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Proposed Childcare Centre

184A Shepperton Road, East Victoria
Park

Transport Impact Statement

PREPARED FOR:
Omni Projects Pty Ltd
C/- Apex Planning

October 2023

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1 Introduction

This Transport Impact Statement (TIS) has been prepared by Transcore on behalf of Omni Projects Pty Ltd with regard to the proposed childcare centre development to be located at Lot 7 (184A) Shepperton Road, East Victoria Park in the Town of Victoria Park.

The proposed childcare centre is located on the southeast corner of the Shepperton Road/Miller Street intersection as shown in **Figure 1**. The existing building on the subject site was previously occupied by a medical training facility. The site also includes a detached car park across Butler Lane which was previously used by the medical training facility and will serve as the centre's main car park.

The proposed childcare centre is proposed to cater for 82 children and 15 staff members. The subject site's access is via Butler Lane and is not proposed to change from the previous use. Butler Lane connects to Miller Street.

The development plan is presented in **Appendix A** for reference.

The Transport Impact Assessment Guidelines (WAPC, Vol 4 – Individual Developments, August 2016) states: "A Transport Impact Statement is required for those developments that would be likely to generate moderate volumes of traffic¹ and therefore would have a moderate overall impact on the surrounding land uses and transport networks". **Section 6.2** of Transcore's report provides details of the estimated trip generation for the proposed development. Accordingly, as the total peak hour vehicular trips are estimated to be less than 100 trips, a Transport Impact Statement is deemed appropriate for this development.

Key issues that will be addressed in this report include the traffic generation and distribution of the proposed development, access and egress movement patterns and parking demand and supply.

The location of the subject site within the *Metropolitan Region Scheme* context is illustrated in **Figure 2**. Review of the *Metropolitan Region Scheme (MRS)* identifies Miller Street as an "Other Regional Road" and Shepperton Road as a "Primary Regional Road". The subject site is zoned as "Urban" in the MRS.

¹ Between 10 and 100 vehicular trips per hour



Figure 1: Location of the subject site

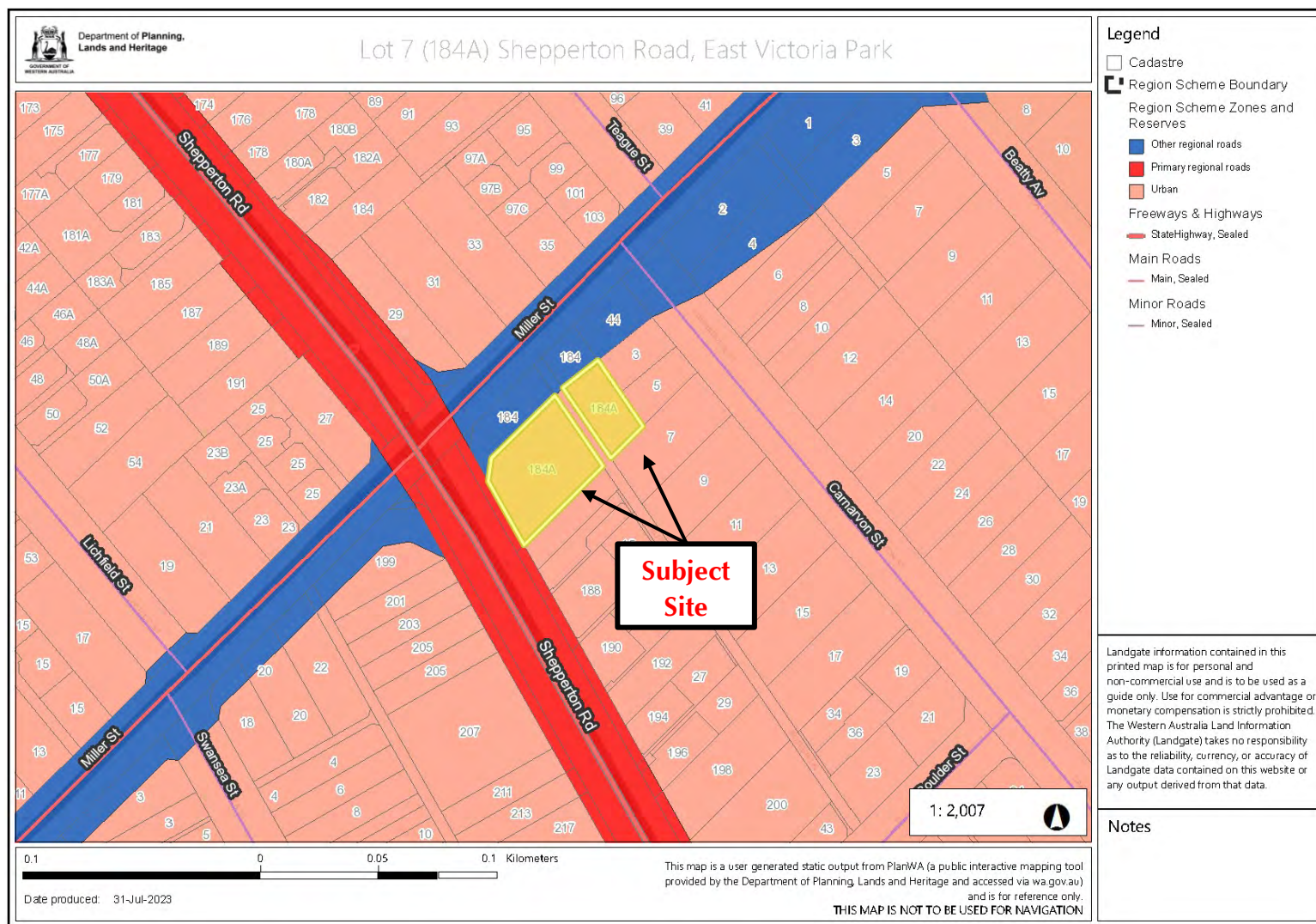


Figure 2: Location of subject site within MRS

2 Development Proposal

The development proposal is for a childcare centre to be located at Lot 7 (184A) Shepperton Road, East Victoria Park in the Town of Victoria Park.

The proposal entails the change of use of the existing building on-site with minor modifications to the internal and external areas. The existing parking/hardstand areas adjacent to the building will be replaced with a minor building extension and outdoor play area. The existing detached parking across Butler Lane will serve as the childcare centre's parking area. The detached car park area will be remarked to incorporate an ACROD bay.

The proposed childcare centre comprises the following elements:

- Four playrooms (one room for 0-2 years old, one room for 2-3 years old, and two rooms for 3+ years old);
- Reception area;
- Staff room;
- Office;
- Kitchen;
- Cot room;
- Nappy and preparation room;
- Laundry;
- Four storerooms;
- Amenities;
- Outdoor play areas;
- On-site bicycle parking; and,
- Detached car park with 16 bays (inclusive of one ACROD bay)

The childcare centre is planned to accommodate 82 children and 15 staff.

The existing crossover on Miller Street which leads to Butler Lane will service the proposed childcare centre.

The existing bin store located on the south side of the detached car park will be used by the proposed childcare centre.

Pedestrian access to the childcare centre is facilitated via the existing pedestrian paths along Miller Street and Shepperton Road.

The proposed development plans are included for reference in **Appendix A**.

3 Vehicle Access and Parking

3.1 Access

Access to the proposed development is facilitated via Butler Lane which forms an intersection with Miller Street. Butler Lane provides direct access to the detached car park of the centre as shown in **Figure 3**.



Figure 3: Location of vehicular access

3.2 Parking

The subject site has an existing detached car park at the rear of the building which currently has an existing 17 parking bays which will then be remarked to allow for an ACROD bay resulting in 16 parking bays.

The Town of Victoria Park *Local Planning Policy 23 – Parking Policy* provides parking requirements for various land uses. The parking provision applicable to the proposed childcare centre is:

- 1 bay for every 5 children

The proposed childcare centre will accommodate 82 children. According to the City's policy, the proposed childcare centre requires a parking provision of 16 parking bays. Therefore, the proposed parking supply satisfies the City's requirement.

The existing 9-bay car park between the subject site and Miller Street (within the Miller Street reservation) can be used by patrons of the proposed development. This car park has a crossover on Butler Lane.

The site is also serviced well by public transport, noting bus services along Shepperton Road and within close proximity to both Victoria Park and Carlisle train stations.

4 Hours of Operation

Based on the information provided to Transcore, the proposed childcare centre is expected to operate from 6:30 AM to 6:30 PM.

5 Provision for Service Vehicles

Based on the advice provided to Transcore, the waste collection for the proposed development will be undertaken by a private contractor. The bin storage area is to remain located at the south corner of the detached car park as shown in the development plan in **Appendix A**.

Waste collection and deliveries will take place via Butler Lane. A private contractor will collect waste using an 8.8m service vehicle. The waste collection truck will go through Butler Lane from Miller Street, park in a suitable location adjacent to the bin store for rubbish collection and exit via Butler Lane onto Boulder Street in forward gear.

It is proposed that servicing will be conducted outside of the peak operating hours of the childcare centre. It is recommended that smaller vehicles, such as vans, should be used for deliveries.

Turn path analysis has been undertaken for an 8.8m service vehicle and is included in **Appendix B**. It shows satisfactory access, egress, and circulation of the vehicle via Butler Lane.

6 Daily Traffic Volumes and Vehicle Types

6.1 Existing Development Trip Generation

For a robust assessment, the traffic generation of the currently approved medical training facility is not considered in this assessment.

6.2 Proposed Development Trip Generation

To establish accurate traffic generation rates for the proposed childcare centre, traffic surveys undertaken by Transcore at similar centres in the Perth metropolitan area were sourced.

Discussions with the respective centre managers revealed that the peak drop-offs and pick-ups for these centres occur between the hours of 7:30 AM – 9:30 AM and 3:00 PM – 5:00 PM.

From the total number of children at each of the centres on the surveyed days, the following average generation rates were established for the morning and afternoon surveyed periods:

- 7:30AM–9:30AM: 1.25 trips per child (57% in / 43% out); and,
- 3:00PM–5:00PM: 1.10 trips per child (49% in / 51% out).

From this information, the traffic generation rate for the combined period of 07:30AM–09:30AM and 3:00PM–05:00PM was calculated as 2.36 trips per child. To convert this figure to a daily generation rate, this figure was increased to 3.5 trips per child to account for any trips outside of the surveyed times. It was assumed that the daily in and out split for vehicle trips was 50/50.

Furthermore, the following peak hour generation rates were established from the surveys for the childcare centres:

- AM peak hour: 8:00AM – 9:00AM: 0.87 trips per child (57% in / 43% out); and,
- PM peak hour: 04:00PM – 05:00PM: 0.71 trips per child (47% in/ 53% out);

A comparison of the four-hour generation rates and the peak-hour generation rates confirms that the distribution of traffic from these centres is spread over the peak periods and that the full concentration of traffic does not occur in one peak hour.

Accordingly, the following number of trips was estimated for the proposed childcare centre, assuming a maximum scenario of 82 children being present (i.e., centre at full capacity):

- AM peak hour: 72 trips generated (41 in / 31 out);

- PM peak hour: 59 trips generated (28 in / 31 out); and,
- Daily traffic generation: 287 trips generated (144 in / 143 out).

6.3 Traffic Flow

Based on the site location and residential areas in the immediate locality, the permeability of the local road network and the assumption that all of the traffic attracted to the proposed childcare centre would arrive/depart via Miller Street, the centre's traffic distribution adopted for this analysis is as follows:

- 35% to/from the residential areas to the northeast of the site and along the north of Miller Street;
- 25% to/from the residential areas to the northwest of the site and along the north of Shepperton Road;
- 25% to/from the residential areas to the southeast of the site and along the south of Shepperton Road; and,
- 15% to/from the residential areas to the southwest of the site and along Miller Street.

Figure 4 illustrates trip generation and distribution over the local road network for the proposed development.



Figure 4: Estimated traffic movements for the proposed childcare centre

6.4 Impact on Surrounding Roads

The WAPC *Transport Impact Assessment Guidelines* (2016) provides the following 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 development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The proposed childcare centre will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph to warrant further analysis. Therefore, the impact of development traffic on the surrounding road network will not be significant.

7 Traffic Management on the Frontage Streets

Shepperton Road, west of the subject site, is constructed as a 17-metre-wide dual-carriageway four-lane divided road. It is divided by a solid median in the vicinity of the site. Pedestrian paths are available on both sides of the road in the vicinity of the site.

Shepperton Road is classified as a *Primary Distributor* road in the Main Roads Metropolitan Functional Road Hierarchy. It is covered by a *Primary Regional Road* reservation (i.e. *Red Road*) under the care and control of Main Roads WA. Refer to **Figure 5** and **Figure 6** for more details.

According to the traffic counts obtained from the Main Roads WA traffic map, Shepperton Road, north of Mint Street, carried 28,923 vehicles per day (vpd) in 2020/21



Figure 5: Northbound view of Shepperton Road



Figure 6: Southbound view of Shepperton Road

Miller Street, north of the subject site, is constructed as a 9.5 metre-wide single-carriageway, two-lane divided road. Pedestrian paths are provided on both sides of the road in the vicinity of the subject site.

Miller Street is classified as a *Distributor B* road in the Main Roads *Metropolitan Functional Road Hierarchy*. It is covered by an *Other Regional Road* reservation (i.e. *Blue Road*). It operates under the default, built-up speed limit of 50km/h. Refer to **Figure 7** and **Figure 8** for more details.

According to the traffic counts obtained from the Main Roads WA traffic map, Miller Street, east of Albany Highway, carried 11,457vpd in 2020/21.



Figure 7: Eastbound view of Miller Street

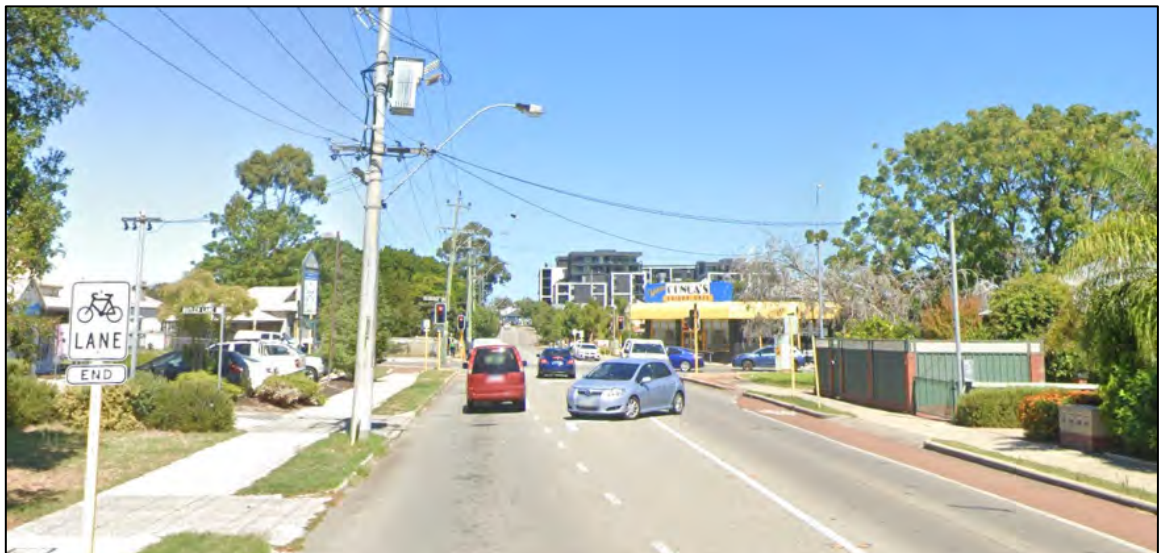


Figure 8: Westbound view of Miller Street

Butler Lane is constructed as a 4-metre-wide laneway. It is understood that some sites along the laneway have ceded land for widening, however, the laneway itself is 4-metre-wide. It is classified as an *Access Road* in the *Main Roads WA Metropolitan Functional Road Hierarchy* and operates under the default; built-up speed limit of 50km/h. Refer **Figure 9** and **Figure 10** for more details.

No traffic counts were available for Butler Lane.



Figure 9: Northbound view of Butler Lane



Figure 10: Southbound view of Butler Lane

8 Public Transport Access

Nearby public transport services are shown in **Figure 11** to **Figure 14**. The subject site has access to the bus services tabulated in **Table 1**. The nearest bus stops are located on both sides of Shepperton Road within close proximity of the site. The nearest train stations are Victoria Park and Carlisle train stations which are about a kilometre away from the site.

Table 1: Bus services available (Transperth)

Bus Services	Days of Service	Service
38	Monday to Sunday (inc Public Holidays)	Perth Busport – Cloverdale via Shepperton Road
282	Monday to Saturday	Elizabeth Quay Stn – Kalamunda Bus Stn via Shepperton Rd
283	Monday to Sunday (inc Public Holidays)	Elizabeth Quay Stn – Kalamunda Bus Stn via Shepperton Rd
930	Monday to Sunday (inc Public Holidays)	Elizabeth Quay Stn – Thornlie Stn via Shepperton Rd & Albany Hwy
Train Services	Days of Service	Service
Armadale Line	Monday to Sunday (inc Public Holidays)	Perth Stn – Armadale Stn
Thornlie Line	Monday to Sunday (inc Public Holidays)	Perth Stn – Thornlie Stn

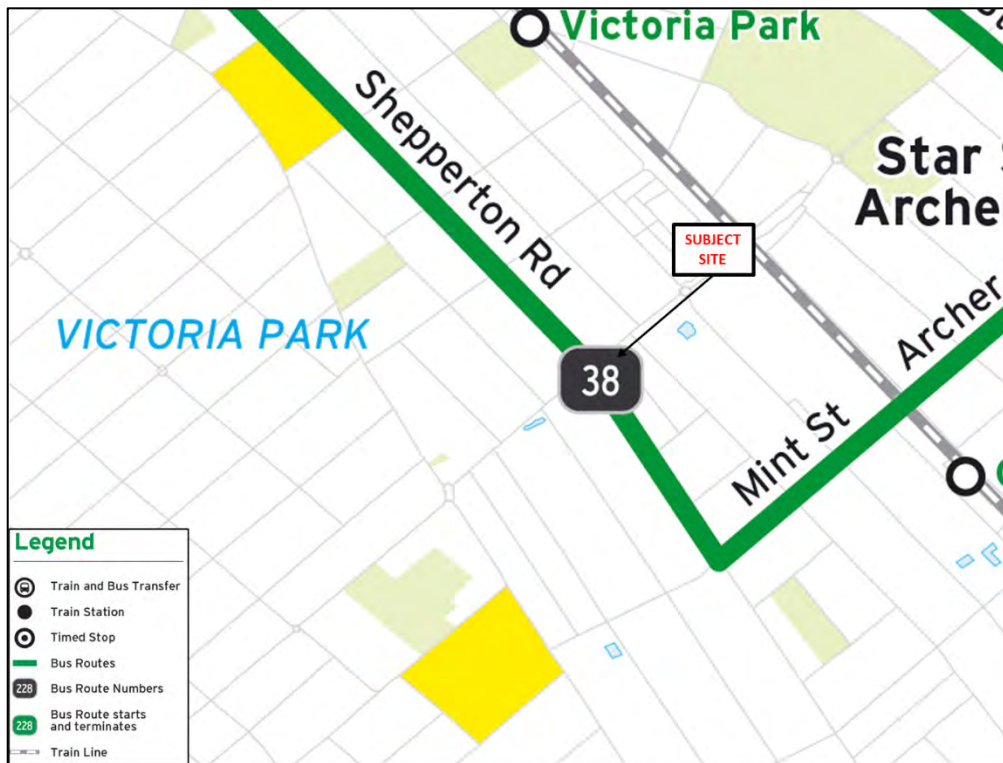


Figure 11: Bus Service 38 (Transperth Maps)

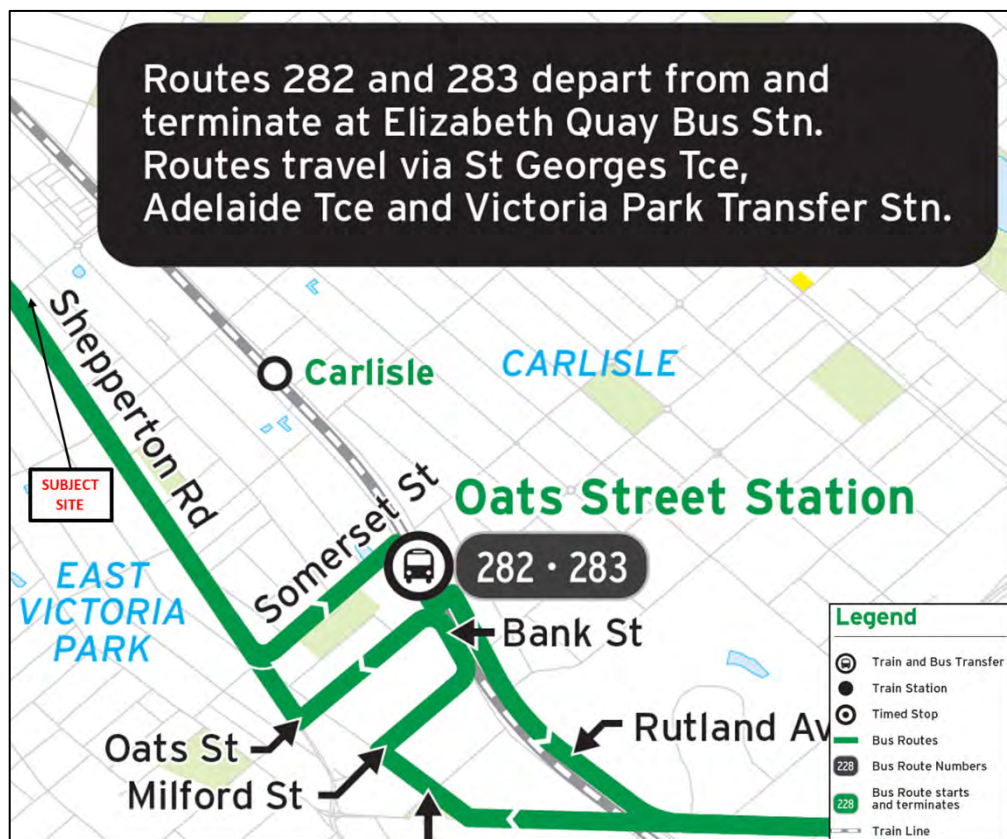


Figure 12: Bus Services 282 and 283 (Transperth Maps)

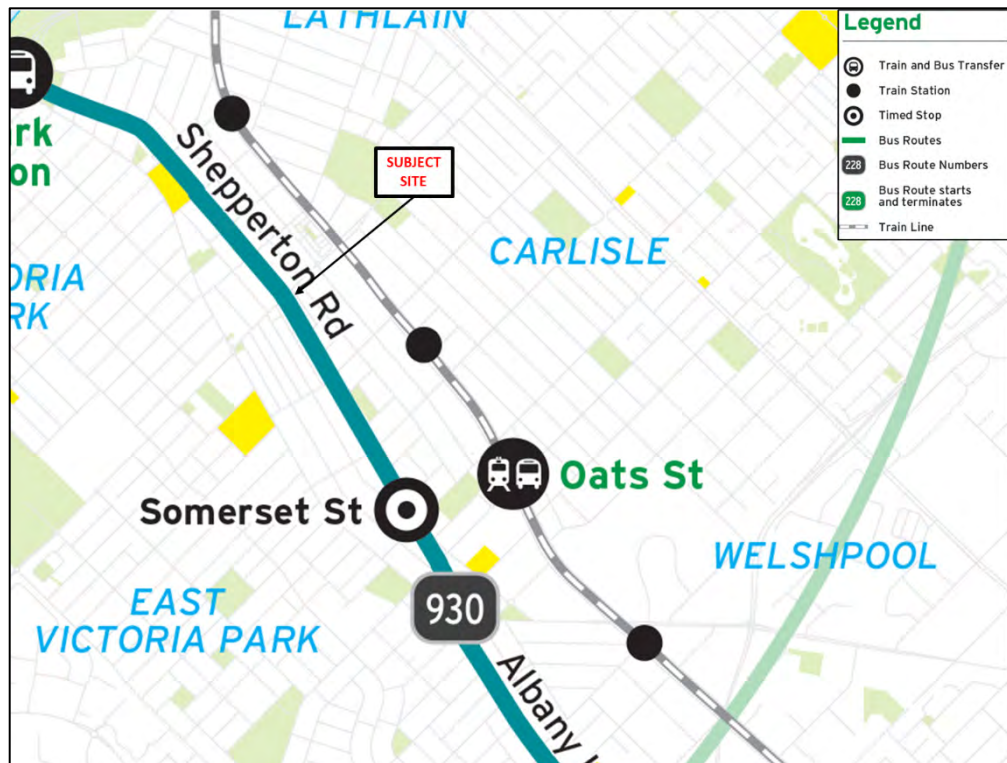


Figure 13: Bus Service 930 (Transperth Maps)

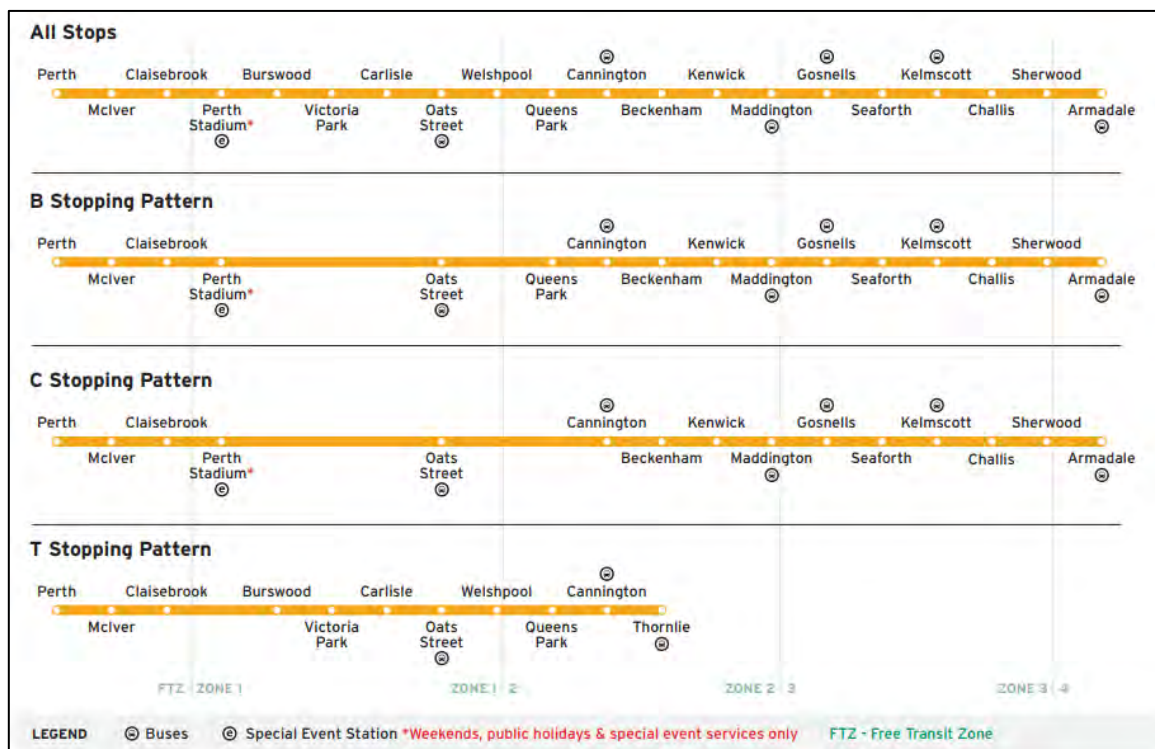


Figure 14: Armadale/Thornlie Line (Transperth Maps)

9 Pedestrian Access

Pedestrian access to the subject site is available directly from the existing footpath network on both sides of Shepperton Road and Miller Street.

10 Cycle Access

The Perth Bicycle Network Map illustrated in **Figure 15** shows the existing cyclist connectivity to the subject site. Miller Street fronting the subject site is referred to as Perth Bicycle Network (PBN) – continuous signed routes (SE16) and is shown to have bicycle lanes or sealed shoulders on either side. This provides further links to other bicycle lanes.

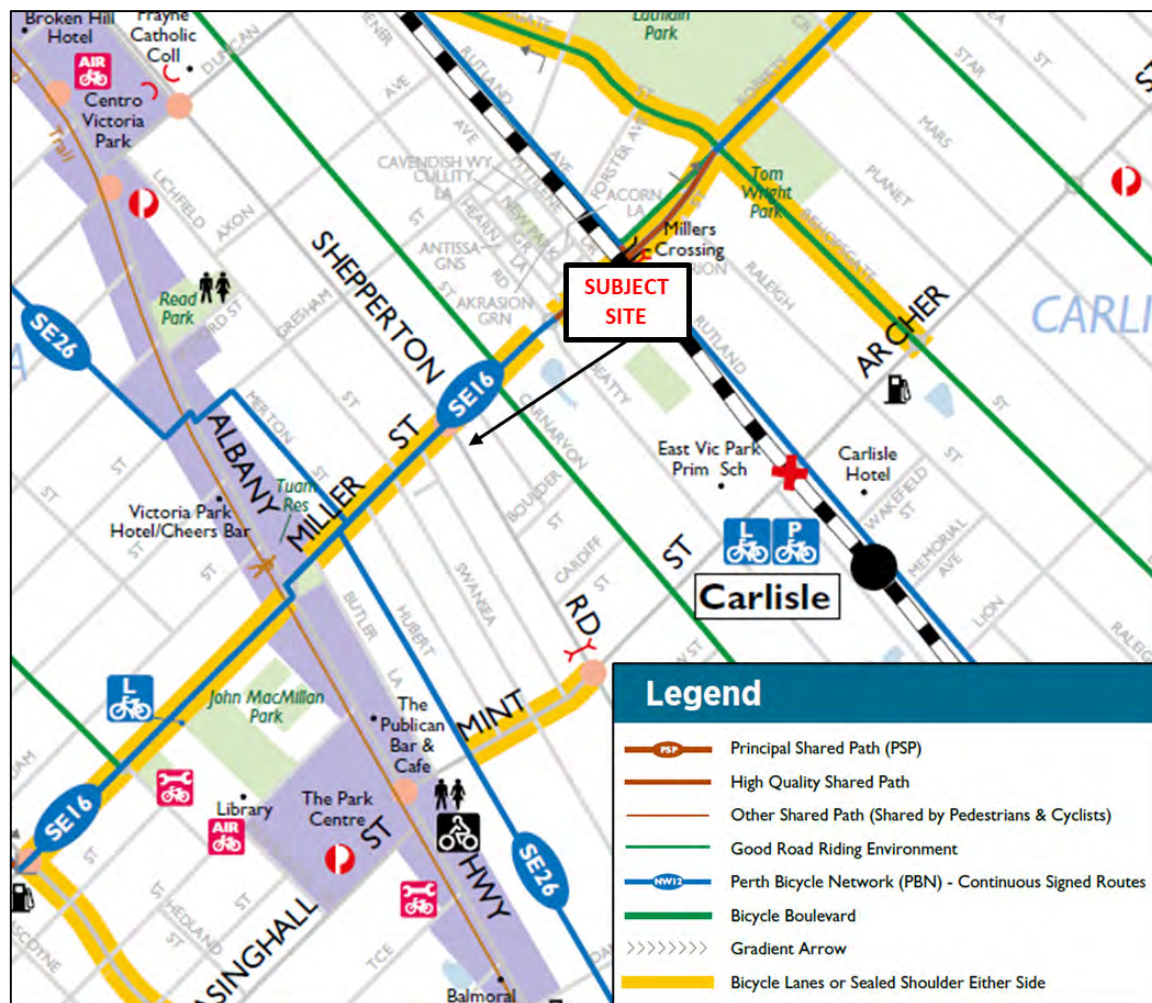


Figure 15: Extract from Perth Bicycle Network Map (Department of Transport)

11 Site Specific Issues

No site-specific issues were identified within the scope of this assessment.

12 Safety Issues

No safety issues were identified within the scope of this assessment.

13 Conclusions

This Transport Impact Statement (TIS) has been prepared by Transcore on behalf of Omni Projects Pty Ltd. The subject of this report is the proposed childcare centre to be located at Lot 7 (184A) Shepperton Road, East Victoria Park in the Town of Victoria Park.

The subject site is presently occupied by a previous medical training facility.

The proposal entails the change of use of the existing building into a childcare centre with minor modifications to the internal and external areas. The site also includes a detached car park which will serve as the centre's main car park.

The proposed childcare centre is to cater to 82 children and 15 staff.

Access to the proposed development will continually be facilitated via Butler Lane which forms an intersection with Miller Street leading to the detached car park of the centre. The detached car park has an on-site parking supply of 16 bays (inclusive of one ACROD bay). Additionally, a 9-bay car park between the subject site and Miller Street (within the Miller Street reservation) is available for patrons of the proposed development.

The traffic analysis undertaken in this report shows that the anticipated traffic generation is below the critical threshold and as such, would not have any significant impact on the surrounding road network.

The waste collection will be undertaken via a private contractor. The turn path analysis undertaken for the service vehicle entering and exiting Butler Lane shows satisfactory access, egress and circulation.

The site features good connectivity with the existing road, cyclist network and public transport coverage through the existing bus service operating in the proximity of the site.

No transport or safety issues have been identified for the proposed development.

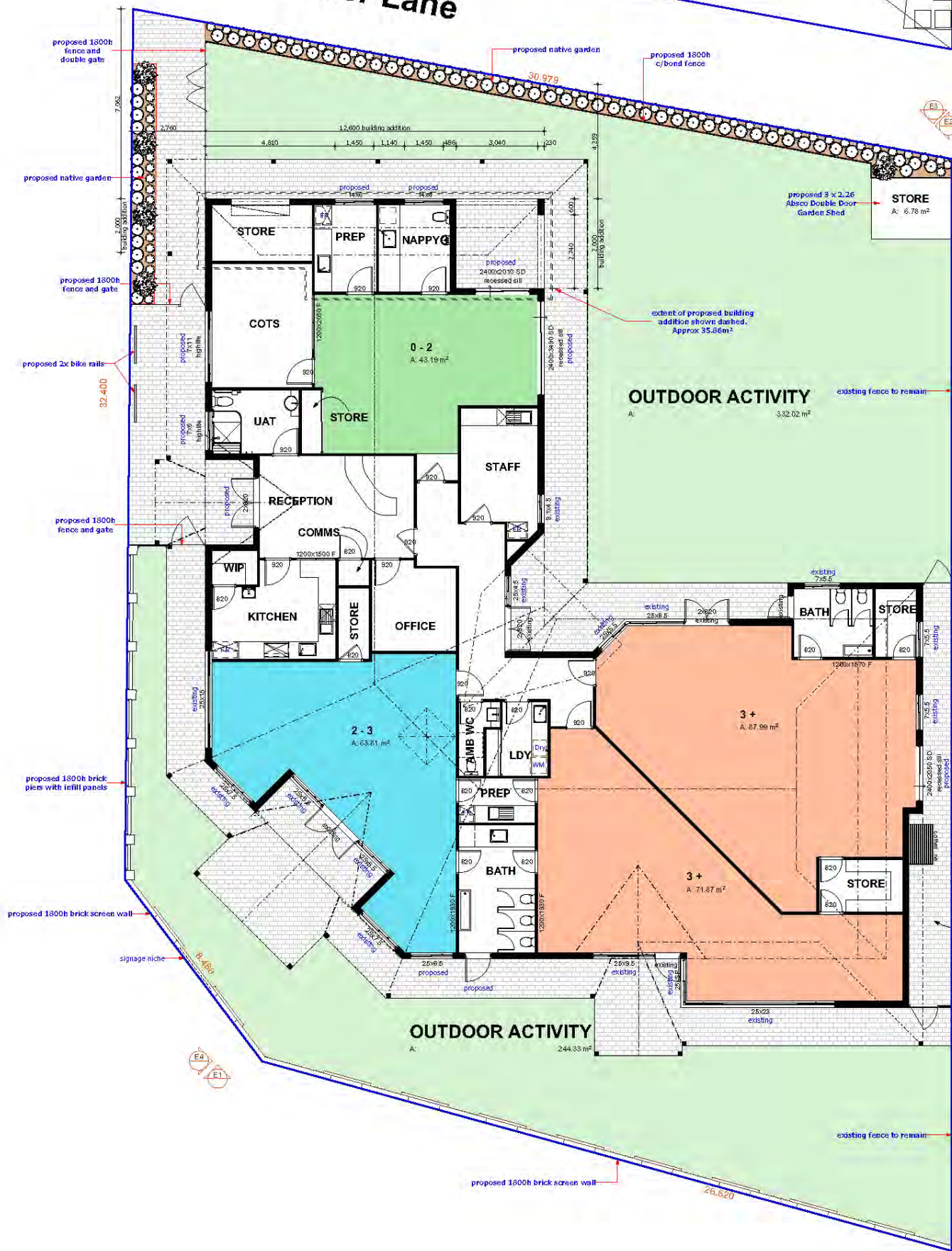
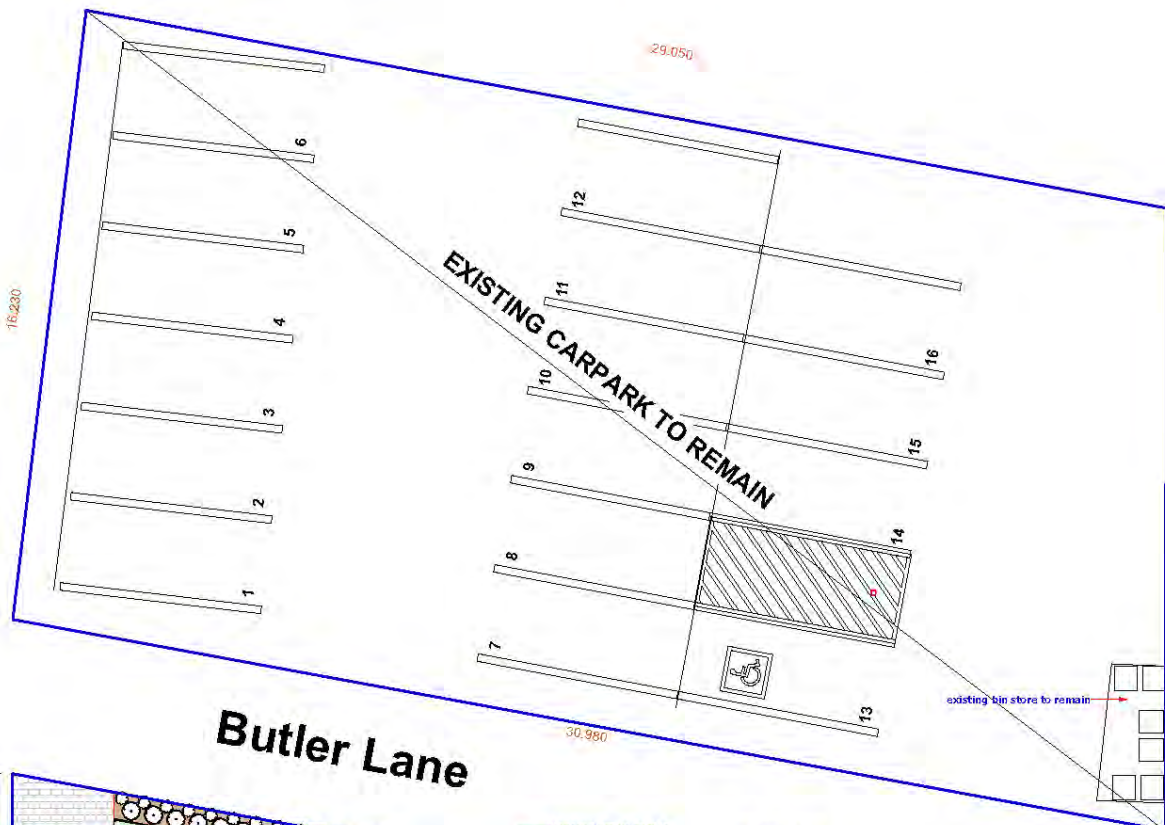
It is concluded that the findings of this Transport Impact Statement are supportive of the proposed development.

Appendix A

PROPOSED DEVELOPMENT PLANS



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Building and Site Criteria

Play Area:
Capacity: 82
Indoor:-
Required: 266.5m²
Provided: 266.86m²

Outdoor:-
Required: 574.00m²
Provided: 574.3m²

Capacity:
0-2 years: 12 (3 Staff)
2-3 years: 30 (6 Staff)
over 3 years: 40 (4 Staff)
Total: 82
Total staff: 15

Parking
Required: 16 (inc. 1 Accessible)
Provided on-site: 16
Adjacent parking: 9
Total available parking: 25

Areas	
. 0 - 2	43.19
. 2 - 3	63.81
. 3 +	159.86
. AMB WC	3.16
. BATH	21.04
. COMMS	1.11
. COTS	17.23
. DRYING CRT	11.48
. KITCHEN	15.24
. LDY	5.73
. NAPPY	8.65
. OFFICE	10.15
. OUTDOOR ACTIVITY	576.35
. PREP	12.18
. RECEPTION	21.78
. STAFF	12.81
. STORE	29.39
. UAT	7.66
. WIP	2.12

AREA CALCULATION	
. Building Addition	35.86
. Existing Building	468.92
. Site	1,168.79
. Parking	486.23
	2,179.71 m ²

AMENDMENTS:	
11/01/22	18/11/24
11/01/22	22/11/24
11/01/22	31/12/24
11/01/22	31/12/24
11/01/22	31/12/24

SIGNATURES:	
OWNER:	
OWNER:	
BUILDER:	
DATE:	

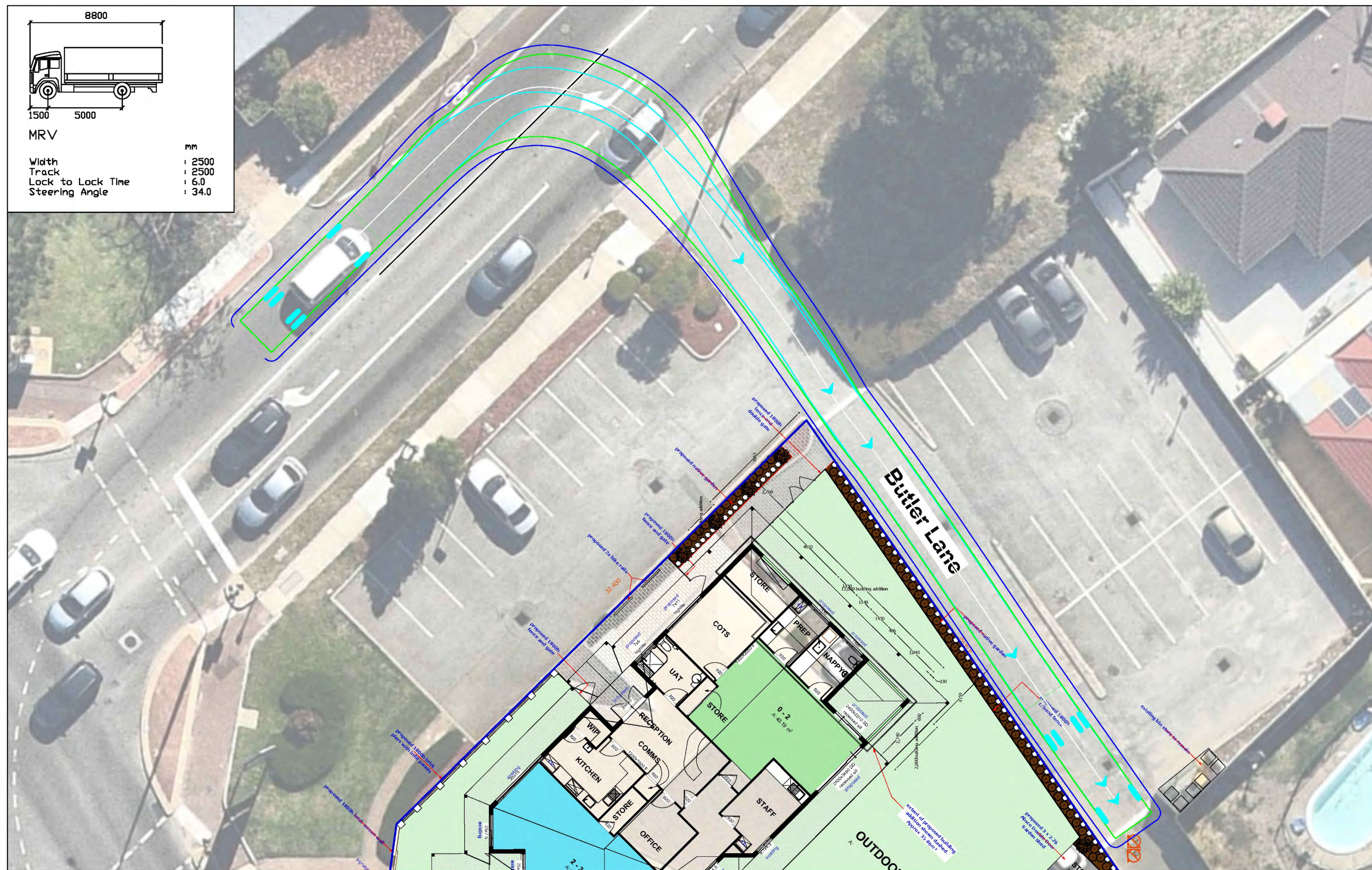
EXISTING BUILDING RE-FIT ON:	
Lot 7 (#184a) Shepperton Road	
East Victoria Park	
FOR:	
Omni Projects	

Appendix B

TURN PATH ANALYSIS



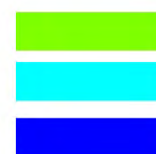
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8.8m Service Vehicle
Service vehicle entry

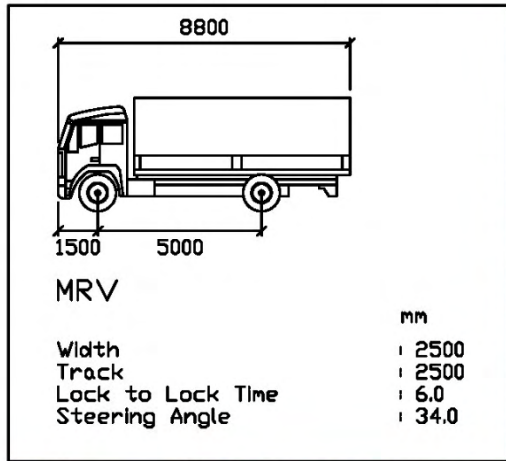
LEGEND

Vehicle Body
Wheel Path
500mm Clearance



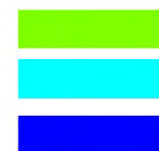
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Lot 7 (184A) Shepperton Road, East Victoria Park
8.8m Service Vehicle
Service vehicle exit

LEGEND
Vehicle Body
Wheel Path
500mm Clearance



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Scale: 1:200 @ A3

