



TRAFFIC & PARKING ASSESSMENT

CHILD CARE CENTRE

**LOT 32 IN DP1223138 & LOT 9 IN DP 1135884
396 & 404 THE ENTRANCE ROAD, ERINA HEIGHTS**

PREPARED FOR: PERCEPTION PLANNING

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TRAFFIC & PARKING ASSESSMENT**PERCEPTION PLANNING****CHILD CARE CENTRE****LOT 32 IN DP1223138 & LOT 9 IN DP 1135884
396 & 404 THE ENTRANCE ROAD, ERINA HEIGHTS**

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1.0 INTRODUCTION

Intersect Traffic Pty Ltd (Intersect Traffic) was engaged by Perception Planning to prepare a Traffic and Parking Assessment Report for a proposed child care centre at Lot 32 in DP 1223138 and Lot 9 in DP 1135884 - 396 & 404 The Entrance Road, Erina Heights. The centre will provide 120 places for children aged 5 years and under and will operate as a Long Day Care Facility between the hours of 6.30 am and 6.30 pm. Forty-five (45) on-site car parking spaces including two accessible spaces are proposed in an at grade car park in front of the centre accessed via the two existing property accesses at The Entrance Road. The development concept plans are shown in **Attachment A**.

This report is required to support a development application to Central Coast Council and presents the findings of the traffic and parking assessment including the following:

1. An outline of the existing situation in the vicinity of the site;
2. An assessment of the traffic impacts of the proposed development including the predicted traffic generation and its impact on existing road and intersection capacities;
3. Reviews parking, public transport, pedestrian and cycle way requirements for the proposed development, including assessment against Council, Australian Standards and the NSW Roads and Maritime Services (RMS) standards and requirements; and
4. Presentation of conclusions and recommendations.

2.0 SITE DESCRIPTION

The development site is located on the southern side of The Entrance Road approximately 8 kilometres east of Gosford, approximately 4 kilometres west of Terrigal Beach and approximately 2 kilometres northeast of Erina. The development part of site includes the whole of 396 The Entrance Road, which is vacant land and approximately 20% of the north western corner, which contains a boarding kennel building, of 404 The Entrance Road. The whole of 404 The Entrance Road is currently operating as Kireena Park Boarding Kennels. The development part of the site is bounded to the north by The Entrance Road, to the west and south by large lot residential land and also to the south and west by the balance of the Kireena Park Boarding Kennels development. The site is close to a large range of schools, shopping centres and beaches. **Figure 1** below shows the development property in context with the surrounding development.



Figure 1 – Site Location

The site has the following property descriptors:

- ◆ Formal land title of Lot 32 in DP 1223138 and Part of Lot 9 in DP 1135884;
- ◆ Postal address of 396 & 404 The Entrance Road, Erina Heights;
- ◆ Site development area of approximately 6,000 m² (with a total area of the two lots upon which the development is proposed of approximately 1.5-hectare); and
- ◆ Land zoning of DM2 – Deferred Matter and SP2 - Infrastructure (Road) pursuant to the Central Coast Council's Gosford LEP (2014).

The site is currently accessed at The Entrance Road via two concrete urban vehicular driveway crossings, one at each of the existing lots. **Photograph 1** below shows the existing development site whilst **Photograph 2** below shows the vehicular crossing at 404 The Entrance Road.



Photograph 1 – Development site



Photograph 2 – Development access – 404 The Entrance Road

3.0 EXISTING ROAD NETWORK

3.1 The Entrance Road

The Entrance Road being part of the Central Coast Highway is a classified road and part of the state highway network (HW 30). It is the major sub-arterial road in the region and is under the care and control of the NSW RMS. The Central Coast Highway connects to the arterial road network, via Gosford, at the Pacific Motorway (M1) and Wisemans Ferry Road at Somersby approximately 15 kilometres west of the site and to the Pacific Highway (HW10) at Doyalson, approximately 40 kilometres north of the site, via Bateau Bay, Norah Head and Budgewoi. It represents a major transport route in the area.

Near the site The Entrance Road is generally a four-lane two-way sealed road with a central vegetated median strip, on- road cycleways and some parking lanes. An additional bus lane exists for various lengths of the separated carriageways east and west of the site including a west bound lane directly fronting the site. Lane widths are between 3.1 and 3.2 metres and kerb and gutter and longitudinal drainage are located along its edges. U-turn bays are also provided approximately 350 metres east and west of the site and a 60 km/h speed limit applies to the road. At the time of inspection, The Entrance Road near the site was observed to be in good condition.

Photograph 3 shows the westbound carriageway of The Entrance Road (Central Coast Highway) adjacent to the site.



Photograph 3 – The Entrance Road westbound carriageway adjacent to the site

4.0 ROAD NETWORK IMPROVEMENTS

There are no proposed road network improvements to be undertaken in the area that would increase the capacity of the local and state road network. Future maintenance works may be undertaken by Central Coast Council and NSW RMS on the local and state road network in accordance with their future maintenance programs.

5.0 TRAFFIC VOLUMES

Northern Transport Planning and Engineering (NTPE) on behalf of Intersect Traffic has previously carried out manual peak hour traffic counts at the Central Coast Highway (The Entrance Road) / Avoca Drive T-intersection on Wednesday 17th November 2018 during the likely AM and PM peak traffic periods for another project. The counts determined that the peak hour traffic occurred at 8 am to 9 am and 3 pm to 4 pm, respectively. These counts are provided within **Attachment B**. Whilst this location is slightly remote from the site, they do give a suitable indication of traffic volumes on the Central Coast Highway.

The 2018 peak hour one-way carriageway traffic for The Entrance Road east of Avoca Drive from these counts are:

- ◆ Eastbound 1,819 vtpm AM and 2,031 vtpm PM and
- ◆ Westbound 1,612 vtpm AM and 1,726 vtpm PM.

Traffic counts were also obtained from the Traffic Volume Viewer of the RMS website for The Entrance Road. The nearest most recent recorded traffic volumes were at Station ID 05008, 700 metres west of Avoca Drive, Station ID 05907, 70 metres east of Terrigal Road / Barralong Road (3.5 kilometres west of the site) and Station ID 05914, 30 metres west of Okanagan Close, Wamberal (2.6 kilometres east of the site).

Eastbound and westbound carriageway AM and PM peak hour traffic figures at Station ID 05008 were recorded in 2010 and 2014 and eastbound only in 2017. Eastbound and westbound carriageway AM and PM peak hour traffic figures at Station ID 05907 and ID 05914 were last recorded in 2010. The 2010, 2014 and 2017 maximum peak hour volumes have been extracted from the Traffic Volume Viewer data and are presented in **Table 1** below along with the NTPE 2018 traffic volumes above.

The 2010, 2014 and 2017 maximum eastbound and westbound carriageway AM and PM peak hour traffic figures at Station ID 05008 indicate that there has been a negligible increase in traffic from 2010 to 2017. Examining the 2010 maximum eastbound and westbound carriageway AM and PM peak hour traffic figures at RMS Stations ID 05907 and ID 05914 it is concluded that the relevant NTPE count figures for 2018 would not be reached near the site in 2019. However, the NTPE 2018 figures have very conservatively been adopted as the 2019 east and westbound one-way carriageway mid-block figures. The adopted 2019 figures have conservatively been increased by 1.5% to determine the relevant 2029 AM and PM eastbound and westbound peak hour traffic volumes near the site. These predicted 2019 and 2029 peak hour traffic figures have also been presented in **Table 1** below and are utilised in this assessment.

Table 1 – Past and future road network traffic volumes

Year	The Entrance Road Count Location	Eastbound		Westbound	
		AM (vtpm)	PM (vtpm)	AM (vtpm)	PM (vtpm)
2010	West of Avoca Drive ID 05008	1698	2691	2440	1796
2014	West of Avoca Drive ID 05008	1642	2755	2656	1698
2017	West of Avoca Drive ID 05008	1723	2631	N/A	N/A
2010	West of Terrigal Dr ID 05907	837	1740	1790	1230
2010	East of Okanagan Cl ID 05914	1059	758	570	1138
2018	East of Avoca St NTPE	1819	2031	1612	1726
2019	conservatively near the site	1819	2031	1612	1726
2029	conservatively near the site	2111	2357	1871	2003

6.0 ROAD CAPACITY

The capacity of urban roads is generally determined by the capacity of intersections. However, Tables 4.3 and 4.4 of the RMS' *'Guide to Traffic Generating Developments'* provides some guidance on mid-block capacities for urban roads and likely levels of service. These tables are reproduced below. As traffic volumes on the local and state road network are less than 60 km/h all roads have been assessed as urban roads.

Table 4.3
Typical mid-block capacities for urban roads with interrupted flow

Type of Road	One-Way Mid-block Lane Capacity (pcu/hr)	
Median or inner lane:	Divided Road	1,000
	Undivided Road	900
Outer or kerb lane:	With Adjacent Parking Lane	900
	Clearway Conditions	900
	Occasional Parked Cars	600
4 lane undivided:	Occasional Parked Cars	1,500
	Clearway Conditions	1,800
4 lane divided:	Clearway Conditions	1,900

Table 4.4
Urban road peak hour flows per direction

Level of Service	One Lane (veh/hr)	Two Lanes (veh/hr)
A	200	900
B	380	1400
C	600	1800
D	900	2200
E	1400	2800

Source: - RTA's *Guide to Traffic Generating Developments* (2002).

The state road network has two lanes per direction and a LoS C is normally considered satisfactory for urban local roads. However, for a major sub-arterial road a LoS D such as the Central Coast Highway (The Entrance Road) is considered acceptable. Noting a LoS E would occur when volumes exceed 2,800 vtpd therefore the threshold for a two-lane one-way mid-block capacity for a LoS D would be 2,800 vtpd. Therefore, a four-lane two-way mid-block capacity for The Entrance Road would be 5,600 vtpd. This road capacity of 5,600 vtpd for The Entrance Road adjacent to the site is therefore considered relevant as a sub-arterial road.

From the traffic volume data provided in **Section 5** above, for this assessment it can be concluded that as existing peak traffic volumes for the state road network are currently below the capacity thresholds determined above there is existing spare capacity within the state road network to cater for additional traffic generated by this development.

7.0 ALTERNATE TRANSPORT MODES

7.1 Public Transport

Red Bus Services operates many public transport (bus) services along The Entrance Road. Routes 17, 18, 19, 21, 22, 23 & 28 all travel between Gosford and The Entrance via Erina, Erina Heights, Wamberal and Bateau Bay, most with a variation to the route to pick up different nearby suburbs. The buses run from approximately 4.30 am to 11 pm every day of the week. In the peak hour on Mondays to Fridays the buses run a total of 5 services in each direction on The Entrance Road adjacent to the site with a 20% reduction in services on Saturdays, Sundays and public holidays.

The nearest bus stop locations to the site are at the site frontage on the southern side of The Entrance Road for westbound passengers and 70 metres northeast of the site on the northern side of the Entrance Road for eastbound travellers. A number of 24-hour bus lanes exist along The Entrance Road with a westbound bus lane approximately 1.0-kilometre-long commencing at the eastern end of the frontage to the development. An extract from the Red Bus Services map showing the public bus service routes travelling past the site and the connecting bus services and Gosford train station is shown below in **Figure 2**.

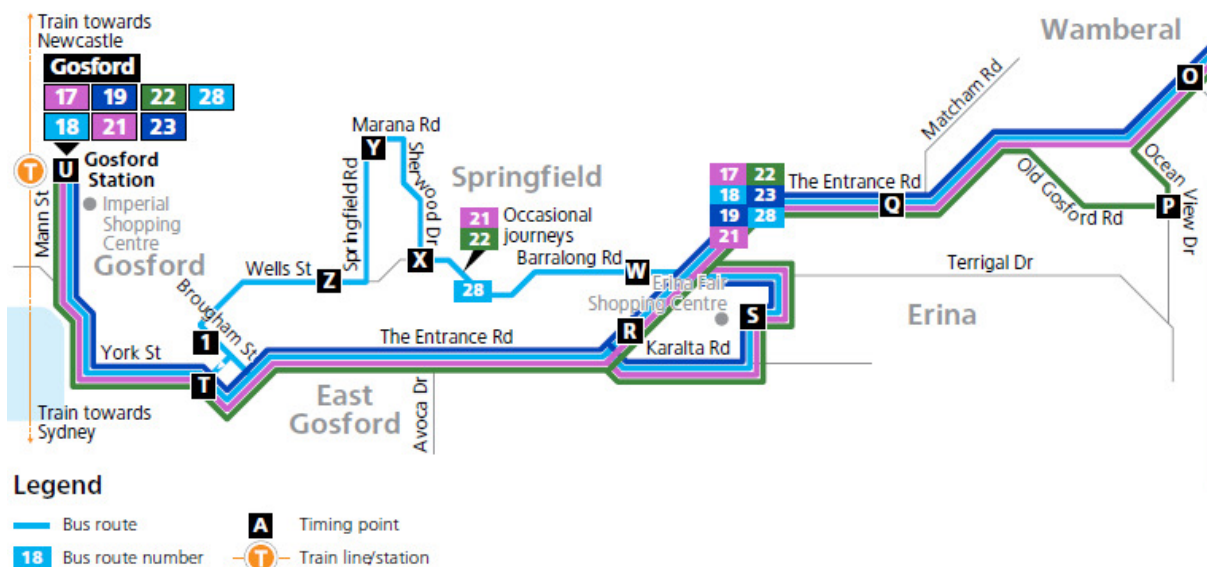


Figure 2 – Red Bus Services- Bus Route Map extract.

The site is very well serviced by the public bus service provided by the Red Bus Services and is also well serviced by many existing school bus routes utilising the bus lanes on The Entrance Road.

7.2 Pedestrians & Bicycles

An off-road shared concrete pathway, approximately 2.7-metres wide, runs along the southern side of The Entrance Road and a concrete pathway, approximately 1.5m wide, runs on the northern side of The Entrance Road adjacent to and opposite the site, respectively. On-road cycleways, varying between 1.5 metres and 2.0 metres wide, one in the westbound and one in the east bound carriageway of The Entrance Road, also run past the site and share the 24-hour bus lanes provided. These pathways and cycleways run for over one kilometre east and west of the site connecting to the large network of other footpaths and cycleways servicing residential, commercial and leisure areas in the area and adjacent suburbs.

A split signalised pedestrian (and cycle) crossing exists across the two carriageways of The Entrance Road directly fronting the site. Many pedestrian refuges and pram ramps exist at road crossings adjoining the footway / cycleway network. Together these footpaths, cycleways, crossings and refuges provide excellent and safe access for the development site. **Photographs 4 & 5** below present some of the alternate transport facilities servicing the site.



Photograph 4 – Bus shelter, shared bus lane and footpath fronting the site



Photograph 5 – Split signalised pedestrian / bicycle crossing / refuge fronting the site.



8.0 DEVELOPMENT PROPOSAL

The development proposal is to construct a proposed child care centre at Lot 32 in DP 1223138 and Lot 9 in DP 1135884 - 396 & 404 The Entrance Road, Erina Heights. The centre will provide 120 places for children aged 5 years and under and will operate as a Long Day Care facility between the hours of 6.30 am and 6.30 pm. On-site car parking spaces including accessible spaces are proposed in an at grade car park in front of the centre accessed via two vehicular crossings at The Entrance Road. The development concept plans are shown in **Attachment A**.

Note entering traffic will only access the car parking via the existing 6.0 metre wide combined entry / exit vehicular crossing access at the eastern end of the development site and a 6.0 metre internal road whilst the existing 4.0 metre wide vehicular crossing access at the western end of the site will be exit only and utilised for all vehicles exiting the child care carpark and the development site. Therefore, a one-way traffic flow system operates for access to the Child Care Centre and this will be suitable delineated through sign posting and line marking within the car park.

Specifically, the proposal also includes the following constructions:

- ◆ A 120 place Child Care Centre (internals 870 m²);
- ◆ Including an internal activity area (390 m²);
- ◆ Outdoor activity areas (840 m² - 580 m² outdoor area and 260 m² verandah area);
- ◆ Indoor storage - 24 m² and outdoor storage area - 36 m²;
- ◆ Forty-five (45) space at-grade car park including two accessible spaces; and
- ◆ Fencing, landscaping and drainage to Central Coast Council requirements.

9.0 TRAFFIC GENERATION

The NSW RMS' 'RTA's Guide to Traffic Generating Developments' provides specific advice on the traffic generation potential of various land uses. In regard to Child Care Centres the following advice is provided within Table 3.6 of the guide.

Table 3.6
Traffic generation rates

Centre Type	Peak Vehicle Trips / Child		
	7.00-9.00am	2.30-4.00pm	4.00-6.00pm
Pre-school	1.4	0.8	-
Long-day care	0.8	0.3	0.7
Before/after care	0.5	0.2	0.7

Source: - RTA's Guide to Traffic Generating Developments (2002).

Using these rates and assuming each vehicle trip involves an inbound and outbound trip, the traffic generating potential of the proposed 120 place child care centre can be calculated as follows:

AM Peak Hour

Traffic Generation = 0.8 vehicle trips per child x 120 children
= **96 vtpm**. (rounded up)

PM Peak Hour

Traffic Generation = 0.7 vehicle trips per child x 120 children
= **84 vtpm**. (rounded up)

10.0 TRIP DISTRIBUTION

Before considering the traffic impacts of the development, the traffic generated by the development needs to be distributed onto the local road network. In this regard assumptions need to be made in relation to origins and destinations of trips and the nature of the trips to and from the site. In determining the trip distribution, it is considered that because of the location of the site it is likely that the majority of the children attending the centre will live within the nearby residential areas. There may be some variations to the proposed traffic distribution vehicle movements that have not been included in the assumptions however their impact is considered insignificant.

The assumptions used in distributing the traffic distribution are listed below.

AM peaks & PM peaks

- ◆ All entering traffic will arrive via the eastern access;
- ◆ All exiting traffic will depart via the western access;
- ◆ In the AM 50% of the trips will be inbound and 50% of the trips will be outbound;
- ◆ In the PM 50% of the trips will be inbound and 50% of the trips will be outbound;

The resulting trip distribution onto the road network is therefore likely to be as shown below in **Figure 3**.

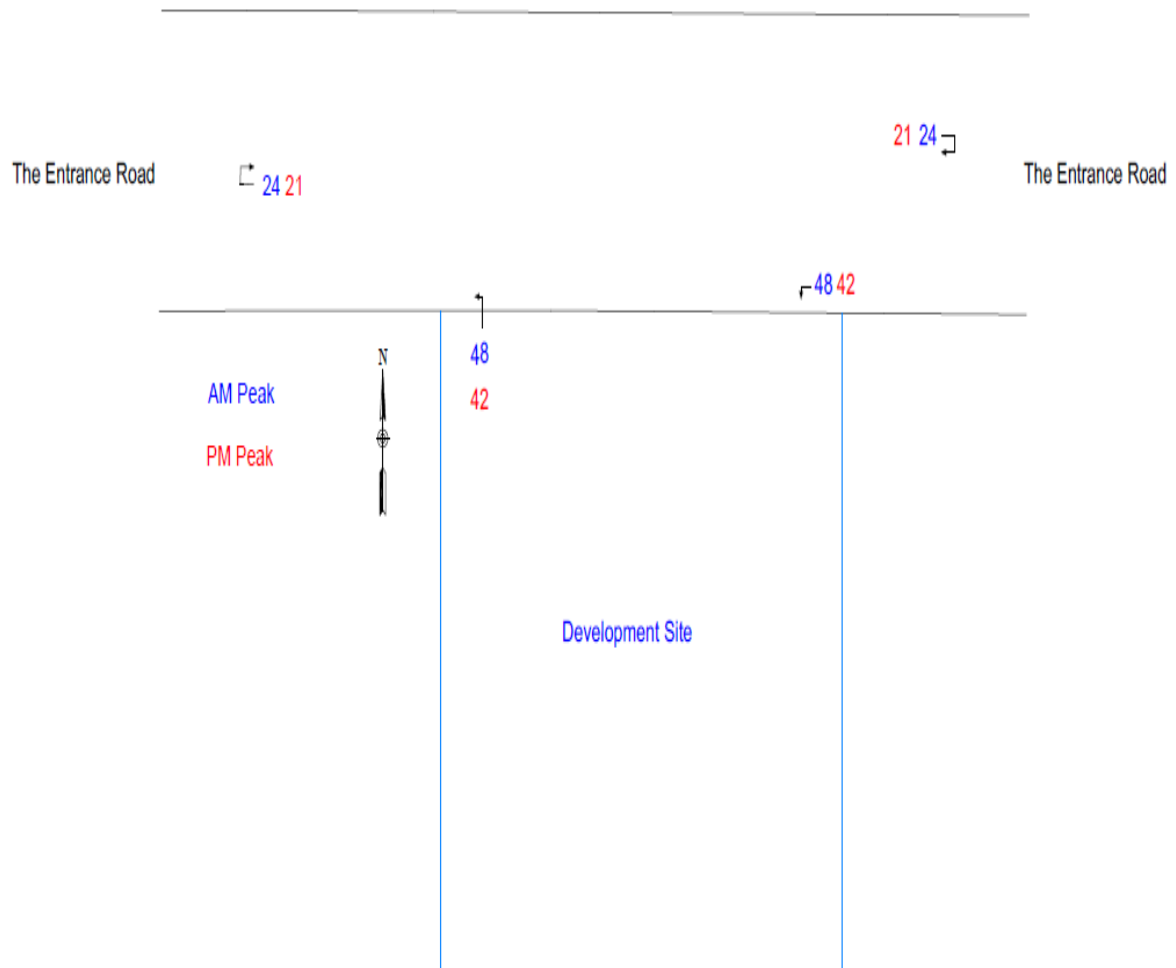


Figure 3 – Development Traffic Distribution

11.0 TRAFFIC IMPACTS OF DEVELOPMENT

11.1 Road Network Two-way Mid-Block Capacity

It has previously been shown in **Section 6** of this report that the local road network is currently operating within its technical two-way mid-block capacity as relevant.

The child care centre is likely to generate the following additional traffic (maximum) on the local road network based on the trip distributions shown in **Figure 3**;

- ◆ The Entrance Road east bound – 48 vtpm in the AM peak and 42 vtpm in the PM peak; and
- ◆ The Entrance Road west bound – 48 vtpm in the AM peak and 42 vtpm in the PM peak.

The addition of this traffic onto the 2019 traffic volumes determined in **Section 5** will not result in the capacity thresholds for the local road network determined in **Section 6** to be reached. Even with the 2029 traffic volumes these road capacity thresholds are not reached. This is demonstrated in **Table 2** below.

Table 2 - Road Capacity Assessment

Road	Section	2019		2029		Road Capacity	Development Traffic	
		AM (vtpm)	PM (vtpm)	AM (vtpm)	PM (vtpm)		AM	PM
The Entrance Road	Eastbound Carriageway	1867	2073	2159	2399	2800	48	42
The Entrance Road	Westbound Carriageway	1660	1768	1919	2045	2800	48	42

The post development traffic flows through to 2029 do not reach the determined road capacities and as such the state road network has sufficient spare capacity to cater for the proposed development. Overall it is reasonable to conclude that the local and state road network around the site has sufficient spare two-way mid-block capacity to cater for this development without adversely impacting on the level of service experienced by motorists.

11.2 Intersection Capacity

In terms of intersection capacity, the addition of up to only 48 vtpm onto any existing major intersection, represents less than 1% of the existing traffic, therefore is considered negligible. It is therefore considered insignificant and would not result in a loss of LoS for motorists using these intersections.

It would therefore be reasonable to conclude without further intersection analysis that the proposed development would not adversely impact on the operation of adjoining intersections on the local road network.

11.3 Access

The on-site car park for this development with 45 parking spaces will be accessed via:

- ◆ the existing eastern combined entry / exit, 6.0-metre-wide concrete driveway and the proposed 6.0-metre-wide new internal road access road, which is to also be used by the Kireena Park Boarding Kennels; and
- ◆ the existing 4.0-metre-wide western concrete driveway which is proposed to be exit only.

In assessing the accesses compliance with Australian Standard *AS2890.1-2004 Parking facilities – Part 1 - Off-street car parking* the following is noted:

- ◆ Vehicular sight distance from the access has been observed to be suitable to meet the requirements as shown in Figure 3.2 of the Standard. i.e. minimum 65 metres for a 60 km/h speed zone;
- ◆ Pedestrian sight lines as required in Figure 3.2 of the Standard have been achieved with appropriate design of landscaping and fencing around the accesses;
- ◆ The accesses support on-site car parking for up to 45 vehicles for Class 3 parking accessed from a local road. Table 3.1 of the Standard thus requires a minimum Class 3 access facility to be constructed. Table 3.2 of the Standard then designates a Class 3 access facility as a separated entry 6.0 metres wide / exit 4.0 to 6.0 metres wide. The existing accesses are considered to be a Category 3 accesses as described in Table 3.2 of the Standard therefore is compliant with the access requirements of the Standard.

Under the Central Coast Council's Gosford DCP (2013) Section B Child Care Centres Section 3.9.5.2 – Traffic the development is also required to comply with the following;

- ◆ All vehicles are to enter and leave the site in a forward direction;
- ◆ Direct access to a state road will not be permitted;
- ◆ Separated driveway access are to be provided; and
- ◆ Parking areas are to be separated from any area used by children by appropriate fencing.

Having reviewed the concept development plans it is concluded that the proposal is compliant with the Gosford DCP requirements except for the access to a state road. This will be a matter for Council to approve however from a safety aspect the development is considered satisfactory as it is in a relatively low speed urban environment with left in and left out only access conditions into a bus lane which provides suitable deceleration and acceleration conditions for merging into and out of the main traffic lanes improving the safety of the access. The design of the development is also such that it is not convenient to park on-street for the dropping off and picking up of children therefore all parking and pedestrian movements generated by the development are likely to occur within the on-site car park. The only likely pedestrian movements generated by the development on The Entrance Road will be with the use of public transport or walking from nearby residential areas by staff or parents and suitable bus stops and pedestrian crossing facilities are available convenient to the site to ensure these movements can be undertaken in a safe and convenient manner.

Overall it is concluded that the proposed car park access, ingress and egress, is safe and suitable to service the car park as it generally complies with Central Coast Council and Australian Standard *AS2890.1-2004 Parking facilities – Part 1 - Off-street car parking* subject to Council supporting a variation to its DCP in regard to the development fronting a state road.

11.4 Off-Street Parking

On-site parking and manoeuvrability should comply with Gosford DCP 2018 *Child Care Centres - Section 3.9.5.3 - Parking* and Australian Standard *AS2890.1-2004 Parking facilities – Off-street car parking*. The DCP states that the following car parking requirements are applicable for Child Care Centres:

- ◆ 1 space per staff, plus
- ◆ 1 temporary space per 6 children.

Based on the DCP advice and noting staff numbers are likely to be up to 25 staff the on-site parking requirement for the child care centre can be calculated as 25 staff plus 20 children spaces i.e. 45 spaces. The plans for the proposal show the provision of 45 on-site car parks, including 2 accessible parking spaces, although the DCP requires only 1 space per 100 car parking spaces. Therefore, in respect of the DCP requirements it is concluded that the proposal is compliant with the DCP by providing a total of 45 on-site car parks.

The current plans do not show dimensions however the car park design appears to comply with Australian Standard *AS2890.1-2004 Parking facilities Part 1 – Off street car parking* for user class 3 parking. This will need to be confirmed at Construction Certificate stage and can be conditioned on the consent.

Overall it is concluded that the proposed child care centre is compliant with Australian Standard *AS2890.1-2004 Parking facilities Part 1 – Off street car parking* and Central Coast Council's Gosford DCP 13 requirements for on-site car parking.

11.5 Servicing

In terms of the provision of a service bay it should be noted that as a child care centre:

1. Most consumables are purchased by staff and transported to the site within private light vehicles;
2. Waste collection will be via a contract waste collection with collection internally within the carpark using a medium rigid vehicle (MRV) during non-peak periods. Forward entry and exit are achieved through the use of separate entry and exit driveways and one-way flow through the site; and
3. Other deliveries to the site will be infrequent (once or twice a week) using small rigid vehicles (SRV) that could utilise any of the available car parking bays during non-peak parking demand periods i.e. 9 am to 2 pm.

Therefore, on assessment it is concluded that the child care centre does not need to provide separate on-site servicing and delivery bays and the proposed servicing arrangements are considered satisfactory.

12.0 PEDESTRIAN FACILITIES

The proposed development will not generate any significant external pedestrian traffic. While some children may be walked to the centre from nearby dwellings the majority of children are transported to the centre by private vehicles and parents then tend to be heading off to or coming home from work. Therefore, no nexus exists for the provision of additional external pedestrian infrastructure particularly noting the existing infrastructure in the area is more than adequate for the development.

However internal pedestrian linkages are important within the site and pedestrian footpaths and linkages have been provided from the internal car park and The Entrance Road directing parents to the entrance to the building. A suitable marked foot crossing of the car park at the entrance to the building is also provided to facilitate safe crossing of the car park by pedestrians at an appropriate location.

13.0 ALTERNATE TRANSPORT MODE FACILITIES

The proposed development is not expected to generate an increased demand for public transport therefore will not generate a need to improve the public transport services to the site. It is concluded that no changes to the existing public transport services is required as a result of this development and no additional infrastructure would be required. The development will not generate any significant additional bicycle traffic therefore no nexus for the provision of additional cycle ways in the vicinity of the site is necessary as a result of the development noting the existing infrastructure in the area is more than adequate for the development.

14.0 CONCLUSIONS

This traffic and parking assessment for a proposed child care centre at Lot 32 in DP 1223138 and Lot 9 in DP 1135884 - 396 & 404 The Entrance Road, Erina Heights has determined the following:

- ◆ Current traffic volumes on the local and state road network are below the technical mid-block capacity of the road;
- ◆ It is expected that the additional traffic generated by the development will be up to 96 vtpm in the AM peak and 84 vtpm in the PM peak;
- ◆ The local road network has sufficient spare two-way mid-block capacity to cater for the additional development traffic without adversely impacting on current level of service (LoS).
- ◆ The increase in traffic at any intersection resulting from this development will be less than 1 % of existing traffic volumes therefore will not have an adverse impact on the operation / capacity of any of the local and state road network intersections near the site;
- ◆ The proposed car park access is safe and suitable to service the car park as it complies with Central Coast Council's Gosford DCP (2013), except for the requirement of no access to a state road, and Australian Standard *AS2890.1-2004 Parking facilities – Part 1 - Off-street car parking*. As the western access to The Entrance Road is in a low speed urban environment, has adequate sight distance and is a left-out exit only egress the development is suitable and safe;
- ◆ Council can support the development with access off a state road as a variation to its DCP requirements as the majority of parking and pedestrian movements will be contained on-site, existing pedestrian infrastructure and crossing facilities on The Entrance Road are convenient to the site are suitably safe and access arrangements being left in and left out at separate entry and exit driveways with use of the existing bus lane for deceleration and acceleration out of and into the travel lanes provide a high level of access safety.
- ◆ The development provides sufficient on-site car parking to meet the requirements of Central Coast Council's Gosford DCP (2013).
- ◆ A review of the plans indicates that the car parking layout can comply with the requirements of both Central Coast Council's Gosford DCP (2013) and *Australian Standard AS2890.1-2004 Parking Facilities – Off-street car parking* ensuring suitable parking that is both safe and convenient for parents and children has been provided within the development;
- ◆ Servicing of the site will be infrequent (once or twice a week) by vehicles up to a small rigid vehicle (SRV) that could utilise the on-site car parking spaces during non-peak parking demand periods and waste collection (MRV) is proposed via a contractor within the carpark from the internal access road during non-peak periods with forward entry and exit easily achieved with the design of the car park and accesses;
- ◆ The proposed development will not generate any significant external pedestrian traffic demand. Therefore, no nexus exists for the provision of additional external pedestrian infrastructure noting the existing infrastructure in the area is more than adequate;
- ◆ The proposed development is not expected to generate an increased demand for public transport therefore will not require any changes to existing public transport services as a result of this development and no additional infrastructure will be required; and
- ◆ The development will not generate any significant additional bicycle traffic therefore no nexus for the provision of additional cycle ways in the vicinity of the site exists as a result of the development noting the existing infrastructure in the area is more than adequate.

15.0 RECOMMENDATION

Having carried out this traffic and parking assessment for a proposed child care centre at Lot 32 in DP 1223138 and Lot 9 in DP 1135884 - 396 & 404 The Entrance Road, Erina Heights it is recommended that the proposal can be supported from a traffic and parking impact perspective as it will not adversely impact on the local and state road network and complies with all relevant Central Coast Council, Australian Standard and NSW Roads and Maritime Services requirements subject to Council supporting a variation to its DCP requirements prohibiting Child Care Centres on state roads.



JR Garry BE (Civil), Masters of Traffic
Director
Intersect Traffic Pty Ltd



ATTACHMENT A

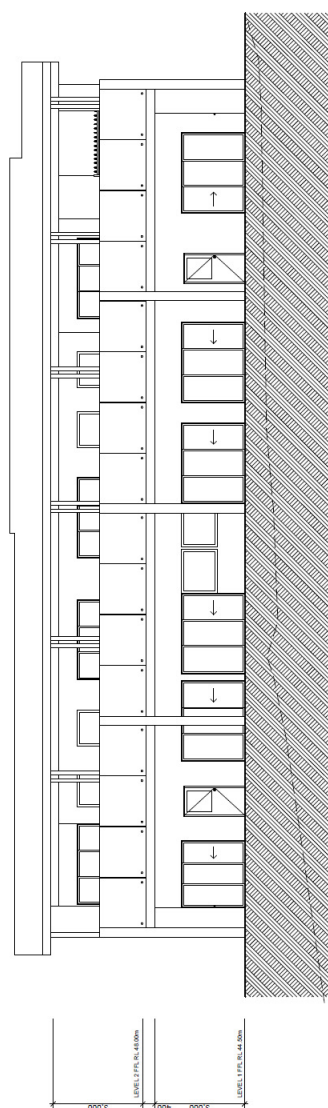
Development Plans



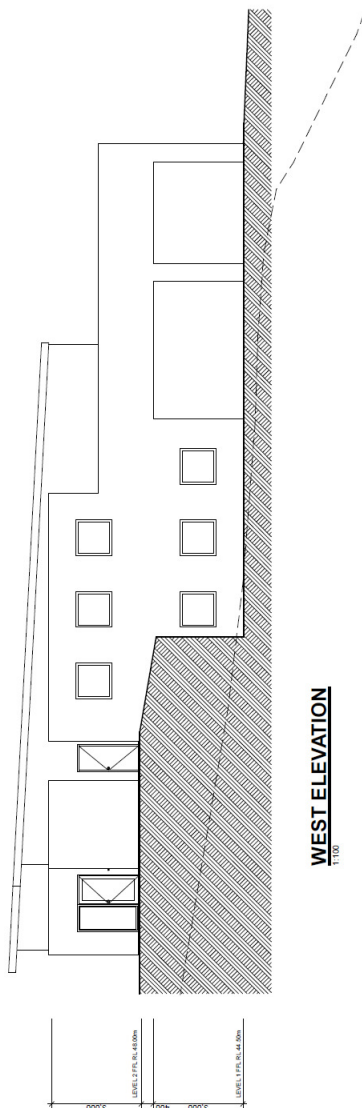


<p>SORENSEN DESIGN & PLANNING</p>	<p>PROJECT: PROPOSED DEVELOPMENT AT 386 THE ENTRANCE ROAD, ERINA HEIGHTS</p>	
	CLIENT:	KALFA & CHAUHAN TRUST
	TITLE:	LEVEL 2 PLAN
	FILE:	1802611 DATE: 17/07/2018 SHEET: 3 OF 6
<p>MEMBER OF BUILDING DESIGNER ASSOCIATION bda WINNER 2011 WINNER 2010</p>	<p>CONTACT DETAILS NEWCASTLE OFFICE 10/100 DUNEDIN STREET NEWCASTLE NSW 1500 PH: 081 439 5544 WWW.SORENSENDESIGN.COM.AU</p>	
	<p>PORT STEPHEN OFFICE 10/100 DUNEDIN STREET PORT STEPHEN NSW 1555 PH: 081 439 5544 WWW.SORENSENDESIGN.COM.AU</p>	
	<p>ISSUE: DETAILS</p>	
	<p>THESE PLANS ARE SUBJECT TO COPYRIGHT</p>	





SOUTH ELEVATION



WEST ELEVATION
1:100

[illegible]



ATTACHMENT B

Traffic Count Sheets

17/10/2018 - CENTRAL COAST HWY / AVOCA DR, ERINA

9:00 <<< HOUR ENDING

Wednesday

Summary:

CENTRAL COAST HWY / AVOCA DR

4963 Total Light Vehicles

211 Total Heavy Vehicles

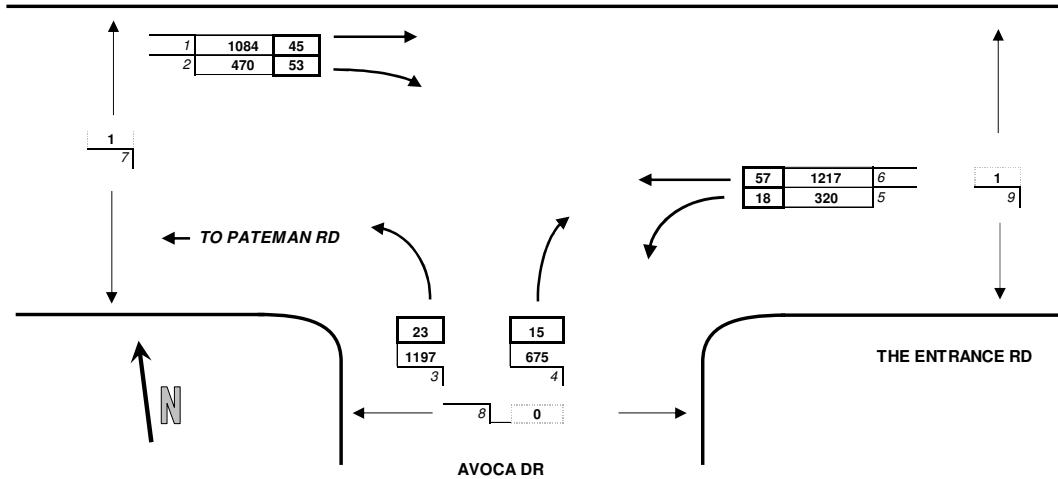
2 Total Pedestrians



Quality Surveys
192888

1084	Light Vehicles
45	Heavy Vehicles
1	Pedestrians

CENTRAL COAST HWY



17/10/2018 - CENTRAL COAST HWY / AVOCA DR, ERINA

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6		15 MIN HOUR			7	8	9
07:15	117	60	215	57	36	285	770			0	0	0
07:30	139	75	261	98	34	298	905			0	0	0
07:45	152	91	348	85	49	315	1040			2	0	0
08:00	211	79	329	158	71	322	1170	3885		0 <	0	1
08:15	218	99	323	141	68	367	1216	4331		0 <	0	0
08:30	286	119	331 <	175	70	312 <	1293	4719		0 <	0	0
08:45	272	141	286	194	92	291	1276	4955		1	0	1 <
09:00	308 <	111 <	257	165 <	90 <	247	1178	4963 <		0	0	0
Heavy Vehicles							Total Vehicles					
1	2	3	4	5	6		15 MIN HOUR					
07:15	10	4	6	2	2	13	37					
07:30	16	13	3	5	1	13	51					
07:45	9	4	4	3	1	7	28					
08:00	10	7	10	4	3	14	48	164				
08:15	11 <	9	7	5 <	3	21	56	183				
08:30	12	13	5	1	4	11	46	178				
08:45	9	18	5 <	4	6	9	51	201				
09:00	13	13 <	6	5	5 <	16 <	58	211 <				
All Vehicles							Total Vehicles					
1	2	3	4	5	6		15 MIN HOUR					
07:15	127	64	221	59	38	298	807					
07:30	155	88	264	103	35	311	956					
07:45	161	95	352	88	50	322	1068					
08:00	221	86	339	162	74	336	1218	4049				
08:15	229	108	330	146	71	388	1272	4514				
08:30	298	132	336 <	176	74	323 <	1339	4897				
08:45	281	159	291	198	98	300	1327	5156				
09:00	321 <	124 <	263	170 <	95 <	263	1236	5174 <				

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

17/10/2018 - CENTRAL COAST HWY / AVOCA DR, ERINA

16:00 <<< HOUR ENDING

Wednesday

Summary:

CENTRAL COAST HWY / AVOCA DR

5082 Total Light Vehicles

158 Total Heavy Vehicles

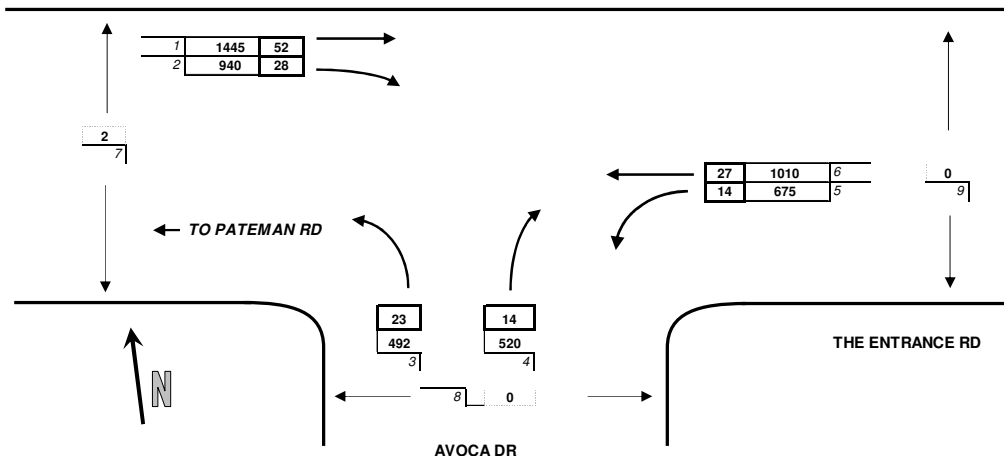
2 Total Pedestrians



Quality Surveys
192888

1445	Light Vehicles
52	Heavy Vehicles
2	Pedestrians

CENTRAL COAST HWY



17/10/2018 - CENTRAL COAST HWY / AVOCA DR, ERINA

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6	15 MIN HOUR	7	8	9	7	8	9
15:15	355	222	118	128	159	211	1193			0	0	0
15:30	375	244	130	132	175	267	1323			2	0	0
15:45	346	218	139	130	166	300	1299			0	0	0
16:00	369	256	105 <	130 <	175 <	232	1267 5082 <			0 <	0	0
16:15	300	195	104	80	144	241 <	1064 4953			0 <	0	0
16:30	326	180	93	69	158	235	1061 4691			0	0	0
16:45	387	242	106	87	153	248	1223 4615			0	0	0
17:00	409	296	94	96	153	212	1260 4608			1	0	0
17:15	417	273	89	91	166	237	1273 4817			0	0	1
17:30	379 <	287	86	90	156	233	1231 4987			0	0	1 <
17:45	365	281 <	90	97	165	185	1183 4947			0	0	0 <
18:00	373	278	90	116	124	182	1163 4850			0	0	0 <

Heavy Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR	7	8	9
15:15	10	10	7	2	3	8	40		
15:30	8	2	5	3	8	7	33		
15:45	24	12	6	5	3	5	55		
16:00	10 <	4 <	5 <	4 <	0 <	7 <	30 158 <		
16:15	10 <	2	7 <	1	0	7	27 145		
16:30	6	3	3	3	3	6	24 136		
16:45	7	4	3	2	0	6	22 103		
17:00	5	4	3	0	1	5	18 91		
17:15	10	5	2	0	1	8	26 90		
17:30	5	8	1	0	0	4	18 84		
17:45	5	9	0	1	2	3	20 82		
18:00	8	4	1	0	0	2	15 79		

All Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR	7	8	9
15:15	365	232	125	130	162	219	1233		
15:30	383	246	135	135	183	274	1356		
15:45	370	230	145	135	169	305	1354		
16:00	379	260	110 <	134 <	175 <	239	1297 5240 <		
16:15	310	197	111	81	144	248 <	1091 5098		
16:30	332	183	96	72	161	241	1085 4827		
16:45	394	246	109	89	153	254	1245 4718		
17:00	414	300	97	96	154	217	1278 4699		
17:15	427	278	91	91	167	245	1299 4907		
17:30	384 <	295	87	90	156	237	1249 5071		
17:45	370	290 <	90	98	167	188	1203 5029		
18:00	381	282	91	116	124	184	1178 4929		

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.