackberry Drive);
- 20% of all traffic to/from the east (Caporn Street/Pinjar Road/Blackberry Drive);
- 20% of all traffic to/from the south (Pinjar Road/Blackberry Drive); and,
- 15% of all traffic to/from the west (Blackberry Drive west).

For simplicity, the three crossovers trip distribution are illustrated in one combined crossover on Nero Lane.

The directional morning, afternoon and total daily trip distribution of the development-generated traffic is illustrated in **Figure 2**.



Figure 2. Estimated traffic movements for the proposed development in the peak periods (AM/PM/Daily)

5.2 Impact on Surrounding Roads

The WAPC *Transport Impact Assessment Guidelines for Developments (2016)* provides guidance on the assessment of traffic impacts:

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where the development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The proposed development will not increase traffic flows anywhere near the quoted WAPC threshold to warrant further detailed analysis. The proposed development will not increase traffic on any lanes on the surrounding road network by more than 100vph, therefore the impact on the surrounding road network is insignificant. Further, the standard and classification of the surrounding road network is such that it can accommodate the proposed development traffic comfortably.

6.0 Traffic Management on the Frontage Streets

Blackberry Drive is an L-shaped road skirting the subject site along the southern and western boundaries. It is a single-carriageway road with the section immediately west of Pinjar Road constructed as a boulevard-style road with a 2m wide solid median. Pedestrian paths are in place along both sides for the section immediately west of Pinjar Road with a row of embayed on-street parking bays along the southern side of the road.

Pedestrian crossing facilities are in place at the intersection with Pinjar Road and immediately west of the proposed crossover.

Blackberry Drive is classified as an *Access Road (MRWA, Metropolitan Functional Road Hierarchy)*. No traffic counts are presently available for this road; however, based on Transcore's September 2016 manual counts it is estimated that this road presently carries up to 1,000vpd. Blackberry Drive operates under a speed limit of 50km/h.

Blackberry Drive forms a priority-controlled left-in/left-out/right-in T-intersection with Pinjar Road at the southwest corner of subject site. There are presently no crash records for this intersection.

Pinjar Road, east of the subject site, is a four-lane dual-carriageway arterial road with a wide landscaped median. A short distance to the north of the site Pinjar Road becomes a single-carriageway two-lane road. It operates under a sign-posted speed limit 70km/h.

According to the Main Roads WA *Metropolitan Functional Road Hierarchy* document, Pinjar Road is classified as a *Distributor A* road. It is also covered by the *Other Regional Roads (Blue Roads)* reservation in the *Metropolitan Region Scheme* as shown in **Figure 3**.

Based on the latest available traffic count data supplied by Main Roads WA, Pinjar Road (east of Wanneroo Road) carried approximately 13,200vpd on a regular weekday (Mar 2016). The morning peak of 1,048vph and the afternoon peak of 1,200vph were recorded at the time.

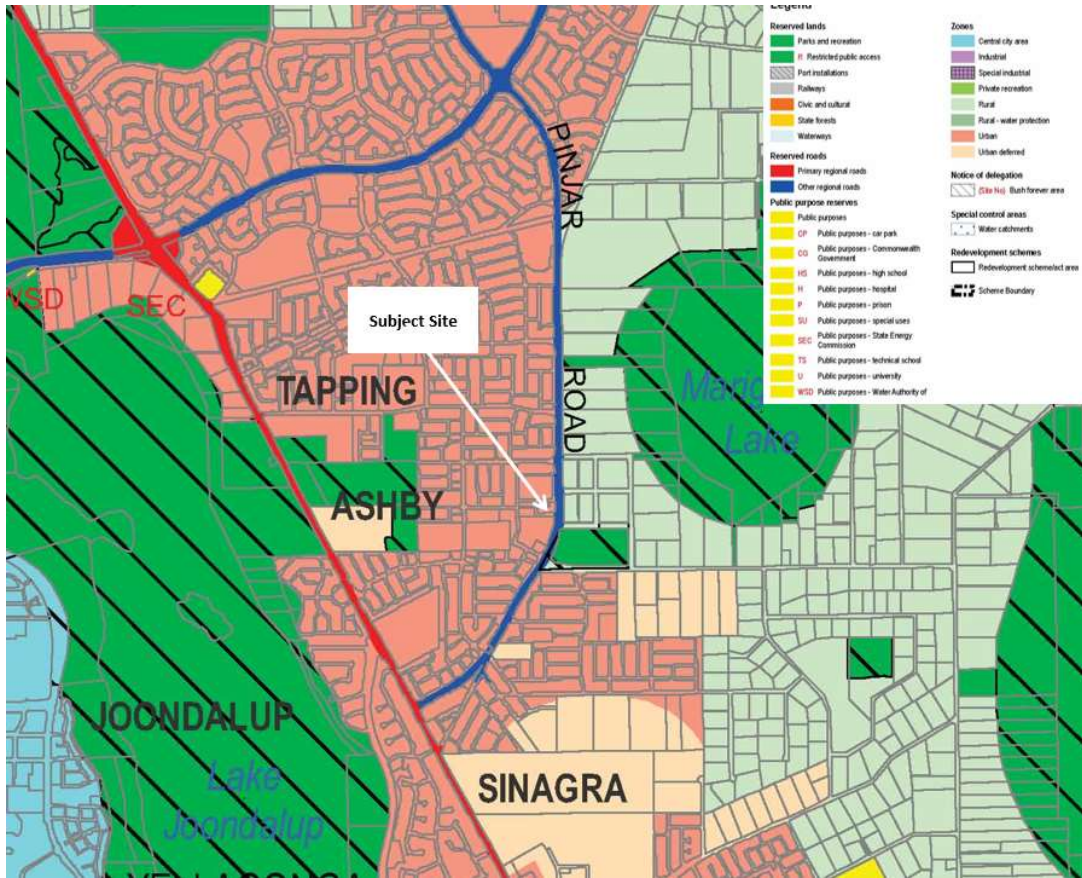


Figure 3. Site location within Metropolitan Region Scheme

7.0 Public Transport Access

The subject site has no practical or convenient access to public transport network at present. The nearest pair of bus stops is located on Carosa Way some 500m walking distance to the northwest of the subject site. The map of existing public transport services within the locality is provided in **Figure 4** for more details.

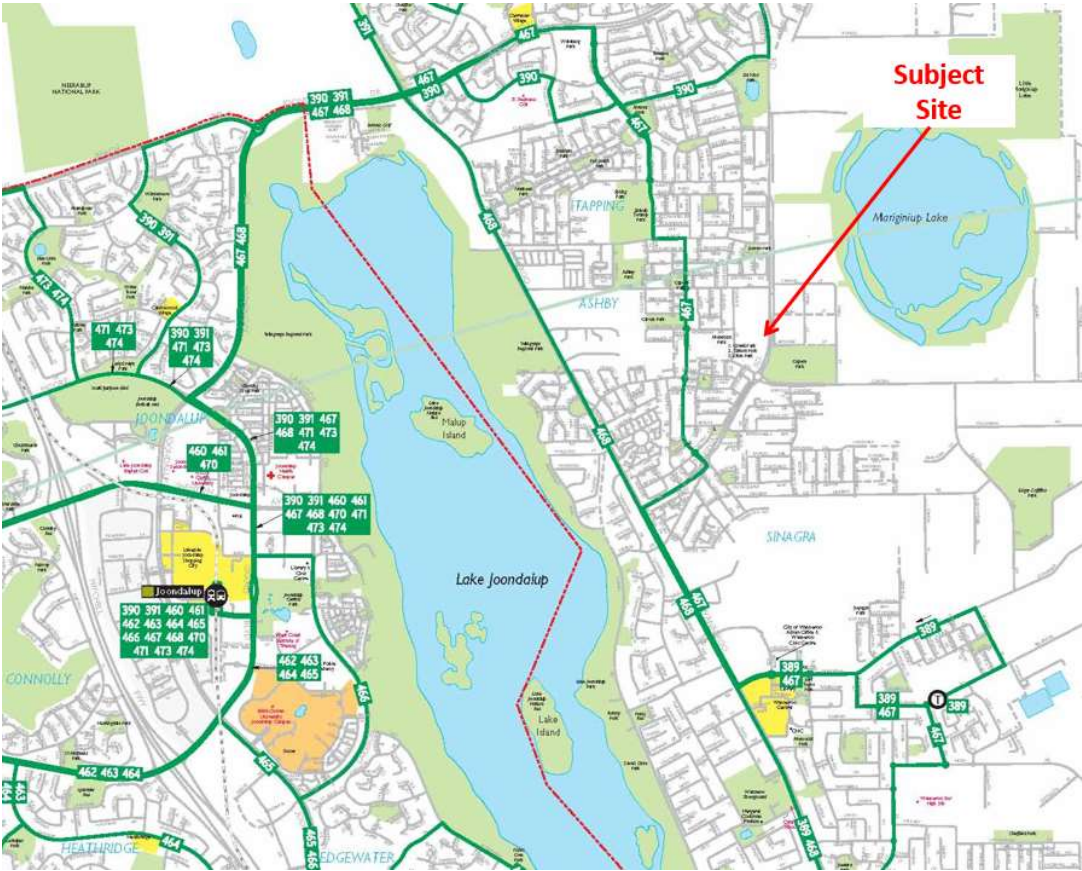


Figure 4. Local public transport service map (source: Transperth Maps)

8.0 Pedestrian Access

Pedestrian connectivity to the proposed development is available via existing external path network comprising paved paths on surrounding roads.

9.0 Cycle Access

Bike access to the site is available via shared paths which are in place along the east side of the subject site and links to the existing network of shared paths and roads classified as “good road riding environment” within the locality. Please refer to Perth’s Bicycle Network map illustrated in **Figure 5** .

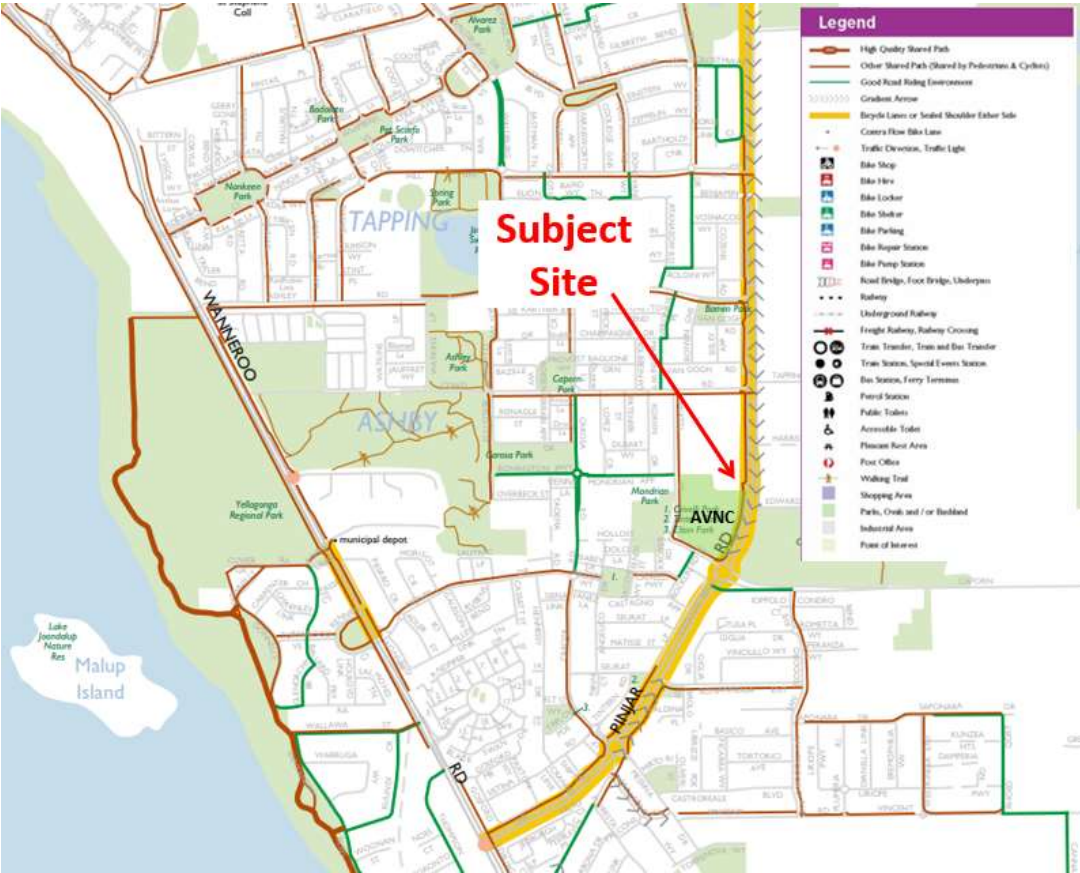


Figure 5. Extract from Perth Bicycle Network map series (source: Department of Transport)

10.0 Site Specific Issues

No particular site-specific issues have been identified for the proposed Medical Centre.

11.0 Safety Issues

No specific safety issues have been identified for this proposed Medical Centre.

12.0 Conclusions

This Transport Impact Statement provides information on the proposed medical centre and office development to be located at Lot 9631 (14) Part A, Blackberry Drive, Ashby, City of Wanneroo.

The proposed development will incorporate 11 consulting rooms for medical practitioners and additional 408 square meters NLA of office space.

Vehicle access to and from the site will be via single crossover on Blackberry Drive and via three crossovers on Nero Lane, those crossovers lead to 56 on-site parking bays (including one ACROD bay). Additionally, 13 on-site parking bays will be available at the northeast car parking module which will be accessed via planned new eastbound laneway extension of Nero Lane.

Based on the analysis documented in this report it is concluded that the proposed total combined on-site parking supply of 69 bays is considered to be sufficient to cater for the needs of the proposed development and to meet the anticipated parking demand.

Also, there are two on-street parking bays available within the eastern verge of Blackberry Drive, west of the of the subject site. Public car parking bays can be used by the proposed development patrons when available.

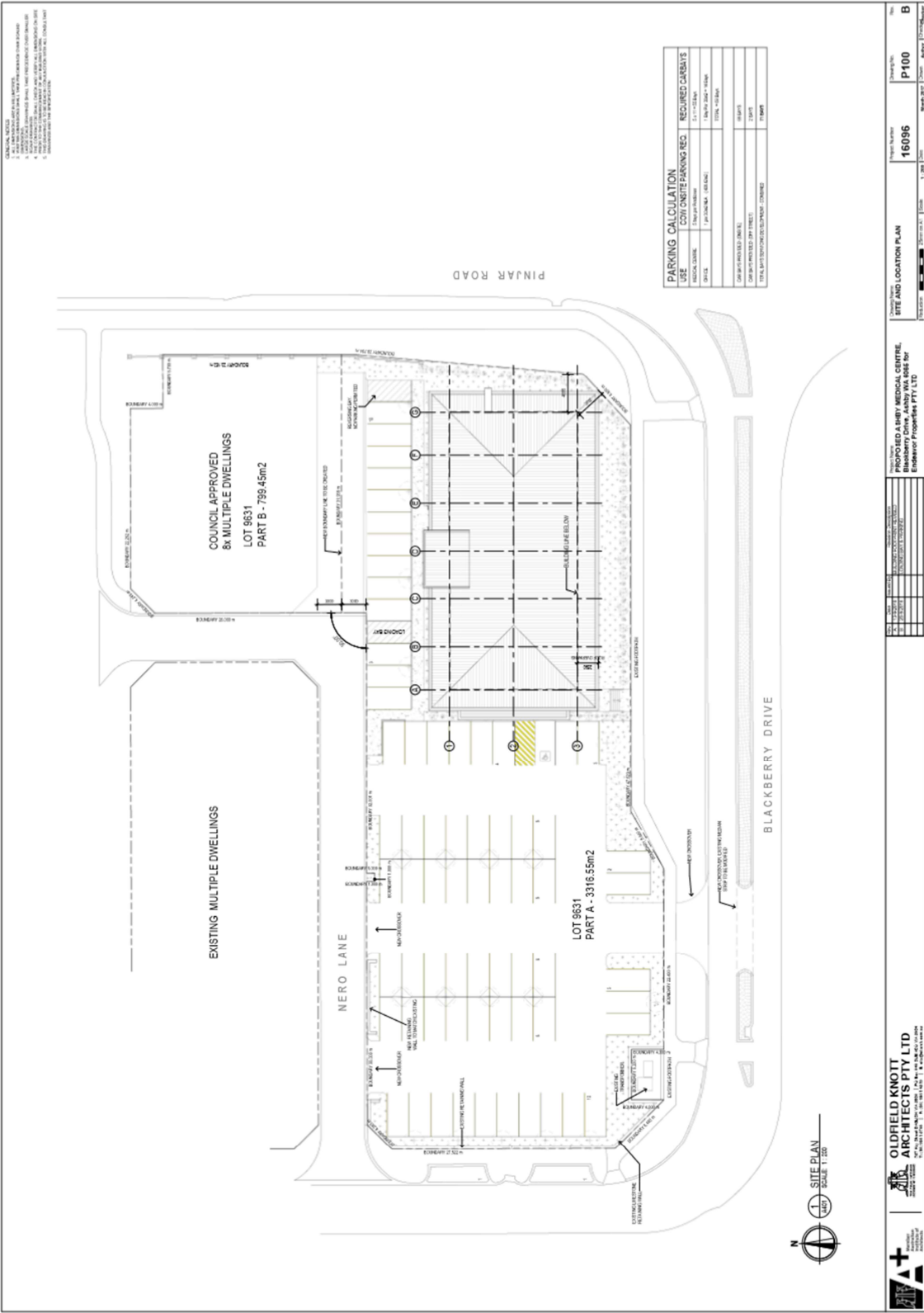
The proposed development is expected to generate approximately 418 (inbound and outbound) total peak daily trips, 48 trips (inbound and outbound) during the peak morning period and about 52 trips (inbound and outbound) during the peak afternoon period, which is anticipated to represent the critical period for combined development and road network traffic.

The traffic analysis undertaken in this report shows that the traffic generation of the proposed development would have insignificant impact on the surrounding road network.

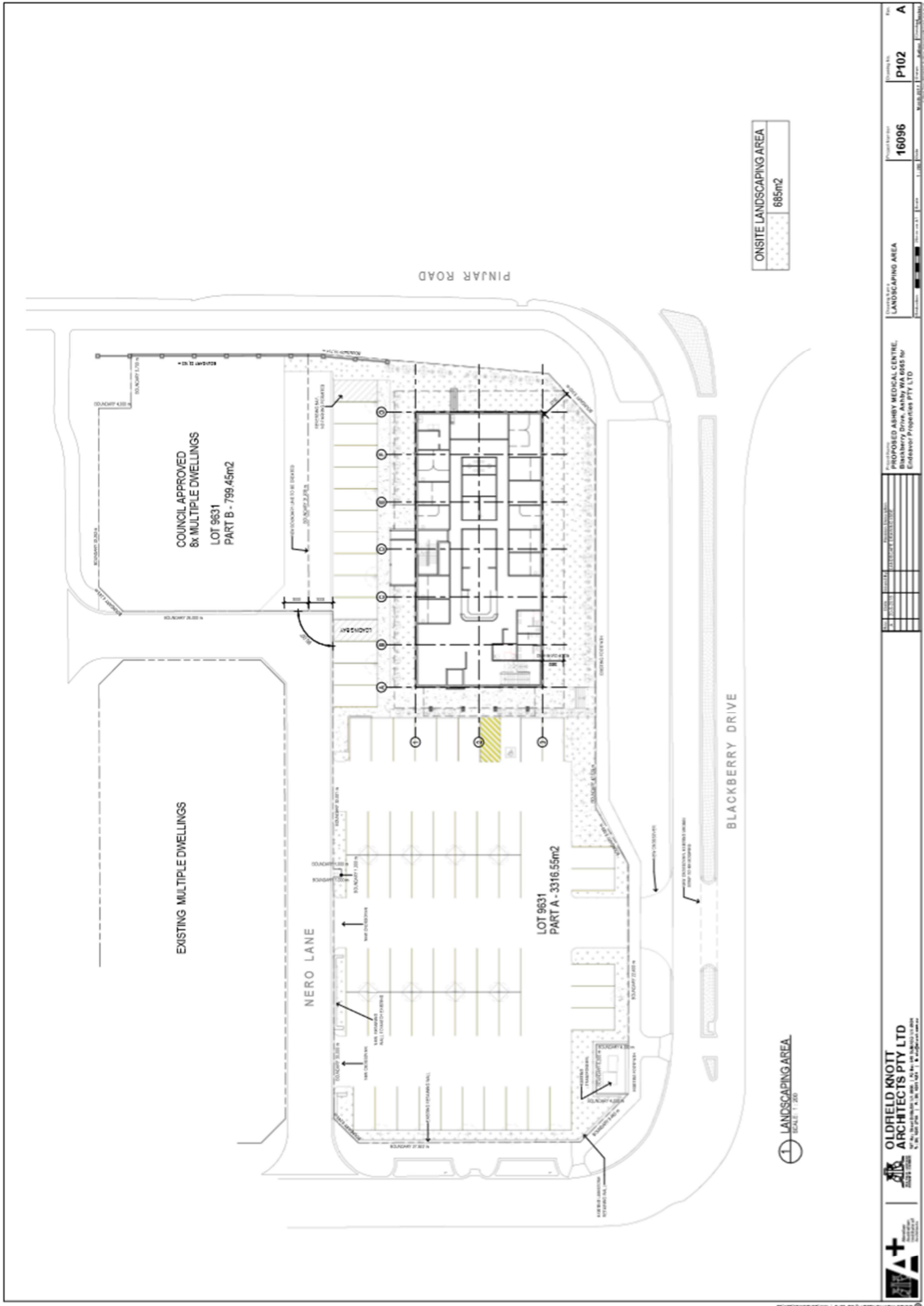
It is concluded that the findings of this Transport Impact Statement are supportive of the proposed medical centre and office development.

Appendix A

PROPOSED DEVELOPMENT PLANS







	OLDFIELD KNOTT ARCHITECTS PTY LTD <small>1/100 ROYAL AVENUE, WEST PERTH, WA 6150 T: (08) 9447 1111 F: (08) 9447 1112 E: info@oldfieldknott.com.au</small>	PROJECT NAME PROPOSED ASHBY MEDICAL CENTRE <small>Site Plan for Embasay Properties Pty Ltd</small>	PROJECT NO. 16096	SHEET NO. P102	DATE A
	LANDSCAPING AREA 865m ²		SCALE 1:200		