



Engineering a better future for over 20 years!

Proposed Childcare Centre & Swim School

Lot 810 Wentworth Parade,
Success

Transport Impact Statement

PREPARED FOR:
Ladybug Investment Trust
Thirty Three C/- Apex
Planning

November 2025

Document history and status

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TABLE OF CONTENTS

1	INTRODUCTION.....	5
2	DEVELOPMENT PROPOSAL.....	8
3	VEHICLE ACCESS AND PARKING.....	9
3.1	ACCESS.....	9
3.2	PARKING	10
4	PROVISION FOR SERVICE VEHICLES	11
5	DAILY TRAFFIC VOLUMES AND VEHICLE TYPES	12
5.1	EXISTING DEVELOPMENT TRIP GENERATION.....	12
5.2	PROPOSED DEVELOPMENT TRIP GENERATION	12
5.2.1	CHILDCARE CENTRE.....	12
5.2.2	SWIM SCHOOL	13
5.3	TRIP DISTRIBUTION AND TRAFFIC FLOW.....	14
5.4	IMPACT ON SURROUNDING ROADS.....	14
6	TRAFFIC MANAGEMENT ON FRONTAGE STREETS.....	17
7	PUBLIC TRANSPORT ACCESS	19
8	PEDESTRIAN & CYCLIST ACCESS	20
9	SITE SPECIFIC ISSUES	22
10	SAFETY ISSUES.....	23
11	CONCLUSIONS.....	24

APPENDIX A: PROPOSED DEVELOPMENT PLAN

APPENDIX B: SWEEP PATH ASSESSMENT PLANS

REPORT FIGURES

Figure 1: Location of the subject site 6

Figure 2. Location of the subject site under City of Cockburn’s Town Planning Scheme No. 3
(source: City of Cockburn) 7

Figure 3. Location of the crossover at the subject site.....9

Figure 4. Estimated traffic movements for the proposed development – AM peak/ PM peak.....16

Figure 5. Northbound view along Wentworth Parade.....17

Figure 6. Eastbound view along Malata Crescent 18

Figure 7. Public transport services (source: Transperth) 19

Figure 8. Existing bike map in the locality (source: Department of Transport) 20

REPORT TABLES

Table 1. Estimated peak hour trips for the proposed development 14

1 Introduction

This Transport Impact Statement (TIS) report has been prepared by Transcore on behalf of Ladybug Investment Trust Thirty Three C/- Apex Planning with respect to the proposed childcare centre and swim school to be located at Lot 810 Wentworth Parade, Success in the City of Cockburn.

The subject site is currently a vacant land and is located at the northeast corner of Wentworth Parade and Malata Crescent intersection. The subject site is bound by Cockburn Central Gateway Shopping City Service Road to the north, a vacant land to the east, Malata Crescent to the south and Wentworth Parade to the west, as shown in **Figure 1**.

The subject site is zoned as “Residential” in the City of Cockburn’s *Town Planning Scheme No. 3* as shown in **Figure 2**.

The Transport Impact Assessment Guidelines (WAPC, Vol 4 – Individual Developments, August 2016) state: “A *Transport Impact Statement* is required for those developments that would be likely to generate moderate volumes of traffic and therefore would have a moderate overall impact on the surrounding land uses and transport networks”.

Section 5 of Transcore’s report provides details of the estimated trip generation for the proposed development and impact on adjacent road network. Accordingly, as the total peak hour vehicular trips are estimated to be less than 100 trips threshold, a Transport Impact Statement (TIS) 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/egress movement patterns and parking demand and supply at the subject site.



Figure 1: Location of the subject site

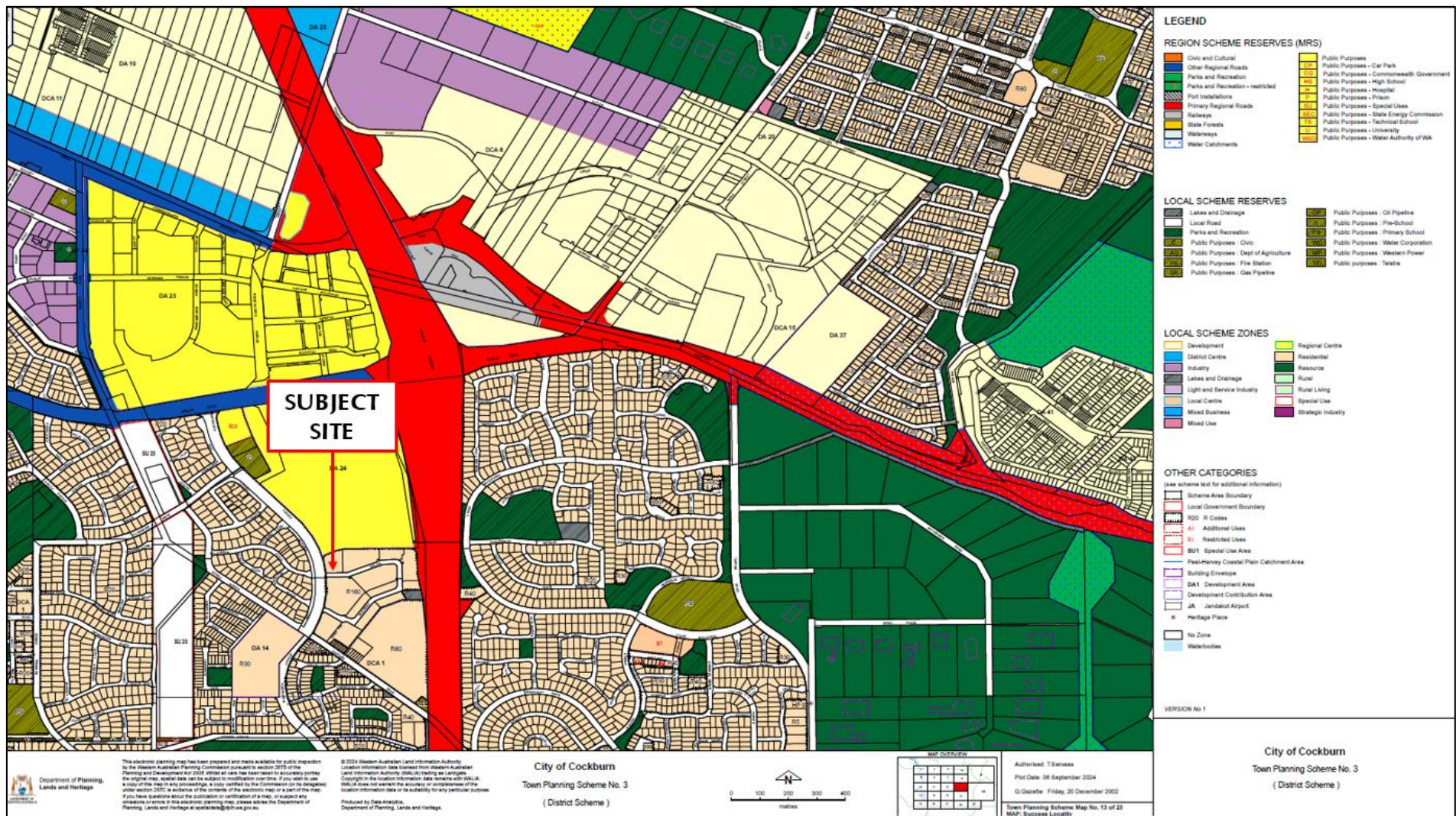


Figure 2. Location of the subject site under City of Cockburn's Town Planning Scheme No. 3 (source: City of Cockburn)

t25.204.wt.r01a | Lot 810 Wentworth Parade, Success

2 Development Proposal

The Development Application (DA) for the subject site proposes the construction of a two-storey building accommodating a childcare centre and a separate building accommodating a swim school, along with an associated car park for the proposed development. The childcare centre is designed to accommodate up to 96 children and approximately 18 “room ratio” staff and additional support staff. The proposed swim school will occupy a total Gross Floor Area (GFA) of 831m².

The proposed development provides a total of 58 on-site parking bays, including two ACROD bays to address the parking demand of the proposed land uses. Additionally, a turnaround bay is also provided to ensure that the vehicles can satisfactorily traverse within the carpark.

The bin storage area for the proposed childcare centre is located at the southeast corner of the building and the waste storage area for the proposed swim school is located at the northern end of the building next to the heat pump. Waste collection and deliveries will be accommodated within the subject site by private contractor. Waste collection is anticipated to take place when the facility is closed or outside of peak operation periods of the centre.

As part of the development proposal, vehicular access to the subject site is proposed via a full movement crossover on Malata Crescent. This access point is located at the southeastern corner of the site, the furthest point from the priority-controlled ‘T’ intersection of Wentworth Parade and Malata Crescent.

Pedestrian access to the proposed development is available via the existing external footpath network on Wentworth Parade (west of the subject site) and Malata Crescent (south of the subject site).

The proposed development plan is attached in **Appendix A** for more details.

3.2 Parking

A total of 58 on-site parking bays including two ACROD bays is proposed as part of the development proposal to address the parking demand.

Please refer to the separate parking management plan and it is our understanding that the provision of 58 parking spaces onsite will meet the needs of the proposed development.

Additionally, it also should be noted that:

- Some of the staff of the childcare centre and swim school are expected to use public transport or to be dropped off at the centre as the subject site is well served by a transport bus service operating along Wentworth Parade.
- The operator of the childcare centre and swim school will also encourage local employees and staff car-pooling and use of other means of transport which will further reduce the parking demand at the subject site.
- It is expected that there would be reciprocal parking between the patrons of the childcare centre and the swim school.

For the reasons outlined above, it is considered that sufficient parking has been provided on site to meet the anticipated needs of the proposed development.

4 Provision for Service Vehicles

The bin storage area for the proposed childcare centre is located at the southeast corner of the building and the waste storage area for the proposed swim school is located at the northern end of the building next to the heat pump as shown in the development plan in **Appendix A**.

Waste collection and deliveries will be accommodated within the subject site by private contractor. It is anticipated that the largest size vehicle that will access the proposed development would be 8.8m long waste vehicle. An 8.8m waste vehicle will enter the subject site via the proposed full movement crossover on Malata Crescent, access the designated bin storage areas, collect the waste and exit the subject site via the same crossover on Malata Crescent in forward gear.

The onsite service and waste collection will take place when the facility is closed to ensure that the car parking area is available for safe manoeuvring, loading and unloading activities with no disturbance to the operation of the facility.

Swept path analysis undertaken for an 8.8m service vehicle provided in **Appendix B** shows satisfactory access, egress and circulation within the site.

5 Daily Traffic Volumes and Vehicle Types

5.1 Existing Development Trip Generation

The subject site is currently a vacant land, so that the existing traffic generation is zero.

5.2 Proposed Development Trip Generation

5.2.1 *Childcare Centre*

In order to establish an accurate traffic generation rate for the proposed childcare centre, traffic count surveys undertaken by Transcore at similar centres in the Perth region were sourced.

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

- AM peak hour: 8:00AM – 9:00AM: 0.87 trips per child (57% in / 43% out); and,
- PM peak hour: 4:00PM – 5:00PM: 0.71 trips per child (47% in/ 53% out).

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 full concentration of traffic does not occur in one peak hour. Accordingly, the following number of trips were estimated for the proposed childcare centre, assuming a maximum scenario of 96 children being present (i.e., centre at full capacity):

- AM peak hour: 84 trips generated (48 in / 36 out);
- PM peak hour: 68 trips generated (32 in / 36 out); and,
- Daily traffic generation: 336 trips generated (168 in / 168 out).

5.2.2 Swim School

The traffic volumes likely to be generated by the proposed swim school have been estimated based on the appropriate land use in accordance with the *ITE Trip Generation Manual (11th Edition)*. The trip rates for “Recreational Community Centre” are used to calculate the traffic generated by the proposed swim school as the facilities of recreational community centre include classes for adults and children, a day care or nursery school, and other social facilities such as swimming pools, saunas, tennis and so on. However, it is considered that the trip rates for such facilities will provide a conservative estimation of the trip generation for the swim facility.

The trip rates which were used to estimate the traffic generation of the proposed swim school development are as follows:

Recreational Community Centre (ITE – 495) – 1,000 Sq. Ft. GFA

- Weekday AM peak hour: $1.91\text{vph per }1000\text{sqft GFA} / 0.929 = 2.06\text{vph} / 100\text{m}^2 \text{ GFA}$;
- Weekday PM peak hour: $2.5\text{vph per }1000\text{sqft GFA} / 0.929 = 2.69\text{vph} / 100\text{m}^2 \text{ GFA}$;
- Weekday daily: $28.82\text{vpd per }1000\text{sqft GFA} / 0.929 = 31.02\text{vpd} / 100\text{m}^2 \text{ GFA}$.

Accordingly, it is estimated that the traffic generations for the proposed swim school are:

- Weekday AM: $2.06 \times 831 / 100 \text{ (GFA)} = 17\text{vph}$;
- Weekday PM: $2.69 \times 831 / 100 \text{ (GFA)} = 22\text{vph}$; and,
- Weekday daily: $31.02 \times 831 / 100 \text{ (GFA)} = 258\text{vpd}$.

Given that the two proposed land uses (childcare centre and swim school) will be located within the same site, several advantages for parents and community are offered. Parents can drop off the children at the proposed childcare centre and take them to swim lessons in one single trip. Further, siblings may also be attending both facilities, simplifying the travelling for parents.

Therefore, it is understood that a portion of the trips associated with the proposed swim school will be shared between the childcare centre and the swim school. Therefore, 25% was assumed as cross-traffic between the proposed childcare centre and swim school for the purpose of a conservative assessment.

Accordingly, it is estimated that the proposed development would conservatively generate a total of approximately **530** vehicular trips per regular weekday with about **96** trips during the typical weekday AM peak hour and **85** trips during the typical weekday PM peak hour. These totals include both inbound and outbound vehicle movements.

The traffic generation and peak hour splits are detailed in **Table 1**, which were based on the directional split assumption for peak hour periods referenced from *ITE Trip Generation Manual* for the proposed swim school and the split for vehicular trips reported in **Section 5.2.1** for the proposed childcare centre.

Table 1. Estimated peak hour trips for the proposed development

Land Uses	Daily	AM	PM	Cross Trade	Daily	AM Peak		PM Peak	
						In	Out	In	Out
Childcare centre	336	84	68	0%	336	48	36	32	36
Swim School	258	17	22	25%	194	8	4	8	9
Total					530	56	40	40	45

Given the subject site's close proximity to Cockburn Gateway Shopping City, it is also important to note that a portion of the trips associated with the proposed development will likely be shared between the proposed development and the shopping centre. As a result, the number of primary trips generated solely by the proposed development is expected to be lower than the reported trip generation figure.

5.3 Trip Distribution and Traffic Flow

Based on the general spatial distribution of existing residential developments in the immediate area, permeability of the local road network, the proposed development's traffic distribution adopted for this analysis is as follows:

- 55% to/from the north of Wentworth Parade;
- 40% to/from the south of Wentworth Parade; and,
- 5% to/from the east of Malata Crescent.

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

5.4 Impact on Surrounding Roads

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

"For ease of assessment, 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."

As detailed in **Section 5.2**, it is clear that the proposed development will not increase traffic on any road on the surrounding road network above the 100vph per lane threshold, therefore it is concluded that the impact of the development traffic on the surrounding road network will not be significant and no further detailed analysis is warranted in accordance with WAPC guidelines.

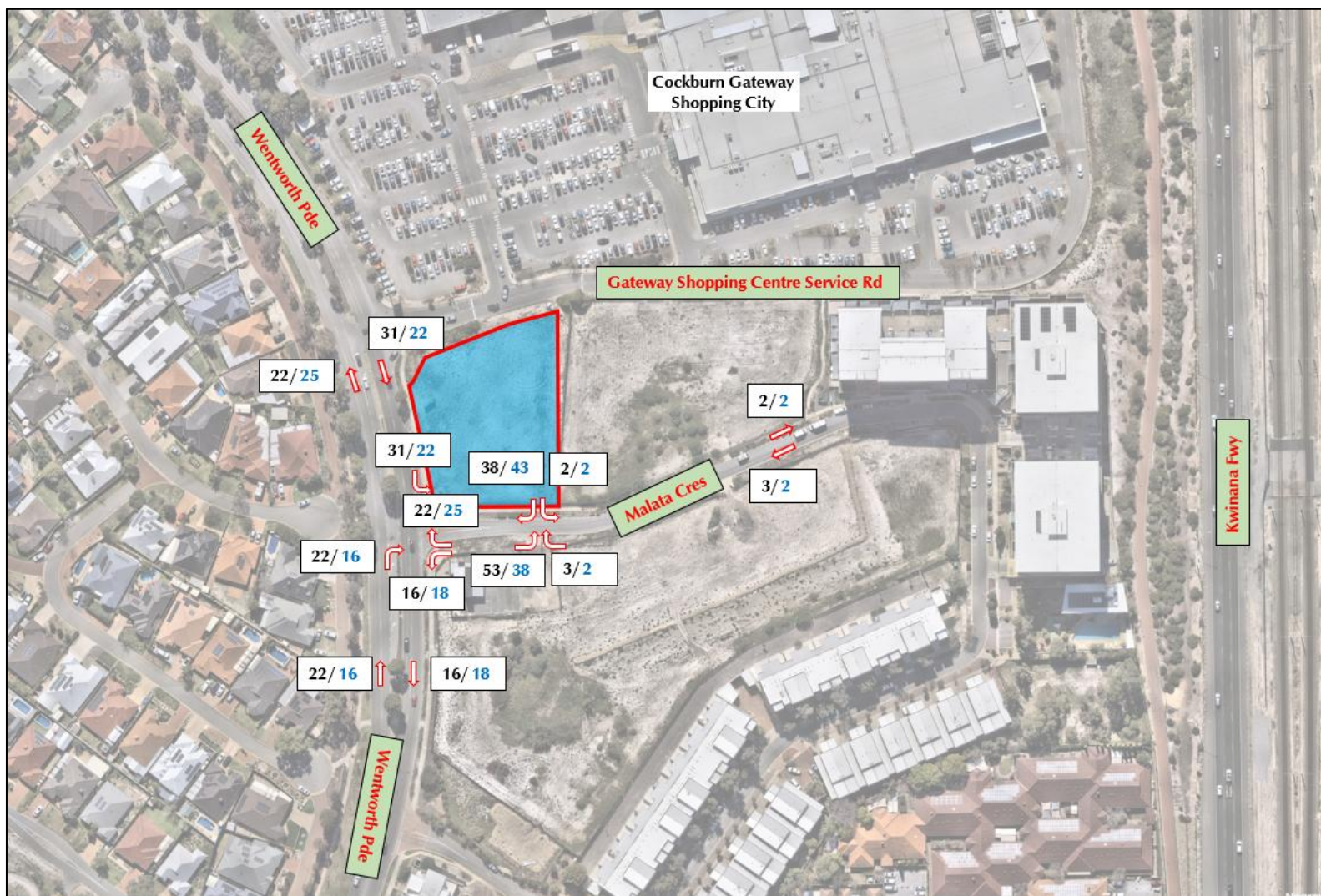


Figure 4. Estimated traffic movements for the proposed development – AM peak/ PM peak

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6 Traffic Management on Frontage Streets

Wentworth Parade, in the vicinity of the subject site is constructed as a dual carriageway, two-lanes in each direction with an approximate 4.5m wide landscaped median. Pedestrian footpath is available on both sides of the road. Please refer to **Figure 5** for more details.

Wentworth Parade is classified as a *Local Distributor Road* in the Main Roads WA's *Functional Road Hierarchy* and operates under the speed limit of 60km/h.

Based on the available SCAT traffic data obtained from Main Roads WA's Traffic Map, Wentworth Parade, south of Beeliar Drive carries about 18,861vpd on a typical weekday in June 2023. The morning and afternoon peaks (combined both directions of the road) are between 8:00am – 9:00pm and 3:00pm – 4:00pm with traffic volumes of 1,299vph and 1,672vph respectively.



Figure 5. Northbound view along Wentworth Parade

Malata Crescent is a 6.0m wide single-carriageway, two-lane undivided road. Pedestrian footpath is available on the northern side of the road. Please refer to **Figure 6** for more details.

Malata Crescent is classified as an *Access Road* in the Main Roads WA's *Functional Road Hierarchy* and operates under the default speed limit of 50km/h. Malata Crescent forms 'T' intersections with Wentworth Parade at both northern and southern ends. There are no available traffic counts for Malata Crescent.



Figure 6. Eastbound view along Malata Crescent

7 Public Transport Access

According to the current Transperth bus network map, the subject site has direct access to the existing bus service that operate on Wentworth Parade in the vicinity of the subject site.

The closest available bus service is route 526, which operates along Wentworth Parade with the nearest bus stop located approximately 150m walking distance from the subject site. This bus route provides direct links to Cockburn Central Train Station, Cockburn Gateway Shopping City and Aubin Grove Train Station.

The public transport services available to the subject site are illustrated in the relevant Transperth service map (please see **Figure 7**).

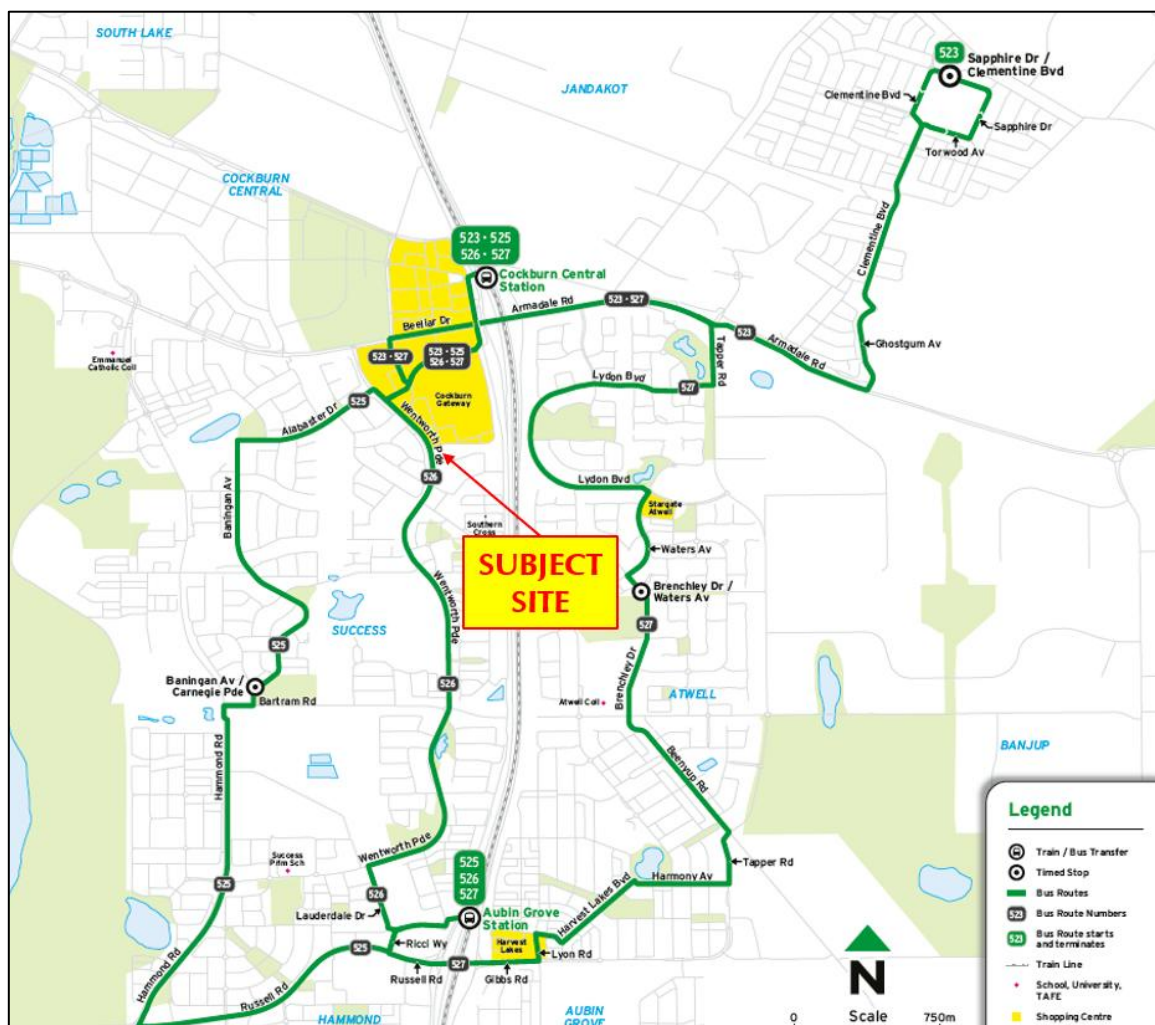


Figure 7. Public transport services (source: Transperth)

8 Pedestrian & Cyclist Access

Pedestrian accesses to the subject site are directly available from the existing footpath network on the eastern side of Wentworth Parade and northern side of Malata Crescent within the locality. Pedestrian crossing opportunities with refuge islands are available at the priority-controlled 'T' intersections of Wentworth Parade with Malata Crescent and Gateway Shopping City Service Road.

Review of the development plan confirms that the proposed development offers strong pedestrian connectivity both within the site and to the existing footpath infrastructure in the surrounding area. Additionally, a pedestrian priority crossing is proposed at the site's main access point as part of the development. The format and details of the crossing is to be confirmed through liaison with the City during the detailed design stage of the project.

According to the current Department of Transport Bike Maps, Wentworth Parade in the vicinity of the subject site is classified as “Other Shared Path (Shared by Pedestrians & Cyclists)”, which then further connects to Pearson Drive to the south of the subject site which is classified as “Good Road Riding Environment”. The existing bike network map in the locality of the subject site is illustrated in **Figure 8**, and it shows the cyclist connectivity in the vicinity of the subject site.

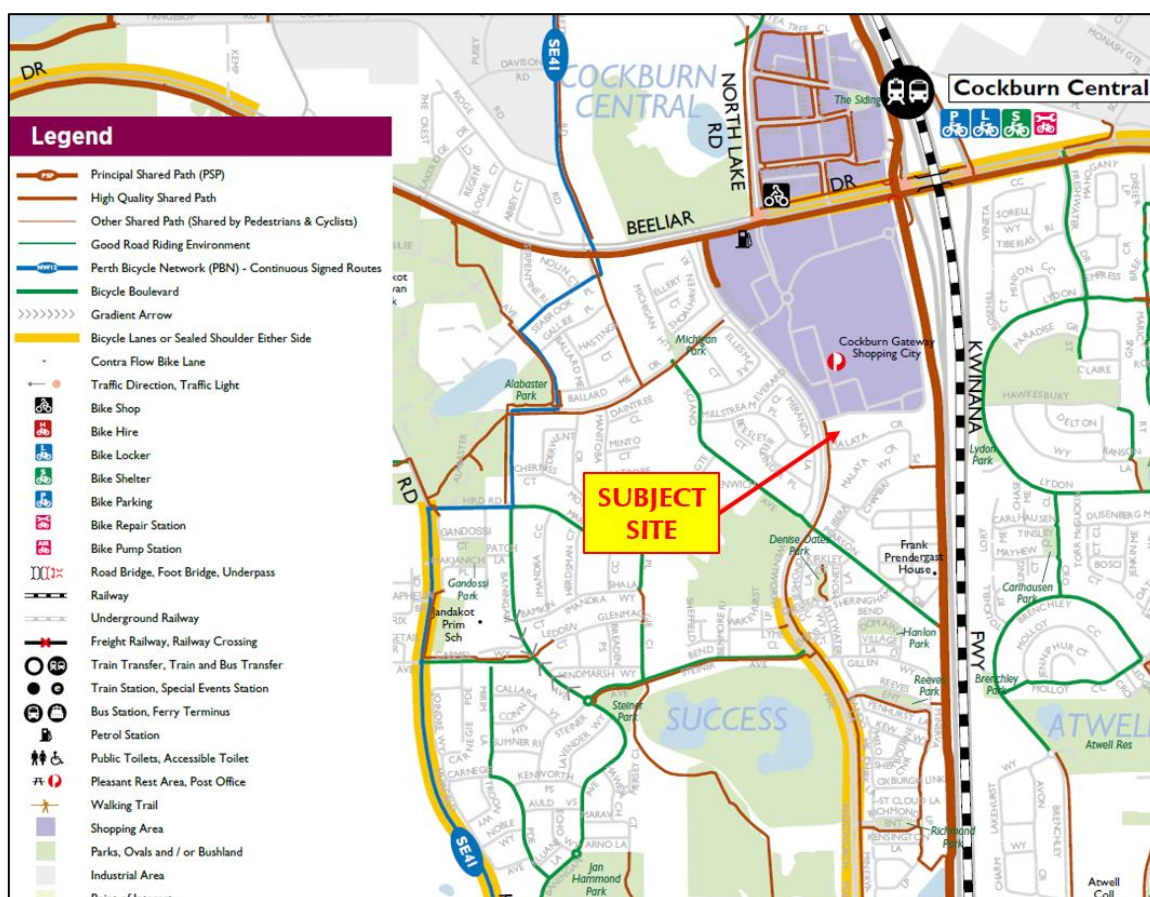


Figure 8. Existing bike map in the locality (source: Department of Transport)

Therefore, it is considered that the layout of the proposed development has been designed with a focus on promoting healthier, more active communities by supporting existing pedestrian and cyclist infrastructure and enhancing the overall walking and cycling experience associated with the proposed development.

9 Site Specific Issues

It is noted that the proposed crossover on Malata Crescent will be located almost directly opposite an existing crossover serving a commercial property currently operating as a café, which provides approximately 10 on-site parking spaces. The café operates from 5:00am to 12:00pm on weekdays (Monday to Friday), and from 7:00am to 11:00am on weekends.

Given the limited number of parking spaces and the café's restricted operating hours, it is considered that the potential for traffic conflicts between the two crossovers is minimal.

Furthermore, it should be noted that "*AS2890.1 – Parking Facilities: Off-Street Car Parking*" document provides guidance in relation to the placement of access driveways with respect to public roads intersections. As such, the standard is not applicable in this case, where the concern relates to proximity between two opposing crossovers on a local street.

In addition, the proposed crossover location has been carefully chosen to ensure it is positioned at furthest distance from the priority-controlled 'T' intersection of Wentworth Parade and Malata Crescent. This location of the proposed crossover minimises any potential traffic impact at the intersection resulting from the proposed development. Further, it should also be noted that the proposed location of the subject crossover is the only feasible location for the subject site.

No other site-specific concerns have been identified within the scope of this assessment for the proposed development.

10 Safety Issues

No specific safety issues have been identified for the proposed development.

11 Conclusions

This Transport Impact Statement (TIS) report has been prepared by Transcore on behalf of Ladybug Investment Trust Thirty Three C/- Apex Planning with respect to the proposed childcare centre and swim school to be located at Lot 810 Wentworth Parade, Success in the City of Cockburn. The subject site is currently a vacant land and is located at the northeast corner of Wentworth Parade and Malata Crescent.

The childcare centre is designed to accommodate up to 96 children and approximately 18 “room ratio” staff and additional support staff. The proposed swim school will occupy a total Gross Floor Area (GFA) of 831m².

The proposed development provides a total of 58 on-site parking bays, including two ACROD bays to address the parking demand of the proposed land uses. Additionally, a turnaround bay is also provided to ensure that the vehicles can satisfactorily traverse within the carpark.

Vehicular access to the subject site is proposed via a full movement crossover on Malata Crescent. This access point is located at the southeastern corner of the site, the furthest point from the priority-controlled ‘T’ intersection of Wentworth Parade and Malata Crescent. The proposed location of the subject crossover is the only feasible location for the subject site.

The bin storage area for the proposed childcare centre is located at the southeast corner of the building and the waste storage area for the proposed swim school is located at the northern end of the building next to the heat pump. It is anticipated that the largest size vehicle that will access the proposed development would be 8.8m long waste vehicle. An 8.8m waste vehicle will enter the subject site via the proposed full movement crossover on Malata Crescent, access the designated bin storage areas, and exit the subject site via the same crossover on Malata Crescent in forward gear.

It is estimated that the proposed development would conservatively generate a total of approximately 530 vehicular trips per regular weekday with about 96 trips during the typical weekday AM peak hour and 85 trips during the typical weekday PM peak hour. These totals include both inbound and outbound vehicle movements.

The traffic generation of the proposed development would not have a significant impact on the surrounding road network in accordance with WAPC guidelines.

Additionally, review of the development plan confirms that the proposed development offers strong pedestrian connectivity both within the site and to the existing footpath infrastructure in the surrounding area.

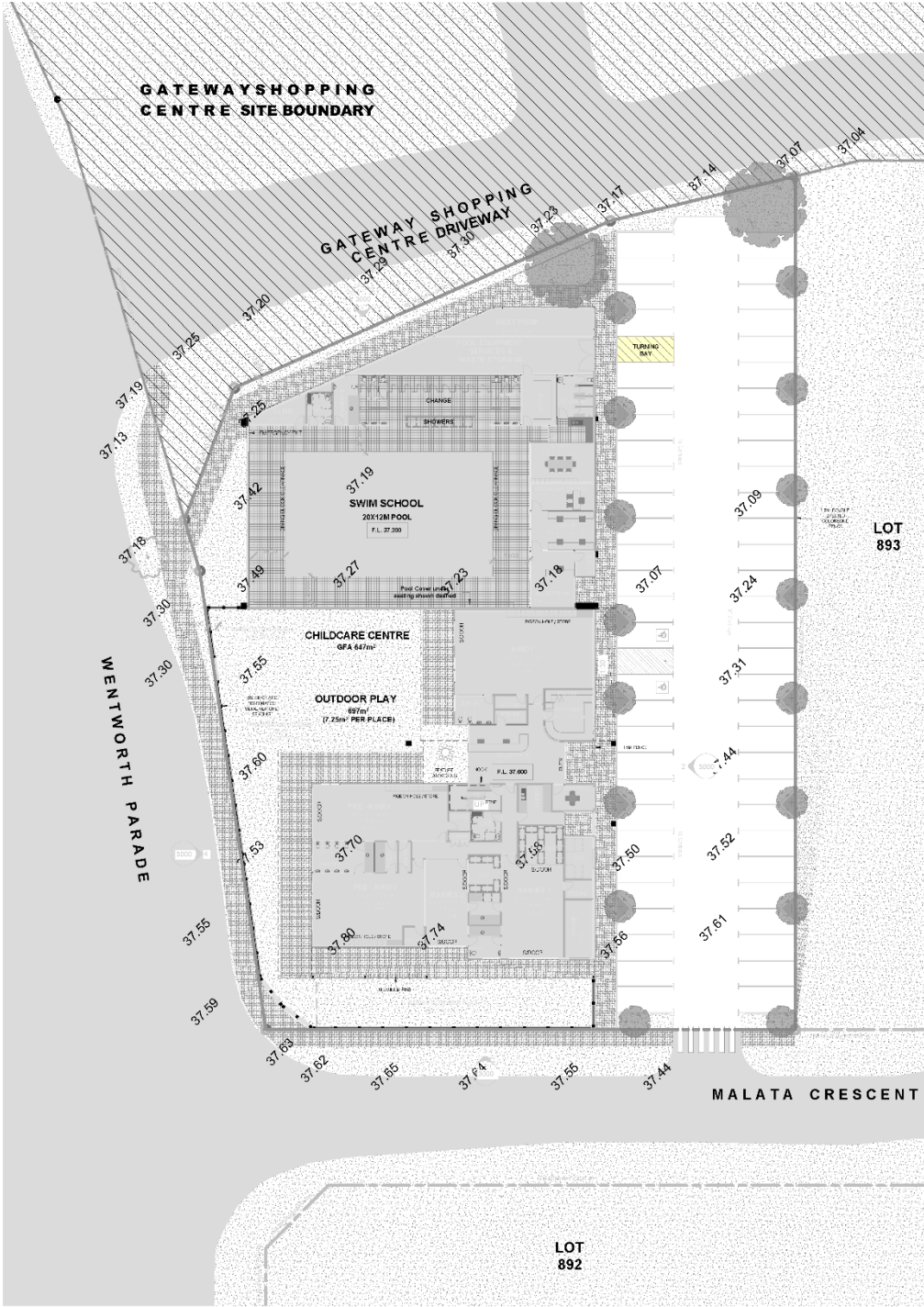
It is finally concluded that the traffic related issues should not form an impediment to the approval of the proposed childcare centre and swim school development.

Appendix A

PROPOSED DEVELOPMENT PLAN



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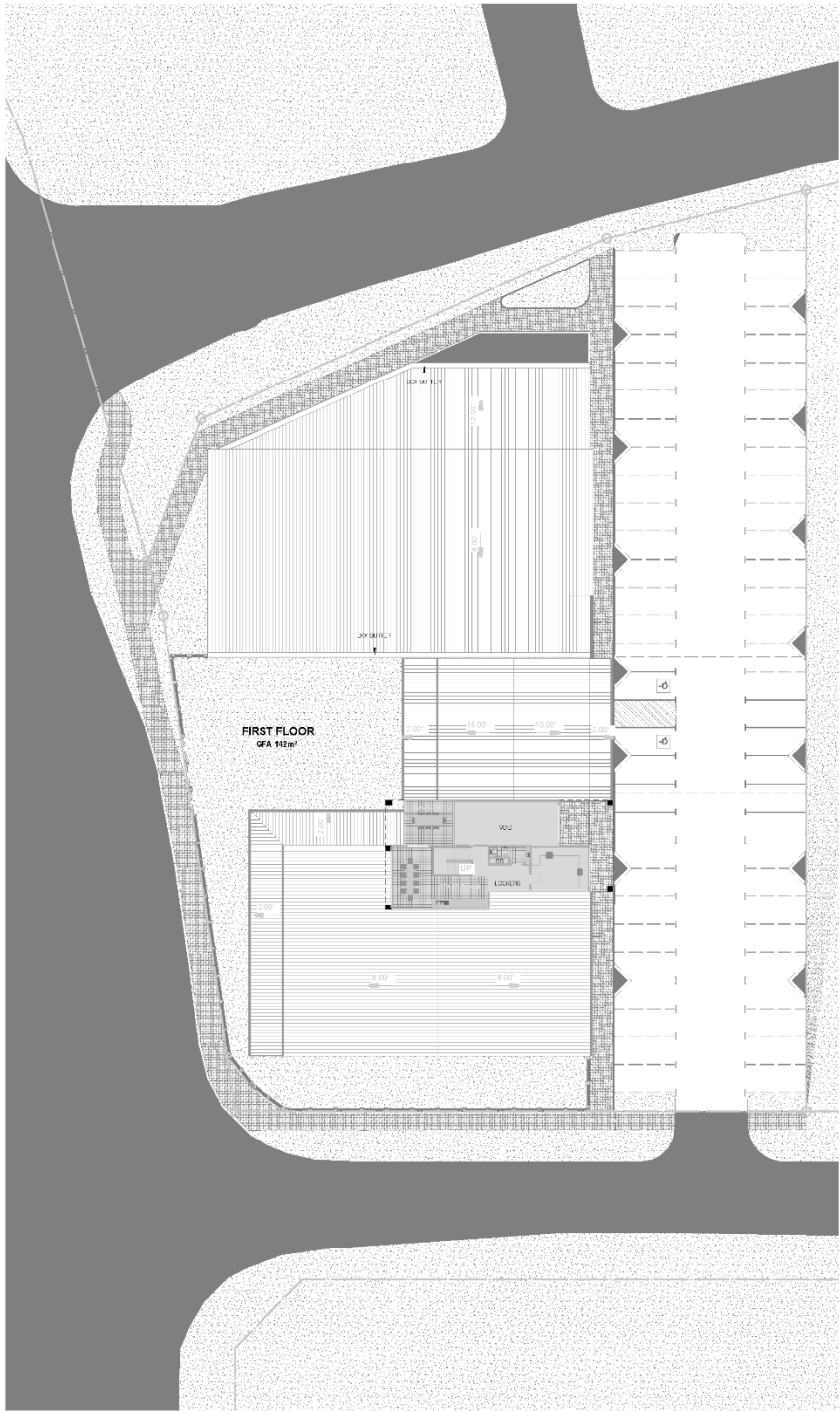
SITE PLAN

SCALE: 1:200



PROPOSED CHILDCARE & SWIM SCHOOL DEVELOPMENT

LOCATION : LOT 810 CNR WENTWORTH PARADE & MALATA CRES, SUCCESS, WA
FOR : JARRA PROPERTY



FIRST FLOOR PLAN

SCALE: 1:200

SITE CRITERIA

1. Site Area	4,000m²
2. Site Area	
3. Landscaping	400m²
a. Required 10% of Site Area	
b. Provided	721m² (18%)
c. Soil	2,000m²
d. Hard	1,279m²
Total	
4. Floor Area (GFA)	
a. Childcare GFA	647m²
b. Swim School GFA	643m²
Total	1,290m²
5. Carparking	
Total Car provided	58 Cars

SITE DESIGN CHECKLIST

1. SEWER MAINS LOCATION TO BE DETERMINED
2. FIRE MAINS PRESSURE TEST REQUIRED
3. FIRE TANKS OR PUMPS TO BE DETERMINED
4. WESTERN POWER TRANSFORMER LOCATION TO BE DETERMINED
5. CROSDOVER & ACCESS TO STREET TO BE DETERMINED BY LOCAL AUTHORITY
6. FULL FEATURE SITE SURVEY REQUIRED
7. DIAL BEFORE YOU DIG REQUIRED
8. BUSHFIRE ATTACK LEVEL (BAL) TO BE DETERMINED
9. STREET POWER POLES TO BE DETERMINED
10. SITE JOINING & LANE TO BE DETERMINED

NOTE: Any of the following items that do not have an "X" in the provided square require determination.

LEGEND

- BUILDING FOOTPRINT - SWIMMING SCHOOL
- BUILDING FOOTPRINT - CHILDCARE
- EXTENT OF CONCRETE HARDSTAND
- EXTENT OF ROADBASE HARDSTAND
- EXTENT OF BITUMEN PAVING
- EXTENT OF CERAMIC TILES
- EXTENT OF BRICK PAVING / CONCRETE PAVING
- EXTENT OF LANDSCAPING

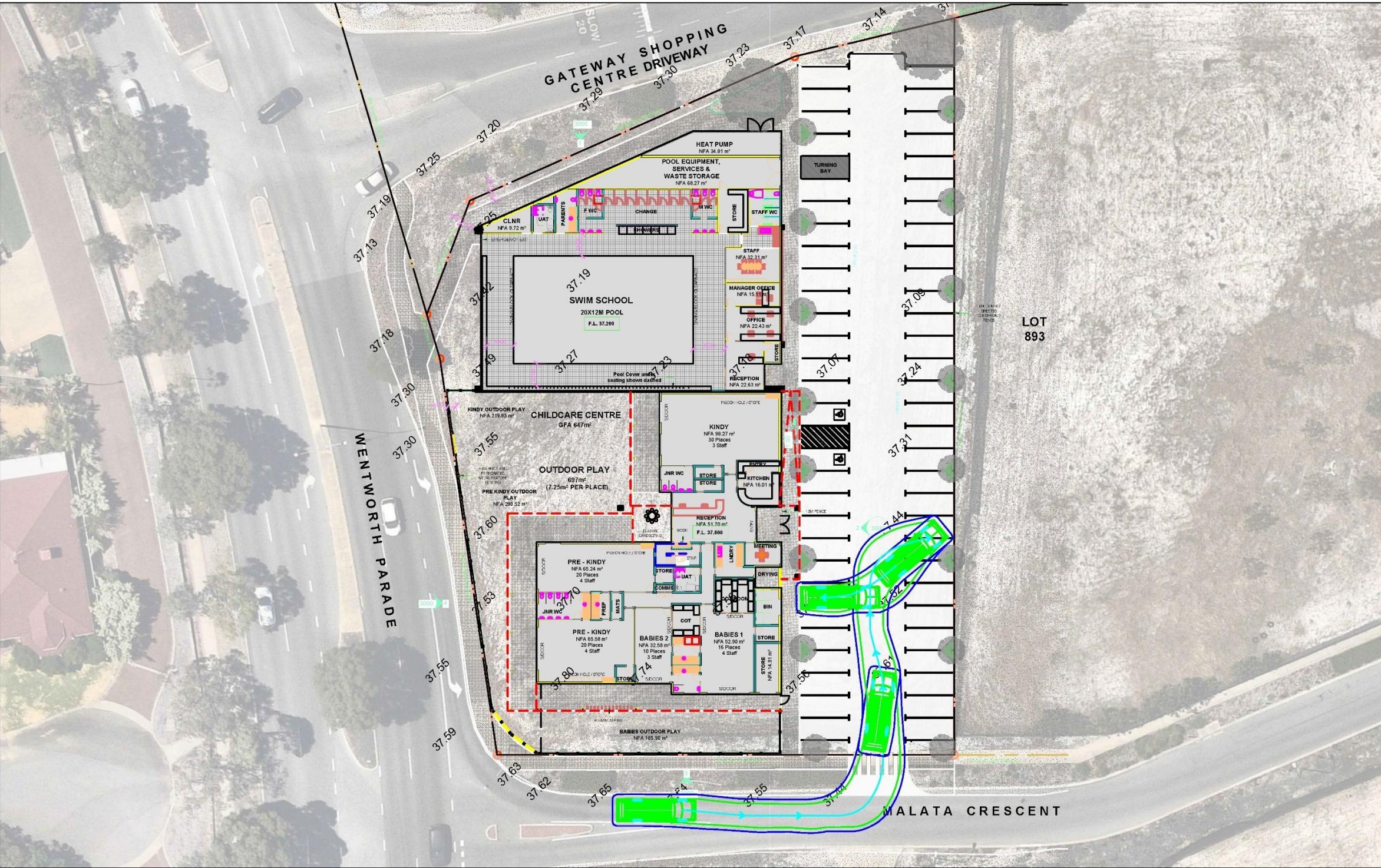
PRELIMINARY

DATE:	OCT 2025	PROJECT NUMBER
REVISION:	SK030	P25-9533
SHEET:	A - 1001	
SCALE:	As indicated@B1	



Appendix B

SWEPT PATH ASSESSMENT PLANS



Lot 810 Wentworth Parade, Success

Austrroads 2023: 8.8m Service Vehicle

Service vehicle entry to child care centre's service area

LEGEND

Vehicle Body
Wheel Path
500mm Clearance

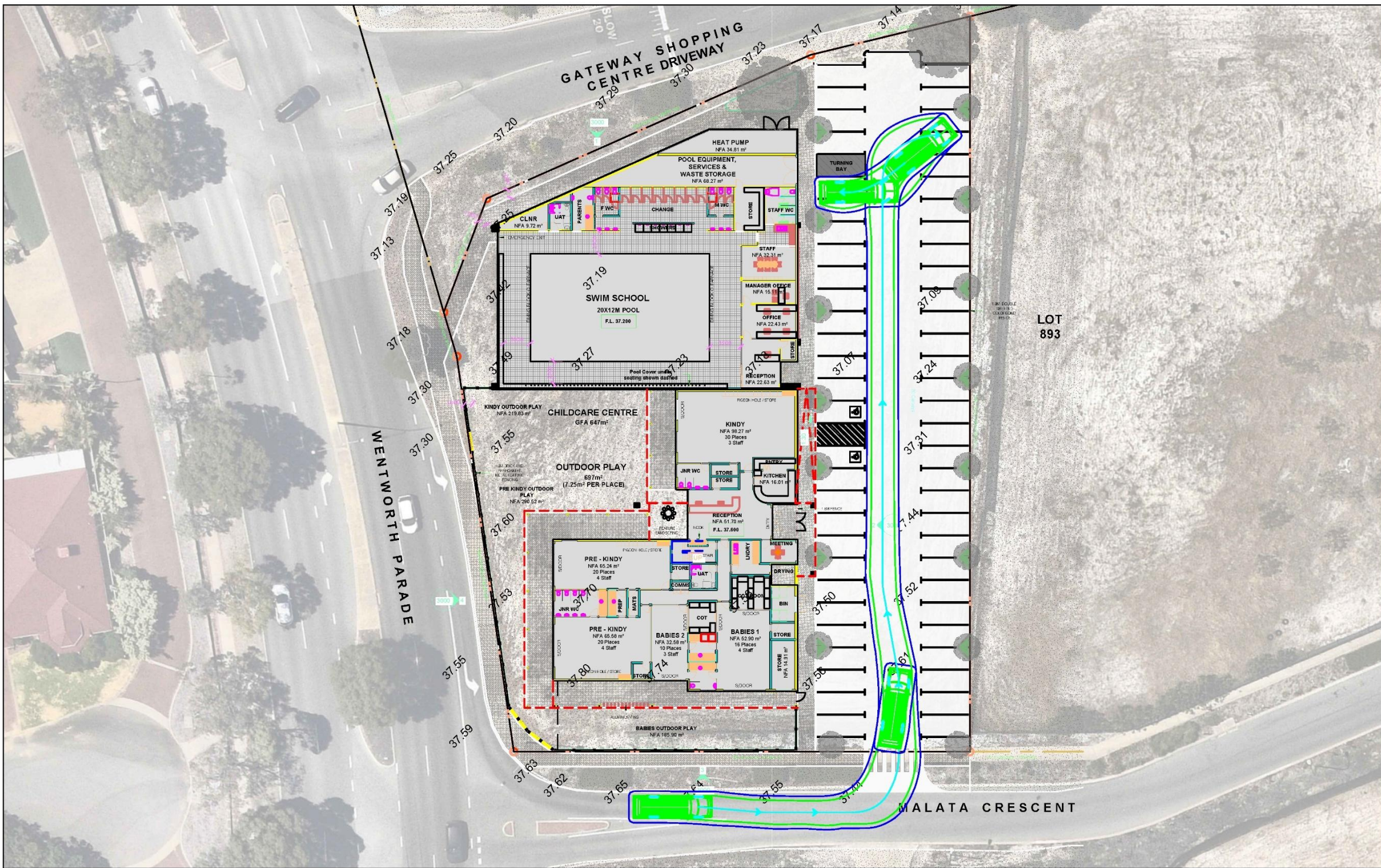


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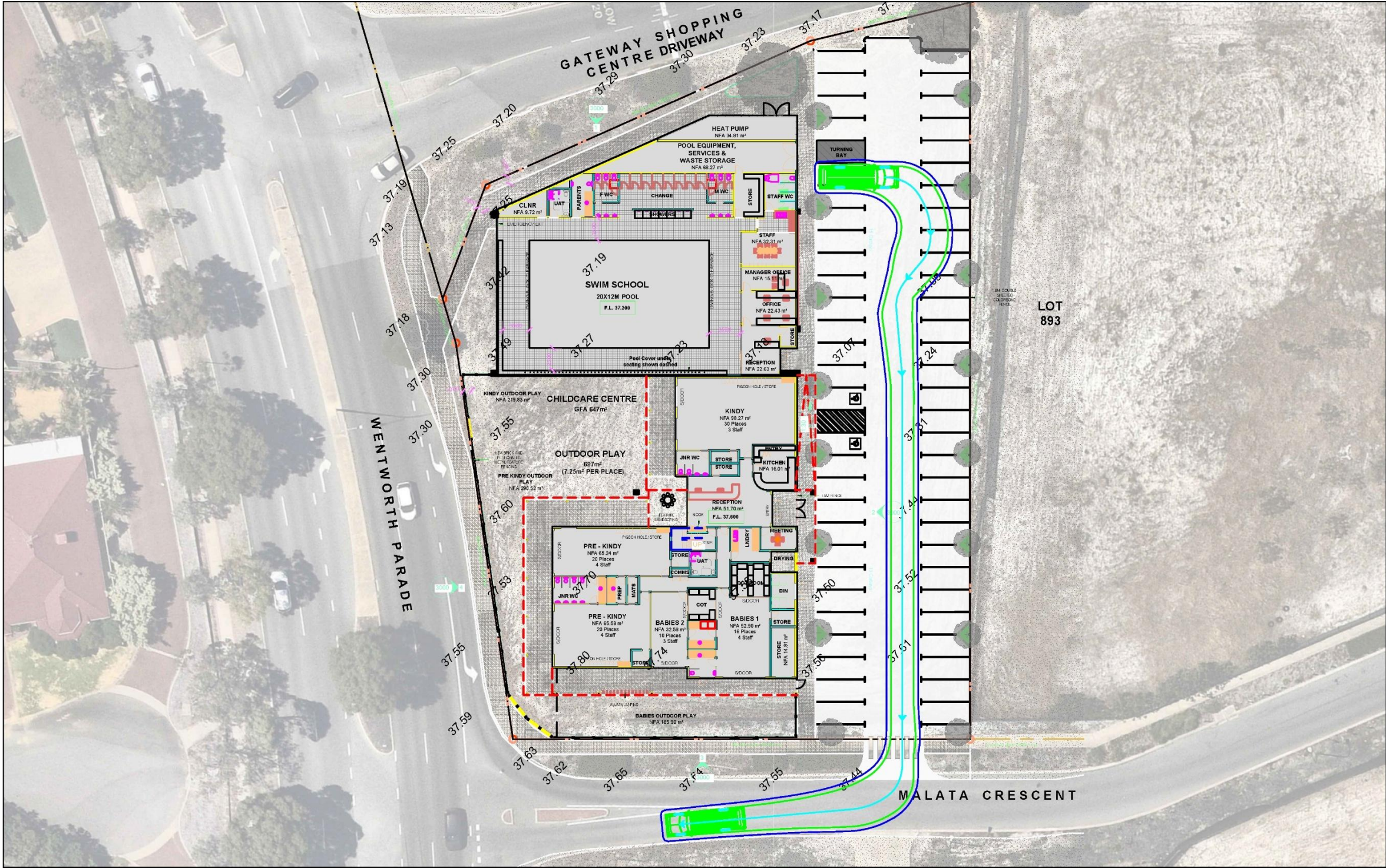
Lot 810 Wentworth Parade, Success
 Austroads 2023: 8.8m Service Vehicle
 Service vehicle entry to swim school's service area

LEGEND

Vehicle Body
 Wheel Path
 500mm Clearance

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 Scale: 1:400 @ A3





Lot 810 Wentworth Parade, Success
Austroads 2023: 8.8m Service Vehicle
Service vehicle exit from swim school's service area

LEGEND

Vehicle Body

Wheel Path

500mm Clearance

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