

Transport Impact Statement

Proposed Child Care Centre - No. 39
King David Boulevard and No. 67
Kingsway, Madeley

CW1200368 / 304900763



Prepared for
Agem Commercial Pty Ltd

2 August 2022

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now

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1 Introduction

1.1 Background

Cardno now Stantec was commissioned by Agem Commercial Pty Ltd ("the Client") to prepare a Transport Impact Statement (TIS) for a proposed Child Care Centre at No. 39 King David Boulevard and No. 67 Kingsway, Madeley.

This TIS has been prepared in accordance with the *Western Australian Planning Commission (WAPC) Transport Impact Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016)* and the checklist is included in **Appendix A**.

1.2 Existing Site Context

The Site is located at No. 39 King David Boulevard and No. 67 Kingsway, Madeley. **Figure 1-1** shows an aerial image of the Site.

Figure 1-1 Aerial Image of Site



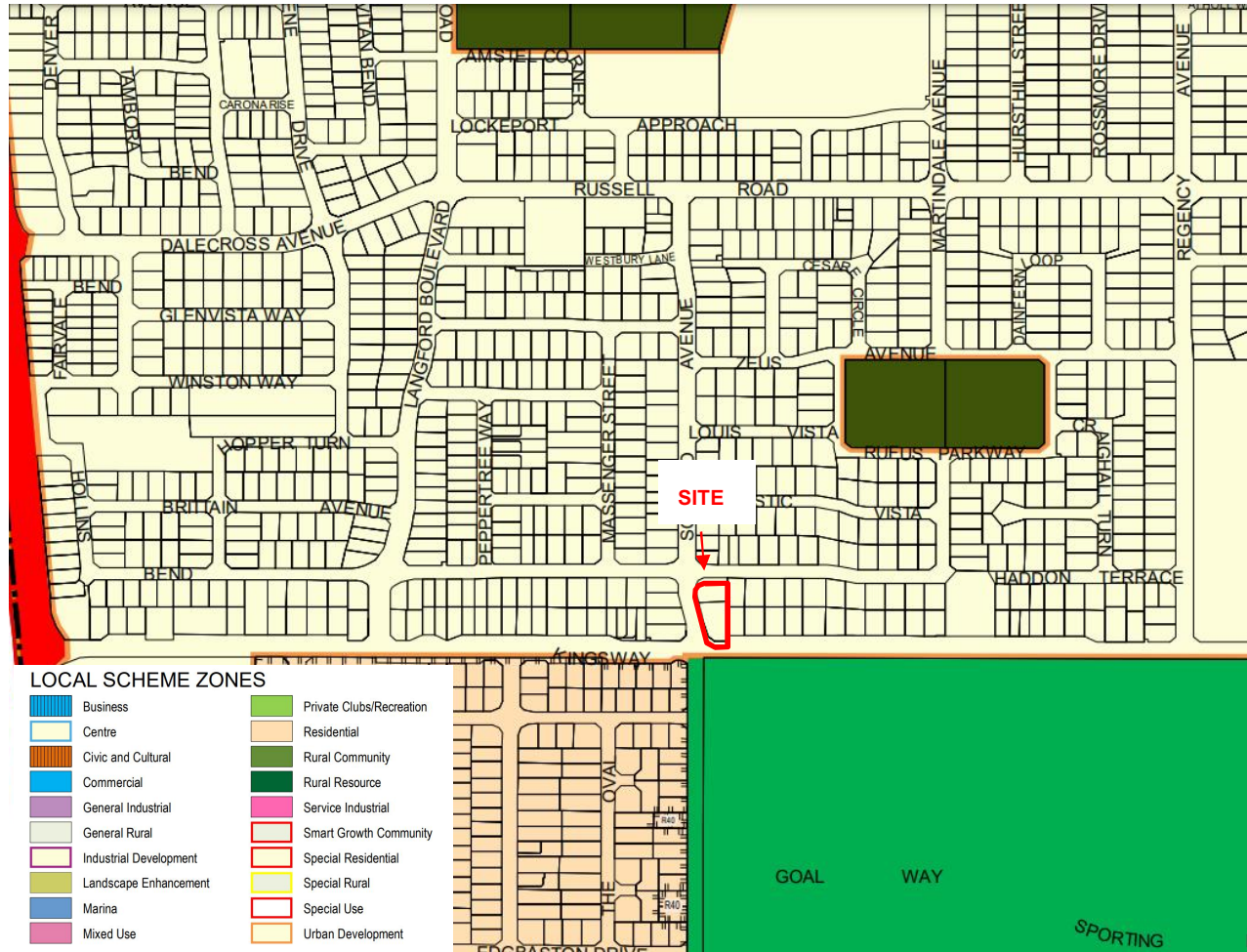
Source: Metromap (2022)

1.3 Surrounding Land Uses

Puursuant to the provision of the *City of Wanneroo District Planning Scheme No. 2 (DPS3)*, the Site is zoned “Urban Development” as shown in **Figure 1-2**.

The Site is primarily surroundned by other urban development, rual community and residential land uses.

Figure 1-2 City of Wanneroo Zoning



Source: City of Wanneroo

1.4 Existing Road Network

Road classifications are defined in the Main Roads Functional Hierarchy as follows:

- > **Primary Distributors (light blue):** Form the regional and inter-regional grid of MRWA traffic routes and carry large volumes of fast-moving traffic. Some are strategic freight routes, and all are National or State Roads.
- > **Regional Distributors (red):** Roads that are not Primary Distributors, but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by Local Government
- > **District Distributor A (green):** These carry traffic between industrial, commercial and residential areas and connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining properties. They are managed by Local Government.
- > **Distributor B (dark blue):** preform a similar function to District Distributor A but with reduced capacity due to flow restrictions from access to and roadside parking alongside adjoining property. These are often older roads with traffic demand in excess of that originally intended. District Distributor A and B roads run between land-use cells and not through them, forming a grid that would ideally be around 1.5 kilometres apart. They are managed by Local Government.

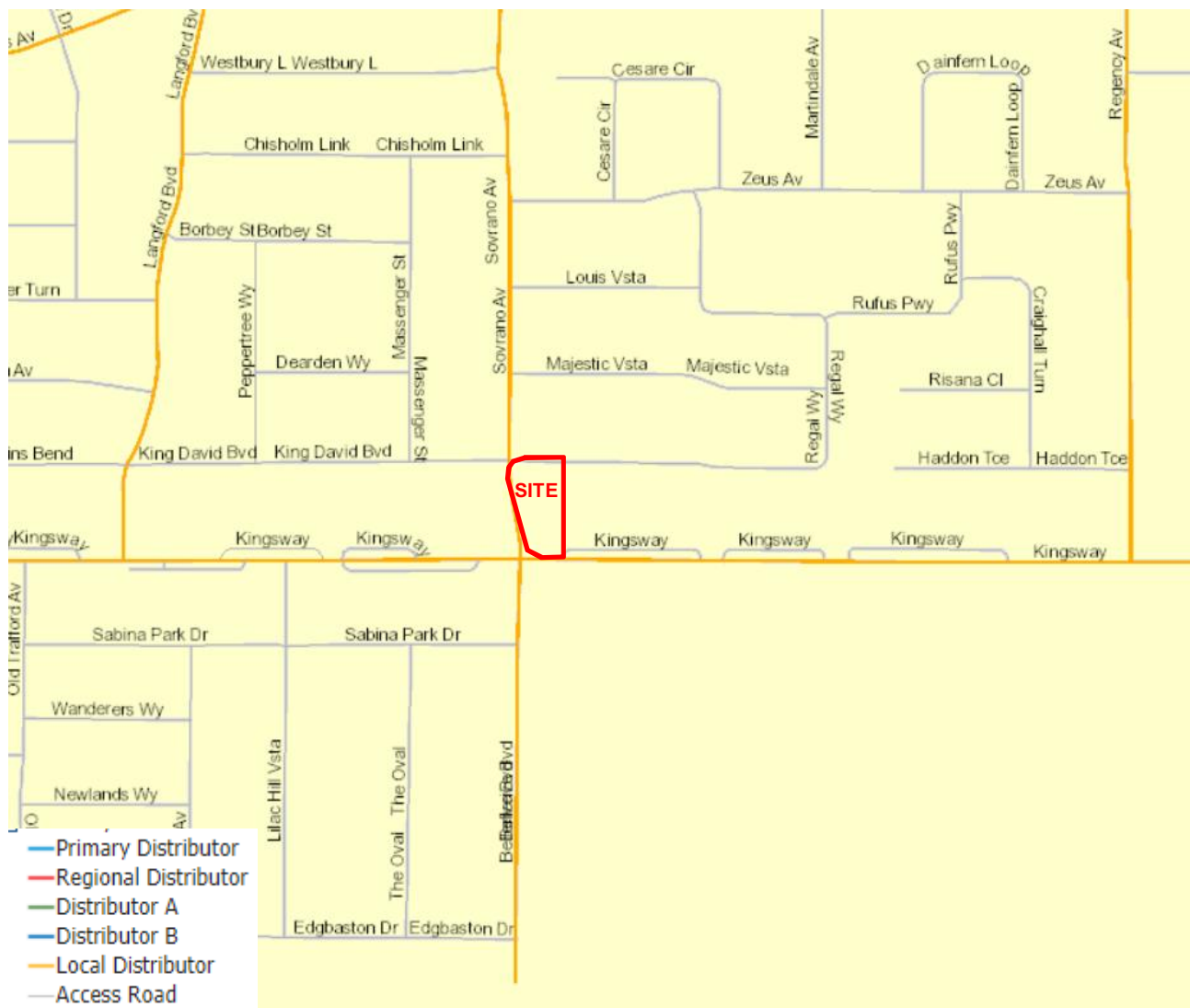
- > **Local Distributors (orange):** Carry traffic within a cell and link District Distributors at the boundary to access roads. The route of the Local Distributor discourages through traffic so that the cell formed by the grid of District Distributors only carries traffic belonging to or serving the area. These roads should accommodate buses but discourage trucks. They are managed by Local Government.
- > **Access Roads (grey):** Provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by Local Government.

The Site is bounded King David Boulevard to the north, Sovrano Avenue to the west and Kingsway Road to the south. The surrounding road network is further described in **Table 1-1** shows the road hierarchy as per the Main Roads WA Road Information Mapping System and **Figure 1-3** shows the road hierarchy.

Table 1-1 Road Network Classification

Street Names	Road Hierarchy			Road Network		
	Road Hierarchy	Jurisdiction	No. of Lanes	No. of Footpaths	Width (m)	Speed Limit
King David Boulevard	Access Road	Local Government	2	2	6m	50 km/h
Sovrano Avenue	Local Distributor	Local Government	2	1	6m	50 km/h
Kingsway Road	Local Distributor	Local Government	2	1	7m (1m median)	50 km/h

Figure 1-3 Road Hierarchy



Source: Road Information Mapping System

1.5 Traffic Volumes

The most recent traffic volumes for the roads in the vicinity of the Site were obtained from the City of Wanneroo and summarised below in **Table 1-2**. No traffic volumes were available for Sovrano Avenue or King David Boulevard.

Table 1-2 Daily Traffic Volumes

Road Names	Year	Average Daily Traffic Volumes
Kingsway	2021	8,970

2 Public Transport Facilities

2.1 Existing Public Transport Facilities

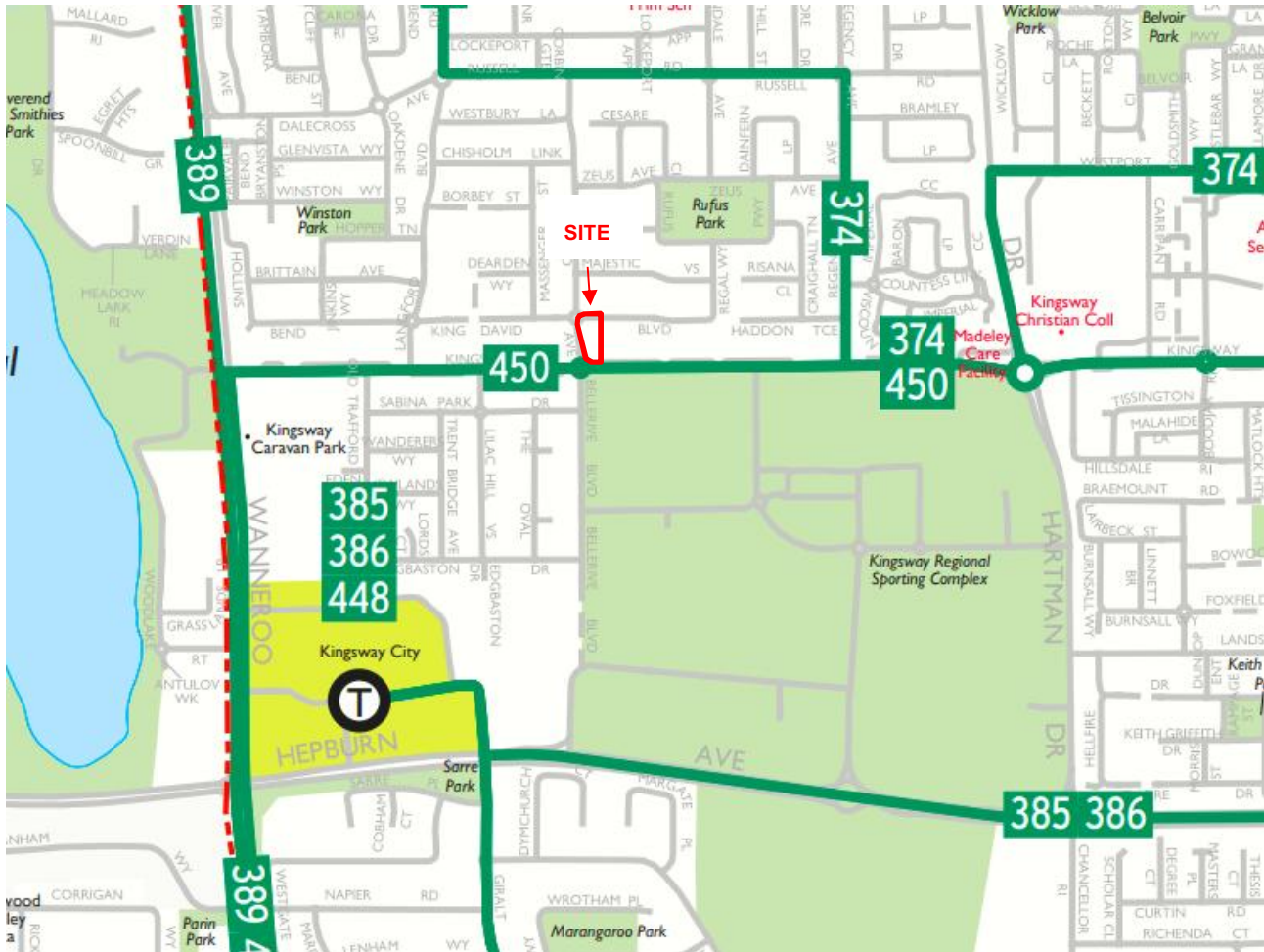
The nearest bus stops to the Site are located approximately 70m away as shown in **Figure 2-1**. Bus route 450 operates from these stops along Kingsway, as shown below in **Figure 2-2** and travels to Landsdale and Warwick Station.

Figure 2-1 Nearest Bus Stops



Source: Metromap (2022)

Figure 2-2 Existing Bus Routes



Source: Transperth Network Maps (2022)

Table 2-1 Public Transport Route and Frequency

Bus Routes	Route Description	Frequencies		
		Weekdays	Saturdays	Sundays and Public Holidays
450	Landsdale to Warwick Station	20 minutes	30 minutes	60 minutes

2.2 Future Public Transport Facilities

Cardno now Stantec contacted the Public Transport Authority and understand there are no proposed changes to the network in this area.

3 Pedestrian/Cycle Network Facilities

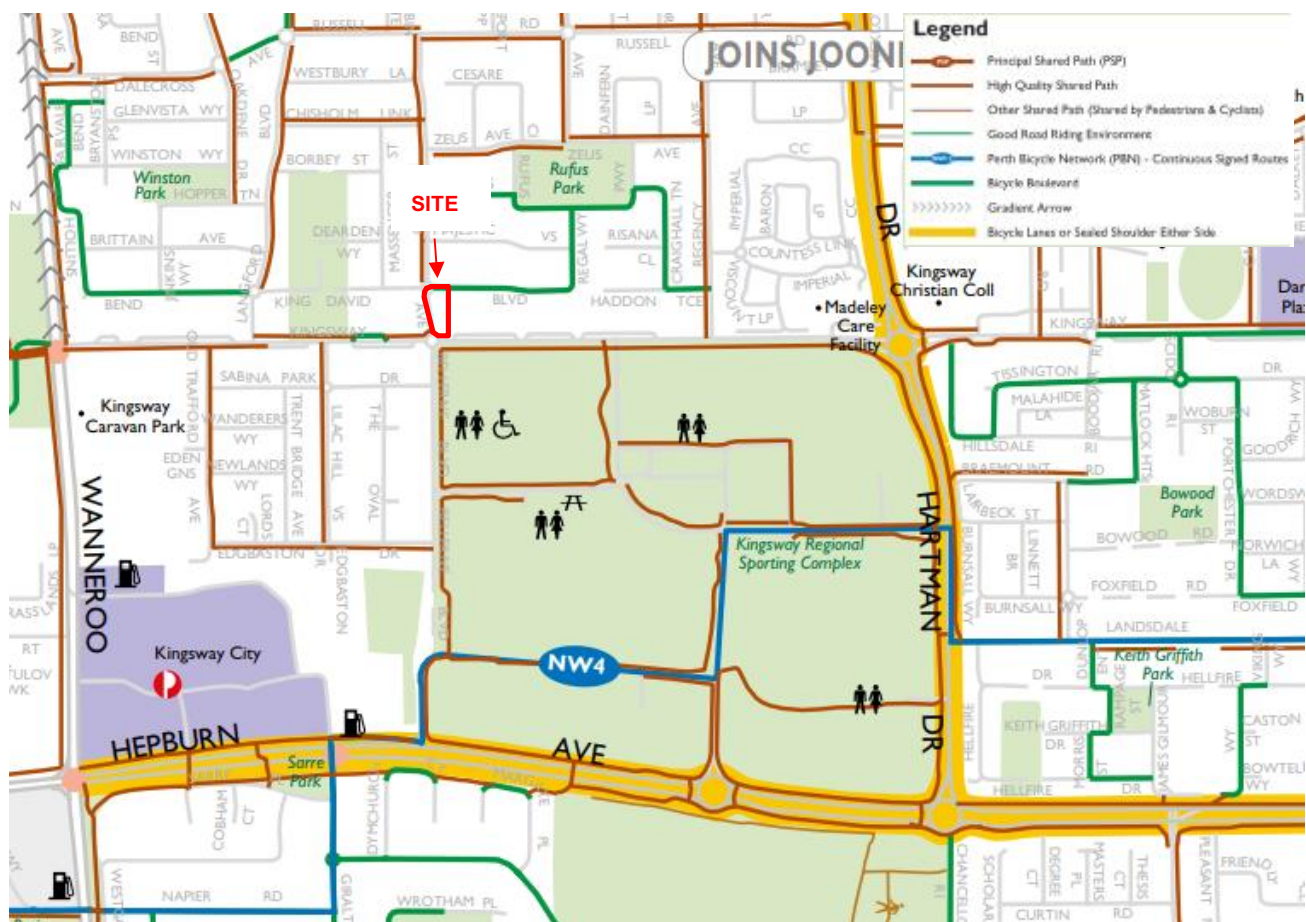
3.1 Existing Pedestrian/Cycle Network Facilities

A footpath is provided along Kingsway and Sovrano Avenue, whilst footpaths are provided on both sides of King David Boulevard.

“Good Road Riding Environments” run along portions of King David Boulevard, Regal Way, Louis Vista and Hollins Bend, as shown in **Figure 3-1**. Shared paths are provided along Kingsway, Regency Avenue, Sovrano Avenue, Wanneroo Road and Bellerive Boulevard. The Perth Bicycle Network stretches along Landsdale Road, Hartman Drive, through the Kingsway Regional Sporting Complex, Giralt Road and Napier Road.

Overall, the Site is surrounded by good pedestrian/cycle networks that facilitate reasonable walking and cycling access to the Site.

Figure 3-1 Existing Pedestrian and Cycling Network



Source: Department of Transport (2016)

3.2 Future Pedestrian/Cycle Network Facilities

Cardno now Stantec contacted the City of Wanneroo and understand there are no proposed changes to the network within the short term.

4 Proposed Development

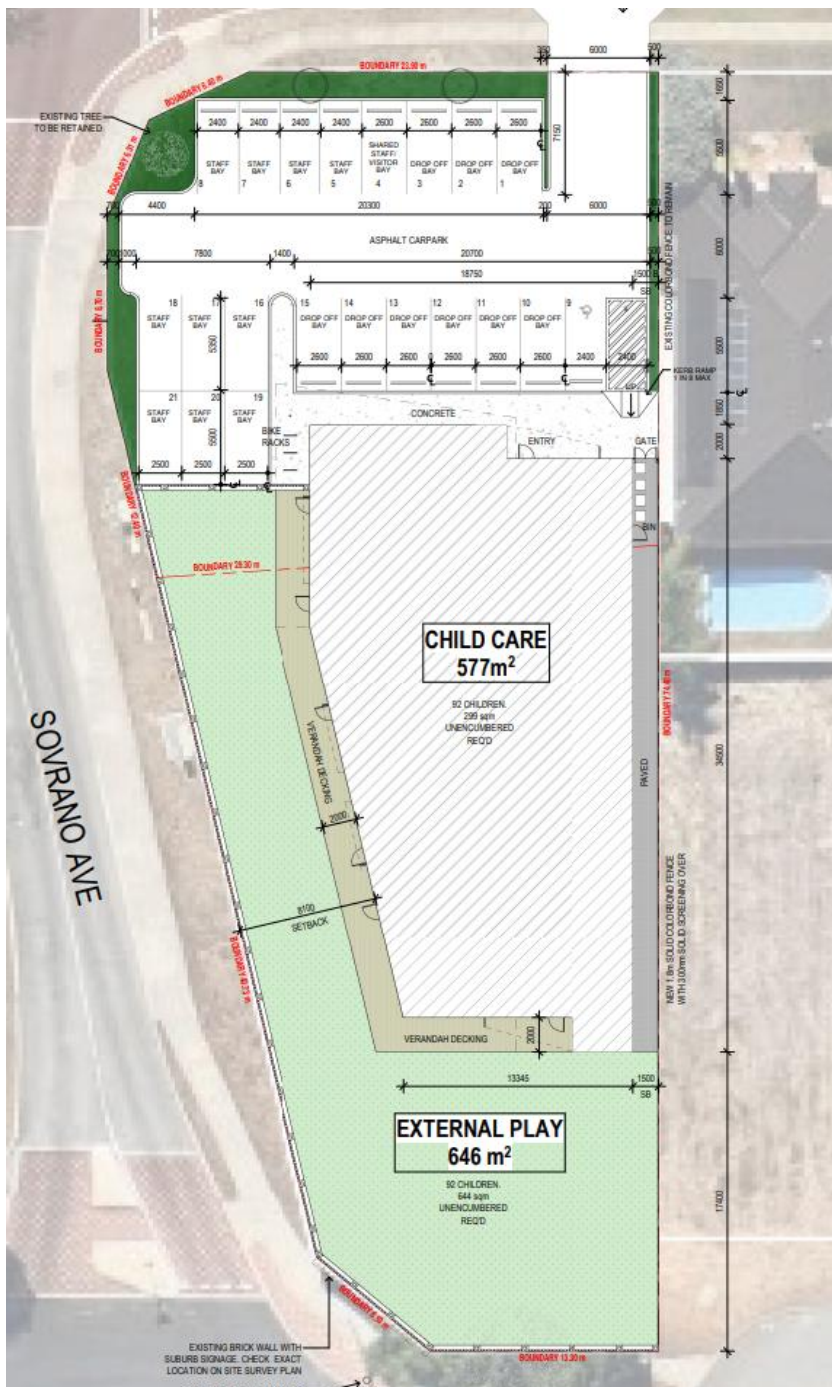
4.1 Proposed Development

The proposal is for a child care centre, comprising of the following site-specific design components:

- > 92 children;
- > 13 staff members; and
- > 21 car parking bays (including 1 ACROD bay).

The layout of the proposed childcare at the Site is shown below in **Figure 4-1**. Please note, larger versions are included in **Appendix B**.

Figure 4-1 Ground Floor Plan



Source: Hodge Collard Preston Architects (2022)

4.2 Access Arrangements

Vehicle access to/from the Site is proposed via a new 6m crossover on King David Boulevard.

4.3 Waste Collection

Waste collection is proposed to be on the verge area along King David Boulevard.

4.4 Operating Hours

The child care centre is proposed to operate during the following days and times:

- > Monday to Friday (7:00AM – 6:00PM).

4.5 Traffic Generation

Trip generation rates from the *Institute of Transportation Engineers (ITE) "Trip Generation" 10th Edition* were used to estimate the number of vehicle trips generated by the subject site. The trip generation rate, distribution and development trip generation for the proposed child care centre is summarised in **Table 4-1**, **Table 4-2** and **Table 4-3**.

Table 4-1 Adopted Trip Generation Rates

Land Use	ITE Code/Source	AM Peak	PM Peak	Daily
Child Care Centre	ITE 565	0.79	0.81	4.09

Table 4-2 Trip Directionality Rates

Land Use	ITE Code/Source	AM Peak		PM Peak		Daily	
		In	Out	In	Out	In	Out
Child Care Centre	ITE 565	53%	47%	47%	53%	50%	50%

Table 4-3 Estimated Trip Generation

Land Use	ITE Code/Source	AM Peak		PM Peak		Daily	
		In	Out	In	Out	In	Out
Child Care Centre	ITE 565	39	34	35	39	188	188
Total		73		74		376	

The estimated peak hour trip generation is 73 vehicles in the AM Peak Hour, 74 vehicles in the PM Peak Hour and 376 Daily trips. Based on the numbers above, this low volume of trip generation is anticipated to have no material impact on the surrounding road network.

5 Parking Supply

5.1 Parking Requirements

The Statutory parking requirements, in accordance with the *City of Wanneroo Local Planning Policy 2.3 – Child Care Centres* have been considered in the context of the proposed development and are summarised below in **Table 5-1**.

Table 5-1 Car Parking Provision and Requirements

Proposed Land Use	Requirements	Yield	Parking Required	Parking Provided
Child Care Centre	(55 or more children) 9 bays plus 1 per 8 children accommodated in excess of 54	92 Children	14 bays	21 bays
	1 bay per staff member	13 staff	13 bays	
Total			27 bays	21 bays
Shortfall				6 bays

It is anticipated that the Site will accommodate a maximum of 92 children and 13 staff members.

A total of 21 car parking bays are provided on Site, 10 of those bays will be allocated for staff only whilst the other 11 bays will be available for parents to use during drop-off/pick-up times. This represents a minor shortfall of 3 bays for pick up/drop off and 3 bays for staff. Operations at the site will be managed to minimise any potential impact of the parking shortfall against statutory requirements.

Due to the nature of a child care centre, the key parent pick-up/drop-off periods extend over 90-120 minutes, related to external factors such as school and work starting times. This means that parking demand is spread over a considerable period of time. With the large number of bays available for drop off/pick up, and the short duration of drop off/pick up activity (<5 minutes), it is unlikely that all bays would be occupied more than momentarily.

It is also unlikely that the proposed child care centre would operate at its theoretical maximum capacity at all times. The actual enrolment in similar facilities is approximately 85% of legal capacity, rarely reaching 90%

It should be noted that maximum staffing levels occur outside of pick-up/drop-off periods. As a contingency, should occasional staff demand exceed the allocation of the 11 staff bays, incidental parking within visitor bays can be permitted without impacting parent use of on-site parking. One bay has been designated on the plan as a shared staff / visitor bay for this purpose.

Overall, it is considered that the on-site visitor and staff parking bays are sufficient and are able to cater for any potential parent pick-up/drop-off, with the parking supply sufficient for the predicted peak demand, even when the centre operates at maximum capacity.

5.2 Staff Parking

A total of 10 allocated staff only bays have been provided on-site. Additional parking within drop off/pick up bays may be permitted outside of drop off/pick up periods as necessary.

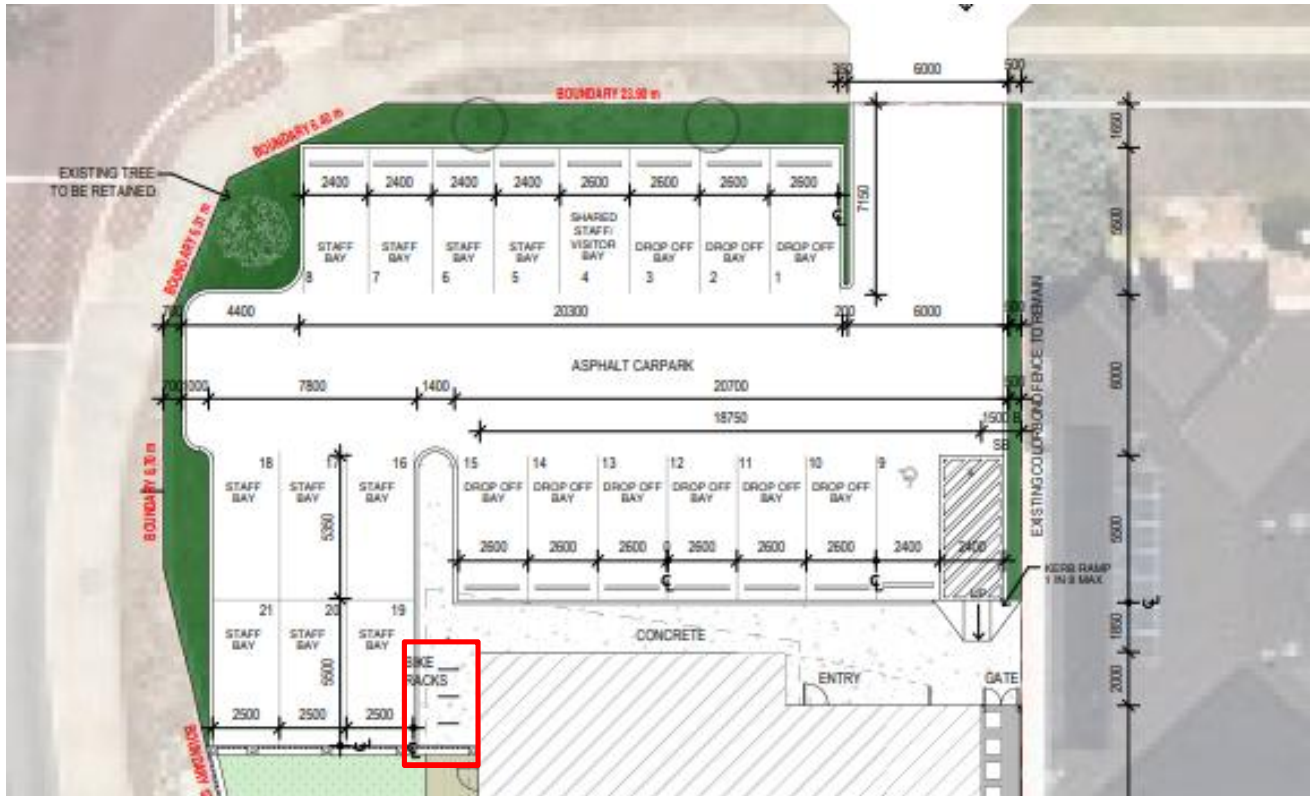
5.3 Parking Compliance with Australian Standards

A review of the proposed car park against AS2890.1:2004 requirements has been undertaken and no non-compliances have been identified.

5.4 Bicycle Parking Requirements

Under the *City of Wanneroo District Planning Scheme No. 2* and the *City of Wanneroo Local Planning Policy 2.3 – Child Care Centres*, no bicycle parking is required for a child care centre. However, 6 bicycle parking spaces have been provided near the front entrance of the Site along King David Boulevard, as shown in Figure 5-1

Figure 5-1 Bicycle parking Location



Source: Hodge Collard Preston Architects (2022)

6 Summary

This Transport Impact Statement outlines the transport aspects of the proposed development focusing on traffic operations, access and provision of car parking. Included are discussions regarding pedestrian, cycle and public transport considerations.

This report has been prepared in accordance with the *WAPC Transport Impact Assessment Guidelines for Developments: Volume 4 – Individual Developments* (2016).

The following conclusions are evident about the proposal:

- > The proposal is for a Child Care Centre at the Site;
- > The development is expected to have a total trip generation of approximately 73 vehicles in the AM peak hour, 74 vehicles in the PM peak hour and 376 vehicles daily. This level of traffic generation is anticipated to have no material impact on the surrounding road network;
- > The Site is located approximately 70m from bus stops that service routes 450; and
- > 21 car parking bays are proposed on-site, comprised of 10 staff parking bays and 11 drop off/pick up bays.
- > Although there is a shortfall of 6 bays against the statutory requirements, the overall parking supply is considered sufficient and able to cater for anticipated demand.

Overall the Site is anticipated to have no material impact on the surrounding road network and no material impact on residential amenity.

Proposed Child Care Centre - No. 39
King David Boulevard and No. 67
Kingsway, Madeley

APPENDIX

A

WAPC CHECKLIST



now



Item	Status	Comments/Proposals
Proposed development		
proposed land use	Section 4	
existing land uses	Section 1	
context with surrounds	Section 1	
Vehicular access and parking		
access arrangements	Section 4	
public, private, disabled parking set down / pick up	N/A	
Service vehicles (non-residential)		
access arrangements	N/A	
on/off-site loading facilities	N/A	
Service vehicles (residential)		
Rubbish collection and emergency vehicle access	Section 4	
Hours of operation (non-residential only)		
	N/A	
Traffic volumes		
daily or peak traffic volumes	Section 4	
type of vehicles (e.g. cars, trucks)	N/A	
Traffic management on frontage streets		
	N/A	
Public transport access		
nearest bus/train routes	Section 2	
nearest bus stops/train stations	Section 2	
pedestrian/cycle links to bus stops/train station	Section 3 and 2	
Pedestrian access/facilities		
existing pedestrian facilities within the development (if any)	Section 3	
proposed pedestrian facilities within development	Section 3	
existing pedestrian facilities on surrounding roads	Section 3	
proposals to improve pedestrian access	Section 3	
Cycle access/facilities		
existing cycle facilities within the development (if any)	Section 3	
proposed cycle facilities within the development	Section 3	
existing cycle facilities on surrounding roads	Section 3	
proposals to improve cycle access	N/A	
Site specific issues		
	N/A	
Safety issues		
identify issues	Section 6	
remedial measures	Section 6	

Proposed Child Care Centre - No. 39
King David Boulevard and No. 67
Kingsway, Madeley

APPENDIX

B

SITE PLAN



now

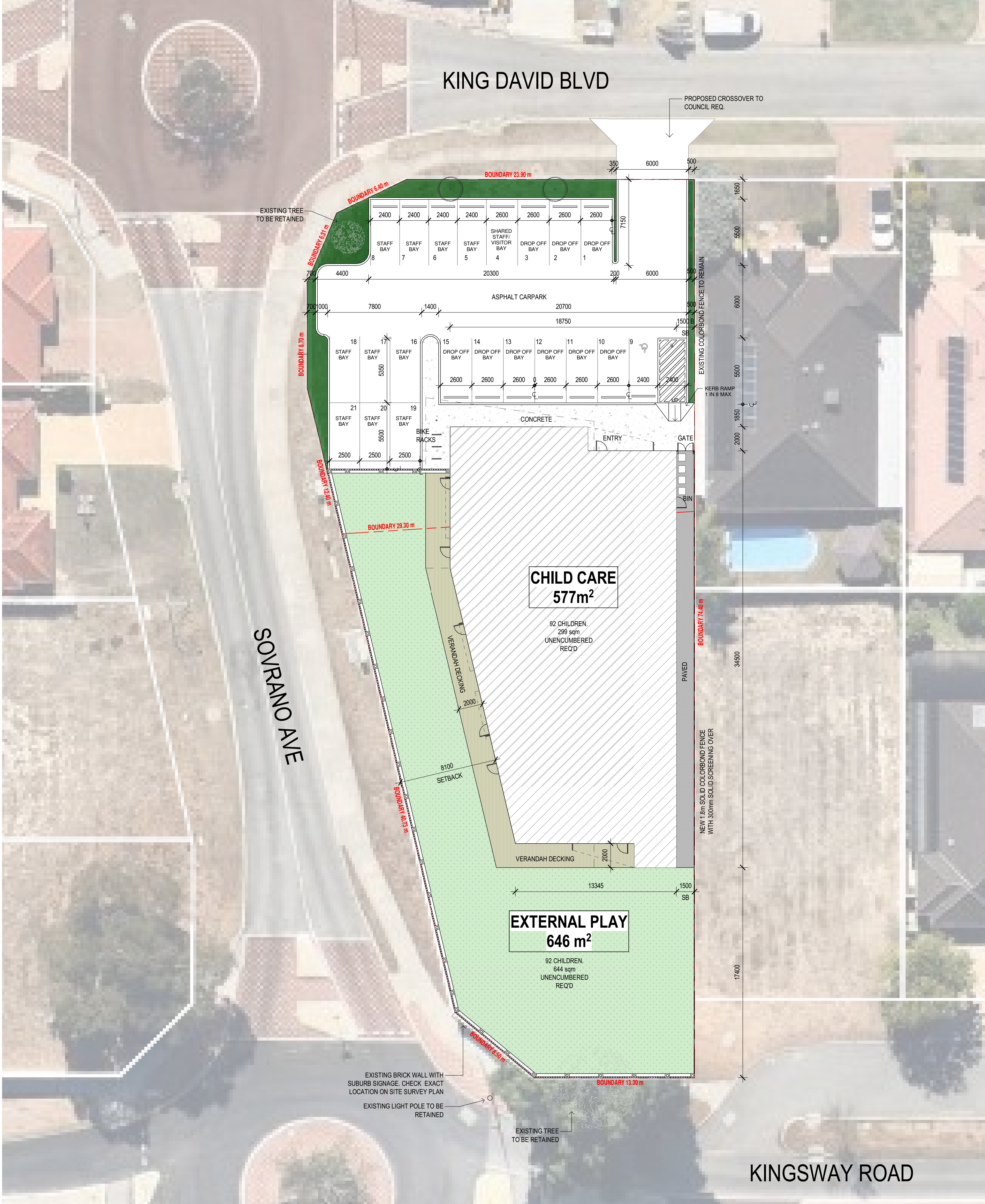




MADELEY CHILDCARE CENTRE

SHEET LIST	
SHEET NUMBER	SHEET NAME
A000	COVER PAGE
A001	PROPOSED OVERALL SITE PLAN
A002	PROPOSED LANDSCAPE PLAN
A100	PROPOSED GROUND FLOOR PLAN
A200	PROPOSED ELEVATIONS

1	ISSUED FOR DEVELOPMENT APPROVAL	LD	DM	28.07.2022
revision/ issue	description	drawn by	check by	date
project	LD	description	COVER PAGE	
location	DM	checked		
PROPOSED MADELEY CHILDCARE CENTRE		scale	date	28.07.2022
39 KING DAVID BVD / 67 KINGSWAY RD		project no	62.22	dwg no A000
Hodge Collard Preston ARCHITECTS		Third Floor, 38 Richardson Street, West Perth, WA 6005 PO Box 743, West Perth, WA 6872 Ph: (08) 9322 5144 Fax: (08) 9322 5140 Email: admin@hccparch.com		rev 1



NOTE:
THIS FEASIBILITY STUDY IS SUBJECT TO THE FOLLOWING:
- FEATURE SITE SURVEY (TO BE CONFIRMED)
- PLANNING ADVICE (TO BE CONFIRMED)
- TRAFFIC ADVICE (TO BE CONFIRMED)
- SITE SERVICES, EASEMENTS, ETC TO BE CONFIRMED
- SETBACKS TO BOUNDARY TO BE CONFIRMED BY PLANNER

OCCUPATION SCHEDULE - 92 CHILDREN			
AGE GROUP	NO. OF CHILDREN	NO. OF STAFF	RATIO
NURSERY - BIRTH TO 2 YRS	12 CHILDREN	3 STAFF	1:4
TODDLERS - 2-3 YRS	20 CHILDREN	4 STAFF	1:5
KINDY - 3-4 YRS	30 CHILDREN	3 STAFF	1:10
KINDY - 4-5 YRS	30 CHILDREN	3 STAFF	1:10
TOTAL	92 CHILDREN	13 STAFF	
CAR BAYS - 9 BAYS UP TO 54 PLACES + 1 PER 8 OVER = 14 CAR BAYS REQ'D CAR BAYS - 1 PER 1 STAFF = 13 CAR BAYS REQ'D TOTAL CAR BAYS = 27 BAYS (21 BAYS PROVIDED, 6 BAY SHORTFALL)			
CHILDREN NUMBERS AND AREAS TO BE VERIFIED IN DESIGN LAYOUT COUNCIL DISCUSSIONS REQUIRED TO REVIEW PLANNING REQUIREMENTS			

NOTE:
PRELIMINARY PLAN ONLY
SUBJECT TO PLANNING, TRAFFIC, ACOUSTIC, SURVEY AND SPECIALIST ASSESSMENT.
LEVELS AND FUNCTIONALITY WITH SITE TOPOGRAPHY SUBJECT TO SURVEY
CROSSOVERS TO BE ASSESSED
LOCAL AUTHORITY: CITY OF WANNEROO

SITE PLAN LEGEND	
	CONCRETE PAVING. REFER CIVIL ENGINEER'S DRAWINGS FOR CUTS / THICKNESS
	EXTERNAL PLAY
	FRONT LANDSCAPING AREA
	DECKING AREA

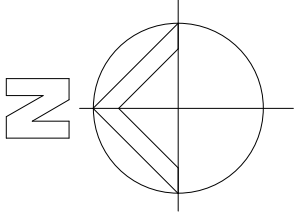
1	ISSUED FOR DEVELOPMENT APPROVAL	LD	DM	28.07.2022
revision/ issue	description	drawn by	check by	date
project	LD	description	PROPOSED OVERALL SITE PLAN	
location	DM	checked	DM	
39 KING DAVID BVD / 67 KINGSWAY RD		scale	date	28.07.2022
Hodge Collard Preston ARCHITECTS		As indicated	project no	62.22
Third Floor, 38 Richardson Street, West Perth, WA 6005 PO Box 743, West Perth, WA 6872 Ph: (08) 9322 5144 Fax: (08) 9322 5140 Email: admin@hpcparch.com			dwg no	A001
			rev	1



Childcare Room Schedule		
Name	Provided Area	Required area
AAT	4 m²	
AAT	4 m²	
AMENITIES	15 m²	
CIRCULATION	47 m²	
COTTES	15 m²	
FOYER	12 m²	
KINDY	102 m²	97.5 sqm
KINDY	101 m²	97.5 sqm
KITCHEN	14 m²	
L'DRY	8 m²	
NURSERY	43 m²	39 sqm
OFFICE	9 m²	
PREP/STORE	11 m²	
RECEPTION	8 m²	
STAFF ROOM	10 m²	
STORE	11 m²	
STORE	9 m²	
STORE	11 m²	
TODDLERS	72 m²	65 sqm
UAT	8 m²	

- LEGEND:
- CONCRETE PAVING
 - EXTERNAL PLAY
 - FRONT LANDSCAPING AREA AS PER CONSULTANTS DRAWINGS
 - DECKING AREA

1 GROUND FLOOR PLAN
1:100



1 ISSUED FOR DEVELOPMENT APPROVAL		LD	DM	28.07.2022
revision/ issue	description	drawn by	check by	date
project	LD	drawn	LD	description
location	DM	checked	DM	PROPOSED GROUND FLOOR PLAN
39 KING DAVID BVD / 67 KINGSWAY RD		scale	date	28.07.2022
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