Government of **Western Australia**
Development Assessment Panels

Metro Central Joint Development Assessment Panel Agenda

Meeting Date and Time: 28 October 2019, 9:00 AM
Meeting Number: MCJDAP/370
Meeting Venue: Town of Bassendean
48 Old Perth Road
Bassendean

Attendance

DAP Members

Ms Megan Adair (Presiding Member)
Ms Rachel Chapman (Deputy Presiding Member)
Mr Michael Hardy (Specialist Member)
Mayor Renee McLennan (Local Government Member, Town of Bassendean)
Cr Kathryn Hamilton (Local Government Member, Town of Bassendean)

Officers in attendance

Mr Cameron Hartley (Town of Bassendean)
Mr Brian Reed (Town of Bassendean)

Minute Secretary

Ms Amy Holmes (Town of Bassendean)

Applicants and Submitters

Mr Julius Skinner (Thomson Geer Lawyers)
Mr Neil Teo (Dynamic Planning)

Members of the Public / Media

Nil

1. Declaration of Opening

The Presiding Member declares the meeting open and acknowledges the traditional owners and pay respects to Elders past and present of the land on which the meeting is being held.

2. Apologies

Nil

3. Members on Leave of Absence

Nil

4. Noting of Minutes

Signed minutes of previous meetings are available on the DAP website.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Nil

7. Deputations and Presentations

7.1 Mr Julius Skinner (Thomson Geer Lawyers) presenting in support of the application at Item 8.1. The presentation will address supporting the recommendation for approval and responding to the Reason 1 of the Town of Bassendean's separate recommendation for refusal.

7.2 Mr Neil Teo (Dynamic Planning & Developments) presenting in support of the application at Item 8.1. The presentation will address the proposal, planning context and Council resolution.

The Town of Bassendean may be provided with the opportunity to respond to questions of the panel, as invited by the Presiding Member.

8. Form 1 – Responsible Authority Reports – DAP Applications

8.1

Property Location:	Lot 54 (72) Railway Parade, Bassendean
Development Description:	Proposed Childcare Premises
Applicant:	Dynamic Planning and Developments
Owner:	Mark Hammond and Sandra Hammond
Responsible Authority:	Town of Bassendean
DAP File No:	DAP/19/01641

9. Form 2 – Responsible Authority Reports – Amending or cancelling DAP development approval

Nil

10. Appeals to the State Administrative Tribunal

Current Applications		
LG Name	**Property Location**	**Application Description**
City of Melville	Nos. 10, 12 & 14 (Lots 311, 800 & 801) Forbes Road and Nos. 40A, 40B & 40C (Lots 802, 803 & 804) Kishorn Road, Applecross	20 Storey Mixed-Use Development comprising 97 Multiple Dwellings, 15 Short Stay Accommodation Units and 5 Non-Residential tenancies (Office, Restaurant, Shop and 2 Co-Working Spaces)

Current Applications		
LG Name	**Property Location**	**Application Description**
City of South Perth	Lots 2-20 (72-74) Mill Point Road, South Perth	36 Level (118.2m) Mixed Use Development
City of South Perth	Lots 29-31 (50-52) Melville Parade, South Perth	31 Level (103.1m) Mixed Use Development
City of South Perth	Lot 220 (464) Canning Highway, Como	3-Storey Office Building redevelopment plus Basement Parking with 2 Large Format Digital Signs (Advertisement)
City of South Perth	Lots 81 and 82 (No.31) Labouchere Road and Lot 12 (No.24) Lyall Street, South Perth	Mixed use development comprising commercial and residential land uses (41 Storey) (next to Perth Zoo)
City of South Perth	Lot 4 (No. 3) Lyall Street and Lot 11 (No. 56) Melville Parade, South Perth	43-Storey Mixed Development

11. General Business / Meeting Closure

In accordance with Section 7.3 of the DAP Standing Orders 2017 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.

Government of **Western Australia**
Development Assessment Panels

Form 1 – Responsible Authority Report
(Regulation 12)

Property Location:	Lot 54 (No. 72) Railway Parade Bassendean
Development Description:	Proposed Childcare Premises
DAP Name:	Metro Central JDAP
Applicant:	Regan Cake – Dynamic Planning and Developments
Owner:	Mark Hammond and Sandra Hammond
Value of Development:	$2.15 million
LG Reference:	DABC/BDVAPPS 2019-106
Responsible Authority:	Town of Bassendean
Authorising Officer:	Brian Reed, Manager Development Services
DAP File No:	DAP/19/01641
Report Due Date:	18 October 2019
Application Received Date:	2 August 2019
Application Process Days:	90 Days
Attachment(s):	1 Development Plans Revision 2 2 Planning Assessment Report Revision 2 3 Waste Management Plan dated October 2019 4 Environmental Acoustic Assessment Revision1 5 State Planning Policy 5.4 Acoustic Assessment 6 Transport Impact Assessment Revision D 7 Schedule of Submissions an Applicant's response

Officer Recommendation:

That the Metro Central JDAP resolves to:

Approve DAP Application reference DAP/19/01641 and accompanying plans at **Attachment 1** in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the Local Planning Scheme No 10, and pursuant to Clause 30 of the Metropolitan Region Scheme subject to the following conditions:

1. The number of children and staff attending the Child Care Premises is limited to a maximum of 92 children and 16 staff at any one time.

2. The Child Care Premises is restricted in its hours of operation to the following:

   - Monday – Friday: Between 7:00am and 6:00pm; and
   - Saturday - Between 8:00am and 1:00pm.

3. Prior to the occupation or use of the development, all car parking spaces together with their access aisles to be clearly paved, sealed, marked and drained in accordance with AS2890.1 and thereafter maintained to the satisfaction of the Town.

4. Vehicle parking spaces identified on the approved site plan being clearly marked for “Visitors Only” or “Staff only” and used only as such.

5. A detailed and professionally prepared landscape plan being submitted prior to or with the application for a Building Permit for the Town's approval which provides full detail of the scope of works to be undertaken in both the private and public realms adjoining the development site, including, but not limited to:

    a) the location, type and size of proposed trees, shrubs and ground cover to be planted; and
    b) reticulation methods, including arrangements incorporated into the design to minimise water use.

6. Landscaping design and species selection shall pay particular attention to provisions contained within the Town of Bassendean Local Planning Policy No. 18 - Landscaping with Local Plants, and shall not include the use of artificial turf.

7. The site shall be landscaped in accordance with the approved landscaping plan and shall be maintained thereafter.

8. Service vehicles shall not enter the site during morning drop offs and afternoon pick- ups as no provision has been made on site for service vehicles to access the site.

9. Prior to the issue of a Building Permit for this development, a 1.0m strip of land shall be excised from the rear of the lot for the purposes of widening the adjoining right-of-way, or the owner shall enter into a legal agreement with the Town prepared by the Town's Solicitors at the owner's cost requiring excision of this land to be completed within twelve months of the issue of a Building Permit, or prior to the completion of the development, whichever occurs earlier.

10. The strip of land to the rear of the site which is excised for right-of-way purposes shall be paved, drained and kerbed to the specifications of the Town prior to occupation of the centre.

11. All storm water being contained and disposed of on site. Details of the method of storm water containment and disposal being included with the drawings submitted for a Building Permit.

12. The street number being prominently displayed at the front of the development.

13. The provision of side and rear fences, behind the street setback line, of 1.8 metres in height, unless higher fencing is shown on the approved drawings. Where the ground levels vary on either side of the fence, the required height shall be measured above the higher ground level.

14. Any fencing which is situated between a building and the Railway Parade or right-of-way frontages of the development site demonstrating compliance with the following requirements:

    a) The overall height of fencing not exceeding 1.8 metres above natural ground levels as viewed from outside of the development site; and

    b) Infill panels above base level solid components which are shown on the approved drawings being visually permeable.

16. External clothes drying is prohibited unless screened from view of the street or other public place.

17. A Waste Management Plan (WMP) is to be submitted for the Town's approval prior to or in conjunction with the application for a Building Permit. The WMP shall address matters including, but not necessarily limited to, the following:

    a) Measures to be implemented for the purpose of minimising the delivery of waste to landfill during occupation, including: the onsite separation of materials for recycling.

    b) Site Plan showing the location and size of the on-site rubbish disposal area(s), including the number of general rubbish, recycling bins, and food and organic waste bins to be provided for the development,;

    c) An estimation of the volume of waste to be generated by the proposed development and the capacity of this volume of waste to be accommodated by on site bin storage capacity;

    d) Details of intended method of collection; and

    e) Details of where the bins would be located when waiting collection.

18. The bin storage areas are:

    a) To be surrounded by a 1.8 metre high minimum wall with a self-closing gate;

    b) To be provided with 75mm min thickness concrete floors grading to a 100mm industrial floor waste, connected to sewer, with a hose cock to enable both the bins and bin storage area to be washed out; and

    c) To be provided with internal walls that are cement rendered (solid and impervious) to enable easy cleaning.

19. External fixtures, including but not restricted to air-conditioning units, satellite dishes and non-standard television aerials, but excluding solar collectors, are to be located such that they are not visible from the street. Prior to the issue of a building permit, details being submitted of all proposed ventilation systems, including the location of plant equipment, vents and air conditioning units for the Town’s approval. All equipment must be adequately screened to the satisfaction of the Town.

20. Bins shall be stored only in an approved, designated location, and shall not be stored within any of the approved car parking bays or associated access aisles.

21. The surface finish of boundary walls on the common boundaries with adjoining properties to be the same finish as the external wall finish for the remainder of the building, unless otherwise approved by the Town.

22. The incorporation of public art into the proposed development or a cash-in-lieu payment of one percent of the construction cost of the proposed development in accordance with the Town's adopted Local Planning Policy No. 15 "Percent for Art Policy". Detailed arrangements and agreement with respect to art to be provided on site or alternatively payment of the required fee shall be made prior to or in conjunction with the application for a Building Permit.

23. Prior to the issue of a building permit, a development bond for the sum of $43,000 being lodged with Council to ensure the satisfactory completion of all works associated with landscaping, car parking, access ways, screen walls, and other associated works.

24. Prior to the issue of a building permit, an acoustic report shall be submitted to the Town for approval which shall implement a Noise Management Plan which incorporates management measures in relation to:

    a) Number of children playing simultaneously in the outdoor play areas and duration of play;

    b) Restrictions on amplified music or musical instruments in outdoor areas;

    c) Type of outdoor activities to ensure compliance with permitted noise levels;

    d) Managing loud voices and distressed/crying children when outdoors;

    e) Noise minimisation strategies for parents/guardians at drop off and pick up times
    f) Deliveries to site i.e. noise from refrigerated food vehicles,

    g) Noise from mechanical services;

25. Measures recommended within the acoustic report shall be implemented to the satisfaction of the Town, and any costs associated with such implementation shall be the responsibility of the owner/applicant.

26. Prior to the issue of a building permit, revised plans shall be submitted for the approval of the Town, showing the provision of facilities shall include provision for storage and parking of bicycles and change rooms/ showers for cyclists.

27. Existing street trees within the street verge adjacent to the development site being protected with barricades during construction in accordance with the Town’s Policy for street tree protection.

28. The proposed crossover from Railway Parade shall be constructed of heavy duty trafficable brick pavers, the material and colour of which shall match the adjoining footpath. The crossover shall have a cream coloured header course which delineates the crossover from the adjoining footpath.

29. The redundant crossover shall be removed and the verge/footpath shall be reinstated to the satisfaction of the Town.

30. Prior to lodging an application for a building permit, all plant equipment, air conditioning units, hot water systems, water storage tanks, service metres, bin storage areas and clothes drying facilities must be located to minimise any visual and noise impact on the occupants of nearby properties and screened from view from the street. Design plans for the location, materials and construction for screening of any proposed external building plant must be submitted to and approved by the Town.

Advice Notes

1. With respect to the condition relating to public art, the applicant is advised that in relation to the requirement for a 1% Public Art contribution to be made that the Town can consider on site art works subject to Council approval and demonstration of equivalent value and public access.

3. With respect to the condition relating to the widening of the right-of- way, please liaise with the Town's Infrastructure Services Directorate in relation to obtaining detailed specifications for works associated with widening of the right-of-way to the rear of the site, prior to undertaking any works on site.

3. The issue of a Building Permit is required prior to the commencement of any works on site.

4 The following works shall be completed within the Railway Parade road reserve to facilitate the proposed development:

a) Existing 1m wide concrete apron associated with redundant crossover forward of No. 74 Railway Parade shall be removed and replaced with barrier kerb and brick paving to match the remainder of the footpath;

b) Existing Paved crossover forward of No. 74 Railway Parade shall be removed and replaced with paving to match the remainder of the footpath (both in material and paving pattern). This includes the removal of the white header course of paving (which defines the alignment of the existing crossover) and replacement to match the remainder of the footpath; and

c) The proposed crossover from Railway Parade shall be constructed of heavy duty trafficable brick pavers, the material and colour of which shall match the adjoining footpath. The crossover shall have a cream coloured header course which delineates the crossover from the adjoining footpath.

5. The food preparation area shall comply with the requirements of the *Food Act 2008* and the *Food Safety Standards 3.2.3 – Food Premises and Equipment.* Detailed fit-out plans to be provided to Health Services in order to ensure all requirements can be met

6. The food preparation area may be undersized for the proposed number of children. It is recommended that additional bench space is provided for the safe preparation of food, cooling of food and plating up of food for the children. It is also noted that allowance for a single bowl sink has been made. As such, please ensure that adequate space for a commercial dishwasher that can accommodate large pots etc., is allowed for. Alternatively, a double bowl sink with draining boards should be provided.

7. Ensure compliance with the Education and Care Services National Regulations 2012 and Education and Care Services National Law (WA) Act 2012.

8. A grease arrestor may be required for the food business. The applicant is required to contact the Water Corporation for advice in this regard.

9. Dial Before You Dig:

   Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please telephone 1100 before excavating or erecting structures. If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets.

   It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via Dial Before You Dig "1100" number in advance of any construction activities.

10. Telecommunications Act 1997 (Commonwealth):

    Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the Criminal Code Act 1995 (Cth) and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, please contact Telstra's Network Integrity Team on 1800810443.

11. If the development approval lapses, no development shall be carried out without further approval having first been sought and obtained.

12. Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) of the *Development Assessment Panel Regulations 2011*

Details: outline of development application

Insert Zoning MRS:	Urban
TPS:	Residential with a split density code of R20/40.
Insert Use Class:	Child Care Premises – An 'A' use within the Residential zone.
Insert Lot Size:	2561.00m²
Insert Existing Land Use:	Vacant land

The application proposes the erection of a single storey Child Care Premises with the following features:

- The facility is intended to accommodate 92 children and 16 staff;.
- There will be a total building area of 818m² with approximately 648m² of outdoor play area;
- A total of 32 car bays will be provided which includes one accessible bay; and.
- Operating hours will be from 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on Saturday.

The 'Child Care Premises' land use under the Scheme is defined as having the same meaning as in the Community Services (Child Care) Regulations 1988. Those Regulations which have since been repealed defined a Child Care Premises as meaning premises specified in a licence or permit as premises in which a child care service may be provided

The zoning of the land is 'Residential' with a split residential density coding of 'R20/40' pursuant to the Town of Bassendean Local Planning Scheme No.10 (LPS10). A Child Care Premises is listed as an "A" (discretionary) land use, and in particular means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the deemed provisions.

Background:

Development approval for 22 Multiple Dwellings was granted by the Metro Central JDAP at its meeting held 23 June 2015. An amended development approval for the proposed 22 Multiple Dwellings was subsequently granted by the Metro Central JDAP at its meeting held 29 May 2017 to:

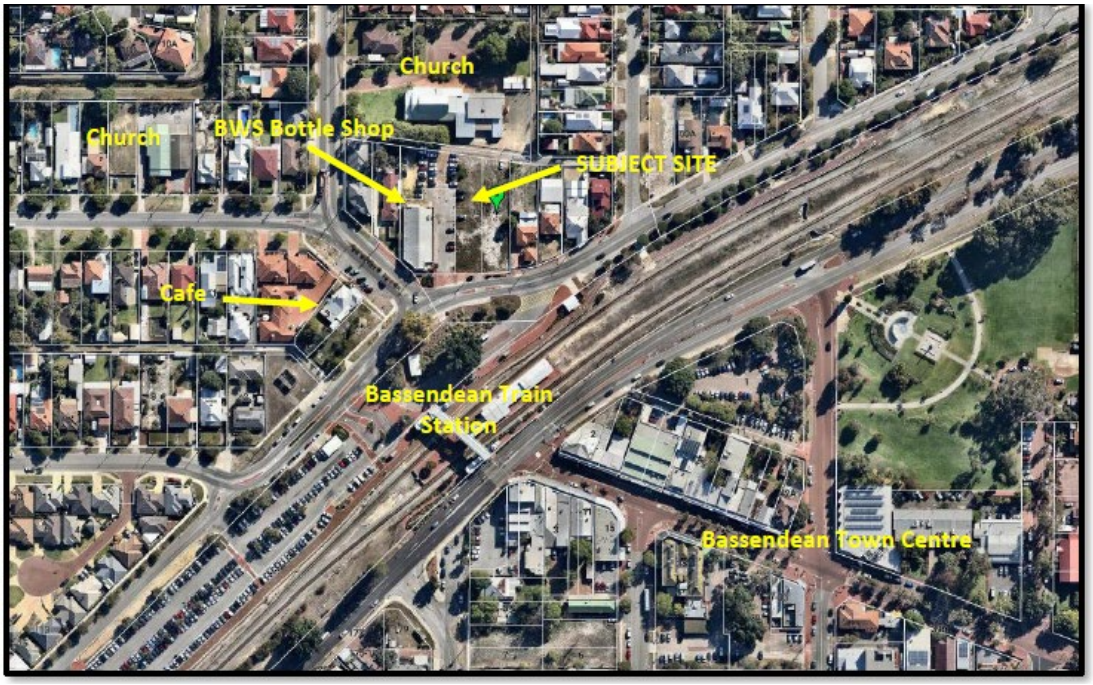
(a) Extend the period of validity within which the proposed development must be substantially commenced; and

(b) Delete certain conditions that had been imposed on the original approval.

A subsequent application to amend the approval so as to extend the period within which the development must be substantially commenced by a further two years, was refused by the JDAP meeting on 15 August 2019

Context of the proposal

The application site lays within an area that is zoned residential with a split density code of R20/40, however, there are a number of non- residential uses in close proximity to the site. The site is within close proximity of the Bassendean Railway Station and to the Town Centre beyond, as shown on the image below, which is reproduced from the applicant's report below



The adopted Local Planning Strategy recommends the establishment of commercial and home based business land uses immediately north of the railway line adjacent to the intersection of Broadway with Railway Parade, as a longer term option together with higher density residential development of R60/100 to the 400m walkable catchment from the Train Station.

The idea of obtaining more intense development of the site, in the future has been discussed with the applicant, who has advised that the childcare development is only intended to be an interim use noting current economic conditions. The applicant further advised that when economic conditions are more favourable, they would be more than willing to explore a more intensive use of the site. They stressed that this is not an uncommon approach as they have another development, which is following this same methodology in other local government areas.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005;*
- *Planning and Development (Local Planning Schemes) Regulations 2015, Schedule 2, Clause 67;*
- Local Planning Scheme No. 10 (LPS 10); and

- Metropolitan Region Scheme Text Clause 30.

State Government Policies

Planning Bulletin 72/2009 Child Care Centres.
State Planning Policy No. 5.4 Road and Rail Noise (SPP 5.4).

Local Policies

Local Planning Policy No 08 - Parking Specifications
Local Planning Policy No 14 - Onsite Stormwater Retention Policy
Local Planning Policy No 15 - Percent for Art Policy
Local Planning Policy No 18 - Landscaping With Local Plants.

Consultation:

Public Consultation

The application was advertised for a period of 21 days commencing on 14 August 2019 and concluding on 4 September 2019.

The application was advertised by the following means:

- By direct mail- out to landowners and occupiers who abut the development site or share the ROW with the development site (refer image below);
- A sign was erected on site to further advertise the proposal for a period of 21 days; and
- The application documentation was also put on the Town's website and made available for inspection at the Town's Customer Services Centre.

In response, two submissions were received objecting to the development.

Issues raised in submissions and officer's comments

Issue Raised	Officer's comments
Increase in traffic and congestion in the area, and the potential to block access to property.	**Not Supported** Railway Parade is classified as a local distributor road that can cater for 3000-6000 vehicles per day (vpd) Traffic classifiers were placed in Railway Parade between Fourth and Fifth Avenue in 2018. Average Daily Traffic (ADT) (7 days) = 2787 vpd Average Weekday Traffic (AWT) (5 days) = 2987 vpd The above vehicle numbers are below the criteria and therefore an increase in traffic will still be within the road hierarchy classification. Adequate provision has been made for on-site parking. The submitted Traffic Impact Assessment, also indicates that the site the amount of additional traffic generated by the development is acceptable.
Noise associated with the drop of children and play areas and air conditioning equipment	**Noted** This element can be addressed through a Noise Management Plan which is recommended as a condition of development approval**.**
Concern over waste management and pollution caused by number of nappies and food production.	**Noted** This element can be addressed through the Waste Management Plan which is recommended as a condition of development approval
Impact of antisocial behaviour that exists in the area on the safety of children.	**Noted** The development of the site is likely to reduce anti-social behaviour in the area through increased passive surveillance and activation of the site.
There is a need for construction management plan to control construction activities	**Supported** A Construction Management Plan is recommended as a condition of development approval.
There is a need for a noise management plan to control noise associated with the operation of the centre.	**Supported** A Noise Management Plan is recommended as a condition of development approval.
Access should not be allowed to the site from the right of way at the rear of the property.	**Supported** The landowner has legal access from the right-of –way. It should be noted, however, that there is no access to the development site from the right-of- way with the exception of the bin collection area.
The bollards that were formerly located in the right of way should be reinstated	**Not Supported** The right of way is designed to provide through access.

Consultation with other Agencies or Consultants

The application was not required to be referred to any external agencies.

Planning Assessment:

Local Planning Scheme

The tables below detail compliance with key development requirements and/or those non-compliant items. Where a specific item is not mentioned, than the proposal is compliant with that element.

Item	Requirement	Proposal	Compliance
Land Use	Not applicable	Child Care premises are an "A" use in the residential Zone	Discretionary
Car Parking	1 space per employee and 1 space per 6 children, which requires the provision of 32 car bays	The proposal provides 32 car bays, and the layout of the bays and access aisles complies with AS 2890.1	Complies
Landscaping for off-street parking	Boundary landscaping shall be provided for parking areas with more than 5 parking spaces and interior landscaping shall be provided for open parking areas with 21 or more parking spaces. Landscaping shall comply with the following requirements:		Discretion required
	(i) all areas between parking areas and adjoining streets shall have a minimum of 2.0 metres wide permanent landscape area, except in the instance of corner lots, where minimum width of 1.0 m shall apply. In addition, the local government may also require permanent landscaping between the parking area and all other side and rear property lines; and	The average width of the landscaping strip is approximately 1.5m, caused in part by the introduction of the blind aisle reversing area. A landscaping strip is included on the eastern lot boundary with a width of 400mm	
	(ii) for open parking areas, with 21 or more parking spaces, there shall be provided a minimum of 1 square metre of permanent landscaping for every 10 Square metres of parking bay area. Such landscaping shall not be in addition to any other landscaping required by this Scheme.	The area of the car park is 988.3m².while the area devoted to landscaping is 76.9m².	
4.7.6 Bicycle Facilities	The local government may require the provision of facilities that provide for and encourage cycling as part of any private development. Such facilities shall provide for storage and parking of bicycles and change	The Traffic Impact Assessment makes the point that bicycle racks can be provided on site to provide sufficient parking, and that staff toilet/ change rooms are provided within the development.	Discretion required.

	rooms/showers for cyclists.	The proposal does not include shower facilities.	

State and Local Planning Policies

Item	Requirement	Proposal	Compliance
State Planning Policy No. 5.4 Road and Rail Noise (SPP 5.4)	Ensures that sensitive land uses are not adversely affected by transport noise.	Addressed through State Planning Policy 5.4 Acoustic Assessment	Complies
Local Planning Policy No 14 - Onsite Stormwater Retention Policy	Requires stormwater to be contained on site	The applicant has advised that a condition can be placed on the approval addressing this issue.	Complies
Local Planning Policy No 15 - Percent for Art Policy	Requires public art to be provided in commercial development with a value above $1,000,000	The applicant has advised that a condition can be placed on the approval addressing this issue.	Complies
Local Planning Policy No 18 - Landscaping With Local Plants	This policy is to assist the Town of Bassendean to promote the protection and enhancement of natural resources within the region by prescribing minimum standards for landscaping with local native plants.	The applicant has advised that a condition can be placed on the approval addressing this issue.	The applicant has advised that a condition can be placed on the approval addressing this issue.
Development Bonds Policy - Compliance With Conditions of Planning Consent Policy	The policy requires that refundable bonds are paid by the applicant to ensure that the development is constructed in accordance with the condition imposed on the approval.		Condition included

Planning bulletin 72/2009 Child Care Centres

Planning bulletin 72/2009 Child Care Centres is intended to provide a guidance document for decision-makers, developers and the community for use when planning for child care centres. Inasmuch as the Scheme only contains minimal controls for Child Care Centres, the following table assesses the application against this policy.

Item	Response
3.2 Objectives	
Distributed strategically to provide the maximum benefit to the community it serves;	The site is well located with good access to public transport facilities. There are five other long day child care centres distributed throughout the Town, with one located in the suburb of Ashfield , one in Eden Hill and the other three within the suburb of Bassendean. The closest child care centre (MercyCare)is located approximately 425m walking distance away, via the train station overpass
Within easy walking distance or part of appropriate commercial, recreation or community nodes and education	The site has sufficient access to the Town Centre, through train station infrastructure as well as pedestrian linkages underneath and over Guildford road.

facilities;	
Located in areas where adjoining uses are compatible with a child care centre (includes considering all permissible uses under the zoning of adjoining properties); and	The general area is zoned for residential purposes and the uses of the surrounding properties and the zoning of the area will not have a detrimental effect on a child care centre. It is acknowledged that the development abuts a site with an additional use for the purposes of a liquor store/ shop (76 Railway Parade). However, there is nothing to prohibit a child care premises next to an approved liquor store. In saying this, If there was an intension to locate a liquor store next to an established child care centre, this may prove problematic, through the (former) department of racing gaming and liquor.
Serviced by public transport (where available).	The site has good access to train and bus services adjacent the site.
3.3 Location of child care centres	
Considered suitable from a traffic engineering/safety point of view	The proposal is supported by a Traffic Impact Assessment
The service provided by the centre will have a demonstrable, adverse impact on the existing or planned level of child care centre services enjoyed by the local community	There are five other long day care centres in the Town of Bassendean, with only two of those centres having limited vacancies. There are no other child care centres currently proposed in the Town
Access is from a major road or in close proximity to a major intersection where there may be safety concerns	The proposal is supported by a Traffic Impact Assessment
Access is from a local access street which may impact on the amenity of the area due to traffic and parking;	Access is proposed via a Local Distributor, rather than a local access road.
The current use or any permissible use under the zoning of the adjoining premises produces unacceptable levels of noise, fumes or emissions or poses a potential hazard by reason of activities or materials stored on-site;	There are no activities either existing or allowed for under the Scheme that would allow adjoining premises to produce unacceptable levels of noise, fumes or emissions or poses a potential hazard by reason of activities or materials stored on-site.
Noise produced by roads, railways and aircraft are likely to have an adverse impact on the site; and/or	The proposal has been assessed against State Planning Policy 5.4 Road and Rail Noise and the proposal is deemed acceptable.
The site is in a heavy industry area or in the buffer area of a heavy industry area.	The site is not within a Heavy Industrial Area, nor a buffer to an Industrial area.
3.4 Site characteristics	
Sites selected for child care centres should be of sufficient size and suitable shape to accommodate the development, including all buildings and structures, parking for staff and parents, outdoor play areas and landscaping, as determined by the relevant local planning scheme or local policy and applicable regulations. As a general rule sites in a residential area should be of regular shape and greater than 1000 sqm.	Whilst the site is not regular in shape, it has an area of 2561m², and generally offers suitable space to accommodate the proposal.
The topography of the site and surrounds should also be considered as steep slopes may affect access to the facility, noise transfer and methods of noise mitigation.	The site and its surrounds do not contain steep slopes.
Sites selected for child care centres	The site has not been reported to the Department of Water and

should also be assessed to determine their potential for soil and groundwater contamination	Environmental Regulation as a potentially contaminated site. Prior to the site being vacant it was occupied by substantially two dwellings and there is nothing to suggest that this former development would have been a cause of contamination. The closest recorded contaminated site is located some 220m to the west of the site, and this site is used for residential purposes and has a classification of *Remediated for restricted use*
3.5 Design of centres	
The visual appearance of the child care centre, including any signage, building design, colour, scale, shape and form, should be in accordance with the local government local planning scheme or relevant local policy and applicable regulations. In the absence of any specific provisions, the visual appearance of the development should reflect the character of the area, enhance its amenity and be considered appropriate for regular use by children.	Whilst the visual appearance of the proposed development is not controlled by the Scheme, the building is single storey in height, and the setbacks to lot boundaries are greater than would be required for residential buildings, with the exception of three portions of wall with a zero setback against the adjoining liquor store / car park
Parking areas should be located in front of the building. If this is not possible they should be clearly visible and easily accessible from the entry to the site.	Parking is provided in front of the building. A separate pedestrian path is provided from Railway Parade to the entrance of the building.
Outdoor play areas should be in a safe location on the site, and away from any adjoining noise-sensitive premises, such as dwellings and nursing homes	The outdoor play area is adjoined by residential dwellings to the west and east. It is considered that this element can be dealt with through conditions imposed on any approval requiring a noise management plan.
Landscaping should be provided in accordance with the relevant local planning scheme or relevant local policy or applicable regulations. In the absence of any such provisions, landscaping will be required along the street frontage of the development to a standard equal to that required or provided for on adjacent properties. Landscaping should not include potentially hazardous heights, landscape fittings, and potentially toxic plants.	Landscaping is proposed along the frontage of the site, however the Town is asked to exercise discretion in this regard.
3.6 Traffic impacts	
A traffic impact statement/ assessment should be required for the development of a child care centre.	A Traffic Impact Assessment has been provided by the applicant which concludes The site will generate approximately 74 vehicle trips during the AM peak and 64 vehicle trips in the PM peak period. The car parking provision complies with the Local Planning Scheme No 10 The site benefits from excellent public transport facilities The site benefits from excellent pedestrian and cycling facilities Vehicular sightlines for the proposed access satisfy the minimum sightline required as described within AS2890.1
A child care centre should be approved only if it can be demonstrated that it will have a	It is considered that approval of the proposed child care centre will have a minimal impact on the functionality and amenity of the area, and will not not create or exacerbate any unsafe

minimal impact on the functionality and amenity of an area and will not create or exacerbate any unsafe conditions for children and families using the centre, or for pedestrians or road users.	conditions for children and families using the centre, or for pedestrians or road users
3.7 Noise impacts	
Where a child care centre is located adjacent to a noise-sensitive use, such as houses, retirement villages and nursing homes, the noise-generating activities of the child care centre, such as the outdoor play areas, parking areas and any plant and equipment, are to be located away from the noise-sensitive use.	While the child care centre is adjoined by noise sensitive uses in the form of dwellings to the south and east, it is considered that noise can appropriately be managed by conditions imposed on any approval
Where, due to design limitations or safety considerations, noise-generating activities such as outdoor play areas are located close to noise-sensitive uses, appropriate noise mitigation is to be undertaken.	This element will be managed through conditions imposed on any approval
As there is now a considerable body of research that demonstrates the negative impact of inappropriate noise on child development, the design and construction of buildings may include noise-mitigation measures to reduce impact from external sources and to achieve accepted indoor noise limits.	The only known source of external noise is associated with the Perth to Midland railway line. The acoustic report prepared by the applicant indicates the interior of the building and the outdoor play areas will not be affected by noise and would comply with the requirements of State Planning Policy 5.4.

Officer Comments

Land Use

The relevant objectives for the residential zone are to:

> *b) to continue and increase the attraction for young families to reside and raise their families in the Bassendean community;*
>
> *e) to limit non-residential activities to those of which the predominant function is to service the local residential neighbourhood and for self-employment or creative activities, provided such activities have no detrimental effect on the residential amenity; and*
>
> *g) to ensure that subdivision and development comply with the Local Planning Strategy and the principles of any Local Planning Policy adopted by the Council*

The proposal is assessed as broadly meeting the objectives of the residential zone.

With the imposition of conditions including the preparation of noise and waste management plans, the proposal is considered not to have a detrimental effect on the amenity of the surrounding residential zone.

Landscaping

The application requires discretion in terms of the extent of landscaping provided in association with the car park. The Local Planning Scheme requirement equates to the provision of 10% of the area of the car park being provided with landscaping, where the proposal includes 8%. The proposal does include 13 trees being provided within the car park area, which represents better than 1 tree for every 3 car spaces, and the 2% reduction in the area provided for landscaping is supported.

Bicycle facilities

Clause 4.7.6 of the Scheme states that the local government may require the provision of facilities that provide for and encouraging cycling as part of any private development. Such facilities shall include provision for storage and parking of bicycles and change rooms/ showers for cyclists. The application does not contain sufficient information in this regard and a condition has been recommended addressing this matter. In particular, it is considered that cycle storage should be provided and showers made available for staff.

Planning Discretion

Clause 4.5 of the Local Planning Scheme No 10 gives the local government the power to approve and application that does not comply with a standard or requirement of the Scheme. This power can only be exercised where:

a) approval of the proposed development would be appropriate having regard to the criteria set out in clause 67 of the deemed provisions; and

b) the non-compliance will not have an adverse effect upon the occupiers or users of the development, the inhabitants of the locality or the likely future development of the locality.

Relevant considerations under Clause 67 of the Deemed Provisions

In considering an application for development approval, the local government is to have due regard to the following matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application:

(a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;

(b) the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;

(c) any approved State planning policy;

(m) the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;

(n) the amenity of the locality including the following:

(i) environmental impacts of the development;
(ii) the character of the locality;
(iii) social impacts of the development;

(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;

(s) the adequacy of —
(i) the proposed means of access to and egress from the site; and
(ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;

(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;

(u) the availability and adequacy for the development of the following
- *public transport services;*
- *public utility services;*
- *storage, management and collection of waste;*

- *access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities);*
- *access by older people and people with disability;*

(v) the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses;

(x) the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;

(y) any submissions received on the application; and

(zb) any other planning consideration the local government considers appropriate.

The application is considered to satisfactorily address the matters that the local government is required to consider.

The recommendation includes a number of conditions to safeguard the amenity of the area, and to ensure that the development functions appropriately.

Council Recommendation

That Council,

Advise the Metro-Central Joint Development Assessment Panel that Council does not support the Officers Recommendation in the Responsible Authority Report to the Panel and the application for the proposed Childcare Premises for Lot 54 (No. 72) Railway Parade, Bassendean should be refused on the grounds:

1 That it represents an underdevelopment of the land and does not align with Council's and State Government's future intent and desire for more intensive, mixed use development in this location due to its close proximity to the Bassendean Train Station; and

2 The proposed Childcare Centre fails to meet all of the objectives of Planning Bulletin 72/2009 Child Care Centres and therefore is inconsistent with the principles of orderly and proper planning, given the Childcare Centre is proposed to be located next to an approved liquor store (76 Railway Parade, Bassendean). Council considers that a liquor store and childcare premises are incompatible land uses and it would be inappropriate to locate a childcare premise next to an existing liquor store.

Conclusion

The application for development approval proposes a single storey building comprising a Child Care Premises land use at No. 72 Railway Parade, Bassendean.

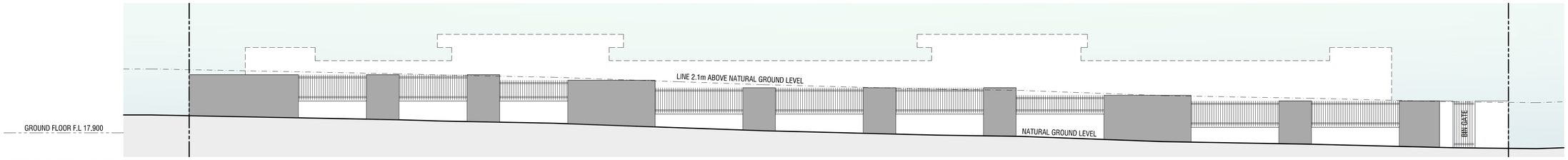
It is acknowledged that the proposed land use is discretionary under the Town of Bassendean Local Planning Scheme No. 10 and that the application requires the exercise of discretion on a number of development standards, as discussed earlier within this report.

During the consultation period two submissions provided comments relating to the perceived negative impact that the proposal may have on the immediate surrounding area.

It is anticipated that any perceived negative impacts regarding the development can be overcome with appropriate conditions including requiring compliance with the Acoustic Report.

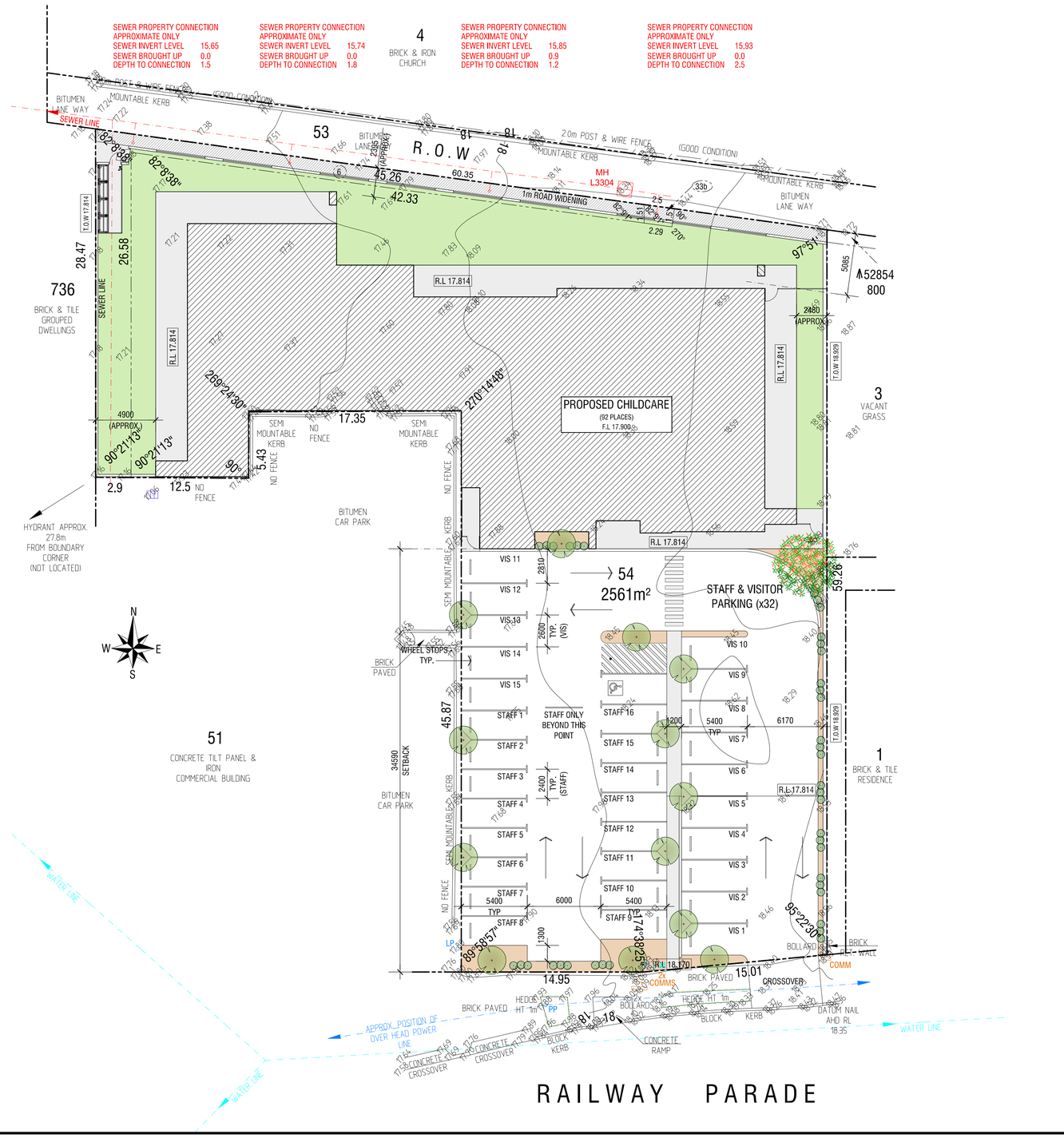
In this context, and given the need to consider the merits of the development on a performance based approach, Council Officers are satisfied that the proposed development satisfies those relevant conditions outlined in the scheme.

On balance, the officers of the Town recommend that discretion is exercised and this application for development approval for a Childcare premises at Lot 54 (No.72) Railway Parade Bassendean is approved, subject to recommended conditions and advice notes.



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

SCALE 1:200 @ A1

DRAWN MJG

CHECKED MJG

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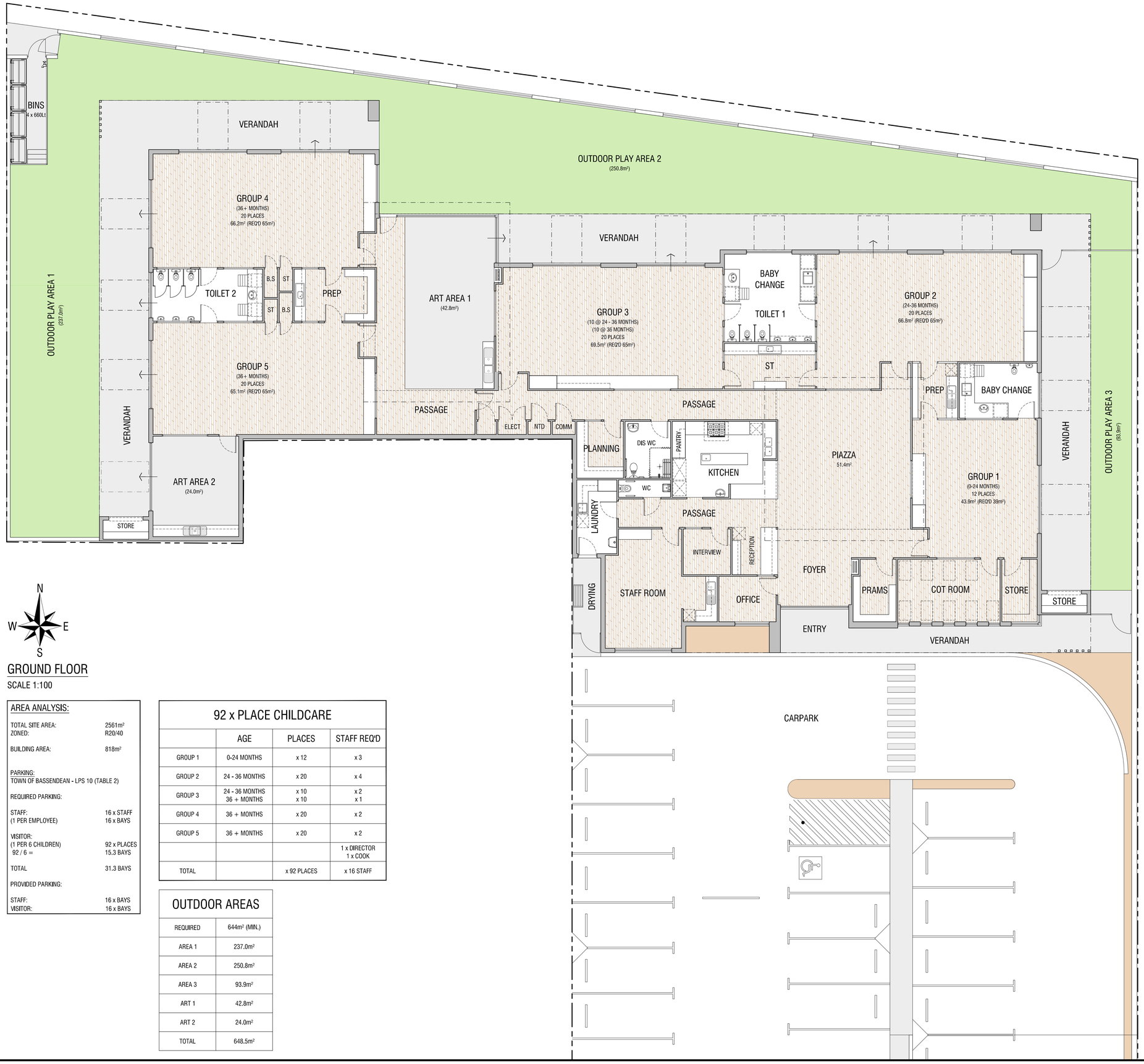

N
W E
S

GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	818m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
AREA 1	237.0m²
AREA 2	250.8m²
AREA 3	93.9m²
ART 1	42.8m²
ART 2	24.0m²
TOTAL	648.5m²

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

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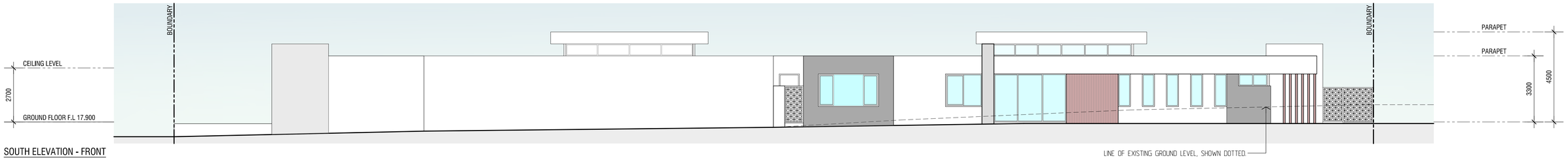
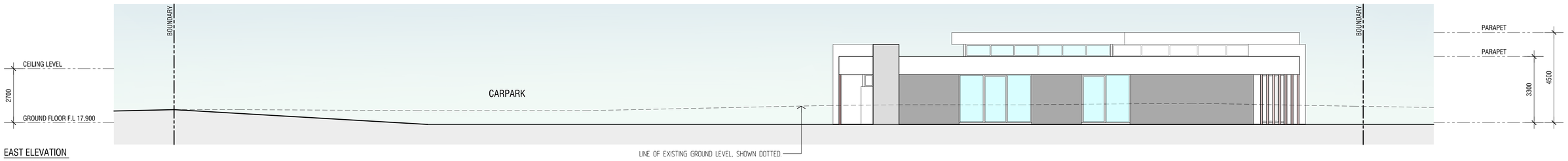
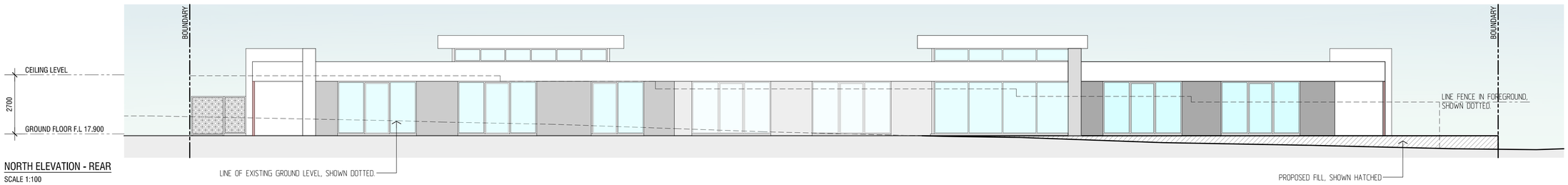


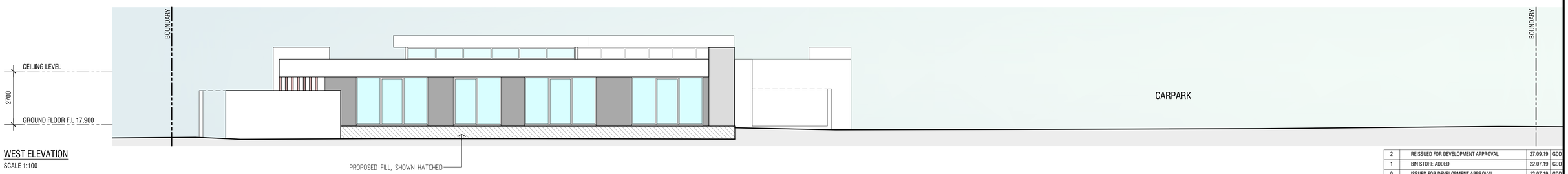
SOUTH ELEVATION - FRONT
SCALE 1:100



EAST ELEVATION
SCALE 1:100



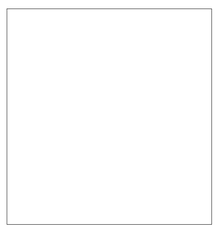
NORTH ELEVATION - REAR
SCALE 1:100



WEST ELEVATION
SCALE 1:100

FEATURE COLOUR:
'DOMINO GREY'

CLADDING:
VERTICAL JARRAH CLADDING



MAIN COLOUR:
'LEXICON WHITE'

FEATURE COLOUR:
'WALLABY GREY'

MATERIALS PALETTE

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- ELEVATIONS

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A03	2

CAD FILE NAME
8123-SD_A00

SCALE
1:100 @ A1

DRAWN
MJG

CHECKED
MJG

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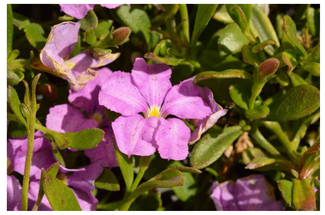
BRACHYCHITON ACERIFOLIA


LAGERSTROEMIA INDICA BILOXI


DAMPIERA LINEARIS


EREMOPHILA GLABRA PROSTRATA


GREVILLEA THELEMANNIANA


SCAEVOLA

LEGEND

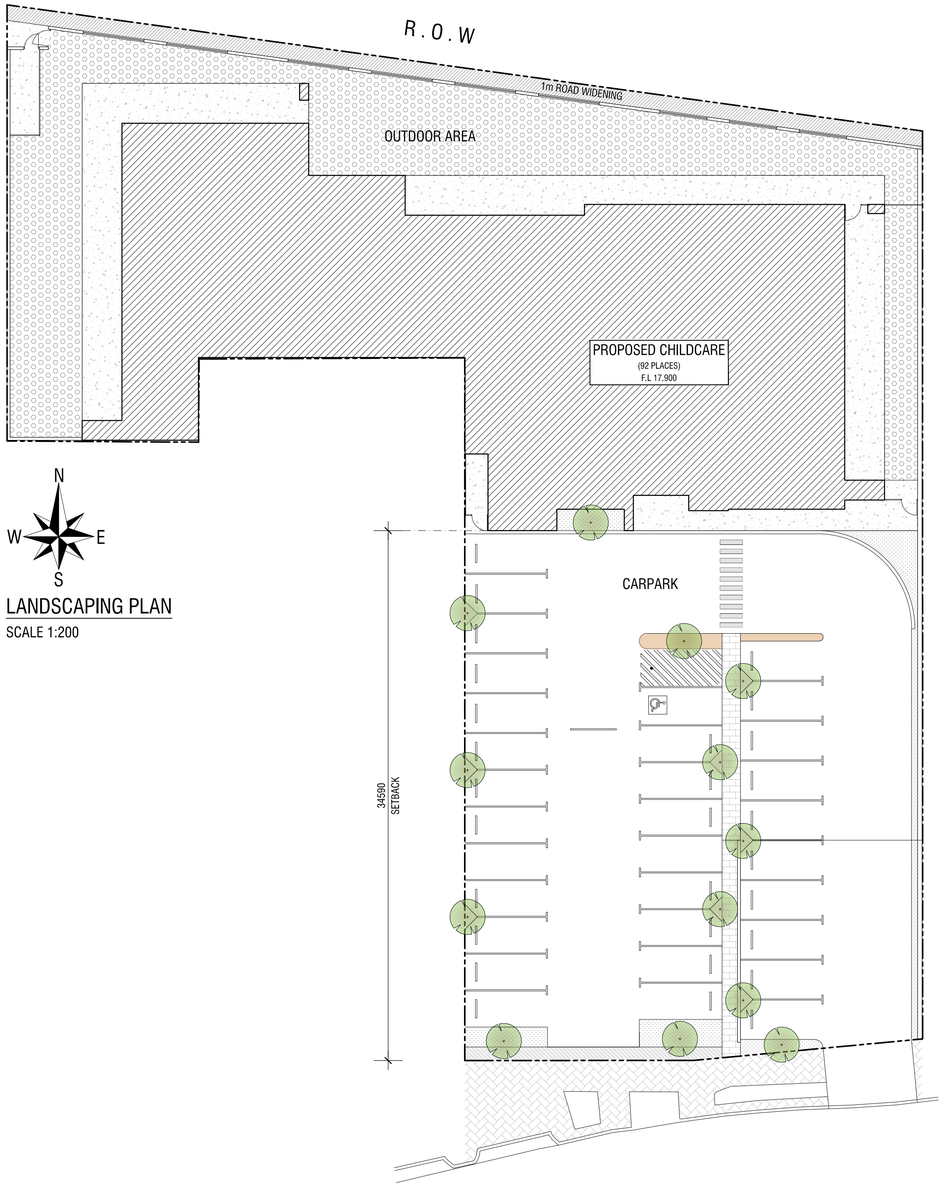
- NON-SLIP CONCRETE
- PAVING
- EXISTING VERGE PAVING (TO REMAIN)
- NATURE PLAY AREA
- PLANTING MIX 'A'
- PLANTING MIX 'B'
- ORGANIC MULCH (75mm DEPTH)

PLANT SCHEDULE

BRACHYCHITON ACERIFOLIA (ILLAWARRA FLAME TREE)

LAGERSTROEMIA INDICA BILOXI (CREPE MYRTLE)

SPECIES	POT SIZE	QUANTITY	PLANT MIX
TREES			
BRACHYCHITON ACERIFOLIA	200L	1	N/A
LAGERSTROEMIA INDICA BILOXI	90L	13	N/A
GROUNDCOVERS			
DAMPIERA LINEARIS	130/140mm	4/m2	A
EREMOPHILA GLABRA PROSTRATA	130/140mm	4/m2	A
GREVILLEA THELEMANNIANA	130/140mm	4/m2	B
SCAEVOLA	130/140mm	4/m2	B



LANDSCAPING PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
1	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	22.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- LANDSCAPE PLAN

PROJECT No. 8123
STAGE SD
DRAWING NO. A04
REVISION 1
CAD FILE NAME 8123-SD_A00
SCALE 1:200 @ A1
DRAWN MJG
CHECKED MJG

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DYNAMIC PLANNING
AND DEVELOPMENTS

Lot 54 (No. 72) Railway Parade, Bassendean

Proposed Child Care Premises

Planning Assessment Report

October 2019

Project No.1012

TABLE OF CONTENTS

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1.0 INTRODUCTION

Dynamic Planning and Developments Pty Ltd (DPD) acts on behalf of AGEM Property Group who are the contracted purchaser of Lot 54 (No. 72) Railway Parade, Bassendean (herein referred to as the 'subject site').

This report has been prepared in support of an Application for Planning Approval for a proposed Child Care Premises development on the abovementioned property. The report contains the following pertinent town planning details of the proposal deemed to be relevant as part of considering the merits of the application:

- Site details;
- Details of the proposal;
- Detailed assessment of the proposal against the relevant planning provisions applicable; and
- An overview of any additional considerations that are applicable.

For reasons detailed in the following sections, the proposal is considered to warrant favourable consideration by the Town of Bassendean and subsequent approval by the Joint Development Assessment Panel (JDAP).

2.0 SITE DETAILS

2.1 Legal Description

The subject site is made up of one (1) freehold lot described as:

- *"Lot 54 on Deposited Plan 74766"* contained under Volume 2868, Folio 757.

The subject site has a total area of 2,561m^2.

A copy of the Certificate of Title for the subject site is contained in **Appendix 1**.

2.2 Site Context

The subject site is situated within the municipal locality of the Town of Bassendean and the suburb of Bassendean. The site is located approximately 11km north-east of the Perth CBD and is situated within an established residential precinct with a mixture of commercial uses that include a BWS bottle shop, a café and two different churches.

The site fronts Railway Parade and also a laneway to the rear. To the east of the property are existing residential dwellings, to the west is an existing bottle shop and to the north is a church. More broadly, the subject site is also located in close proximity to the Bassendean train station and other commercial uses within the Bassendean Town Centre on the opposite side of the railway line.

Being located on Railway Parade, a key local road, the subject site is afforded a high degree of accessibility to other higher order roads such as Guildford Road and Collier Road which are

reserved as regional roads under the provisions of the Metropolitan Region Scheme (MRS). These regional roads provide important access to the wider Perth Metropolitan Area.

Figures 1 and 2 below provide an aerial context of the subject site. Figures 3 to 6 depict the subject site and surrounds.

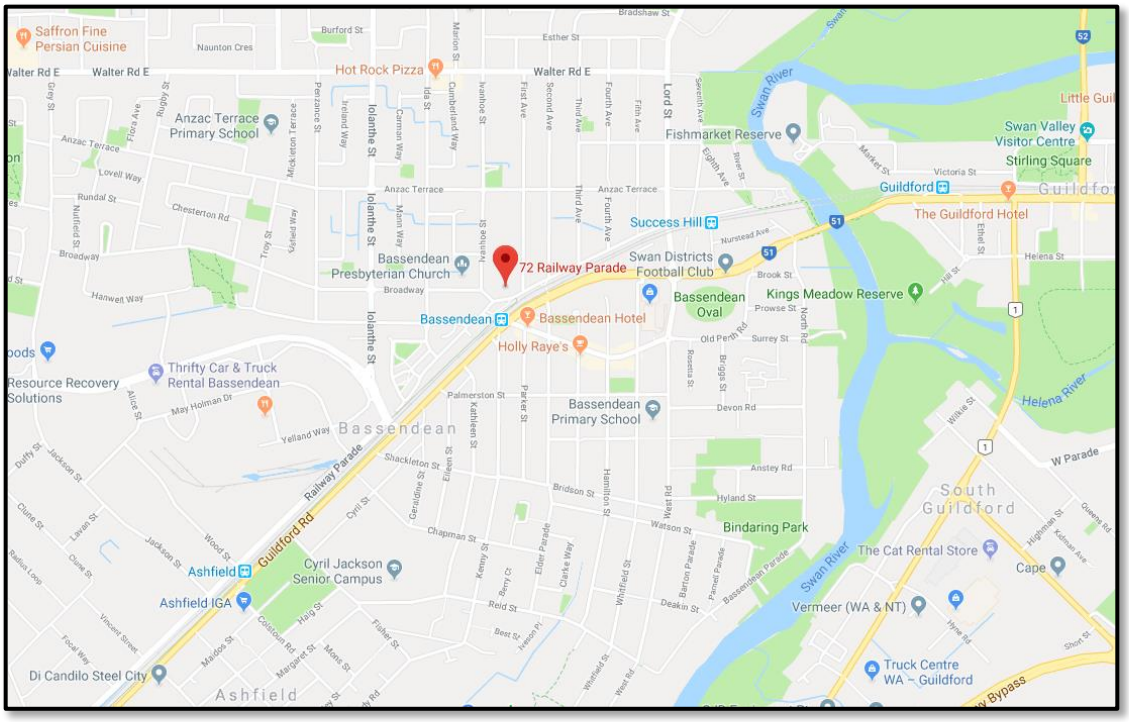


Figure 1 – Regional Context of Subject Site

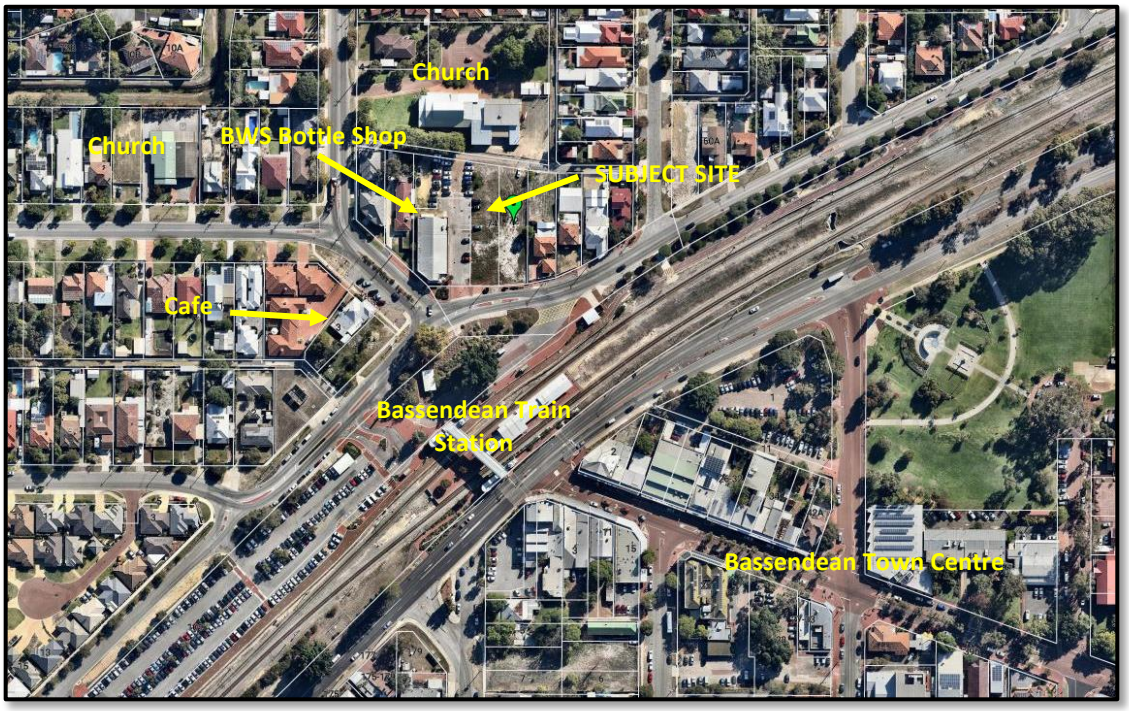


Figure 2 – Local Context of Subject site

3.0 BACKGROUND

On the 23 June 2015, the Metro Central JDAP resolved to approve a development application for 22 multiple dwellings at the subject site. Since the original approval the owners of the site have since sought a Form 2 application approval to extend the allowed approval timeframe and submit a number of modified plans to satisfy a number of the original conditions imposed on the approval. This Form 2 application was subsequently approved which extended the approval timeframe to the 23 June 2019. In addition to the approved Form 2, it is noted that the contracted purchaser have also sought a further extension of the approved development application in order to provide them with flexibility in terms of development options as they assume control of the site.

The approved development which included four separate blocks for multiple dwellings and associated parking and storerooms is considered represent development at a much greater scale than what is proposed by this application. In this regard the impact on the surrounding sites will be substantially less in terms of building bulk, overlooking and overshadowing etc.

4.0 PROPOSAL

The proposal seeks planning approval for a new 'Childcare Premises'. By virtue of the shape of the lot the proposed development will be focused toward the rear of the property in close proximity to the laneway with the parking area accessible from Railway Parade and positioned at the front of the property. An overview of the proposed development has been provided below:

- The facility is intended to accommodate 92 children and 16 staff;
- There will be a total of 818sqm of building area with 648sqm of landscaped outdoor play area;
- A total of 32 car bays will be provided which includes one (1) disabled bay; and
- Internally the facility will provide five (5) separate group rooms for children, two art areas, a staff room with the associated amenities, a central office/reception area with a piazza for children and parents to gather whilst they are received by the facility, a cot room and various toilets and other amenities.

Appendix 2 contains developments plans and a schedule of external materials associated with the subject application.

As far as the operation of the proposed childcare is concerned the following will be applicable:

- Operating hours will be from 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on Saturday.

- The childcare premises will be a 'Nido Early Learning Centre' The word 'Nido' is Italian for 'nest' and was inspired by the Italian principles of the 'Reggio Emilia Approach', which is the world-class educational philosophy upon which our schools are founded. Reggio Emilia is named after the Italian city itself and creates an environment for children where they are encouraged to create, trust, explore, discover and excel.

  Nido have taken the Reggio Emilia philosophy to early childhood development and adapted it to suit the Australian culture, climate and educational expectations of

families. Their childcare centres use calming colours, natural products wherever possible and are designed to inspire a love of the natural environment. We have utilised premium finishes, textures and high quality furnishings throughout and purchased equipment that will extend creativity and curiosity, with the intention that the children will be as comfortable and confident at the school as they are in their own home.

- The various age groups and number of children permitted at the centre is outlined on the attached development plans.

- Whilst commercial demand isn't a relevant planning consideration, other childcare centres within the immediate locality are effectively at capacity suggesting that there is a gap in the market for the proposed Nido Early Learning Centre to fill. A summary of the other childcare centres have been outlined below:

    - MercyCare Early Learning (Limited Vacancy)
    - Wind In the Willows Bassendean (No Vacancy)
    - Organikids Childcare Centre (No Vacancy)
    - Amare Child Care (Limited Vacancy)
    - Wind in the Willows Ashfield (No Vacancy)

In light of the above operational characteristics it is clear that the Nido Early Learning Centre will bring a brand name childcare provider to the Bassendean area which will improve the level of service available to local Bassendean residents.

5.0 PLANNING & DEVELOPMENT FRAMEWORK

5.1 Metropolitan Region Scheme

The subject site is zoned 'Urban' under the provisions of the Metropolitan Region Scheme (MRS). The proposed development is consistent with the 'Urban' MRS zoning applicable to the subject site.

It is noted that the subject site is located in close proximity to the Midland train line which is reserved for the purposes of 'Railways' under the provisions of the MRS.

5.2 Town of Bassendean Local Planning Scheme No. 10 (LPS10)

5.2.1 Zoning

In accordance with the Town of Bassendean LPS10, the subject site is zoned 'Residential' with an applicable density coding of R20/40.

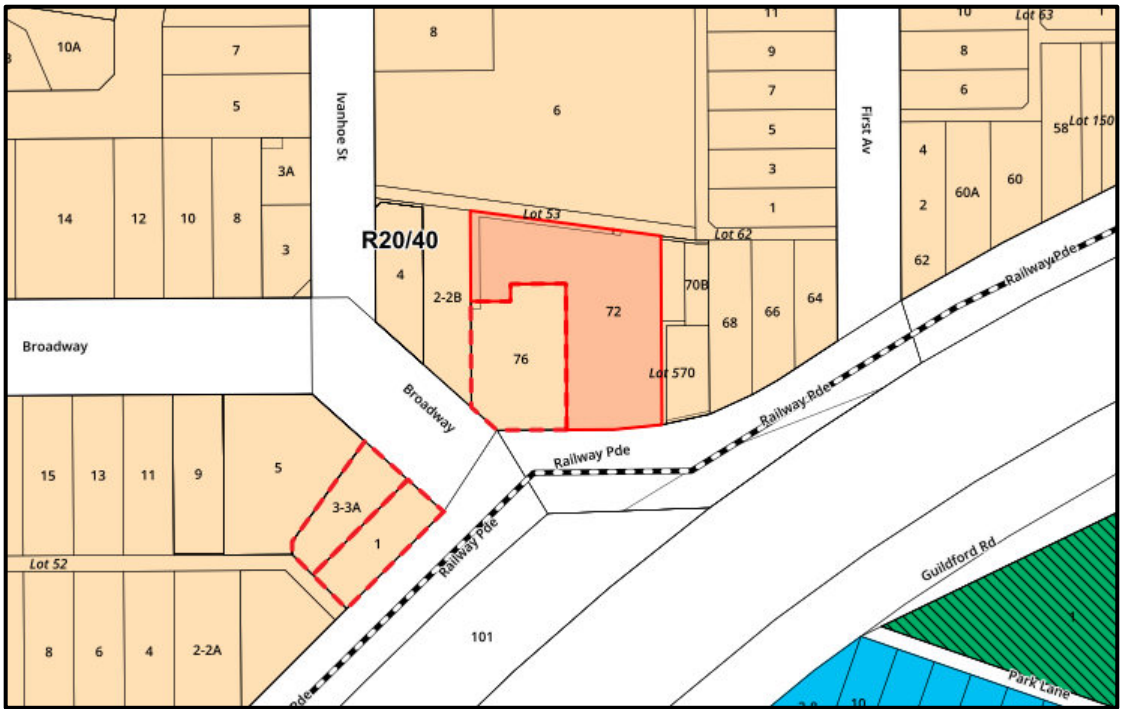


Figure 3 – Zoning Map Extract

Clause 3.2.1 describes the 'Residential' zone objectives as follows:

- *a) To maintain lifeline or long-time residents as an integral component of the Bassendean community;*
- *b) To continue and increase the attraction for young families to reside and raise their families in the Bassendean community;*
- *c) To recognise the role of Bassendean as a middle metropolitan area that is well placed to contribute meaningfully to sustainable urban development for the Perth Region, and therefore facilitate the planned gradual increases in population growth in a manner that provides net environmental, social and economic benefit;*
- *d) To make provision for housing types that respond to the demands of an ageing population and declining occupancy rates;*
- *e) To limit non-residential activities to those of which the predominant function is to service the local residential neighbourhood and for self-employment or creative activities, provided such activities have no detrimental effect on the residential amenity;*
- *f) To ensure that the density of development takes cognisance of the availability of reticulated sewerage, the effluent disposal characteristics of the land and other environmental factors; and*
- *g) To ensure that subdivision and development comply with the Local Planning Strategy and the principles of any Local Planning Policy adopted by the Council.*

The applicable residential density is dependent on compliance with Clause 4.3.1.2 of LPS 10. It is noted that the previously approved development application for 22 multiple dwellings was able to be assessed at the higher R40 density coding as compliance with Clause 4.3.1.2 was able to be demonstrated.

In this instance the applicable residential density is not directly applicable as commercial development is being proposed.

5.2.2 Land Use Permissibility

Clause 3.3 of LPS 10 details the permissibility of land uses against the various zones / precincts. The permissibility of land uses is illustrated using the following symbols which have the following meaning:

- ***'P'** means that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme;*
- ***'D'** means that the use is not permitted unless the local government has exercised its discretion by granting development approval;*
- ***'A'** means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the deemed provisions;*
- ***'X'** means a use that is not permitted by the Scheme.*

6.0 PLANNING ASSESSMENT

6.1 Land Use

The proposed development is considered to be consistent with the land use 'Child Care Premises' which is defined under LPS 10 as follows:

> *'Child Care Premises' has the same meaning as in the Community Services (Child Care) Regulations 1988'.*

The *Community Service (Child Care) Regulations 1988* describes the 'Child Care Premises' land use as '*premises specified in a licence or permit as premises in which a child care service may be provided*.'

Table 1 of the Town of Bassendean LPS 10 identifies the proposed 'Child Care Premises' land use as an 'A' use in the 'Residential' zone meaning that it is capable of approval pending compliance with the applicable LSP 10 and any associated Local Planning Policy provisions.

In addition to the use class permissibility, the proposed 'Child Care Premises' land use is considered to be consistent with the 'Residential' zone objectives under LPS 10 in that:

- It will provide an important community service that will allow young families to reside in the Bassendean community whilst also having the ability to work whilst their children are cared for.
- The development constitutes a non-residential activity which its predominant function is to service the local community as the success of the development will rely heavily on the catchment area of the local residential community.
- The development is compliant with the applicable LPS10 and associated Local Planning Policy provisions, as detailed in subsequent sections.

In light of the above, the proposed 'Child Care Premises' land use is considered to be appropriate for approval.

6.2 Development Requirements

Development of the subject site for the purposes of a 'Child Care Premises' requires assessment against the development requirements outlined in the following planning documents:

- Town of Bassendean LPS 10;

An assessment of the proposed development's compliance with the applicable development requirements has been provided in the below table with any variations noted in red.

LPS 10 Requirements	Proposed Development Compliance
Car Parking	
Day Care/Child Minding Centre – 1 per employee and 1 per 6 children.	The proposed development will consist of 16 staff and 92 children. This equates to a parking requirement of 31.3 bays. 32 bays have been provided as part of the development.
The car parking area is to be landscaped with shade trees, laid out, constructed, drained and maintained.	The proposed development includes 14 shade trees in the car parking area.
The car parking spaces are sealed and clearly marked out at all times.	All proposed bays will be clearly marked and sealed upon completion of construction.
All trafficable areas are to be sealed.	All trafficable areas within the development will be sealed.
Landscaping for Off-Street Parking	
All areas between parking areas and adjoining streets shall have a minimum of 2.0 metres wide permanent landscape area, except in the instance of corner lots, where minimum width of 1.0 m shall apply. In addition, the local government may also require permanent landscaping between the parking area and all other side and rear property lines.	The proposed development includes a 1.9m wide permanent landscaping strip along Railway Parade. The proposed development has provided permanent landscaping along the side boundaries of the parking area.
For open parking areas, with 21 or more parking spaces, there shall be provided a minimum of 1 square metre of permanent landscaping for every 10 square metres of parking bay area. Such landscaping shall not be in addition to any other landscaping required by this Scheme.	The proposed parking area is 980sqm in area which results in a requirement of 98sqm of landscaping. The proposed development includes 95sqm of hard and soft landscaping.

Table 1 – LPS 10 Assessment Table

In light of the assessment of the proposal provided in the above table, it is clear that the proposed development is largely compliant with the applicable development requirements outlined in LPS 10 and the minor variations associated with landscaping are considered justified for the following reasons:

- The proposed car parking area is considered to provide a level of shade over and above what is ordinarily seen in car parking areas with 21 shade trees being proposed. These trees will soften the impact of the development and will reduce the urban heat island effect that is often associated with sealed hardstand parking areas.

- The variations being sought are very minor in nature with a 0.1m variation proposed in the width of the permanent landscaping strip fronting Railway Parade and a 3sqm variation proposed for the overall landscaping required for the car parking area.

7.0 OTHER CONSIDERATIONS

7.1 Residential Amenity

As the subject site is located in close proximity to surrounding residential development, consideration should be given to the impact of the proposed 'Child Care Premises' on these residents. The key amenity considerations are traffic resulting from people dropping and picking children up and noise from children during the operation of the childcare premises. To address the traffic and noise concerns, a Traffic Impact Assessment and an Acoustic Report were prepared and have been provided in **Appendix 3 and 4**, respectively.

These amenity impacts are considered to be negligible and appropriately managed for the following reasons:

1. Railway Parade is a key local distributor road which is used for access to the Bassendean Train Station, this suggests that there is already a substantial amount of traffic utilising this road. Consequently, the traffic generated by the proposed development will only represent a very minor increase to traffic in the area and as such will not have a profound impact on the amenity of residents living in the area.

2. The proposed development is surrounded by other existing commercial developments with a BWS bottle shop to west and a church to the north. In this regard the amount of residents impacted by the proposal will be minimal and any existing residents are already accustomed to living in close proximity to non-residential development.

3. The majority of the noise generated by the development will be within the outdoor play area which is positioned to the rear of the development across from an existing church which is not considered to be a use that is sensitive to noise. The closest adjoining residents to the play area will be to the east of the development and opposite to the proposed car park which will have an adequate amount of separation from the outdoor play area.

   Further to the above, the operating hours of the childcare dictate that there will only be any noise impacts during the day, Monday to Friday, which is when the majority of residents living in the surrounding dwellings are likely to be at work. This combines to ensure that the existing amenity of the surrounding residents will not be impacted by noise created by the development.

4. The proposed development is completely compliant with the applicable parking provisions which suggests that there will be no overflow on-street parking that occurs as a consequence of the development. This will reduce the possibility of residents driveways being blocked and will guarantee that all traffic can be accommodated on site during the pickup and drop off periods for the childcare.

5. The majority of the customers for the childcare will be from the surrounding residential area which suggests that many families will walk their children to the development reducing the parking demand generated by the development.

In consideration of the abovementioned points, the proposed childcare is not considered to negatively impact the amenity afforded the surrounding residents and as such is appropriate for favourable consideration by the Town of Bassendean and subsequent approval by the JDAP.

7.2 – Vehicle Access

The subject site has a legal right of access to Railway Parade and a rear laneway. Due to the applicable road hierarchy, the design of the site has focused on obtaining access from Railway Parade as the traffic likely to be generated by the development is considered to be over and above what the existing laneway is capable of accommodating. In addition, the laneway appears to sometimes accommodate car parking associated with adjoining sites and is regularly covered with soil as illustrated in the below image. In this regard access from Railway Parade is considered to be preferable. The appropriateness of the Railway Parade access and egress has also been addressed in the Traffic Impact Assessment prepared by Cardno.

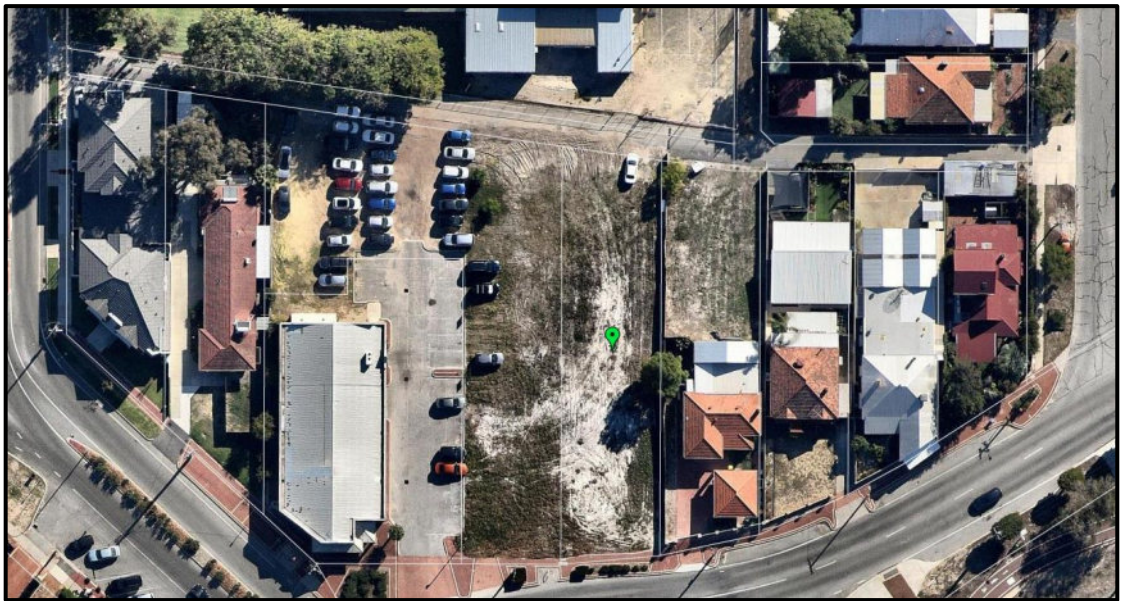


Figure 4 – Rear Laneway Aerial

7.3 – Signage

Signage does not form part of this approval and it is considered to be a design element capable of being addressed post development approval through a condition requiring a signage strategy to be approved prior to the commencement of development. As this would constitute a separate planning application process which would also be governed by the Town of Bassendean Local Planning Policy No. 16 it is considered that appropriate safeguards exist for the Town to control advertising.

In addition to the above, the signage associated with existing Nido Early Learning centres around Perth is limited with very little signage used.

7.4 – Stormwater Disposal

Similar to signage, this element of the development can be addressed through a condition of development approval as it is common for all developments around the Perth Metropolitan Area to address and contain all stormwater on site. This development will be no different and a condition of approval to this effect would ensure that this occurs.

8.0 CONCLUSION

It is considered that the proposal warrants favourable consideration based on the detailed assessment undertaken as part of this report. In summary, reasons in support of the proposal are reiterated as follows:

- The proposed development is consistent with the definition of a 'Childcare Premises' which is a use capable of approval in the 'Residential' zone.
- The proposed development is consistent with the 'Residential' zone objectives.
- The proposed development is almost entirely compliant with the applicable development requirements and where any variations exist they have been appropriately justified.
- The proposed development will not negatively impact the amenity of surrounding residents.

Based on the above, the proposal is considered to warrant a favourable recommendation by the Town of Bassendean and subsequent approval by the JDAP.

APPENDIX 1
Certificates of Title

WESTERN AUSTRALIA

REGISTER NUMBER	
54/DP74766	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	N/A

VOLUME 2868 FOLIO 757

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 54 ON DEPOSITED PLAN 74766

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

MARK FRANCIS HAMMOND
SANDRA LEE HAMMOND
BOTH OF LOT 600 RIDGEHILL ROAD, HELENA VALLEY
AS JOINT TENANTS

(AF M956607) REGISTERED 1/4/2015

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *EASEMENT BURDEN CREATED UNDER SECTION 27A OF T. P. & D. ACT - SEE DEPOSITED PLAN 74766 AS CREATED ON DEPOSITED PLAN 29525 FOR SEWERAGE PURPOSES.
2. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR SEWERAGE PURPOSES TO WATER CORPORATION - SEE DEPOSITED PLAN 74766

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

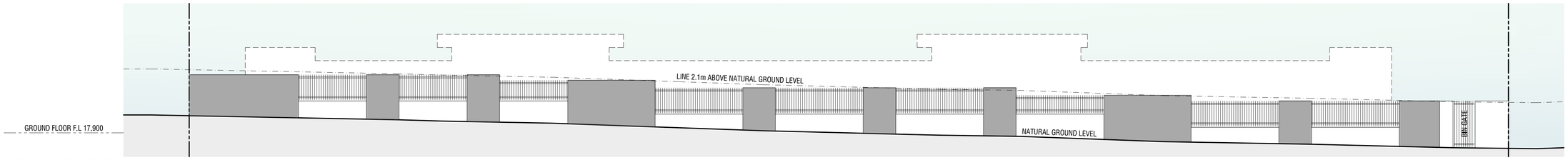
STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP74766
PREVIOUS TITLE:	1034-862, 2535-762
PROPERTY STREET ADDRESS:	72 RAILWAY PDE, BASSENDEAN.
LOCAL GOVERNMENT AUTHORITY:	TOWN OF BASSENDEAN

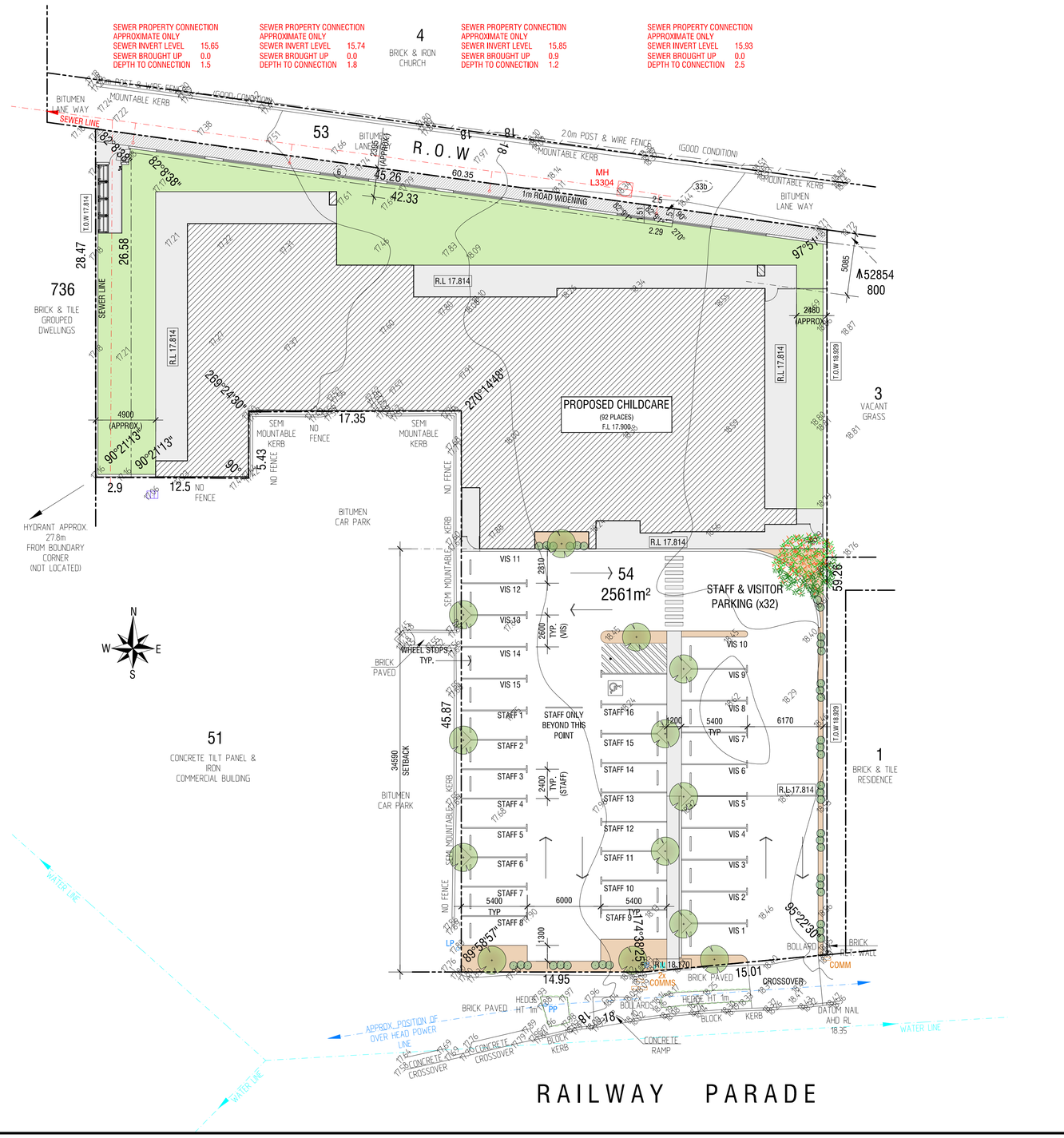
NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING I412164

APPENDIX 2
Development Plans



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

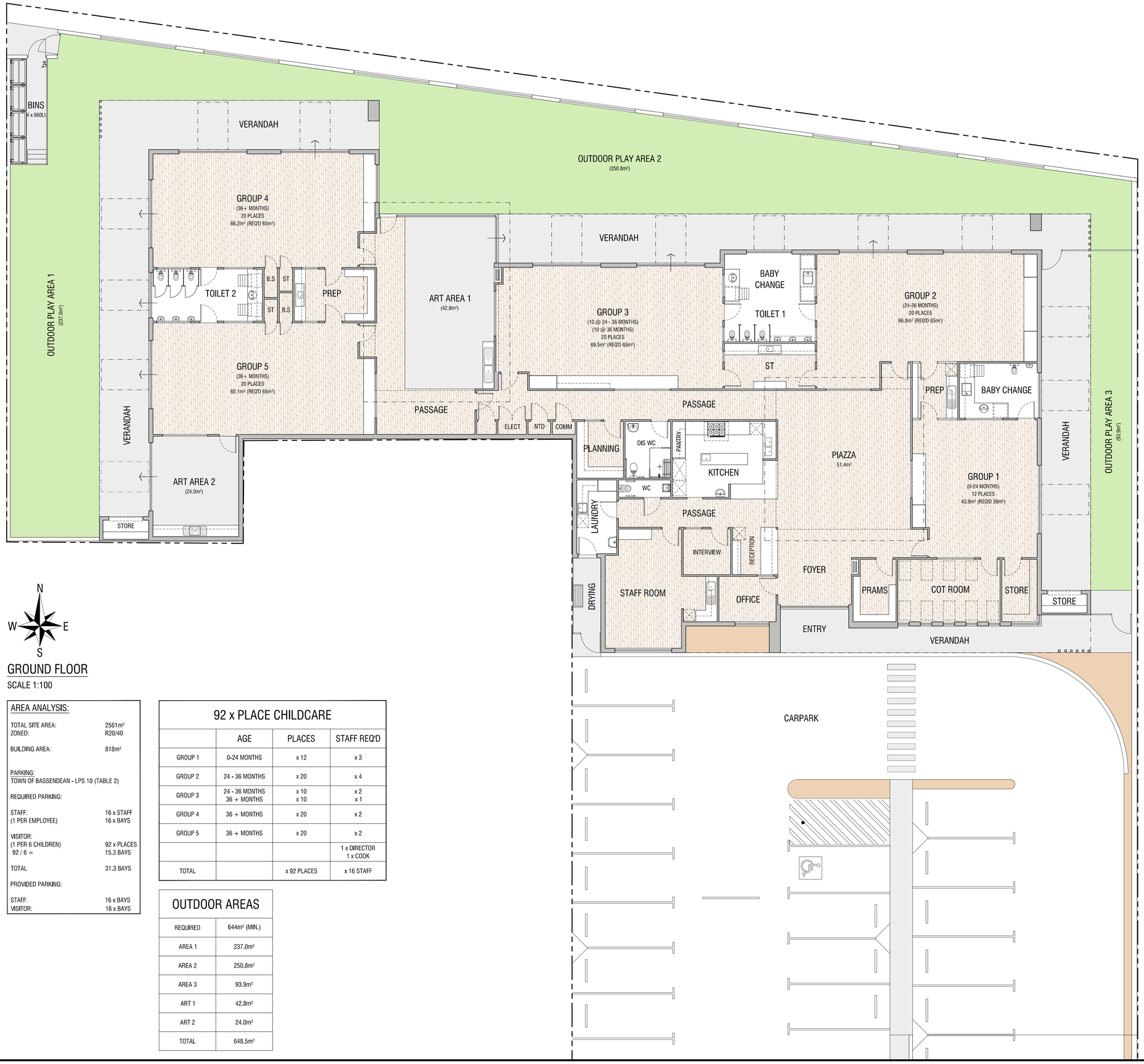
SCALE 1:200 @ A1

DRAWN MJG

CHECKED MJG

GDD DESIGN GROUP

Web : www.gdddesigngroup.com
Tel : (08) 9388 8846



N
W E
S

GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	818m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
AREA 1	237.0m²
AREA 2	250.8m²
AREA 3	93.9m²
ART 1	42.8m²
ART 2	24.0m²
TOTAL	648.5m²

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

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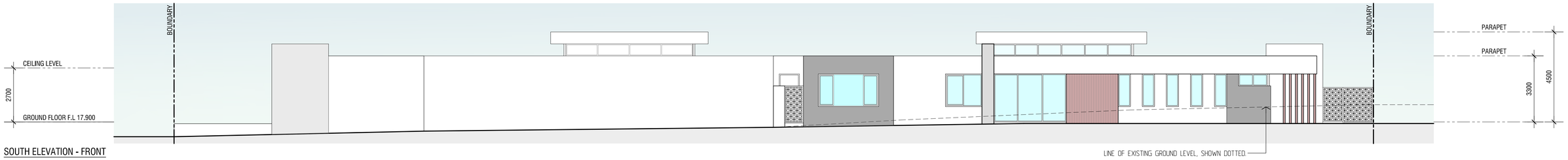
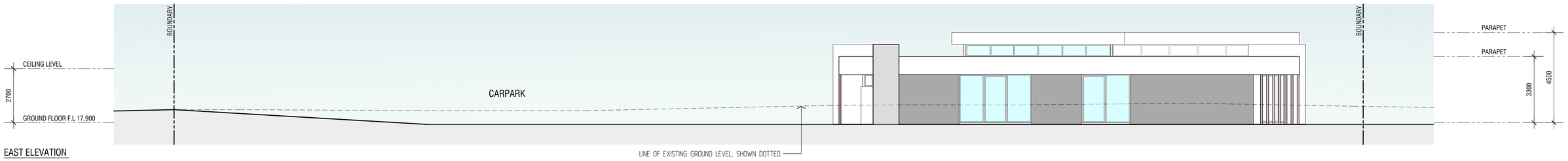
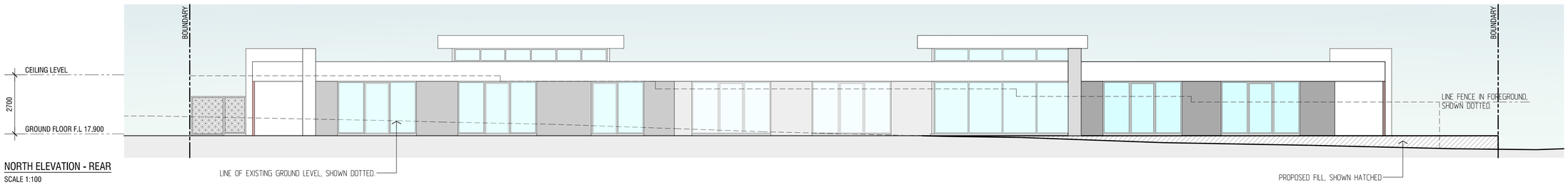
Tel : (08) 9388 8846



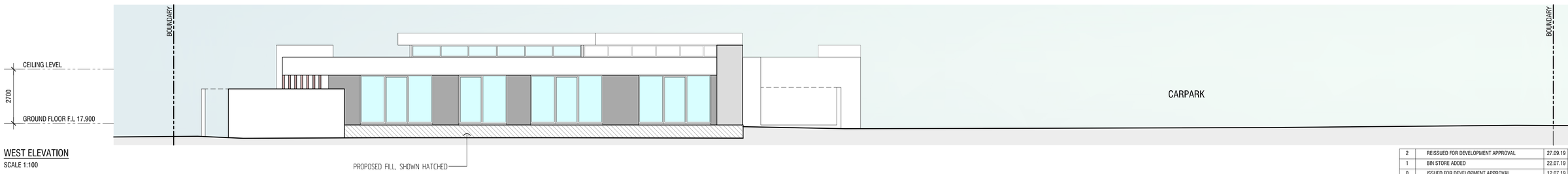
SOUTH ELEVATION - FRONT
SCALE 1:100



EAST ELEVATION
SCALE 1:100



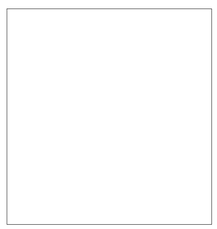
NORTH ELEVATION - REAR
SCALE 1:100



WEST ELEVATION
SCALE 1:100

FEATURE COLOUR:
'DOMINO GREY'

CLADDING:
VERTICAL JARRAH CLADDING



MAIN COLOUR:
'LEXICON WHITE'

FEATURE COLOUR:
'WALLABY GREY'

MATERIALS PALETTE

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- ELEVATIONS

PROJECT No.	STAGE
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DRAWING NO.	REVISION
A03	2

CAD FILE NAME
8123-SD_A00

SCALE
1:100 @ A1

DRAWN
MJG

CHECKED
MJG

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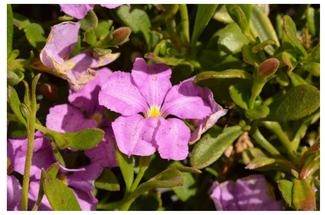
BRACHYCHITON ACERIFOLIA


LAGERSTROEMIA INDICA BILOXI


DAMPIERA LINEARIS


EREMOPHILA GLABRA PROSTRATA


GREVILLEA THELEMANNIANA


SCAEVOLA

LEGEND

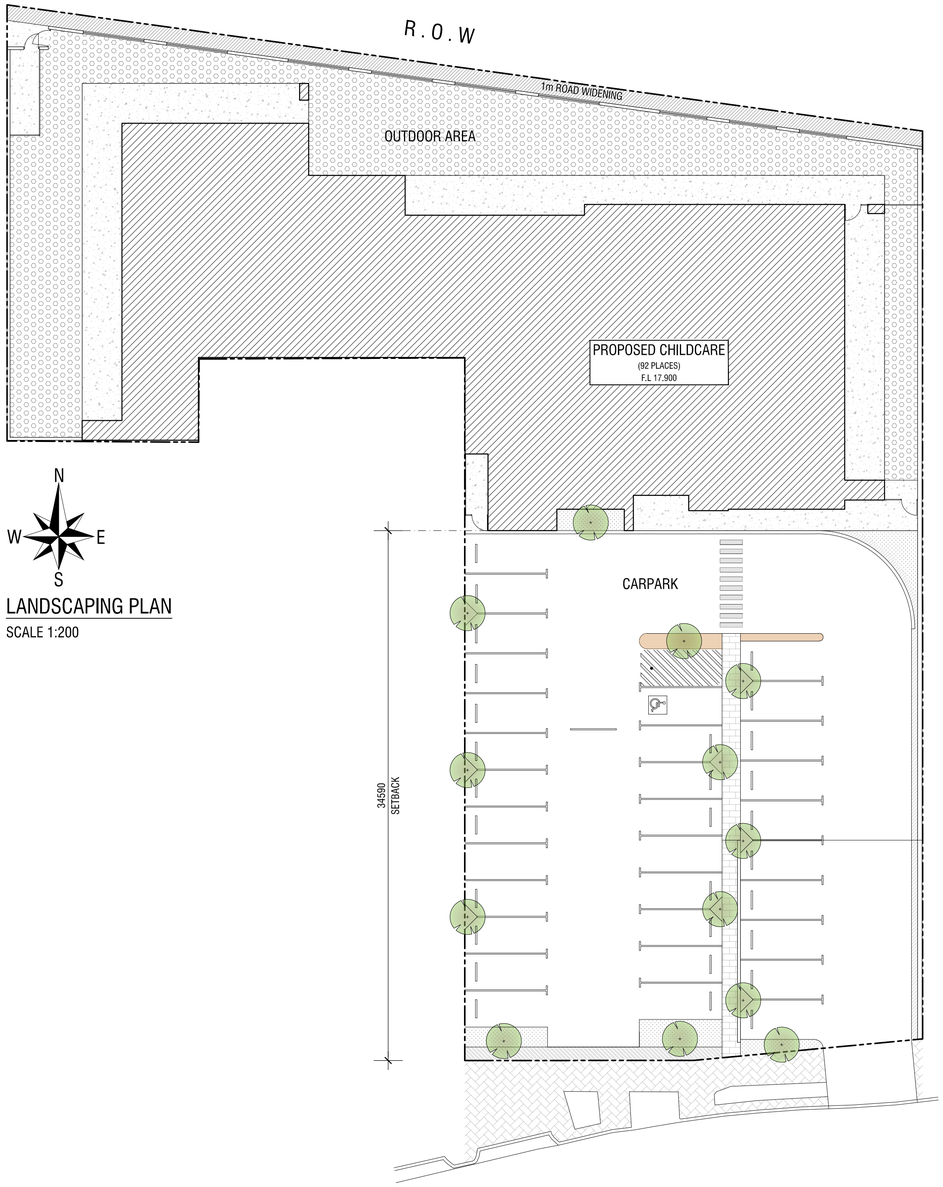
- NON-SLIP CONCRETE
- PAVING
- EXISTING VERGE PAVING (TO REMAIN)
- NATURE PLAY AREA
- PLANTING MIX 'A'
- PLANTING MIX 'B'
- ORGANIC MULCH (75mm DEPTH)

PLANT SCHEDULE

BRACHYCHITON ACERIFOLIA (ILLAWARRA FLAME TREE)

LAGERSTROEMIA INDICA BILOXI (CREPE MYRTLE)

SPECIES	POT SIZE	QUANTITY	PLANT MIX
TREES			
BRACHYCHITON ACERIFOLIA	200L	1	N/A
LAGERSTROEMIA INDICA BILOXI	90L	13	N/A
GROUNDCOVERS			
DAMPIERA LINEARIS	130/140mm	4/m2	A
EREMOPHILA GLABRA PROSTRATA	130/140mm	4/m2	A
GREVILLEA THELEMANNIANA	130/140mm	4/m2	B
SCAEVOLA	130/140mm	4/m2	B



LANDSCAPING PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
1	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	22.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- LANDSCAPE PLAN

PROJECT No.	STAGE
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DRAWING NO.	REVISION
A04	1

CAD FILE NAME
8123-SD_A00

SCALE
1:200 @ A1

DRAWN
MJG

CHECKED
MJG

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APPENDIX 3
Traffic Impact Assessment

Transport Impact Assessment

Childcare Centre Proposal
72 Railway Parade, Bassendean

CW1084900

Prepared for

AGEM Commercial Pty Ltd

8 October 2019

Cardno

Contact Information

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Document Information

Prepared for	AGEM Commercial Pty Ltd
Project Name	Childcare Centre Proposal 72 Railway Parade, Bassendean
File Reference	CW1084900-TR-RP-TIA
Job Reference	CW1084900
Date	08 October 2019
Version Number	D

Author(s):

Brian Sii
Traffic Engineer

Effective Date 08/10/2019

Approved By:

Ray Cook
Manager – Traffic and Transport

Date Approved 08/10/2019

Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
A	26/07/19	For Issue	BS	SJL
B	29/07/19	Amended – For Issue	BS	SJL
C	20/09/19	For Issue	BS	SJL
D	08/10/19	Development Plan Update	BS	SJL

Table of Contents

Appendices

Appendix C development plans

Tables

Figures

1 Introduction

Cardno has been commissioned by AGEM Commercial Pty Ltd. (the Client) to prepare a Transport Impact Assessment (TIA) for the proposed development of a child care centre located at 72 Railway Parade, Bassendean (the Site). **Figure 1-1** shows the Site.

This report aims to assess the impacts of the proposed development upon the adjacent road network, with a focus on traffic operations, circulation, and car parking requirements. This report has been prepared in accordance with the *Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016).*

Figure 1-1 Aerial Image

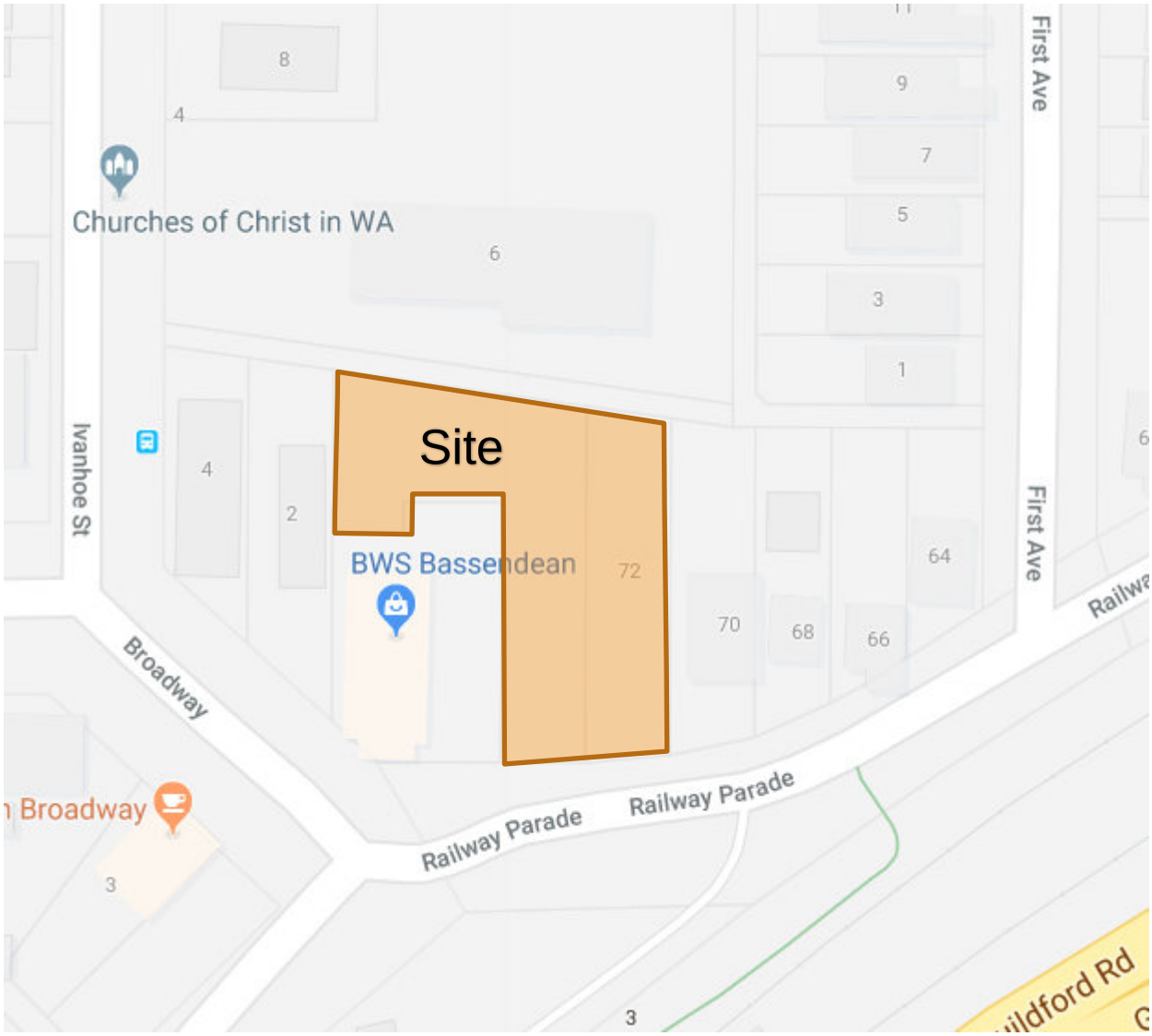
Source: Nearmap

2 Existing Site Location

2.1 Site Location

The Site is located at 72 Railway Parade, in the suburb of Bassendean under the municipality of Town of Bassendean. The Site is bounded by Railway Parade to the south, a church to the north, a bottle shop to the west, and existing residential dwellings to the east. The location of the Site is shown in **Figure 2-1**.

Figure 2-1 Site Location

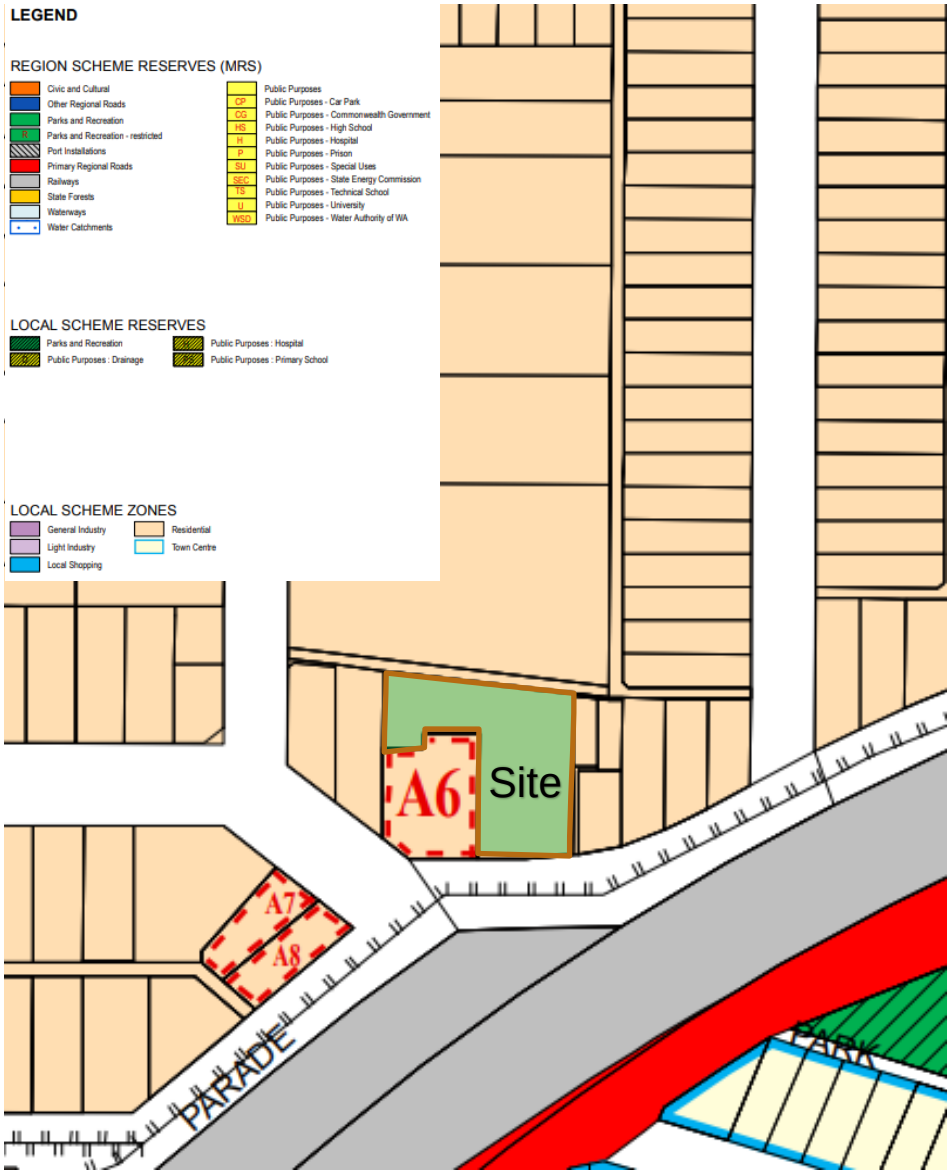


Source: Google Maps

2.2 Surrounding Land Use

According to the *Town of Bassendean Local Planning Scheme No.10,* the Site is zoned as 'residential'. A detailed zoning map showing the land uses around the Site within the *Town of Bassendean* is shown in **Figure 2-2.** The surrounding area is zoned as Residential.

Figure 2-2 Zoning Map

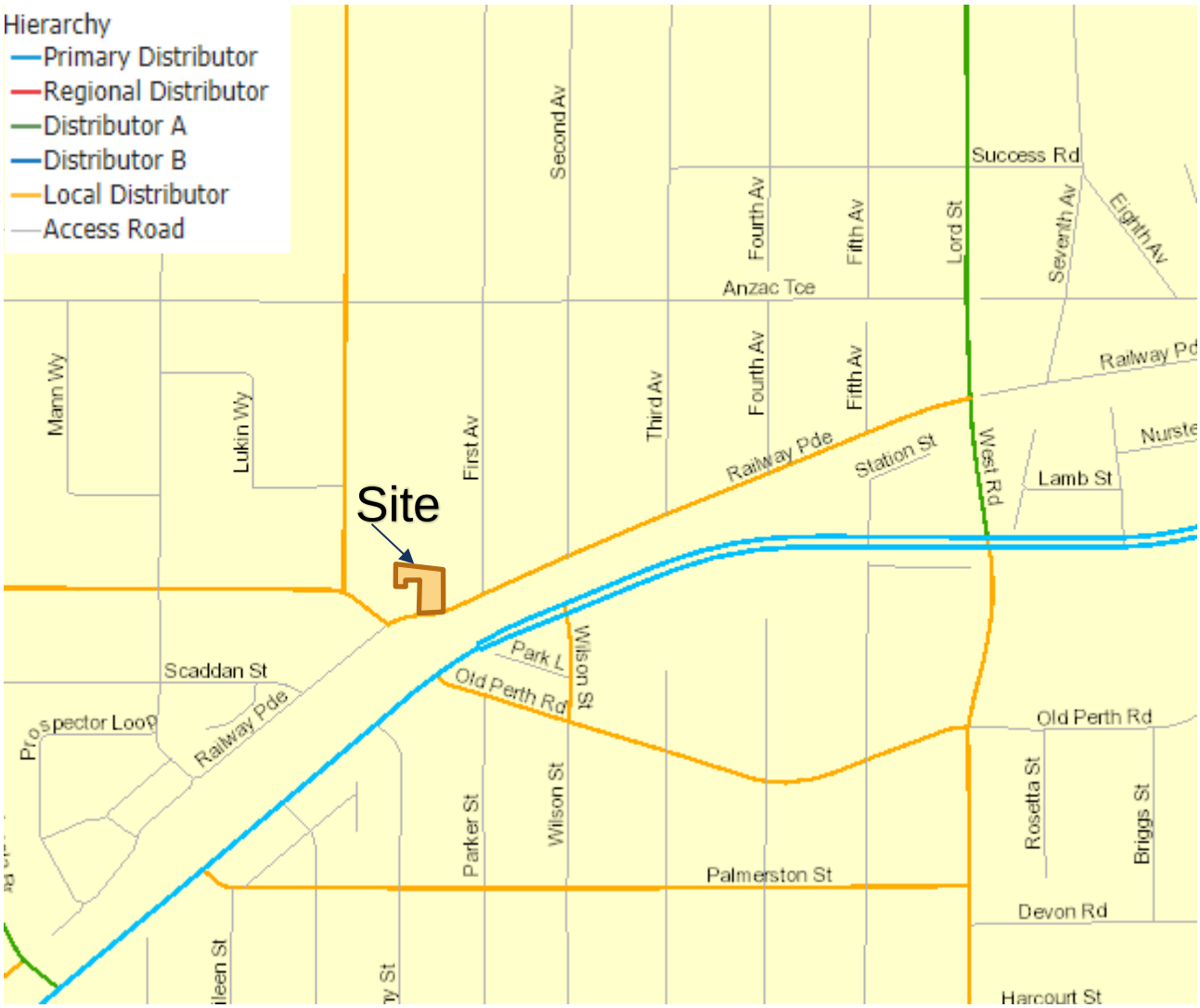


Source: Town of Bassendean

2.3 Existing Road Network

The layout and classification of the roads surrounding the Site is presented in **Figure 2-3.**

Figure 2-3 Road Network Classification



Source: Main Roads Road Information Mapping Centre

The characteristics of the surrounding road network are presented in **Table 2-1**.

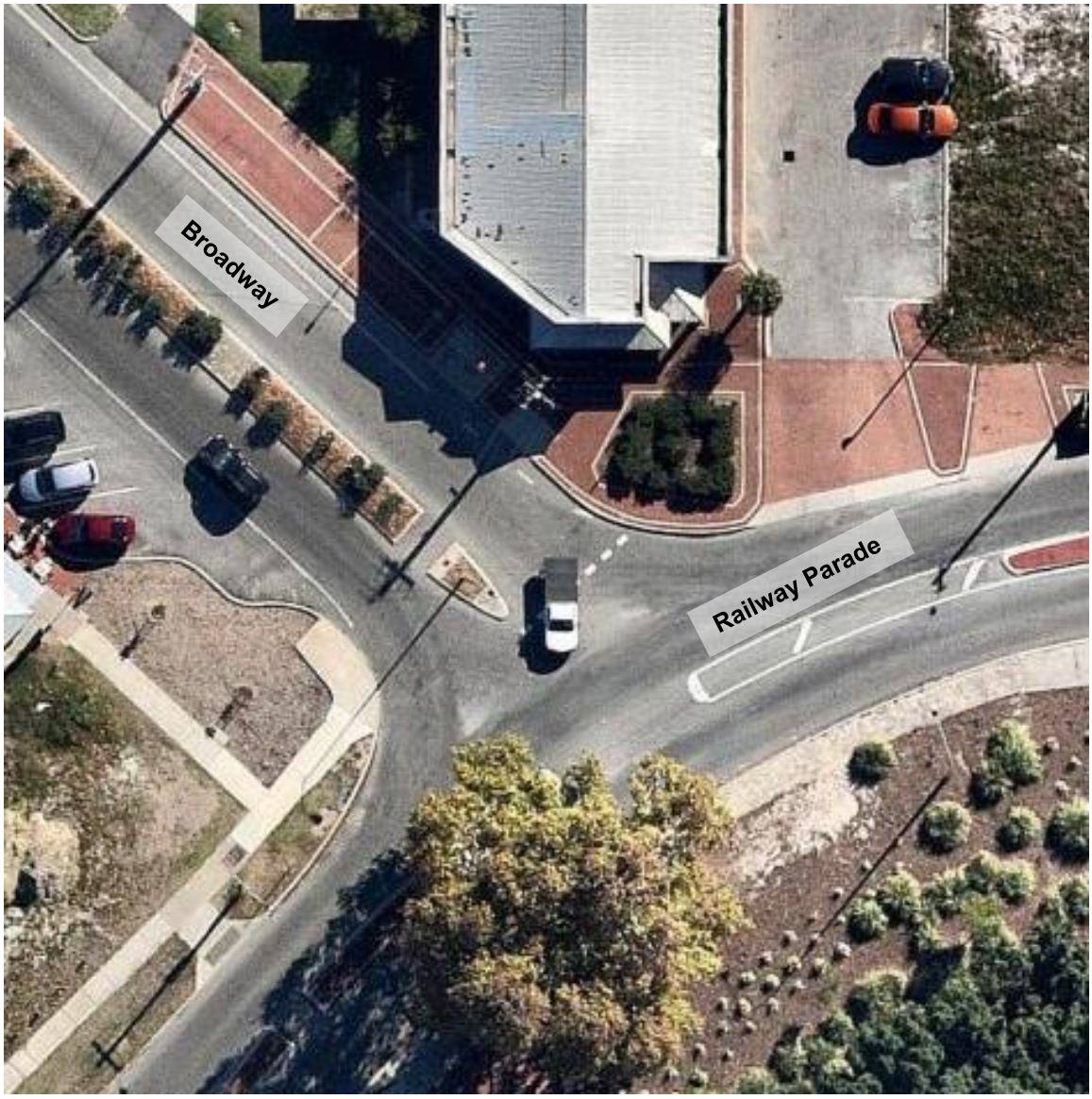
Table 2-1 Road network Description

Road Name	Road Hierarchy	Jurisdiction	Road Network			
			No. of Lanes	No. of Footpaths	Width (m)	Posted Speed Limit (km/h)
Railway Parade	Local Distributor	Local Govt.	2	2	9 (2 m median)	50
Broadway	Local Distributor	Local Govt.	2	2	13 (2.5 median)	50
First Avenue	Access Road	Local Govt.	2	1	7	50

2.4 Existing Intersections

> **Broadway and Railway Parade** is located to the southwest of the Site and is a 3-way give-way intersection with priority to Railway Parade.

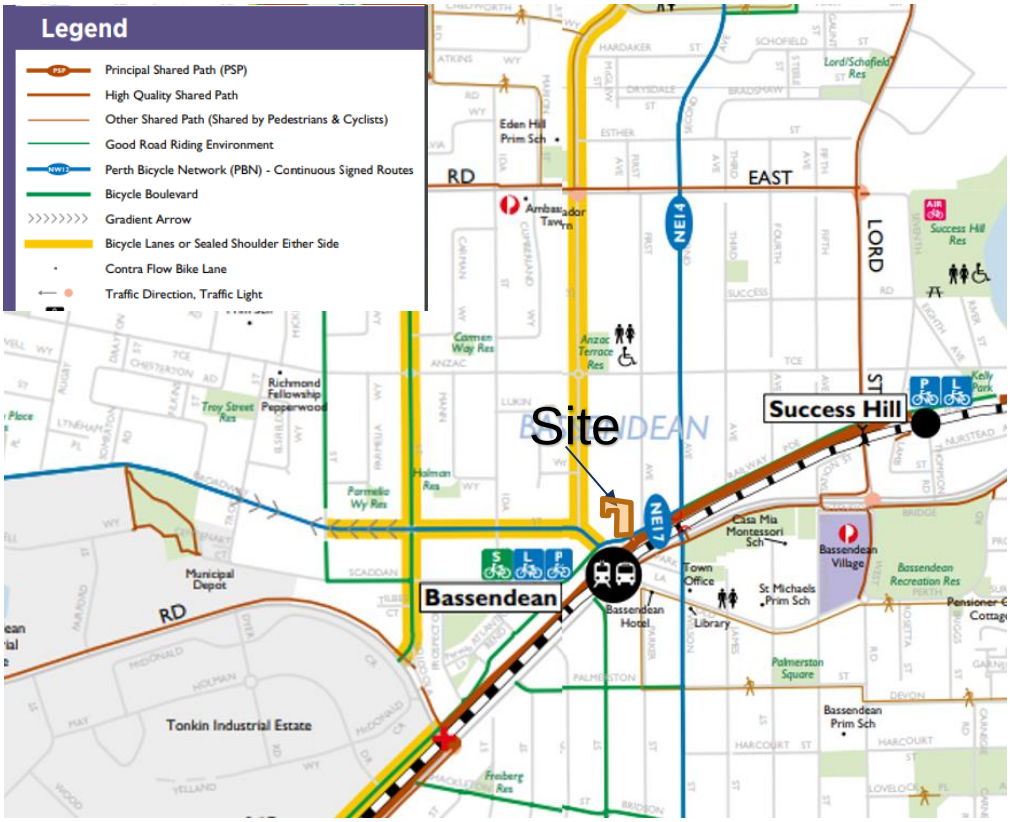
Figure 2-4 Broadway and Railway Parade



2.5 Existing Pedestrian / Cycle Networks

According to the *Department of Transport's Swan and Stirling Bike Maps*, bicycle lanes or sealed shoulders stretch along the arterial roads surrounding the Site such as Broadway and Ivanhoe Street. High quality shared paths cover most of the residential area within the suburb and the Perth Shared Path runs along Railway Parade opposite the Site. **Figure 2-5** shows the excellent provision of bicycle routes/facilities near the Site.

Figure 2-5 Bike Map

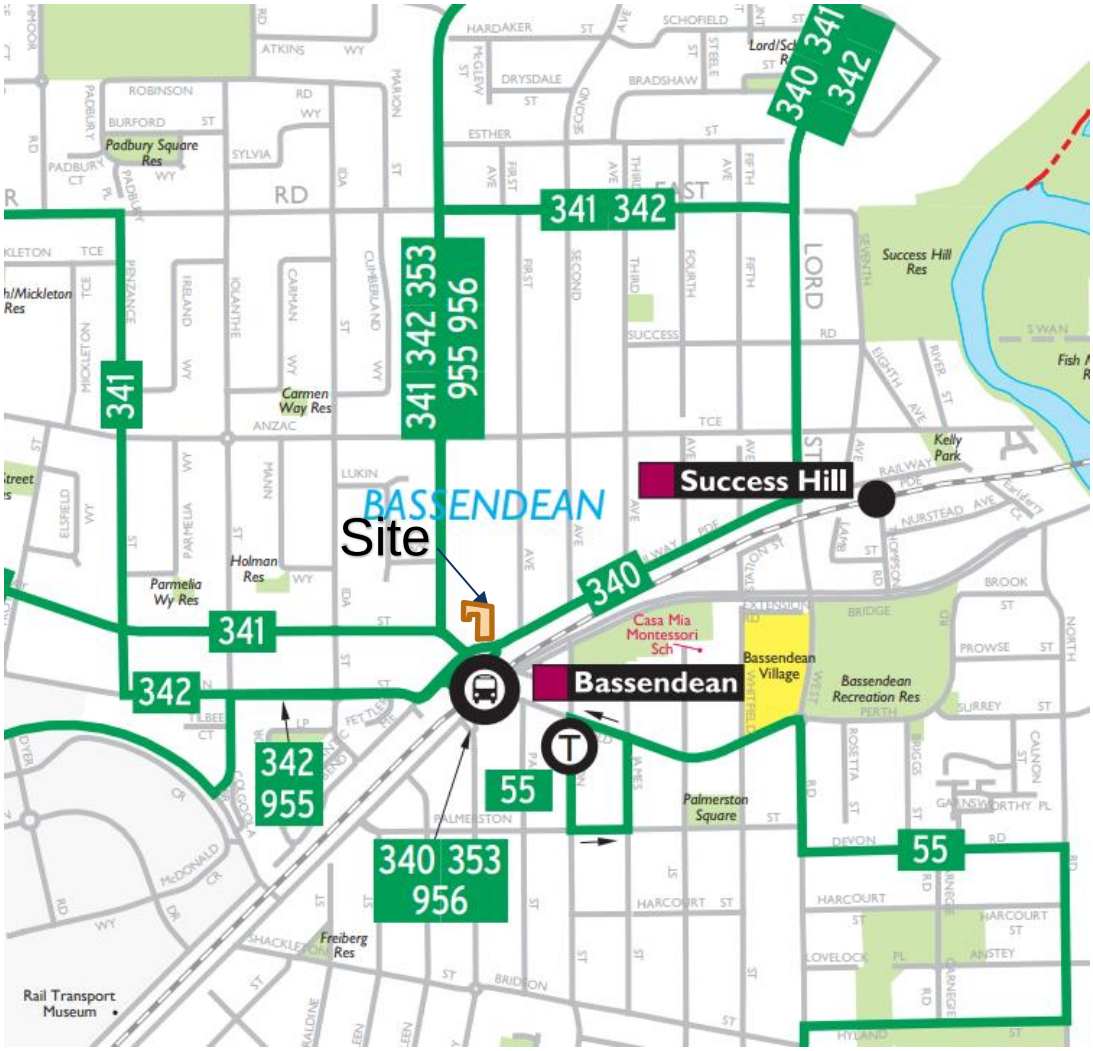


Source: Department of Transport -Swan and Stirling Bike Maps

2.6 Existing Public Transport Facilities

Existing public transport facilities around the Site are shown in **Figure 2-6.** The nearest bus stops to the Site are located next to Bassendean Train Station, approximately 50 m south of the Site. The bus stops are serviced by routes 341, 342, 353, 955 and 956 which provide connection to Morley Bus Station, Ellenbrook, Ellenbrook Transfer Station and Beechboro. The frequencies of the bus routes are presented in **Table 2-2.** Overall, the site benefits from excellent public transport services.

Figure 2-6 Public Transport Facilities



Source: Transperth

Table 2-2 Bus Service Frequency

Route	Route Description	Frequency	
		Weekdays	**Weekends**
Midland Line	Bassendean Station	2:31 AM to 11:55PM (15- 60+ minutes)	2:31AM to 11:46 PM (15 - 60 minutes)
341	Bassendean Station	7:20AM to 10:51PM	6:51 AM to 11:21PM (30-60 minutes)
353	Bassendean Station	6:05AM to 7:19PM (20-30 minutes)	7:19AM to 6:19PM (60 minutes)
955	Bassendean Station	6:22AM to 9:51PM (20-60 minutes)	8:06AM to 8:21PM (30-60 minutes)
342	Bassendean Station	9:01AM to 10:51PM (30-60 minutes)	6:51AM to 11:21PM (30-60 minutes)

2.7 Existing Traffic Volume

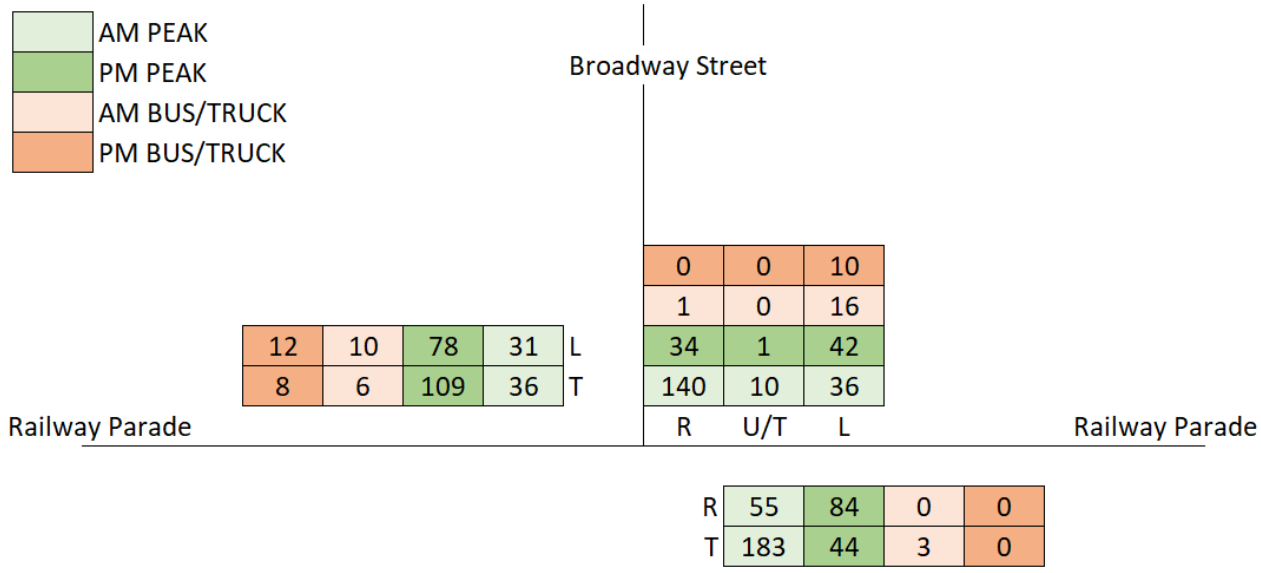
Existing traffic volumes were sourced from *Main Roads Western Australia's Traffic Map* and is shown in **Table 2-3.**

Table 2-3 Traffic Volume

Road Name	Date	Average Two-Way Daily Traffic Volume
Railway Parade (Mt Lawley)	2015/16	5,353

Due to the lack of relevant traffic data in close proximity to the site, Cardno undertook peak hour traffic counts on 23/7/2019 for the PM peak, and 24/7/2019 for AM peak hour at the Railway Parade / Broadway Street intersection. The traffic count data is shown in **Figure 2-7**.

Figure 2-7 Traffic Count



2.8 Crash Assessment

A search of the *Main Roads WA Reporting Centre* for crash data was undertaken for the period of 1 January 2014 and 31 December 2018. Crashes which occurred within 250 metres from the Site were plotted in a map shown in **Figure 2-8.** Six crashes were recorded where all crashes occurred at midblock sections. The crash data summary showing the type of crash and severity are shown in **Table 2-4,** and crash data for individual roads are presented in **Table 2-5** to **Table 2-8**.

Figure 2-8 Crash Locations within the Site Vicinity

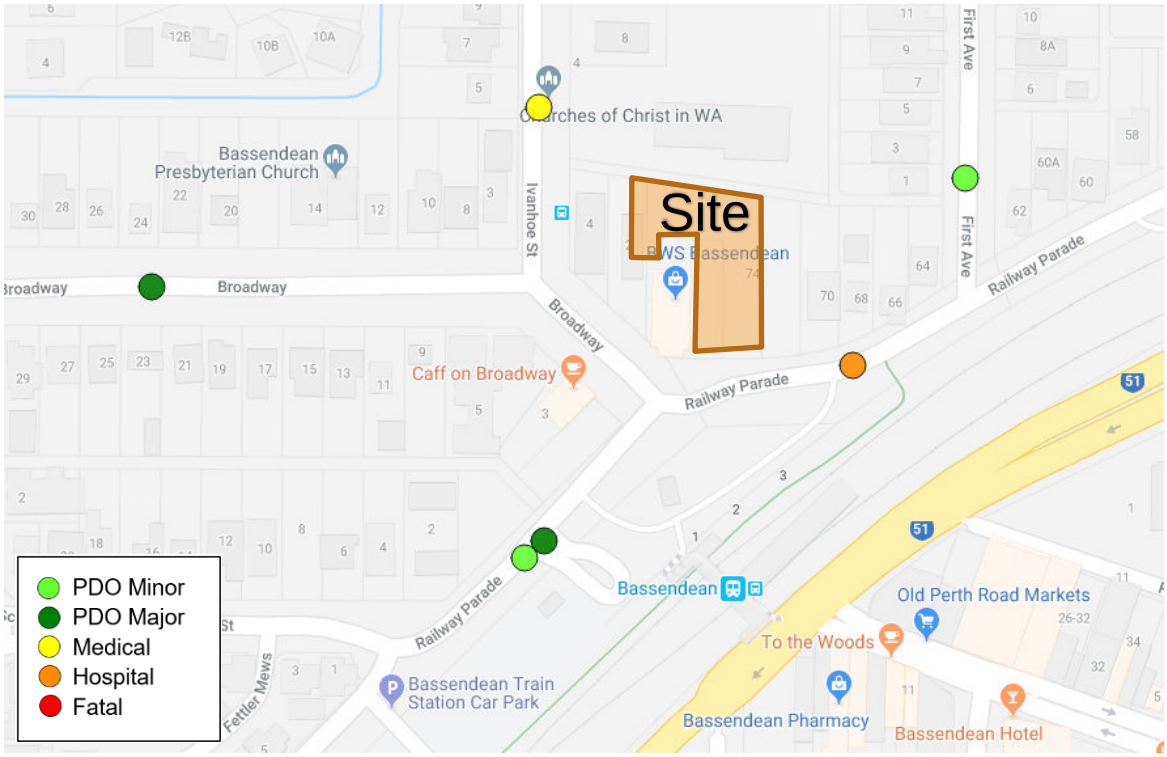


Table 2-4 Crash Data Summary

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	1	-	-	**1**
Sideswipe Same Direction	-	-	-	2	-	**2**
Unspecified	-	-	-	-	1	**1**
Hit Pedestrian	-	1	-	-	-	**1**
Right Angle	-	-	-	-	1	**1**
Total	**-**	**1**	**1**	**2**	**2**	**6**

Table 2-5 Ivanhoe Street (between Lukin Way and Broadway)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	1	-	-	**1**
Total	**-**	**-**	**1**	**-**	**-**	**1**

Table 2-6 Broadway (between Ida Street and Railway Parade)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Sideswipe Same Direction	-	-	-	1	-	**1**
Total	**-**	**-**	**-**	**1**	**-**	**1**

Table 2-7 Railway Parade (between Second Avenue and Scaddan Street)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Unspecified	-	-	-	-	1	**1**
Sideswipe Same Direction	-	-	-	1	-	**1**
Hit Pedestrian	-	1	-	-	-	**1**
Total	**-**	**1**	**-**	**1**	**1**	**3**

Table 2-8 First Avenue (between Railway Parade and Anzac Terrace)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Right Angle	-	-	-	-	1	**1**
Total	**-**	**-**	**-**	**-**	**1**	**1**

Crash data for the site vicinity are summarized below:

> No fatal crashes were recorded.

> A total of 6 crashes were recorded within 250 metres of the Site.

> All crashes occurred at midblock sections.

It is unlikely that the proposed child care centre will cause any material impact on the traffic safety of the surrounding road network due to the relatively low vehicle trips generated during the peak period and the compliant on-site parking being provided.

2.9 Site Observation

Cardno conducted site visits during the PM peak period (4PM-5PM) on 23/7/2019 and AM peak period (7AM-8AM) on 24/7/2019. Due to the lack of site relevant traffic data, the peak period was determined by identifying the peak periods from other road links in the vicinity of the Site.

Directly opposite the Site is a bus layby area to service the Bassendean Train Station. It was observed that the majority of buses turn right into this area and at times momentarily block the proposed access/egress for the development. The situation where a vehicle wishing to access the Site while turning right in from Railway Parade could be blocked by a bus wishing to turn right into the station at the same time, is expected to be rare. In addition, as the trips generated by the proposed development are relatively low and traffic volumes along Railway Parade are also sufficiently low enough to provide suitable regular gaps for the Buses to undertake their right turns, the momentary obstruction of the access by the buses is not expected to be a significant hinderance to the operation of the development.

It is also important to note that should a vehicle be waiting to turn right into the Site, the buses can still turn right into the layby area unobstructed.

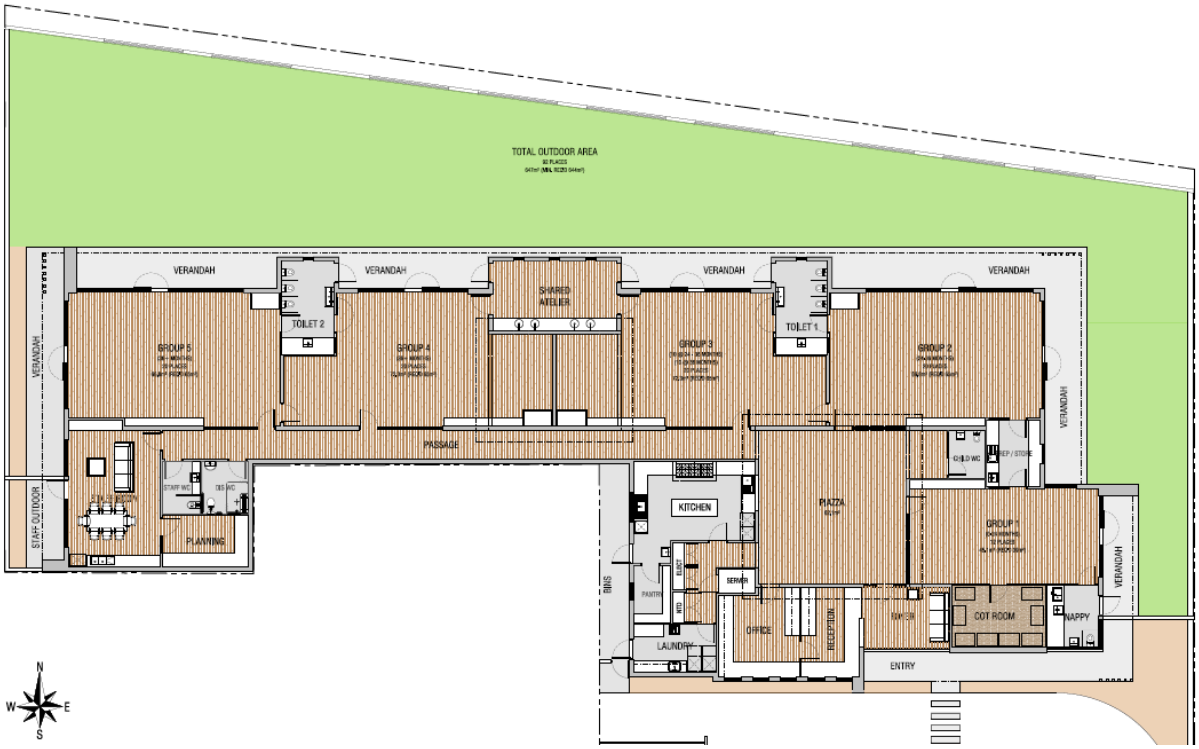
Figure 2-9 Site Observation – bus entering bus stops (right turn in)

3 Development Proposal

3.1 Proposed Land Use

The proposed development (**Figure 3-1**) is a childcare facility which includes an office room, reception area, outdoor area, staff room and activity areas. The development plans are attached in **Appendix C.**

Figure 3-1 Ground Floor Plan



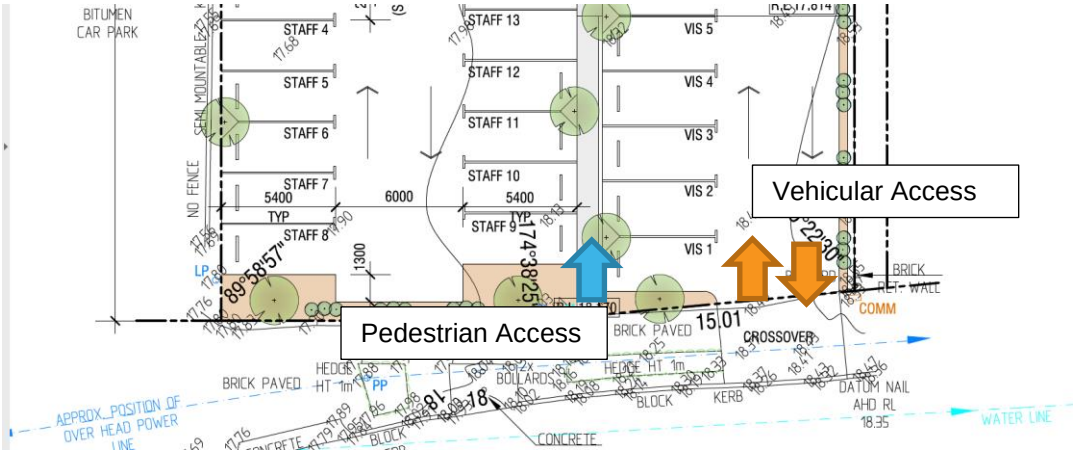
Source: GDD Design Group

3.2 Site Access

3.2.1 Vehicular and Pedestrian Access

Vehicular access into the Site is proposed to be via Railway Parade against the eastern boundary of the Site. The Site is easily accessible via footpaths along Railway Parade, where a dedicated pedestrian path to the Site has been provided away from the proposed vehicular access. The access arrangement of the Site is shown in **Figure 3-2**

Figure 3-2 Site Access – Railway Parade



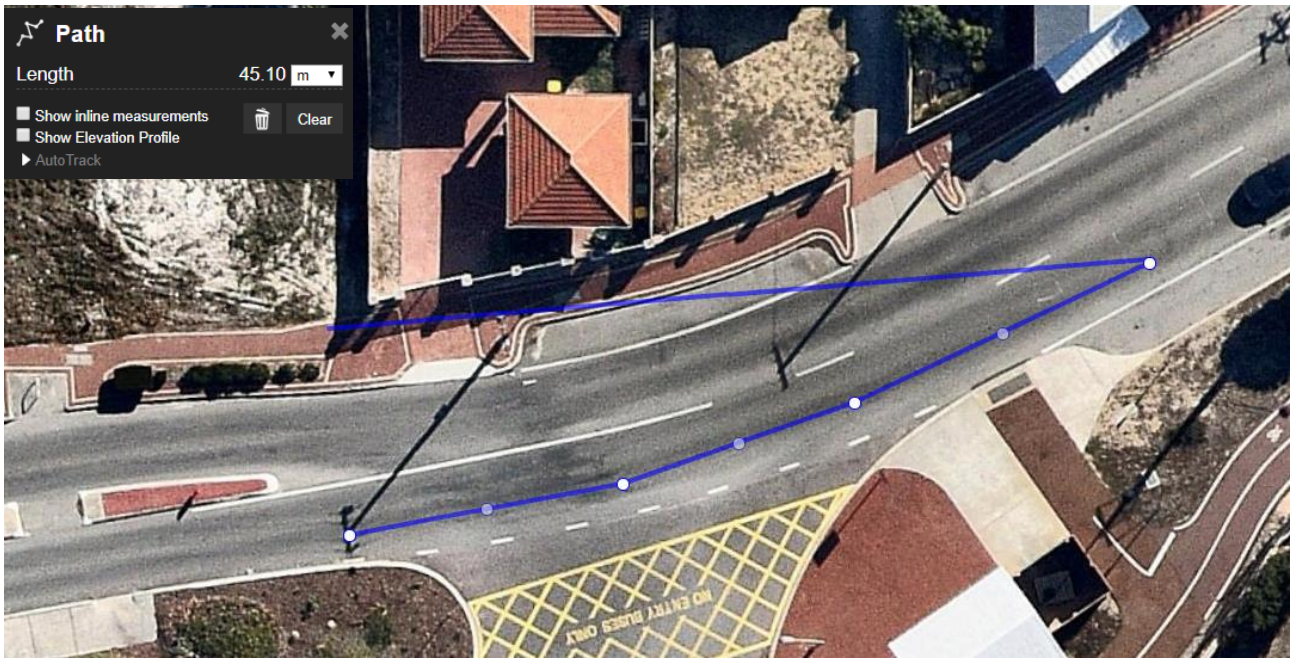
3.2.2 Sightlines of Vehicular Access

Cardno conducted a site visit on the 23/7/2019 to observe the visibility at the proposed vehicular access location for the Site. It was observed that the location of the proposed vehicular access provides a sightline for eastbound traffic that exceeds the desirable minimum sight line requirement as shown within *AS2890.1*.

For westbound traffic, a desktop sightline assessment was undertaken to check the minimum Entering Sight Distance (45m) as required within *AS 2890.1* and is shown to be achieved in **0**. On-site sightline observations are shown in **Figure 3-4** and **Figure 3-5**.

According to *AS2890.1, Figure 3.2, note 3,* parking within the vehicle sightline 'may need' to be restricted on street to ensure that the sight distance required is satisfied. The existing parking bays on the frontage road to the east of the proposed site access is currently restricted for "15 min parking only" at all times, meaning the bays are unlikely to be used for long term parking which may pose a regular sight line obstruction. These short-term bays are expected to be high turnover and, during the peak periods, the parking bays may be utilised by parents who drop-off and pick-up their children. On site observations suggest that the use of the bays to drop off and pick up children from the bus / train station appears to be the primary use of the bays currently. The vehicle shown in **Figure 3-4** is the vehicle that our team drove to the Site.

Figure 3-3 Desktop Sightline Assessment



Source: Nearmap, 2019

Figure 3-4 Sightline Observation (westbound)

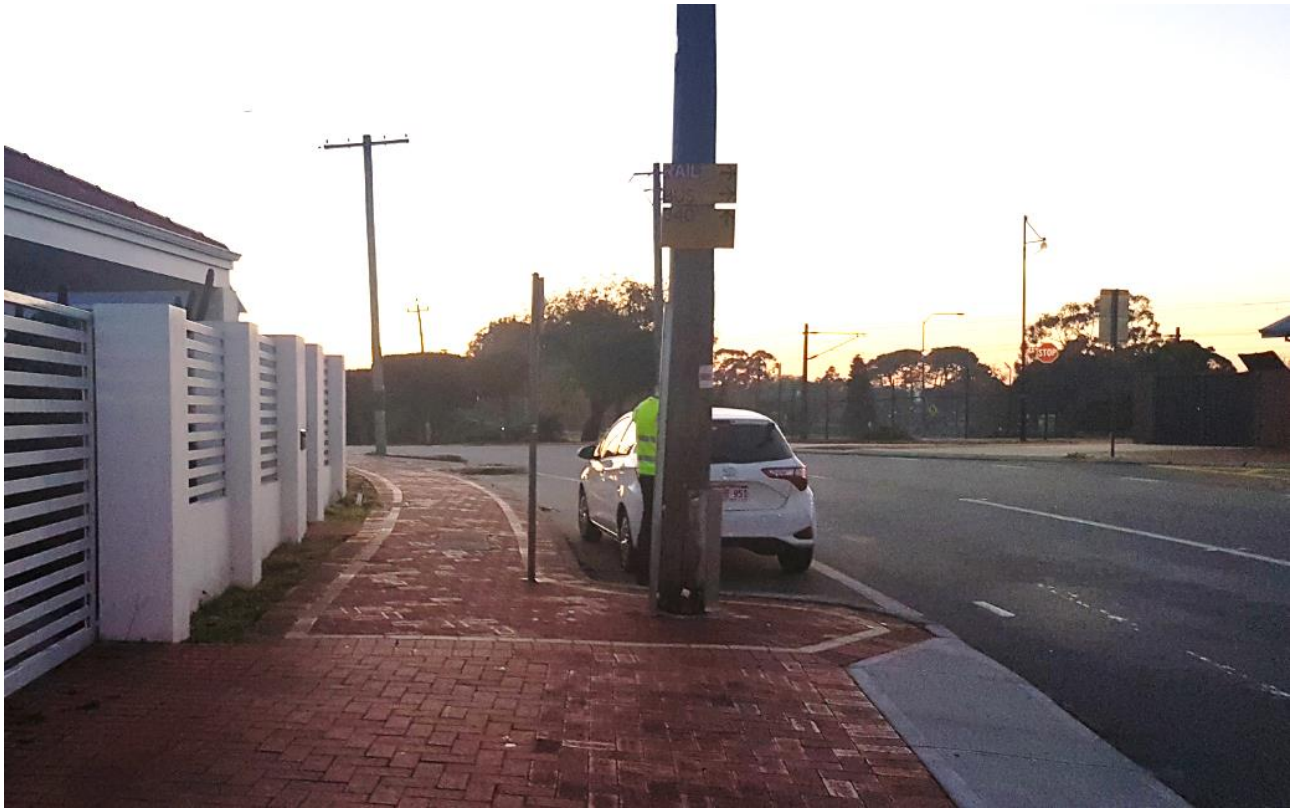
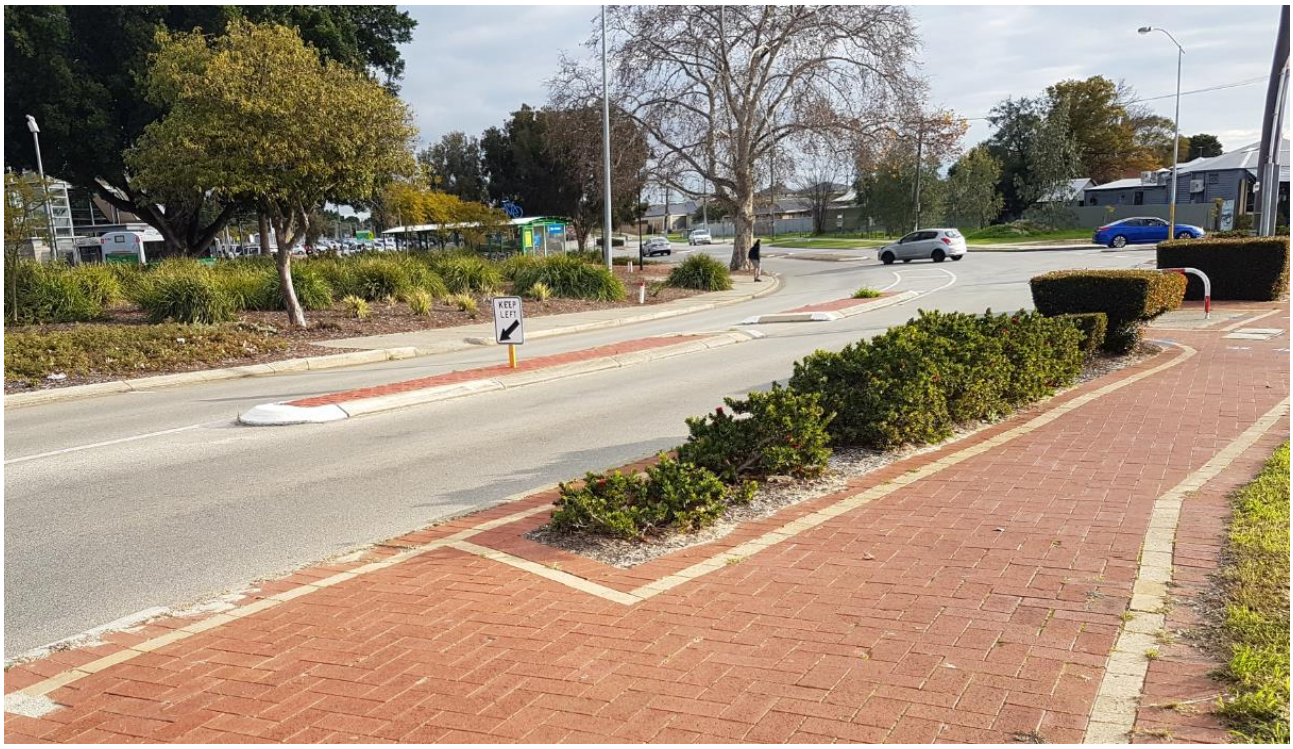


Figure 3-5 Sightline Observation (eastbound)



3.3 Car Parking Provision

The car parking requirements for child care centres as required in the *Town of Bassendean Local Planning Scheme* (the LPS) *No.10* has been calculated. **Table 3-1** shows the car parking requirements and the provision on-site.

Table 3-1 Car Parking Provision

Land Use	Car Parking Requirements		Car Parking Provision
Day Care/Child Minding Centre	1 per employee	16 bays for 16 Staff	16 bays
	1 per 6 children	15.3 bays for 92 Children	16 bays
Total	**32 Bays**		**32 Bays**

As shown in the calculation, the parking provision of the proposed development satisfies the parking requirement as defined in the LPS. Due to the nature of the proposed development as a child care centre, car parking is expected to be high-turnover.

3.4 Bicycle Parking Provision

As per the *Town of Bassendean Local Planning Scheme No.10:*

"**4.7.6 Bicycle Facilities** The local government may require the provision of facilities that provide for and encourage cycling as part of any private development. Such facilities shall provide for storage and parking of bicycles and change rooms/showers for cyclists"

For the purpose of this assessment, bicycle racks can be installed on Site to provide sufficient bicycle parking. Staff toilet / change room are provided within the development.

3.5 Provision for Service Vehicles

The waste generated from the proposed development is expected to be serviced as per the existing arrangement for the adjacent developments. Rubbish bins will be wheeled out and placed along the street during the scheduled collection day and returned after the bins are emptied.

4 Changes to Surrounding Area

4.1 Road Network

Cardno contacted the Town of Bassendean and was advised that there are no proposed road network changes in the foreseeable future in the vicinity of the Site.

4.2 Intersection Controls

Cardno contacted the Town of Bassendean and was informed that there are no intersection controls changes in the foreseeable future in the vicinity of the Site.

4.3 Pedestrian/Cycle Networks

Cardno contacted the Town of Bassendean and was informed that the Town is partnering with Public Transport Authority (PTA) to provide on-road bicycle lane along Broadway and Ivanhoe Street between Iolnathe Street and Railway Parade.

4.4 Public Transport Services

Cardno contacted the PTA and were advised that there are no major changes proposed to the public transport services within Bassendean at this stage. Long term changes may come associated with the Forrestfield Airport Link.

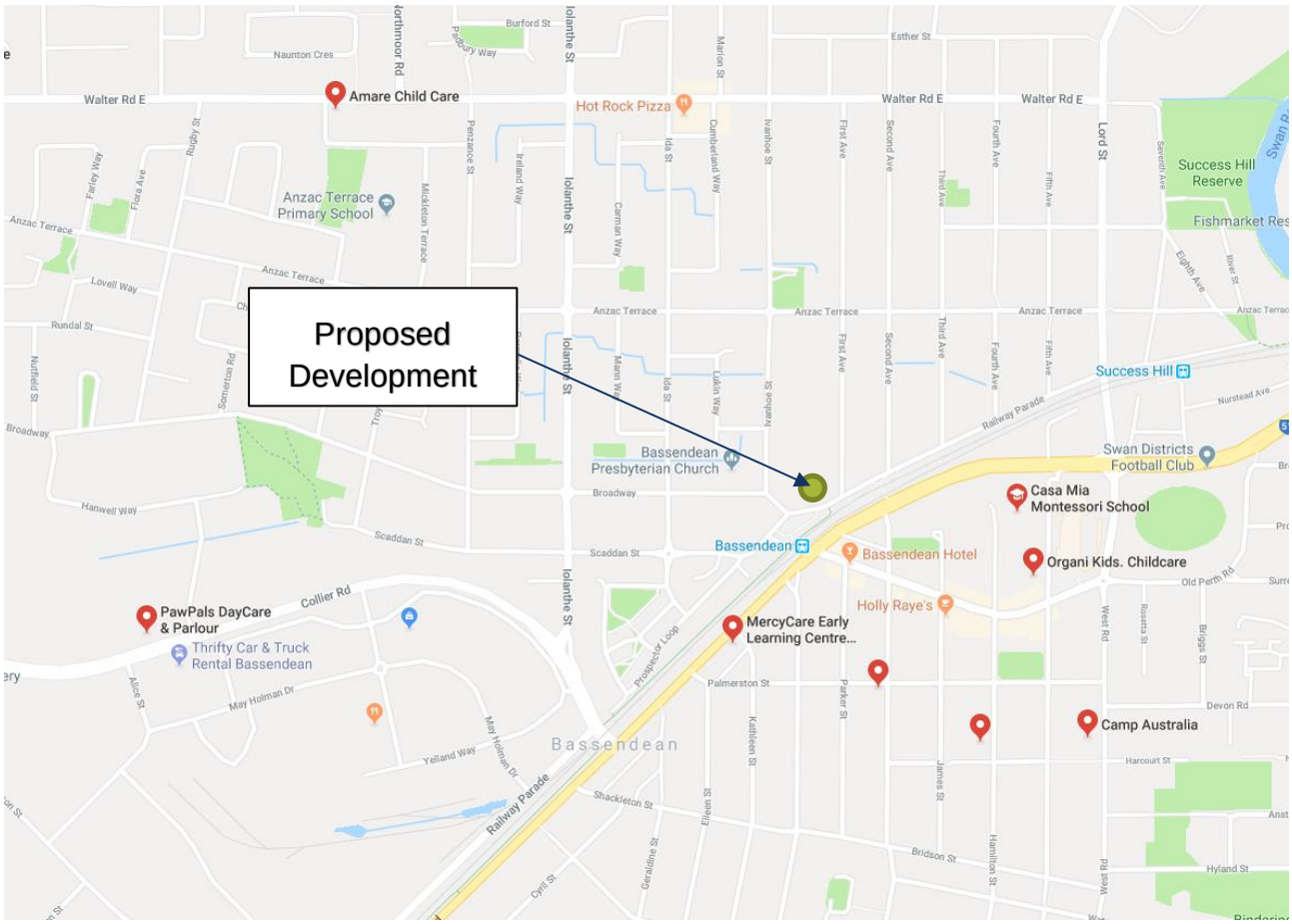
5 Integration with Surrounding Area

5.1 Surrounding Attractors/Generators

The traffic generators for the Site will primarily be the residents from the surrounding residential area who use the facilities of the child care centre.

A search on google map shows that the nearest Early Learning Centre (ELC) / child care is located approximately 300m south of the Site. However, this ELC is located on the other side of Guildford Road, which does not have direct vehicular connections to the proposed development. The nearest childcare located to the north of the Site is approximately 1km away as illustrated in **Figure 5-1.**

Figure 5-1 Potential Catchment Area



5.2 Proposed Changes to Surrounding Land Use

Cardno contacted the Town of Bassendean and was advised that there are no plans to change the land use in the vicinity of the Site.

5.3 Level of Accessibility

The Site benefits from excellent public transportation facilities from the Bassendean Train Station and the bus stops nearby. It is possible that existing users of the Bassendean train station and bus exchange area could utilise this developments childcare services resulting in lower additional trips generated by the site onto the surrounding road network. The Site is also surrounded by excellent footpaths and cycling paths facilitating pedestrian travel to and from the residential developments in the vicinity of the Site.

6 Analysis of Transport Network

6.1 Assessment Years and Time Period

Peak times selected are 7:00 AM – 8:00 AM and 4:00 PM – 5:00 PM respectively for the morning and afternoon peak periods. The following model scenarios have therefore been analysed as part of this assessment:

- Scenario 1 – 2019 background traffic without development
- Scenario 2 – 2020 background traffic with proposed development
- Scenario 3 – 2030 background traffic with proposed development

6.2 Traffic Generation

Trip generation has been calculated using various sources for the different components of the development: *Institute of Transportation Engineers (ITE) "Trip Generation" 10th Edition, Roads and Traffic Authority Guide to Traffic Generating Developments* and *WAPC Transport Impact Assessment Guidelines -Volume 4 - Technical Guidance.*

Table 6-1 Trip Generation Rate Distribution

Land Use	Peak Hour Generation		AM Peak Hour		PM Peak Hour	
	AM Peak	PM Peak	IN	Out	IN	OUT
Child care	0.8	0.7	53%	47%	47%	53%

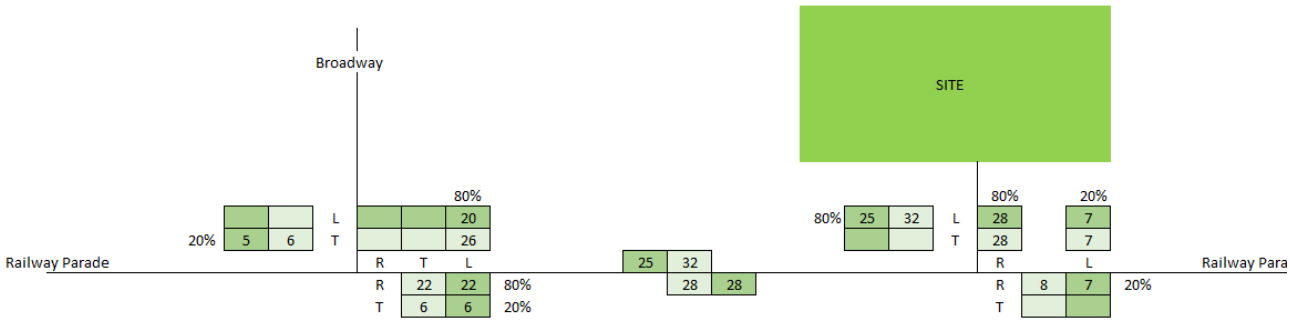
Table 6-2 Trip Generation

Land Use	AM Peak Hour		PM Peak Hour	
Child care	39	35	30	34

6.3 Traffic Distribution

As discussed in **Section 5.1**, the main catchment area of the proposed child care is expected to be north of the Site. Hence, it is assumed that 80% of the trip generated by the proposed development is distributed to the north, while 20% of the trips will be generated from the east and west. The distribution of the traffic generated by the proposed development is shown in **Figure 6-1**.

Figure 6-1 Proposed Development Traffic Distribution



6.4 Key Assumptions

The following key assumptions has been made for this assessment.

- For robust assessment, the peak hour of the proposed development (childcare) is the same as the existing traffic network peak hour
- Staff members would leave outside of the peak period of the proposed development, and this has been reflected in the trip generation calculation
- The growth rate of background traffic has been assumed for 1% growth per annum, including the growth of buses and heavy vehicles

6.5 Intersection Performance

Analysis of the traffic impacts of the proposed development has been carried out for the Railway Parade / Broadway intersection.

The identified intersection has been analysed using the SIDRA analysis program. This program calculates the performance of intersections based on input parameters, including geometry and traffic volumes. As an output SIDRA provides values for the Degree of Saturation (DOS), queue lengths, delays, level of service, and 95th Percentile Queue. These parameters are defined as follows:

- **Degree of Saturation (DOS)**: is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The theoretical intersection capacity is exceeded for an un-signalized intersection where DOS > 0.80;
- **95% Queue**: is the statistical estimate of the queue length up to or below which 95% of all observed queues would be expected;
- **Average Delay**: is the average of all travel time delays for vehicles through the intersection. An unsignalised intersection can be considered to be operating at capacity where the average delay exceeds 40 seconds for any movement; and
- **Level of Service (LOS)**: is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. The different levels of service can generally be described as shown in **Figure 6-2.**

Figure 6-2 Level of Service (LoS) Performance Criteria

LOS	Description	Signalised Intersection	Unsignalised Intersection
A	Free-flow operations (best condition)	≤10 sec	≤10 sec
B	Reasonable free-flow operations	10-20 sec	10-15 sec
C	At or near free-flow operations	20-35 sec	15-25 sec
D	Decreasing free-flow levels	35-55 sec	25-35 sec
E	Operations at capacity	55-80 sec	35-50 sec
F	A breakdown in vehicular flow (worst condition)	≥80 sec	≥50 sec

A LOS exceeding these values indicates that the road section is exceeding its practical capacity. Above these values, users of the intersection are likely to experience unsatisfactory queueing and delays during the peak hour periods.

6.6 Analysis Results

The results of SIDRA analysis show that the nearest intersection will perform satisfactorily after the proposed development is operating, and for the 10 year-horizon with LOS A on all legs during both AM and PM peak. The traffic distributions of all scenarios are presented in **Figure 6-3** to **Figure 6-5**. The analysis results output from SIDRA is contained within **Appendix B** of this report.

Figure 6-3 Traffic Distribution – Scenario 1

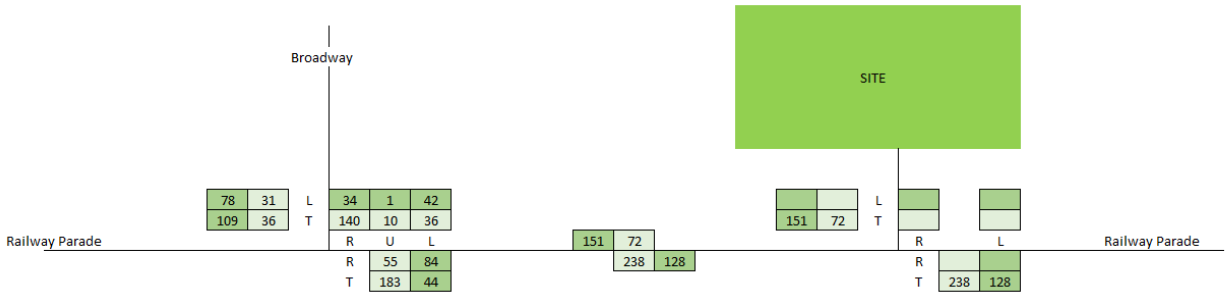


Figure 6-4 Traffic Distribution – Scenario 2

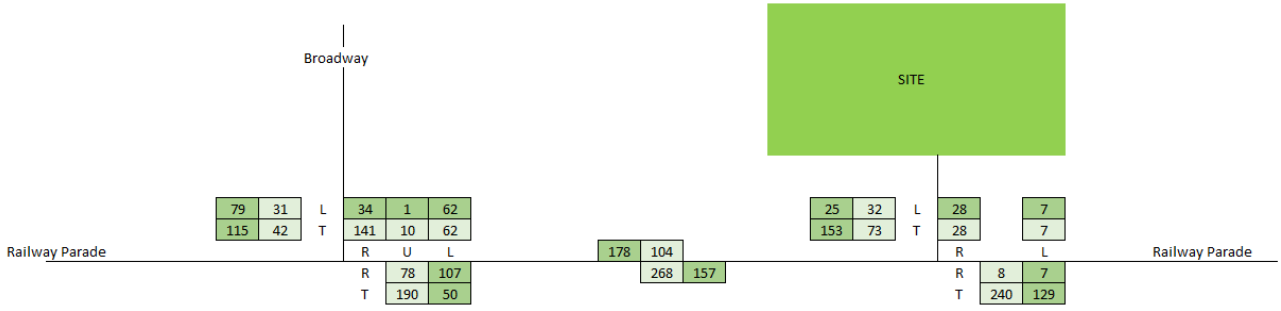
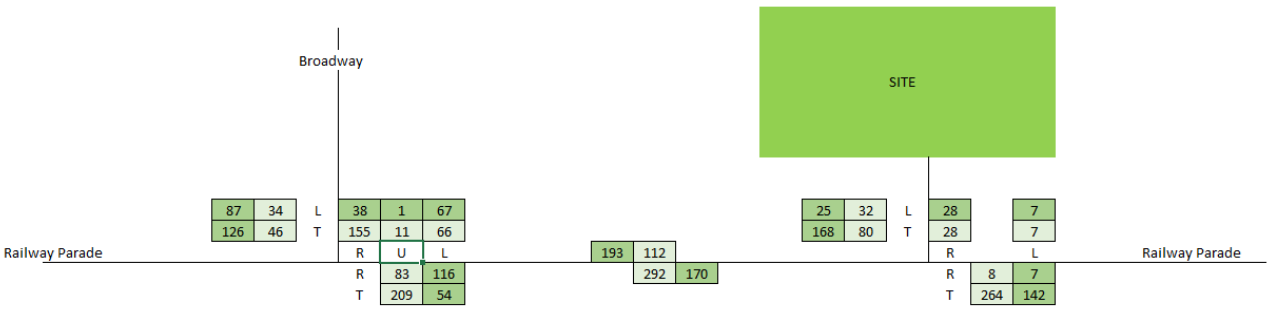


Figure 6-5 Traffic Distribution – Scenario 3



7 Summary

This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) *Transport Assessment Guidelines for Developments: Volume 4 – Individual Development*.

The following conclusions have been made with regards to the proposed development:

- The Site will generate approximately 74 vehicle trips during the AM peak period and 64 vehicle trips during the PM peak period.
- The car parking provision of the proposed development satisfies the parking requirement of the *Town of Bassendean Local Planning Scheme.*
- The Site benefits from excellent public transport facilities with bus stops and train station located approximately 50m to 100m of the Site.
- The Site benefits from excellent pedestrian and cycling facilities with footpaths and shared paths provided in the vicinity of the Site.
- The vehicular sightlines of the proposed access satisfy the minimum sightline requirements as described within *AS2890.1.*

APPENDIX

A

WAPC CHECKLIST

Item	Provided	Comments/Proposals
Summary		
Introduction/Background	Section 1	
name of applicant and consultant	Section 1	
development location and context	Section 2	
brief description of development proposal	Section 2	
key issues	N/A	
Background information	Section 1	
Existing situation	Section 2	
existing site uses (if any)	Section 2	
existing parking and demand (if appropriate)	N/A	
existing access arrangements	Section 3	
existing site traffic	Section 2	
surrounding land uses	Section 2	
surrounding road network	Section 2	
traffic management on frontage roads	Section 2	
traffic flows on surrounding roads (usually am and pm peak hours)	Section 6	
traffic flows at major intersections (usually am and pm peak hours)	Section 6	
operation of surrounding intersections	Section 5	
existing pedestrian/cycle networks	Section 2	
existing public transport services surrounding the development	Section 2	
Crash data	Section 2	
Development proposal	Section 3	
regional context	Section 4	
proposed land uses	Section 3	
table of land uses and quantities	Section 3	
access arrangements	Section 3	
parking provision	Section 3	
end of trip facilities	N/A	
any specific issues	N/A	
road network	Section 2	
intersection layouts and controls	Section 4	
pedestrian/cycle networks and crossing facilities	Section 4	

Item	Provided	Comments/Proposals
public transport services	Section 4	
Integration with surrounding area	Section 5	
surrounding major attractors/generators	Section 5	
committed developments and transport proposals	N/A	
proposed changes to land uses within 1200 metres	Section 4	
travel desire lines from development to these attractors/generators	N/A	
adequacy of existing transport networks	Section 2	
deficiencies in existing transport networks	N/A	
remedial measures to address deficiencies	N/A	
Analysis of transport networks	Section 6	
assessment years	Section 6	
time periods	Section 6	
development generated traffic	Section 6	
distribution of generated traffic	Section 6	
parking supply & demand	Section 3	
base and "with development" traffic flows	Section 6	
analysis of development accesses	N/A	
impact on surrounding roads	N/A	
impact on intersections	Section 6	
impact on neighbouring areas	N/A	
traffic noise and vibration	N/A	
road safety	N/A	
public transport access	Section 2	
pedestrian access / amenity	Section 2	
cycle access / amenity	Section 2	
analysis of pedestrian / cycle networks	Section 2, Section 5	
safe walk/cycle to school (for residential and school site developments only)	N/A	
Traffic management plan (where appropriate)	N/A	

APPENDIX B

SIDRA ANALYSIS

2019 Background Traffic

AM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	183	2.0	0.128	0.1	LOS A	0.3	2.4	0.09	0.14	0.09	54.7
6	R2	55	0.0	0.128	5.7	LOS A	0.3	2.4	0.09	0.14	0.09	43.7
Approach		238	1.5	0.128	1.4	NA	0.3	2.4	0.09	0.14	0.09	52.3
North: Broadway												
7	L2	42	44.0	0.175	4.9	LOS A	0.7	5.0	0.19	0.60	0.19	32.9
9	R2	140	1.0	0.175	6.0	LOS A	0.7	5.0	0.19	0.60	0.19	37.7
Approach		182	10.9	0.175	5.7	LOS A	0.7	5.0	0.19	0.60	0.19	36.6
West: Railway Parade												
10	L2	31	32.0	0.041	5.9	LOS A	0.0	0.0	0.00	0.27	0.00	30.9
11	T1	36	17.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.27	0.00	53.0
Approach		67	23.9	0.041	2.7	NA	0.0	0.0	0.00	0.27	0.00	40.9
All Vehicles		487	8.1	0.175	3.2	NA	0.7	5.0	0.11	0.33	0.11	44.2

PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	44	0.0	0.079	0.6	LOS A	0.4	2.6	0.30	0.39	0.30	47.0
6	R2	84	0.0	0.079	6.1	LOS A	0.4	2.6	0.30	0.39	0.30	37.0
Approach		128	0.0	0.079	4.2	NA	0.4	2.6	0.30	0.39	0.30	40.7
North: Broadway												
7	L2	42	24.0	0.066	5.1	LOS A	0.2	1.9	0.23	0.57	0.23	35.3
9	R2	34	0.0	0.066	5.7	LOS A	0.2	1.9	0.23	0.57	0.23	38.4
Approach		76	13.3	0.066	5.4	LOS A	0.2	1.9	0.23	0.57	0.23	36.7
West: Railway Parade												
10	L2	78	15.0	0.105	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	109	7.0	0.105	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.2
Approach		187	10.3	0.105	2.4	NA	0.0	0.0	0.00	0.24	0.00	42.5
All Vehicles		391	7.5	0.105	3.6	NA	0.4	2.6	0.14	0.35	0.14	40.8

2020 Background Traffic + Development Traffic

AM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	190	2.0	0.146	0.1	LOS A	0.5	3.4	0.12	0.17	0.12	53.4
6	R2	78	0.0	0.146	5.7	LOS A	0.5	3.4	0.12	0.17	0.12	42.6
Approach		268	1.4	0.146	1.7	NA	0.5	3.4	0.12	0.17	0.12	50.5
North: Broadway												
7	L2	62	44.0	0.198	4.9	LOS A	0.8	6.0	0.18	0.60	0.18	32.8
9	R2	141	1.0	0.198	6.2	LOS A	0.8	6.0	0.18	0.60	0.18	37.6
Approach		203	14.1	0.198	5.8	LOS A	0.8	6.0	0.18	0.60	0.18	36.1
West: Railway Parade												
10	L2	31	32.0	0.044	5.9	LOS A	0.0	0.0	0.00	0.25	0.00	31.1
11	T1	42	17.0	0.044	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	53.5
Approach		73	23.4	0.044	2.5	NA	0.0	0.0	0.00	0.25	0.00	42.2
All Vehicles		544	9.1	0.198	3.4	NA	0.8	6.0	0.13	0.34	0.13	43.4

PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	50	0.0	0.098	0.6	LOS A	0.5	3.3	0.31	0.40	0.31	46.6
6	R2	107	0.0	0.098	6.1	LOS A	0.5	3.3	0.31	0.40	0.31	36.7
Approach		157	0.0	0.098	4.4	NA	0.5	3.3	0.31	0.40	0.31	40.0
North: Broadway												
7	L2	62	24.0	0.082	5.2	LOS A	0.3	2.5	0.24	0.57	0.24	35.3
9	R2	34	0.0	0.082	5.9	LOS A	0.3	2.5	0.24	0.57	0.24	38.3
Approach		96	15.5	0.082	5.4	LOS A	0.3	2.5	0.24	0.57	0.24	36.4
West: Railway Parade												
10	L2	79	15.0	0.109	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	115	7.0	0.109	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.4
Approach		194	10.3	0.109	2.3	NA	0.0	0.0	0.00	0.24	0.00	42.8
All Vehicles		447	7.8	0.109	3.7	NA	0.5	3.3	0.16	0.37	0.16	40.5

2030 Background Traffic + Development Traffic

AM

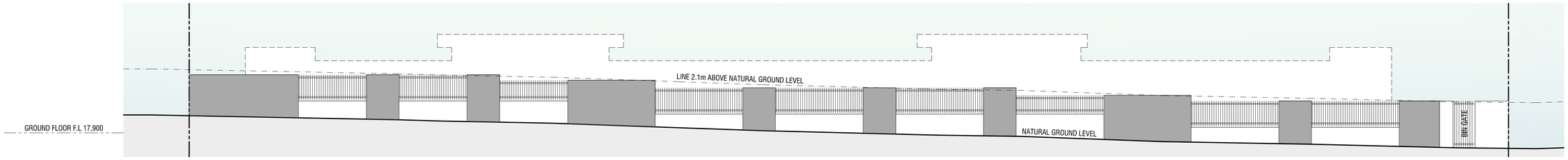
Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	209	2.0	0.159	0.1	LOS A	0.5	3.7	0.12	0.17	0.12	53.5
6	R2	83	0.0	0.159	5.7	LOS A	0.5	3.7	0.12	0.17	0.12	42.6
Approach		292	1.4	0.159	1.7	NA	0.5	3.7	0.12	0.17	0.12	50.6
North: Broadway												
7	L2	66	44.0	0.221	4.9	LOS A	0.9	6.7	0.20	0.61	0.20	32.5
9	R2	155	1.0	0.221	6.4	LOS A	0.9	6.7	0.20	0.61	0.20	37.3
Approach		221	13.8	0.221	6.0	LOS A	0.9	6.7	0.20	0.61	0.20	35.8
West: Railway Parade												
10	L2	34	32.0	0.049	5.9	LOS A	0.0	0.0	0.00	0.25	0.00	31.1
11	T1	46	17.0	0.049	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	53.5
Approach		80	23.4	0.049	2.5	NA	0.0	0.0	0.00	0.25	0.00	42.1
All Vehicles		593	9.0	0.221	3.4	NA	0.9	6.7	0.14	0.34	0.14	43.4

PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	54	0.0	0.108	0.7	LOS A	0.5	3.7	0.33	0.41	0.33	46.5
6	R2	116	0.0	0.108	6.2	LOS A	0.5	3.7	0.33	0.41	0.33	36.5
Approach		170	0.0	0.108	4.5	NA	0.5	3.7	0.33	0.41	0.33	39.9
North: Broadway												
7	L2	67	24.0	0.092	5.2	LOS A	0.3	2.8	0.26	0.58	0.26	35.2
9	R2	38	0.0	0.092	6.1	LOS A	0.3	2.8	0.26	0.58	0.26	38.2
Approach		105	15.3	0.092	5.5	LOS A	0.3	2.8	0.26	0.58	0.26	36.3
West: Railway Parade												
10	L2	87	15.0	0.119	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	126	7.0	0.119	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.3
Approach		213	10.3	0.119	2.3	NA	0.0	0.0	0.00	0.24	0.00	42.7
All Vehicles		488	7.8	0.119	3.8	NA	0.5	3.7	0.17	0.37	0.17	40.4

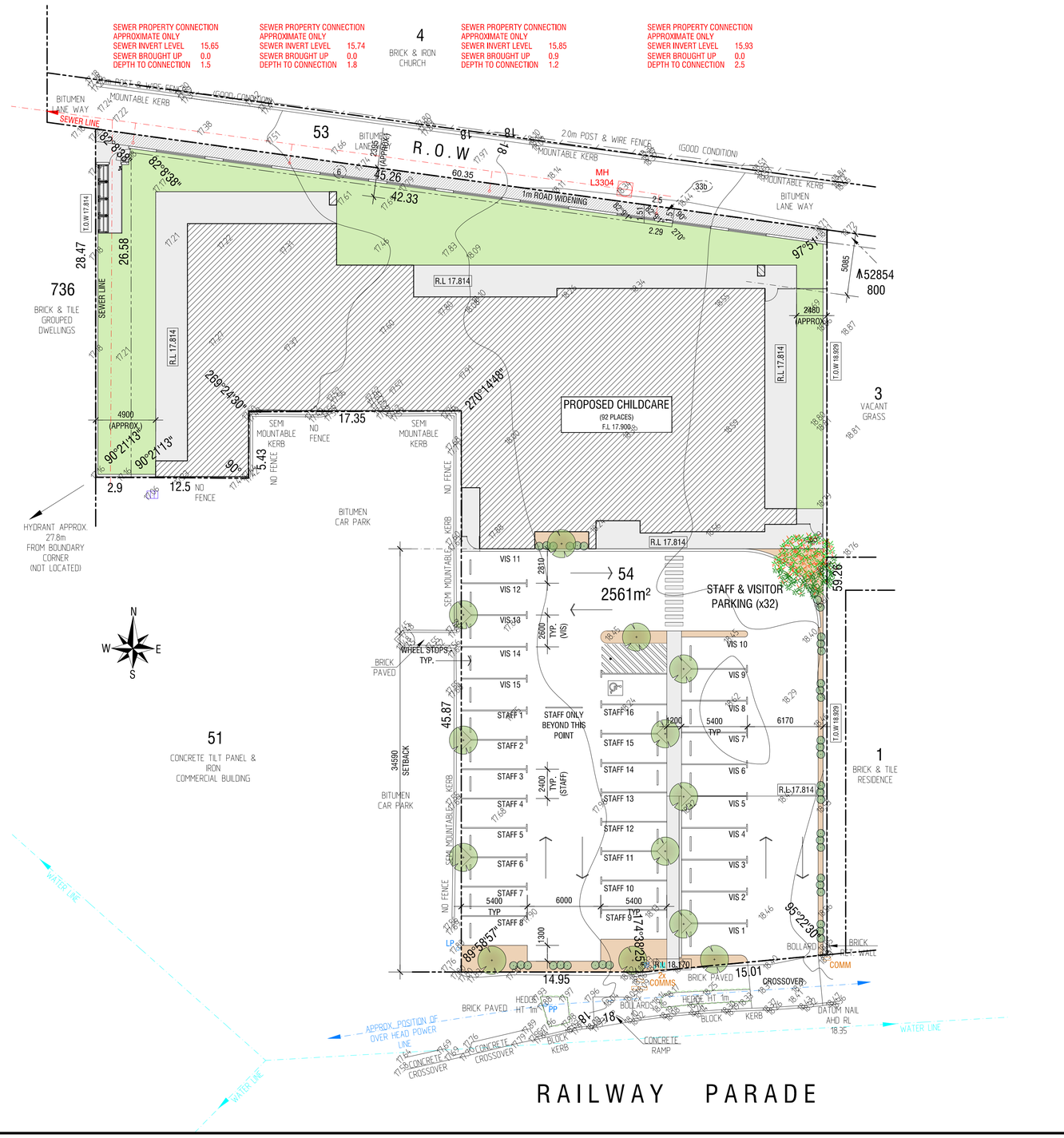
APPENDIX C

DEVELOPMENT PLANS



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

SCALE 1:200 @ A1

DRAWN MJG

CHECKED MJG

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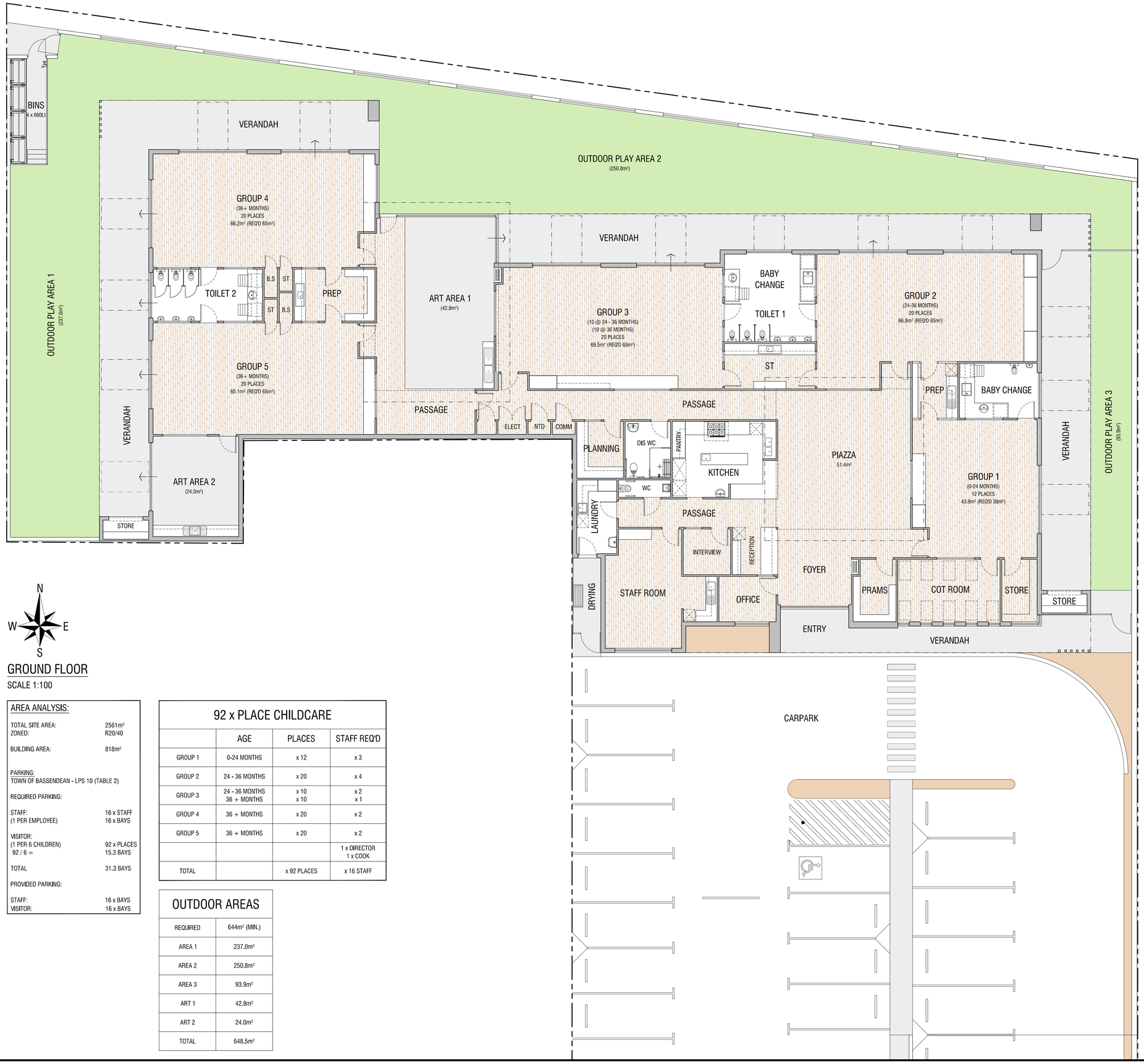

N
W E
S

GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	818m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
AREA 1	237.0m²
AREA 2	250.8m²
AREA 3	93.9m²
ART 1	42.8m²
ART 2	24.0m²
TOTAL	648.5m²

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

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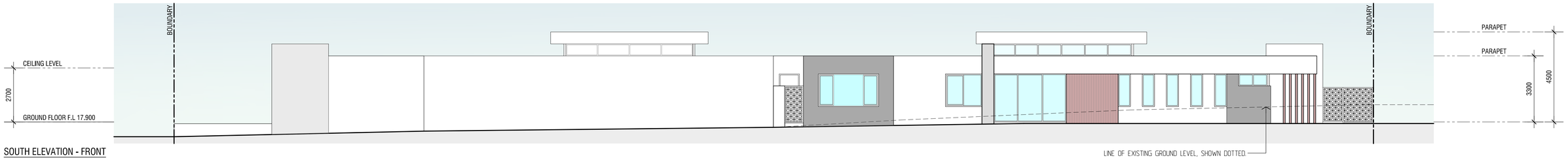
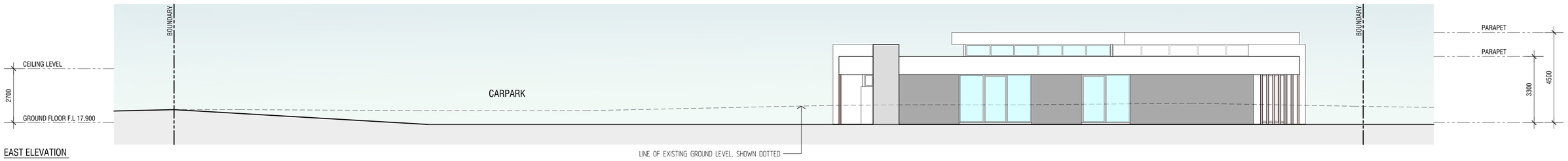
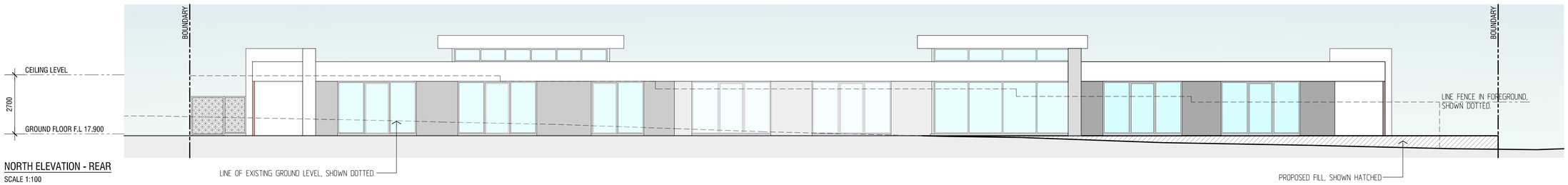


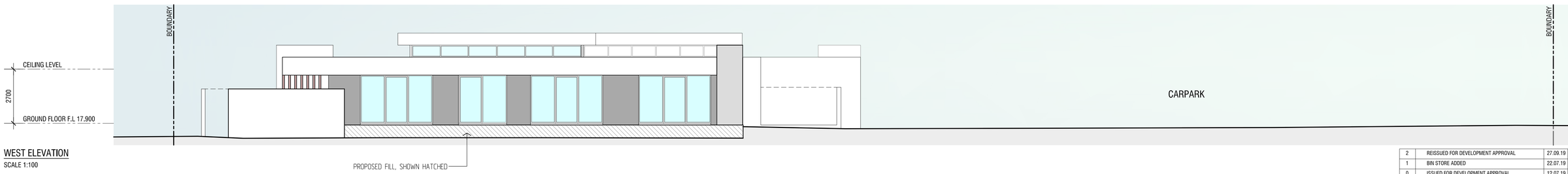
SOUTH ELEVATION - FRONT
SCALE 1:100



EAST ELEVATION
SCALE 1:100



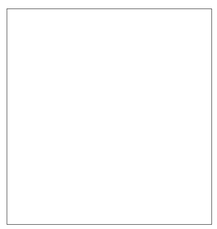
NORTH ELEVATION - REAR
SCALE 1:100



WEST ELEVATION
SCALE 1:100

FEATURE COLOUR:
'DOMINO GREY'

CLADDING:
VERTICAL JARRAH CLADDING



MAIN COLOUR:
'LEXICON WHITE'

FEATURE COLOUR:
'WALLABY GREY'

MATERIALS PALETTE

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- ELEVATIONS

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A03	2

CAD FILE NAME
8123-SD_A00

SCALE
1:100 @ A1

DRAWN
MJG

CHECKED
MJG

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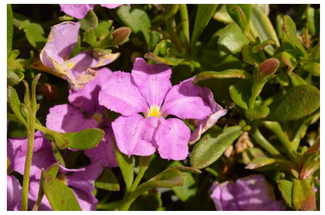
BRACHYCHITON ACERIFOLIA


LAGERSTROEMIA INDICA BILOXI


DAMPIERA LINEARIS


EREMOPHILA GLABRA PROSTRATA


GREVILLEA THELEMANNIANA


SCAEVOLA

LEGEND

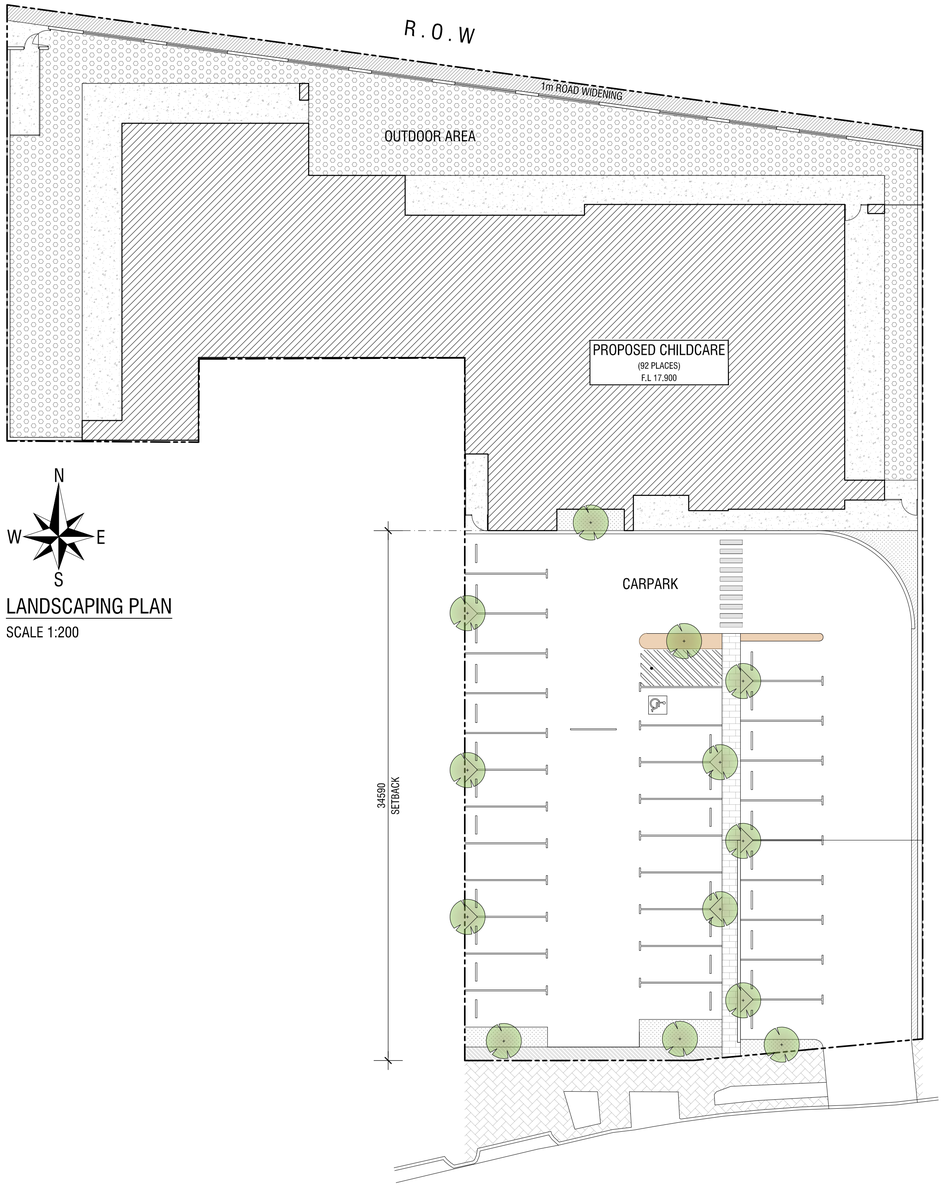
- NON-SLIP CONCRETE
- PAVING
- EXISTING VERGE PAVING (TO REMAIN)
- NATURE PLAY AREA
- PLANTING MIX 'A'
- PLANTING MIX 'B'
- ORGANIC MULCH (75mm DEPTH)

PLANT SCHEDULE

BRACHYCHITON ACERIFOLIA (ILLAWARRA FLAME TREE)

LAGERSTROEMIA INDICA BILOXI (CREPE MYRTLE)

SPECIES	POT SIZE	QUANTITY	PLANT MIX
TREES			
BRACHYCHITON ACERIFOLIA	200L	1	N/A
LAGERSTROEMIA INDICA BILOXI	90L	13	N/A
GROUNDCOVERS			
DAMPIERA LINEARIS	130/140mm	4/m2	A
EREMOPHILA GLABRA PROSTRATA	130/140mm	4/m2	A
GREVILLEA THELEMANNIANA	130/140mm	4/m2	B
SCAEVOLA	130/140mm	4/m2	B



LANDSCAPING PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
1	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	22.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- LANDSCAPE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A04	1

CAD FILE NAME
8123-SD_A00

SCALE
1:200 @ A1

DRAWN
MJG

CHECKED
MJG

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APPENDIX 4
Acoustic Report

DYNAMIC PLANNING
AND DEVELOPMENTS

WASTE MANAGEMENT PLAN

For

Lot 54 (No. 72) Railway Parade, Bassendean

Proposed Child Care Premises

October 2019

| Suite 15/29 Collier Road Morley WA 6062 | P.O. Box 688 Inglewood WA 6932 t (08) 9275 4433 f (08) 9275 4455

DYNAMIC PLANNING
AND DEVELOPMENTS

INTRODUCTION

This waste management plan pertains to the following:

Development: Proposed Child Care Premises

Address: Lot 54 (No.72) Railway Parade, Bassendean

This waste management plan is to address the operational phases of the development and has been developed having reference to the City of Melbourne's *Waste Generation Rates 2016.*

Once approved by the Town of Bassendean, waste collection and disposal is to be undertaken in accordance with this Waste Management Plan, subject to any additional conditions of planning approval.

The development consists of:

☒ Residential

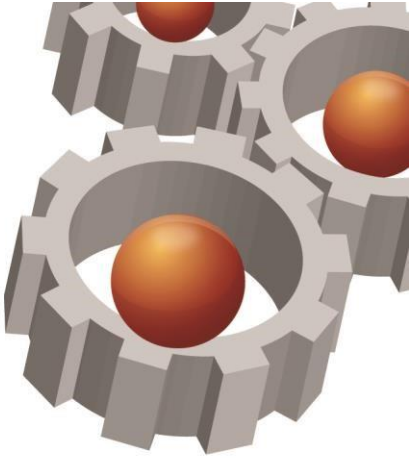
If yes, how many dwellings? **N/A**

☑ Non-Residential Tenancies

If yes, complete the table below:

Land Use	***No. of Tenancies***	***Waste Generating Area***
Child Care Premises	1	750sqm

DYNAMIC PLANNING
AND DEVELOPMENTS



WASTE AND RECYCLABLES CAPACITY

In the absence of the Town of Bassendean and WALGA having applicable waste generation rates, the rate used in the below table is based on the City of Melbourne's *Waste Generation Rates 2016*.

Land Use	***Total Waste Requirement***	***Total Recycling Requirement***
Generation		
Proposed Child Care Premises (750sqm)	350L / 100m^2 floor area / week	350L / 100m^2 floor area / week
Total Non-Residential (litres):	**2,625L per week**	**2,625L per week**
Capacity		
Proposed Commercial Development	2 x 660L bins on a twice a week pick up.	2 x 660L bins on a twice a week pick up
Total Residential (litres):	**n/a**	**n/a**
Total Non-Residential (litres):	**2,640L per week**	**2,640L per week**

Other Waste Requirements

Liquid or hazardous waste generated on-site? **NO**
If yes, please detail collection arrangements:

_____

_____

_____

Medical waste products controlled by the *Environmental Protection (Controlled Waste) Regulations 2004* generated on-site? **NO**
If yes, please detail collection arrangements:

_____

_____

_____

Will processing, retail and/or wholesale of animal products occur on-site? **NO**

If yes, please detail collection arrangements:

_____

_____

_____

DYNAMIC PLANNING
AND DEVELOPMENTS

BIN SELECTION

Type of bins to service the development:

Non-Residential

Please circle selected bin size:

Bin Capacity	**80L**	**120L**	**140L**	**240L**	**360L**
Height (mm)	870	940	1065	1080	1100
Depth (mm)	530	560	540	735	885
Width (mm)	450	485	500	580	600
Approx. footprint (m^2)	0.24	0.27	0.27	0.43	0.53

Bin Capacity	**660L**	**770L**	**1100L**	**1300L**	**1700L**
Height (mm)	1250	1425	1470	1408	1470
Depth (mm)	580	1100	1245	1250	1250
Width (mm)	1370	1370	1370	1770	1770
Approx. footprint (m^2)	1.16	1.5	1.7	1.21	1.27

Total number of bins required: **2 x general waste. 2 x recycle waste.**

Collection Method: Collection will occur via a private contractor twice weekly.

When collection is due to occur the bins will be transferred from the designated bin store to the boundary of the site with the ROW to the rear. It is expected that whilst waiting for collection, the bins will be stored immediately adjacent to the exit gate so as to not obstruct the ROW. Once collected the bins will be transferred back to the secure bin store.

Collection will occur at off peak periods and outside of noise sensitive periods being 7pm at night to 7am in the morning. This is to reduce both traffic and noise impacts associated with the waste collection.

BIN COMPOUNDS

The applicable bin storage area is illustrated on the attached development plans which have been submitted for planning approval – refer below for excerpt displaying the relevant bin storage locations.

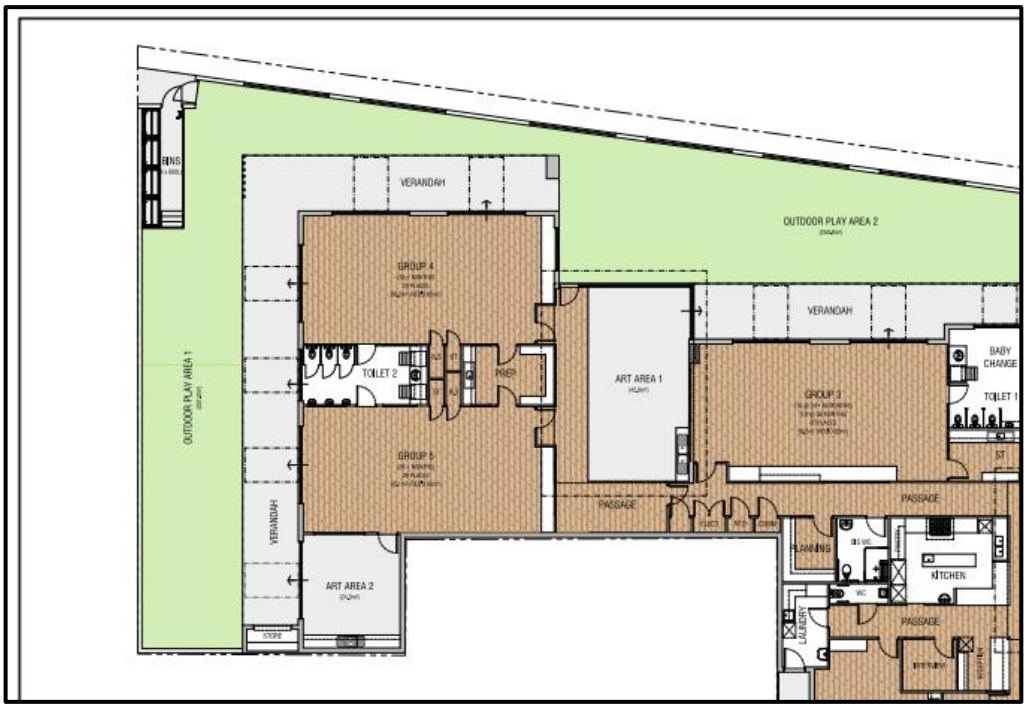
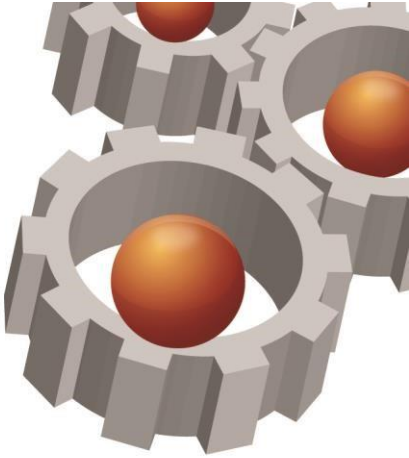


Fig 1 – Excerpt from Development Plans

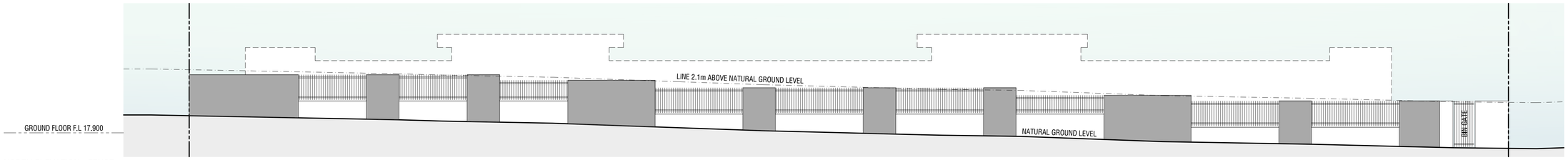
This compound will be secured and screened from view from the ROW and adjoining site via a compound wall. In addition, the compound will be connected to water and drained appropriately to allow for the bins to be cleaned.

DYNAMIC PLANNING
AND DEVELOPMENTS



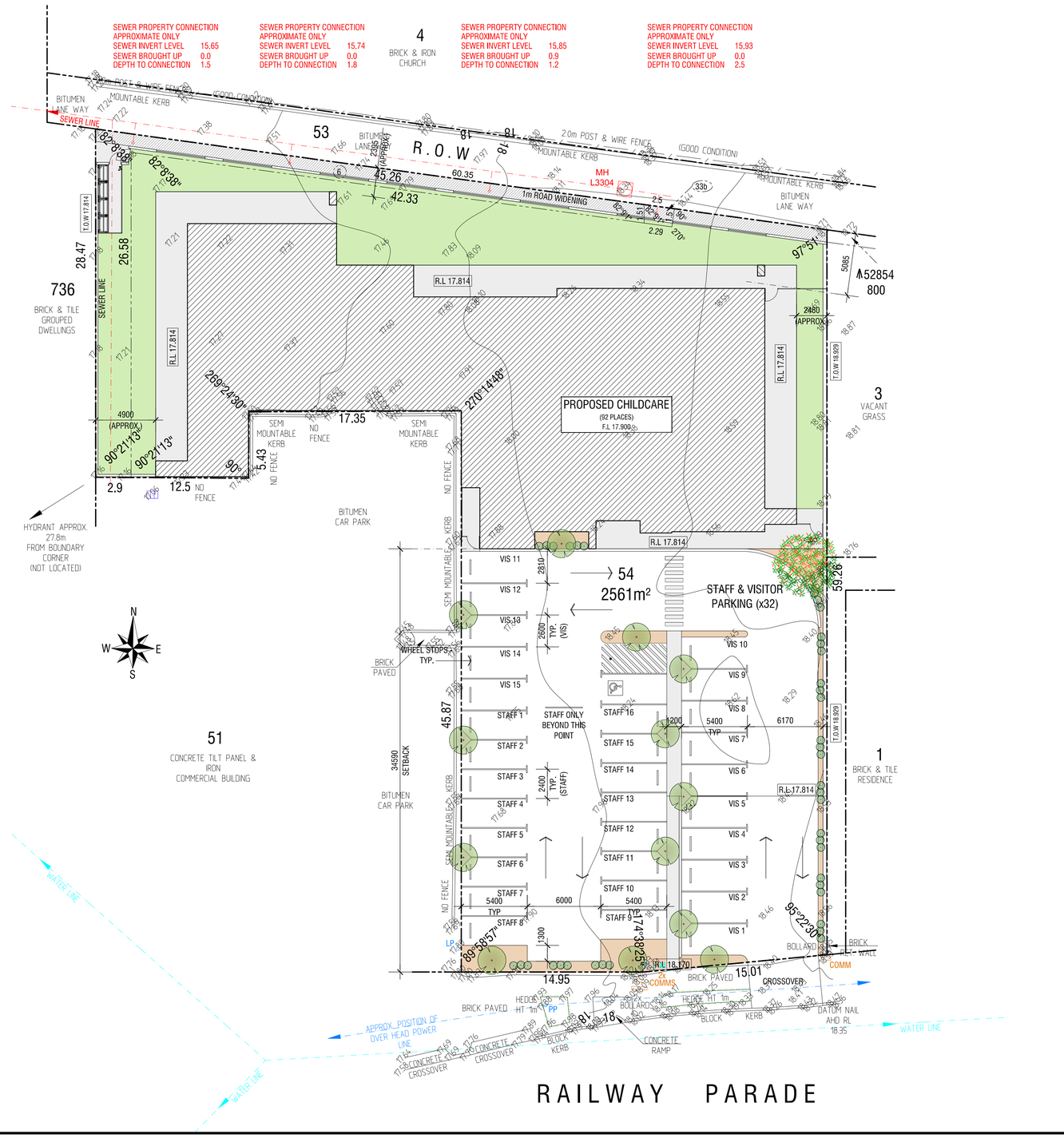
Attachment 1
Proposed Development Plans

| Suite 15/29 Collier Road Morley WA 6062 | P.O. Box 688 Inglewood WA 6932 t (08) 9275 4433 f (08) 9275 4455



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

SCALE 1:200 @ A1

DRAWN MJG

CHECKED MJG

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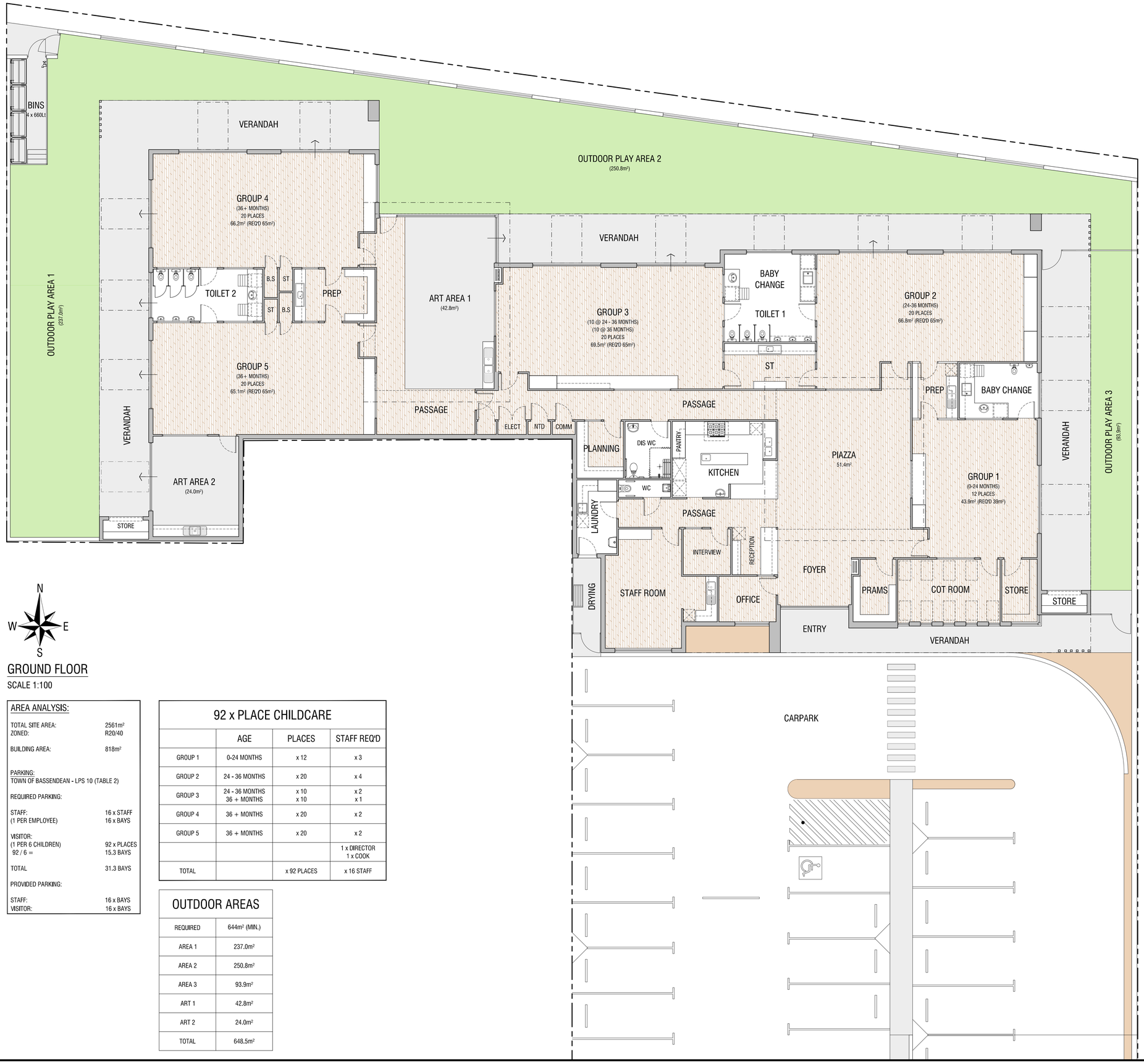

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GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	818m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
AREA 1	237.0m²
AREA 2	250.8m²
AREA 3	93.9m²
ART 1	42.8m²
ART 2	24.0m²
TOTAL	648.5m²

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

GDD DESIGN GROUP
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Tel : (08) 9388 8846

HERRING STORER ACOUSTICS

PROPOSED CHILD CARE CENTRE

72 RAILWAY PARADE BASSENDEAN

ENVIRONMENTAL ACOUSTIC ASSESSMENT

OCTOBER 2019

OUR REFERENCE: 24622-2-19194

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:
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ENVIRONMENTAL ACOUSTIC ASSESSMENT

CHILD CARE CENTRE - BASSENDEAN

Job No: 19194

Document Reference : 24622-2-19194

FOR

AGEM COMMERCIAL Pty Ltd

DOCUMENT INFORMATION			
Author:	Tim Reynolds	**Checked By:**	George Watts
Date of Issue:	31 July 2019		

REVISION HISTORY

Revision	Description	Date	Author	Checked
1	Revised Plan	11/10/19	TR	N/A

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CONTENTS

APPENDICIES

1. INTRODUCTION

Herring Storer Acoustics were commissioned to undertake an acoustic assessment of noise emissions associated with the proposed child care centre to be located at 72 Railway Parade, Bassendean.

This report assesses noise emissions from the premises with regards to compliance with the requirements of the *Environmental Protection (Noise) Regulations 1997*. For this development of a Child Care Centre, the noise sources considered as part of this assessment include :

- Children within the outdoor play area; and
- Mechanical Services.

We note that from information received from DWER, the bitumised area would be considered as a road, thus noise relating to the "propulsion and braking of motor vehicles is exempt from the *Environmental Protection (Noise) Regulations 1997*. We note that these noise sources are rarely critical in the determination of compliance. However, for completeness, they have been included in the assessment, for information purposes only.

For reference, a plan of the proposed development is attached in Appendix A.

2. SUMMARY

For this development, the neighbouring residences premises are to the west and east along Railway Parade. It is understood that, although the proposed child care centre would open before 7 am (ie during the night period), the outdoor play area would not be used until after 7am. Thus, noise received at the neighbouring residences from the outdoor play area needs to comply with the assigned day period noise level. However, other noise sources would need to comply with the assigned night period noise levels.

Noise received at the neighbouring premises from children playing in the outdoor areas would comply with the requirements of the *Environmental Protection (Noise) Regulations 1997*, for the proposed hours of operation, provided :

- play is limited to the day period.
- the western boundary fence is as shown in Figure 5.1 in Section 5.
- the number of children within the outdoor play area located on the western side of the child care is limited to 20.

Noise from cars, including closing of doors and engine start-up, would also comply with the relevant noise criteria at the neighbouring residences.

Finally, noise emissions from the mechanical services also achieves compliance at the neighbouring premises for the proposed operating times, provided the condensing units to be located be located either outside the kitchen, underneath the verandah, as outlined in Section 5 - Modelling.

Note : Alternative locations for the condensing units, would be behind the parapet, Thus, given that the various locations that the air conditioning condensing units could be located, it is recommended that an acoustic assessment be undertaken of the final design, to ensure compliance with the Regulations.

Thus, noise emissions from the proposed development would be deemed to comply with the requirements of the *Environmental Protection (Noise) Regulations 1997* for the proposed hours of operation. However, given that the various locations that the air conditioning condensing units could be located, it is recommended that an acoustic assessment be undertaken of the final design, to ensure compliance with the Regulations.

3. CRITERIA

The allowable noise level for noise sensitive premises in the vicinity of the proposed Facility site is prescribed by the *Environmental Protection (Noise) Regulations 1997*. Regulations 7 and 8 stipulate maximum allowable external noise levels or assigned noise levels that can be received at a premise from another premises. For residential premises, this noise level is determined by the calculation of an influencing factor, which is then added to the base levels shown below. The influencing factor is calculated for the usage of land within two circles, having radii of 100m and 450m from the premises of concern. The base assigned noise levels for residential premises are listed in Table 3.1.

TABLE 3.1 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises: highly sensitive area	0700 - 1900 hours Monday to Saturday (Day)	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day)	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days (Evening)	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	35 + IF	45 + IF	55 + IF

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.
IF is the influencing factor.

It is a requirement that received noise be free of annoying characteristics (tonality, modulation and impulsiveness), defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax(Slow)}$ is more than 15 dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3 dB L_{AFast} or is more than 3 dB L_{AFast} in any one-third octave band;

(b) is present for more at least 10% of the representative assessment period; and

(c) is regular, cyclic and audible;

"tonality" means the presence in the noise emission of tonal characteristics where the difference between –

(a) the A-weighted sound pressure level in any one-third octave band; and

(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as L_{ASlow} levels.

Where the noise emission is not music, if the above characteristics exist and cannot be practicably removed, then any measured level is adjusted according to Table 3.2 below.

TABLE 3.2 - ADJUSTMENTS TO MEASURED LEVELS

Where **tonality** is present	Where **modulation** is present	Where **impulsiveness** is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Note: These adjustments are cumulative to a maximum of 15 dB.

For this development, the closest residential premises of concern are located, as shown on Figure 3.1 below.

FIGURE 3.1 – AREA AROUND PROPOSED CHILD CARE

The influencing factor at the neighbouring residence to the east, due to Guildford Road being within 100m, would be +6 dB. For the other neighbouring residences, the Influencing Factor would be +2 dB. Thus, the assigned noise levels are as listed in Tables 3.3 and 3.4.

TABLE 3.3 - ASSIGNED OUTDOOR NOISE LEVEL
NEIGHBOURING RESIDENCES TO EAST

Premises Receiving Noise	**Time of Day**	**Assigned Level (dB)**		
		$L_{A\ 10}$	**$L_{A\ 1}$**	**$L_{A\ max}$**
Noise sensitive premises : Highly sensitive area	0700 - 1900 hours Monday to Saturday	51	61	71
	0900 - 1900 hours Sunday and Public Holidays	46	56	71
	1900 - 2200 hours all days	46	56	61
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	41	51	61

Note: L_{A10} is the noise level exceeded for 10% of the time.

L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

TABLE 3.4 - ASSIGNED OUTDOOR NOISE LEVEL
OTHER NEIGHBOURING RESIDENCES

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises : Highly sensitive area	0700 - 1900 hours Monday to Saturday	47	57	7
	0900 - 1900 hours Sunday and Public Holidays	47	52	67
	1900 - 2200 hours all days	42	52	57
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	37	47	57

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

4. PROPOSAL

From information supplied, we understand that the child care centre could open before 7am (ie 6:30am), with the normal hours of operations would be between 0630 and 1830 hours, Monday to Friday (closed on public holidays). It is understood that the proposed childcare centre will cater for a maximum of 92 children, including 12 babies.

It is noted that although the proposed child care centre would open before 7 am (ie during the night period), the outdoor play area would not be used until after 7am. Thus, noise received at the neighbouring residences from the outdoor play area needs to comply with the assigned day period noise level. However, other noise sources would need to comply with the assigned night period noise levels.

For reference, a plan of the proposed development is attached in Appendix A.

5. MODELLING

Modelling of the noise propagation from the proposed development was carried out using an environmental noise modelling computer program, “SoundPlan”. Calculations were carried out using the EPA worst case weather conditions as stated in the Environmental Protection Authority’s *“Draft Guidance for Assessment of Environmental Factors No.8 - Environmental Noise”*.

Noise emissions from the development, include:

- Mechanical Services.
- Car movements on Site.
- Car engine start and door closing.
- Children in Outdoor play area.

The calculations were based on the sound power levels listed in Tables 5.1 and 5.2.

TABLE 5.1 – GENERAL SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Children Playing	87 (per 10 children)
Delivery Vehicle	84
Cars moving	79
Car Start	85
Car Door	87

TABLE 5.2 – MECHANICAL SERVICES SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Air Conditioning Condensing Units	6 @ 71
Kitchen Exhaust	65
Toilet Exhausts	4 @ 57

The above noise sources need to comply with the following assigned noise levels :

L_{A10} - Outdoor play and mechanical services.
L_{A1} - Car movements.
L_{AMax} - Car starts and doors closing.

With regards to noise emissions, the following are noted:

1 Noise associated with the mechanical services does not take into account any diversity of operation. Thus, this is a conservative assessment. The acoustic assessment of the mechanical services has been based on:

- 4 condensing units located outside the kitchen;
- 1 condensing unit to eastern side of the group 4 room (under verandah); and
- 1 condensing unit to the back of baby change area (under verandah).

2 Given the size of the outdoor play area, acoustic modelling of outdoor play noise was made, based on 60 children playing outside within the outdoor play areas at the one time, utilising 6 groups of 10 children with sound power levels distributed as plane sources.

3 The following assessment is based on the western boundary fence being as shown in Figure 5.1. This fence to extend from the southern corner to the bin store. Additionally, the number of children allow in the play scape area to the west of the building to be limited to 20.

Thus, noise modelling was undertaken to the neighbouring residential premises, as shown on Figure 3.1.

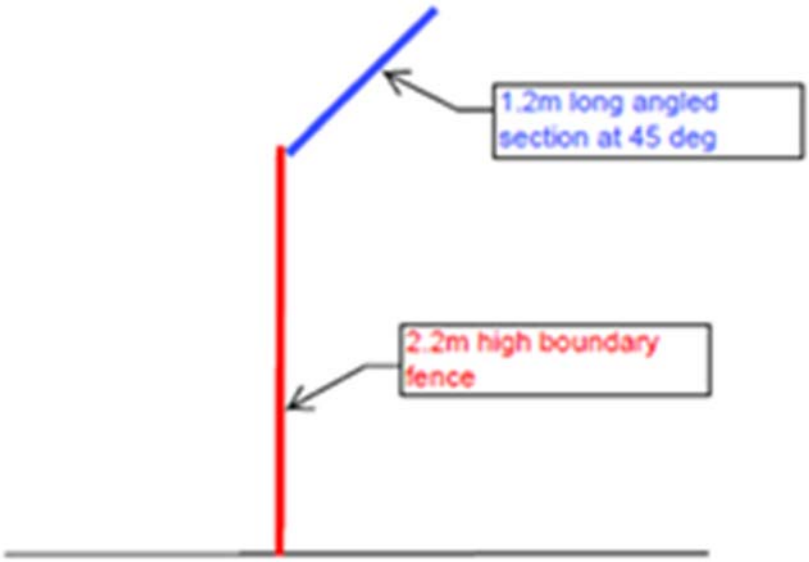


Figure 5.1 – Western Boundary Fence

6. RESULTS

The results of the noise modelling are listed in Tables 6.1 and 6.2.

TABLE 6.1 – CALCULATED NOISE LEVELS FOR LA10 NOISE SOURCES

Location	Noise Source / Calculated Noise Levels (dB(A))	
	Outdoor Play	Mechanical Services
Residences to West	48	26 (31)
Residence to East	33	25 (30)
Vacant lot to East	43	29 (34)

( ) Includes +5 dB(A) penalty of a tonal component
[ ] Includes +10 dB(A) penalty for impulsiveness

TABLE 6.2 – CALCULATED NOISE LEVELS FOR LA1 AND LAMAX NOISE SOURCES

Location	Noise Source / Calculated Noise Levels (dB(A))			
	Deliveries	Car Movement	Car Start	Car Door
Residences to West	29	24	26	28 [38]
Residence to East	46	42	46	47 [57]
Vacant lot to East	41	40	42	43 [53]

( ) Includes +5 dB(A) penalty of a tonal component
[ ] Includes +10 dB(A) penalty for impulsiveness

For information, the noise contours for the outdoor play and mechanical services are attached in Appendix B.

7. ASSESSMENT

The assessment for the noise sources that are required to achieve compliance are outlined below.

7.1 L_{A10} NOISE EMISSIONS

Tables 7.1 and 7.2 summarise the applicable Assigned Noise Levels, and assessable noise level emissions associated for the sources needing to comply with the L_{A10} criteria.

TABLE 7.1 – ASSESSMENT OF L_{A10} NOISE LEVEL FOR OUTDOOR PLAY

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{A10} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	48	Day Period	47	Complies
Residence to East	33	Day Period	51	Complies
Vacant lot to East	43	Day Period	47	Complies

TABLE 7.2 – ASSESSMENT OF L_{A10} NOISE LEVEL FOR MECHANCIAL SERVICES

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{A10} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	31	Night Period	37	Complies
Residence to East	30	Night Period	41	Complies
Vacant lot to East	34	Night Period	37	Complies

7.2 L_{A1} NOISE EMISSIONS

Tables 7.3 and 7.4 summarises the applicable Assigned Noise Levels, and assessable noise level emissions for deliveries and car movements.

Based on the definitions of tonality, noise emissions from car movements, being an L_{A1} and present for less than 10% of the time, would not be considered tonal. Thus, no penalties would be applicable, and the assessment would be as listed in Table 7.3.

TABLE 7.3 – ASSESSMENT OF L_{A1} NOISE LEVEL EMISSIONS FOR DELIVERIES

Source	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{A1} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	29	Night Period	47	Complies
Residence to East	46	Night Period	51	Complies
Vacant lot to East	42	Night Period	47	Complies

TABLE 7.4 – ASSESSMENT OF L_{A1} NOISE LEVEL EMISSIONS FOR CAR MOVEMENTS

Source	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{A1} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	24	Night Period	47	Complies
Residence to East	42	Night Period	51	Complies
Vacant lot to East	40	Night Period	47	Complies

7.3 L_{AMAX} NOISE EMISSIONS

Tables 7.5 and 7.6 summarises the applicable Assigned Noise Levels, and assessable noise level emissions for car starts and car doors closing.

Noise associated with the closing of a vehicle doors could be impulsive and to be conservative, a +10 dB(A) penalty for impulsiveness would be applicable.

Based on the definitions of tonality, noise emissions from the vehicle starts would not be considered tonal.

TABLE 7.5 – ASSESSMENT OF L_{AMAX} NOISE LEVEL EMISSIONS FOR CAR START

Source	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{AMax} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	26	Night Period	57	Complies
Residence to East	46	Night Period	61	Complies
Vacant lot to East	42	Night Period	57	Complies

TABLE 7.6 – ASSESSMENT OF L_{AMAX} NOISE LEVEL EMISSIONS FOR CAR DOOR

Source	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L_{AMax} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residences to West	38	Night Period	57	Complies
Residence to East	57	Night Period	61	Complies
Vacant lot to East	53	Night Period	57	Complies

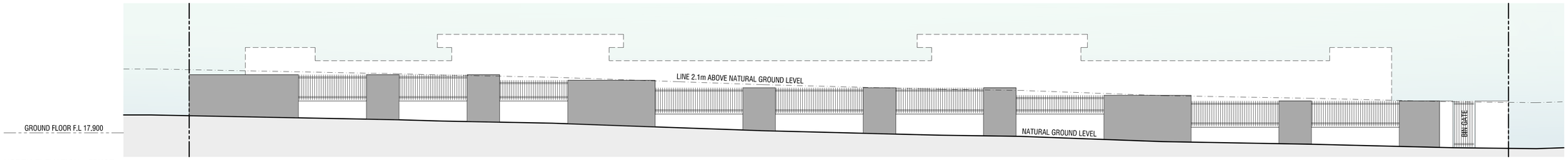
From the above assessments, noise received at the neighbouring residences, even using a conservative analysis, complies with the requirements of the *Environmental Protection (Noise) Regulations 1997* at all times, provided :

- the condensing units to be located either outside the kitchen, underneath the verandah, as outlined in Section 5 - Modelling.
- the western boundary fence is as shown in Figure 5.1.

Note : For the air conditioning condensing units, it is noted that compliance could also be achieved if they were located behind the parapet. Given that the various locations that the air conditioning condensing units could be located, it is recommended that an acoustic assessment be undertaken of the final design, to ensure compliance with the Regulations.

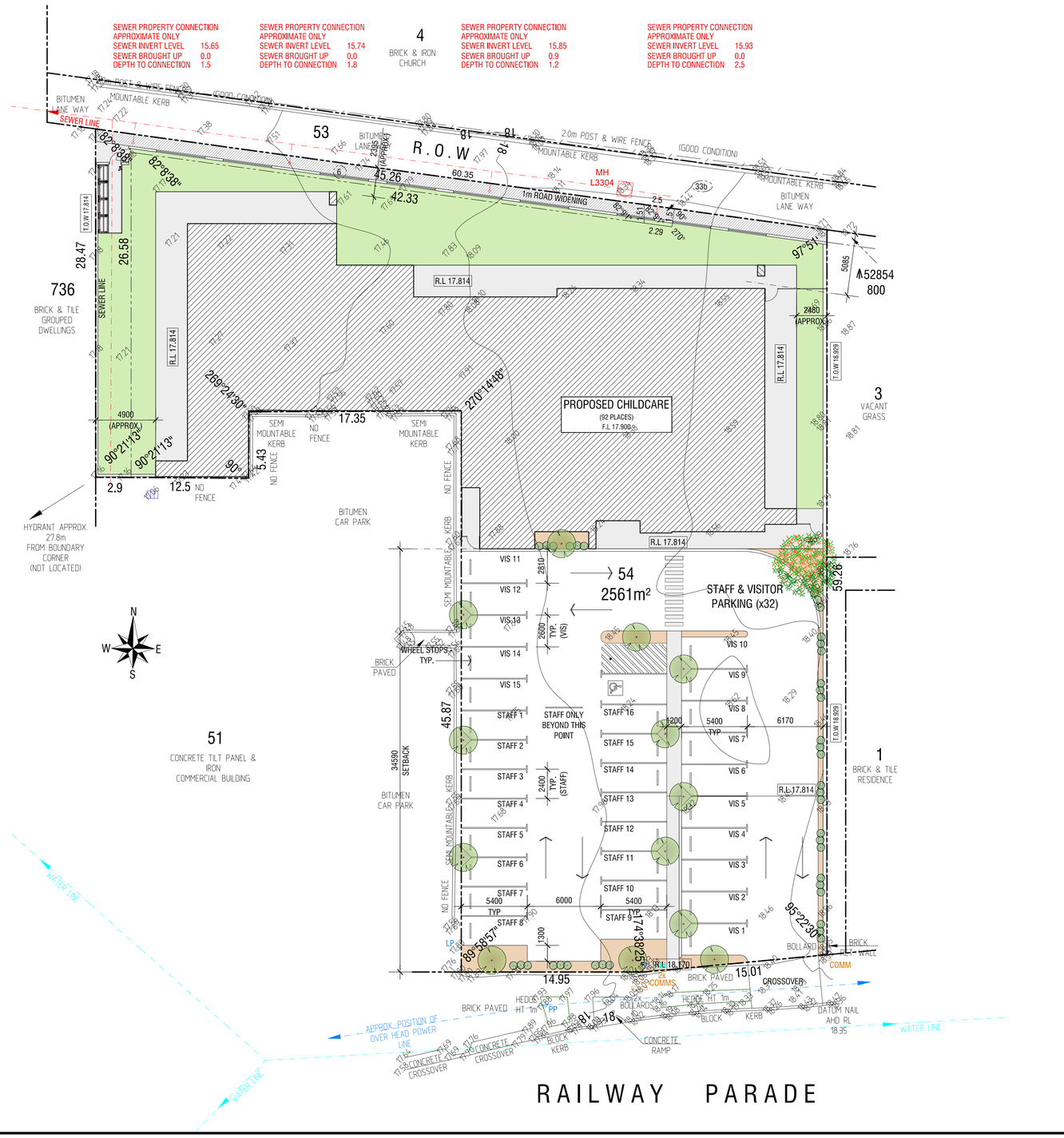
APPENDIX A

PLAN



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

SCALE 1:200 @ A1

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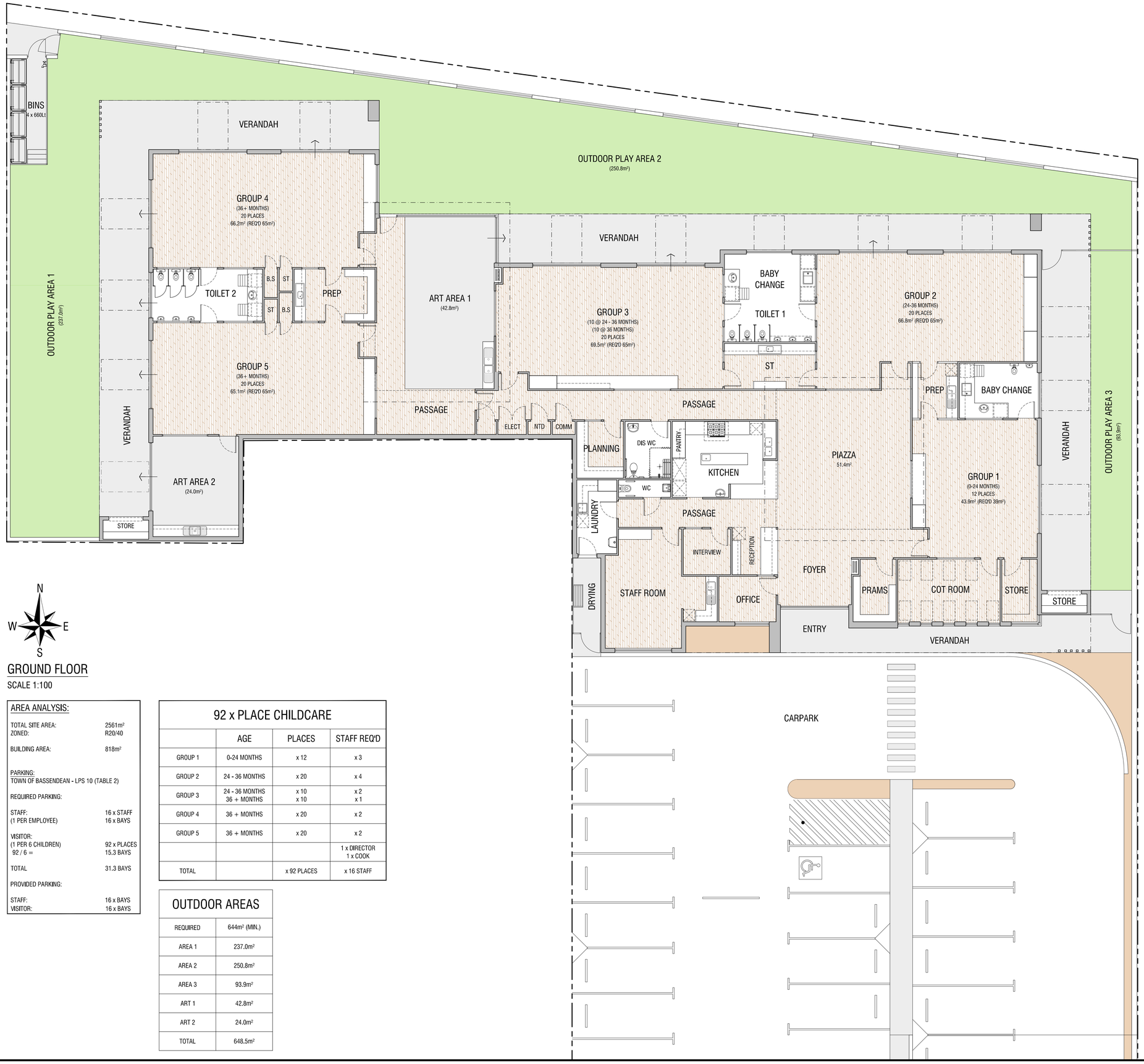

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GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
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STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
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AREA 2	250.8m²
AREA 3	93.9m²
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REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

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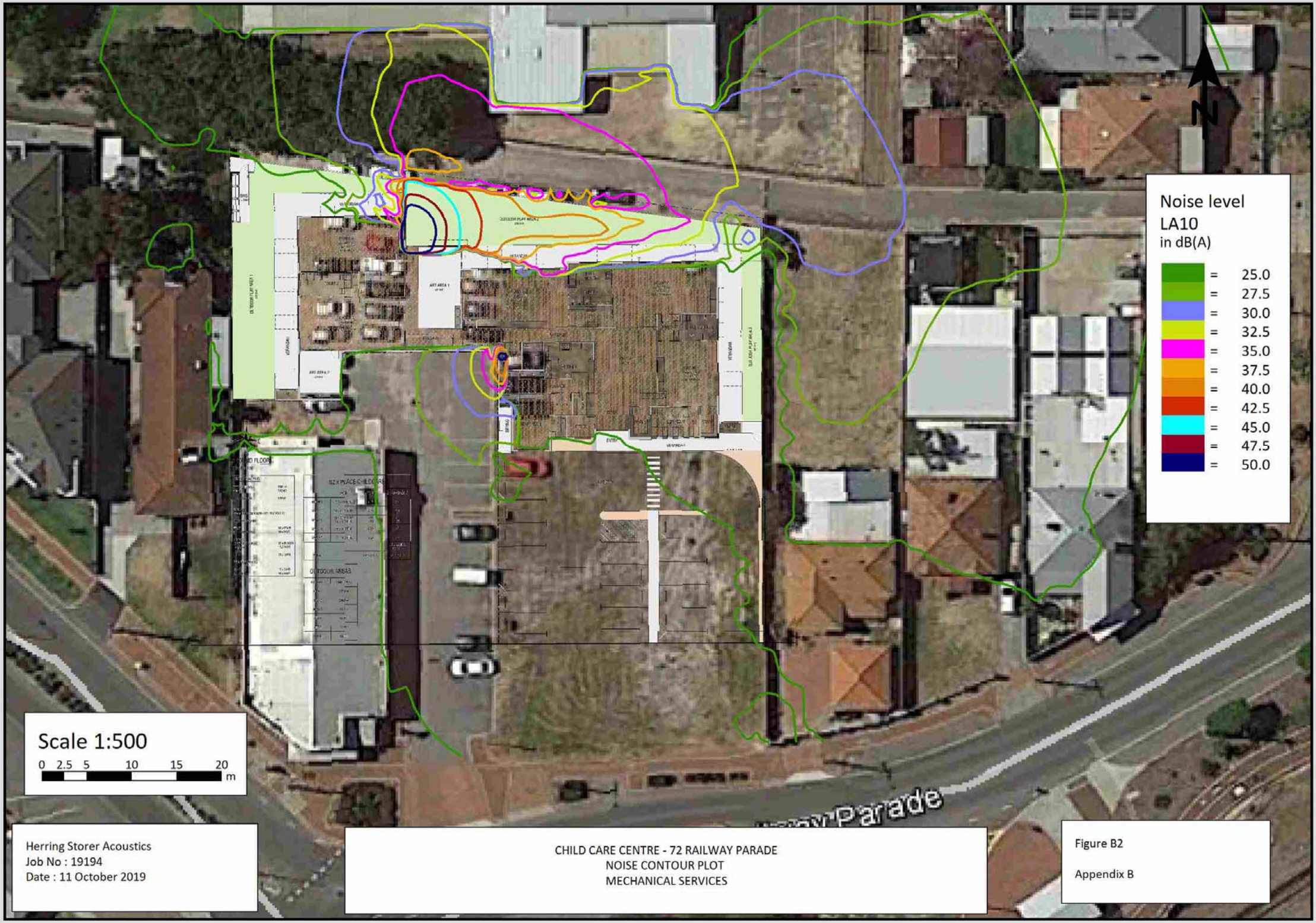
APPENDIX B

CONTOUR PLOTS



Herring Storer Acoustics
Job No : 19194
Date : 11 October 2019

CHILD CARE CENTRE - 72 RAILWAY PARADE
NOISE CONTOUR PLOT
MECHANICAL SERVICES

Figure B2

Appendix B

Herring Storer Acoustics
Job No : 19194
Date : 04 October 2019

CHILD CARE CENTRE - 72 RAILWAY PARADE
REVISED LAYOUT
NOISE CONTOUR PLOT
OUTDOOR PLAY

Figure B1

Appendix B

HERRING STORER ACOUSTICS

PROPOSED CHILD CARE CENTRE

72 RAILWAY PARADE
BASSENDEAN

STATE PLANNING POLICY 5.4 ACOUSTIC ASSESSMENT

JULY 2019

OUR REFERENCE: 24623-1-19194

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:
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ACOUSTIC ASSESSMENT

CHILDCARE CENTRE - BASSENDEAN

Job No: 19194

Document Reference: 24623-1-19194

FOR

AGEM COMMERCIAL Pty Ltd

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CONTENTS

APPENDICIES

1. INTRODUCTION

Herring Storer Acoustics was commissioned to undertake an acoustic assessment for the proposed child care centre to be located at located at 72 Railway Parade, Bassendean. The acoustic assessment is to comply with councils' requirements to undertake an assessment with respect to State Planning Policy 5.4 *"Road and Rail Transport Noise and Freight Considerations in Land Use Planning"* (SPP5.4).

As part of this this assessment, the following was carried out:

- Measure noise levels received at the development associated with passing passenger trains.
- Determine the noise that would be received at the child care centre from passenger trains.
- Assess the noise levels for compliance with the appropriate criteria.
- If exceedances are predicted, provide noise amelioration options to compliance with the appropriate criteria.

For information, plans for the child care centre are attached in Appendix A.

2. SUMMARY

For a child care centre, under State Planning Policy 5.4 *"Road and Rail Transport Noise and Freight Considerations in Land Use Planning"* only the criteria for the day period is applicable. Thus, for this development the external acoustic criteria is that an $L_{Aeq(Day)}$ of 60 dB(A) needs to be achieved in at least one outdoor area.

We also note that under the policy, there is an internal criteria that should be achieved. Under the Policy, for non-residential noise sensitive premises, internal noise levels should meet the design sound levels as listed in Table 1 of AS/NZ 2107:2000 "Acoustics – Recommended design sound levels and reverberation times for building interiors". The internal criteria would be an $L_{Aeq(Day)}$ of 40 dB(A) within the activity rooms and an $L_{Aeq(Day)}$ of 45 dB(A) for other spaces.

It is noted that the noise sensitive portion of the development are located on the northern side of the development away from the railway line.

Based on the above requirements, compliance with the requirements of State Planning Policy 5.4 would be achieved using standard glazing with a minimum glass thickness of 4mm.

Finally, it is noted that given the orientation of the child care centre, noise received at the outdoor play area would also comply with the requirements of State Planning Policy 5.4.

3. CRITERIA

Road traffic noise received at a sensitive premise needs to comply with the requirements of State Planning Policy 5.4 "*Road and Rail Transport Noise and Freight Considerations in Land Use Planning*". Under this policy, for non-residential noise sensitive premises, internal noise levels should meet the design sound levels as listed in Table 1 of AS/NZ 2107:2000 "Acoustics – Recommended design sound levels and reverberation times for building interiors". Under AS2017, the internal criteria would be an $L_{Aeq(Day)}$ of 45 dB(A).

We note that the Association of Australasian Acoustical Consultant, within their Guideline for Child Care Centre's, recommends an internal noise level an $L_{Aeq(Day)}$ of 40 dB(A).

Thus, for this development, the internal acoustic criteria used in the assessment were an $L_{Aeq(Day)}$ of 40 dB(A) within the activity rooms and an $L_{Aeq(Day)}$ of 45 dB(A) for other spaces.

Additional to the indoor criteria, the external acoustic criteria would be an $L_{Aeq(Day)}$ of 60 dB(A) also needs to be achieved at the outdoor play area.

4. MEASUREMENTS

To determine the noise that would be received at the proposed child care centre from passing Passenger Trains, a noise level measurement was undertaken on the south boundary (i.e. middle of boundary) of the development. The measurement was carried out between 3:00 pm and 4:00 pm Friday 26th July 2019. The noise level recorded are summarised in Table 4.1, which would be typical of noise for train passing.

TABLE 4.1 – MEASURED NOISE LEVEL

Measurement	L_{Aeq} Noise Level (dB(A))
To Perth	53 - 63
From Perth	52 - 62

Note : The above noise level measurements also include traffic noise from vehicles travelling on the surrounding road network. Typically, the noise received from the passenger trains related to the lower noise levels recorded (ie between traffic).

5. ASSESSMENT

An analysis of the noise that would be received at the child care centre was undertaken, correlating both the noise level measurement recorded and the noise level as outlined under Table A.1 within Implementation Guidelines for State Planning Policy 5.4.

We note that the front façade of the child care centre is approximately 80 metre from the closest track.

Based on the highest noise level recorded (ie 63 dB(A)) being the worst case, the noise received at the various rooms within the child care centre were determined to be as listed in Table 5.1.

TABLE 5.1 – CALCULATED NOISE LEVEL

Location	Calculated Noise Level (dB(A))
Entry Foyer	60
Office	61
Reception	61
Staff (Western Window)	45
Group Room 1 (Eastern Window)	57
Group Room 2 (Eastern Window)	56
Group Rooms (Northern Windows)	45
Group Room 5 (Western Window)	47
Passage	61
Nappy	60
Kitchen / Pantry	59
Laundry	59

6. ASSESSMENT

Based on this noise modelling and including the adjustments, the required R_w rating are summarised in Table 6.1.

TABLE 6.1 – GLAZING R_W RATING AND SUGGESTED GLAZING

Location	Calculated R_W dB
Entry Foyer	23
Office	24
Reception	24
Staff (Western Window)	<20
Group Room 1 (Eastern Window)	21
Group Room 2 (Eastern Window)	<20
Group Rooms 2 - 5 (Northern Windows)	<20
Group Room 5 (Western Window)	<20
Passage	23
Nappy	24
Kitchen / Pantry	<20
Laundry	<20

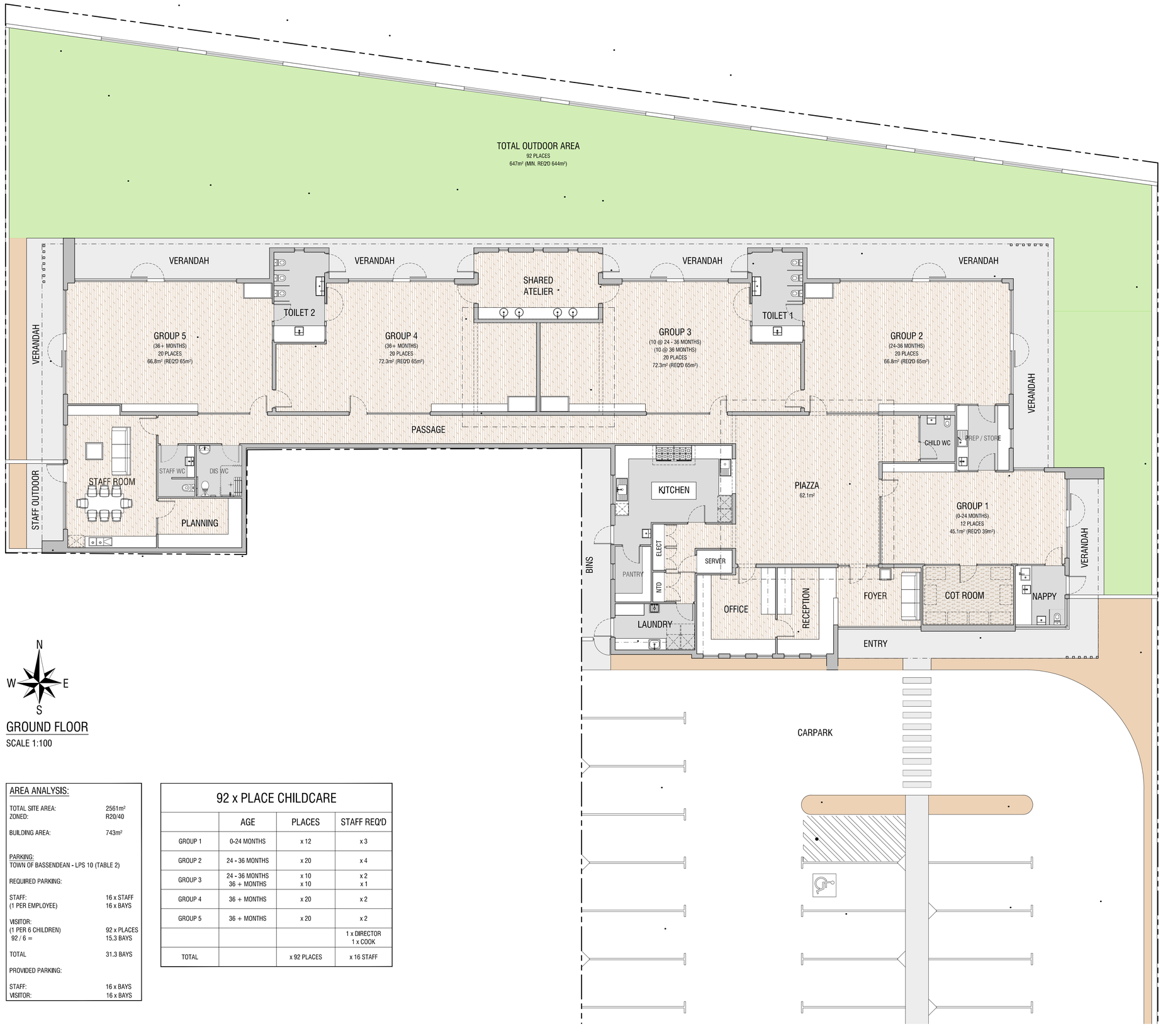
Based on the above requirements, compliance with the requirements of State Planning Policy 5.4 would be achieved using standard glazing with a minimum glass thickness of 4mm.

We understand that the proposed construction of the external walls would be of double brick, which would be acceptable.

Finally, it is noted that given the orientation of the child care centre, noise received at the outdoor play area would also comply with the requirements of State Planning Policy 5.4.

APPENDIX A

DEVELOPMENT PLANS



N
W E
S

GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	743m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

REV	DESCRIPTION	DATE	APP
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

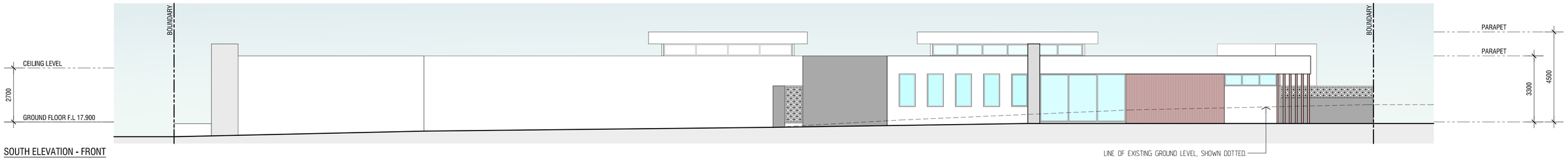
REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

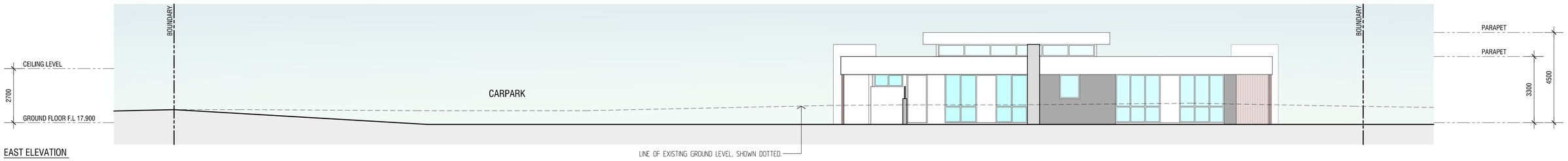
DRAWING
CONCEPT DESIGN
- FLOOR PLAN

PROJECT No. 8123	STAGE SD
DRAWING NO. A02	REVISION 0
CAD FILE NAME 8123-SD_A00	
SCALE 1:100 @ A1	
DRAWN MJG	
CHECKED MJG	

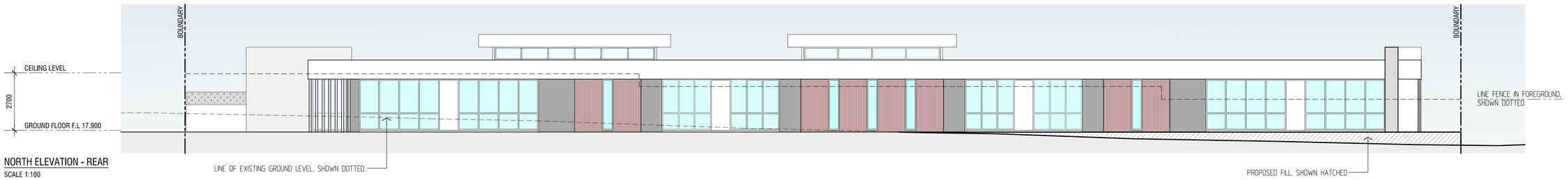
GDD DESIGN GROUP
Web : www.gdddesigngroup.com
Tel : (08) 9388 8846



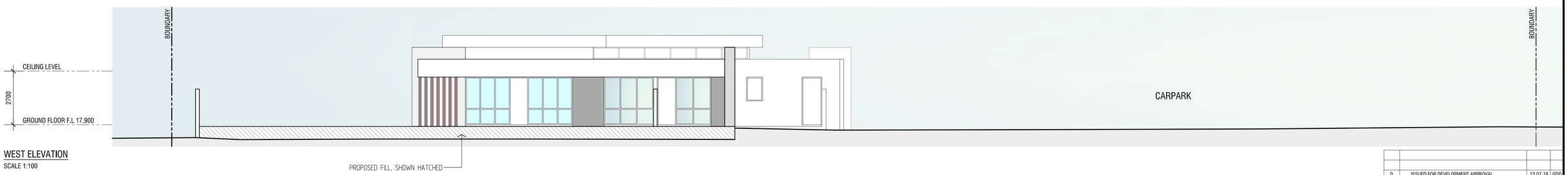
SOUTH ELEVATION - FRONT
SCALE 1:100



EAST ELEVATION
SCALE 1:100



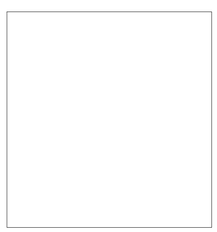
NORTH ELEVATION - REAR
SCALE 1:100



WEST ELEVATION
SCALE 1:100

FEATURE COLOUR:
'DOMINO GREY'

CLADDING:
VERTICAL JARRAH CLADDING



MAIN COLOUR:
'LEXICON WHITE'

FEATURE COLOUR:
'WALLABY GREY'

MATERIALS PALETTE

REV	DESCRIPTION	DATE	APP
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- ELEVATIONS

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A03	0

CAD FILE NAME
8123-SD_A00

SCALE
1:100 @ A1

DRAWN
MJG

CHECKED
MJG

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Transport Impact Assessment

Childcare Centre Proposal
72 Railway Parade, Bassendean

CW1084900

Prepared for

AGEM Commercial Pty Ltd

8 October 2019

Cardno

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Approved By:

Ray Cook
Manager – Traffic and Transport

Date Approved 08/10/2019

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A	26/07/19	For Issue	BS	SJL
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C	20/09/19	For Issue	BS	SJL
D	08/10/19	Development Plan Update	BS	SJL

Table of Contents

Appendices

Appendix C development plans

Tables

Figures

1 Introduction

Cardno has been commissioned by AGEM Commercial Pty Ltd. (the Client) to prepare a Transport Impact Assessment (TIA) for the proposed development of a child care centre located at 72 Railway Parade, Bassendean (the Site). **Figure 1-1** shows the Site.

This report aims to assess the impacts of the proposed development upon the adjacent road network, with a focus on traffic operations, circulation, and car parking requirements. This report has been prepared in accordance with the *Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016).*

Figure 1-1 Aerial Image

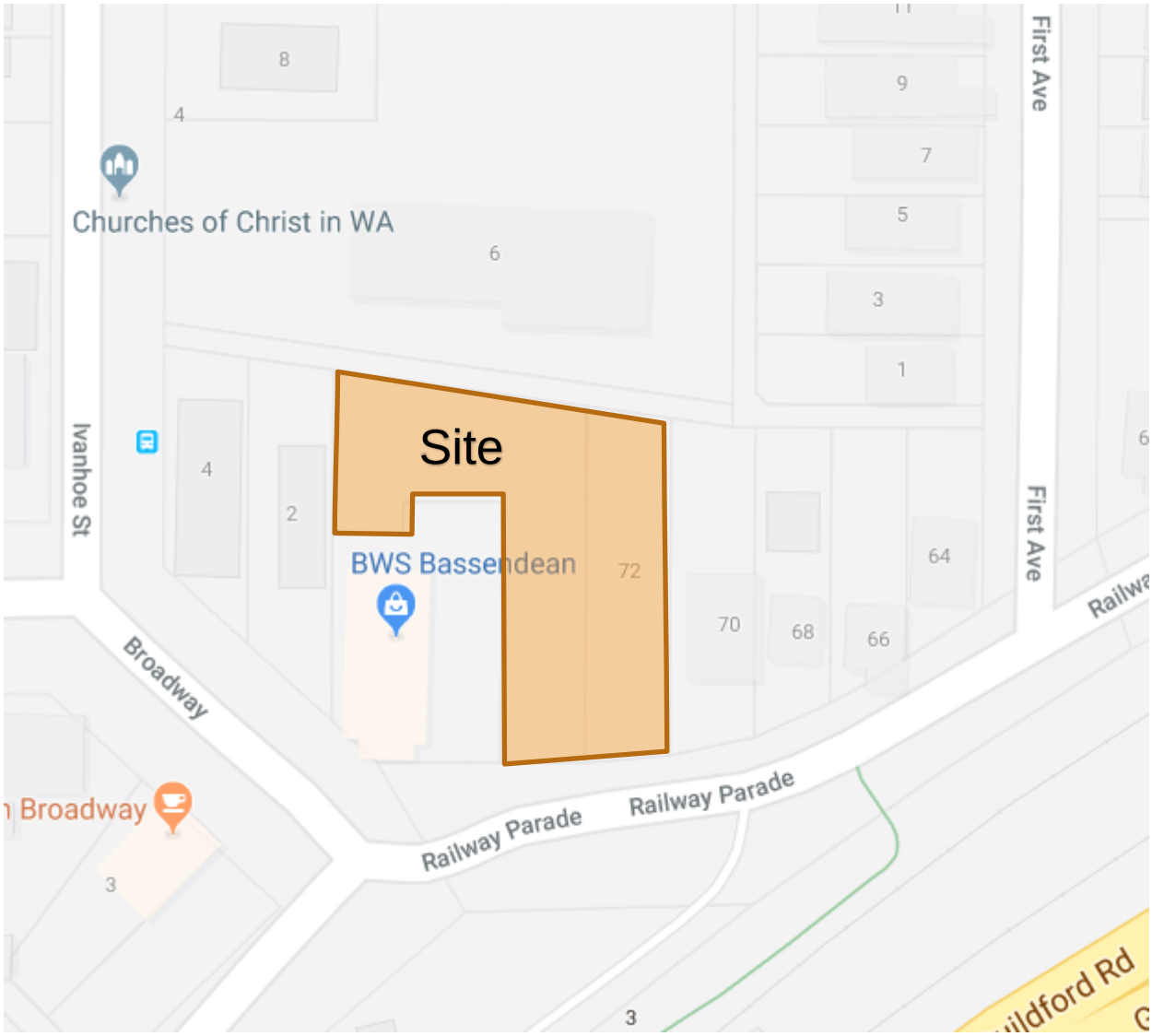
Source: Nearmap

2 Existing Site Location

2.1 Site Location

The Site is located at 72 Railway Parade, in the suburb of Bassendean under the municipality of Town of Bassendean. The Site is bounded by Railway Parade to the south, a church to the north, a bottle shop to the west, and existing residential dwellings to the east. The location of the Site is shown in **Figure 2-1**.

Figure 2-1 Site Location

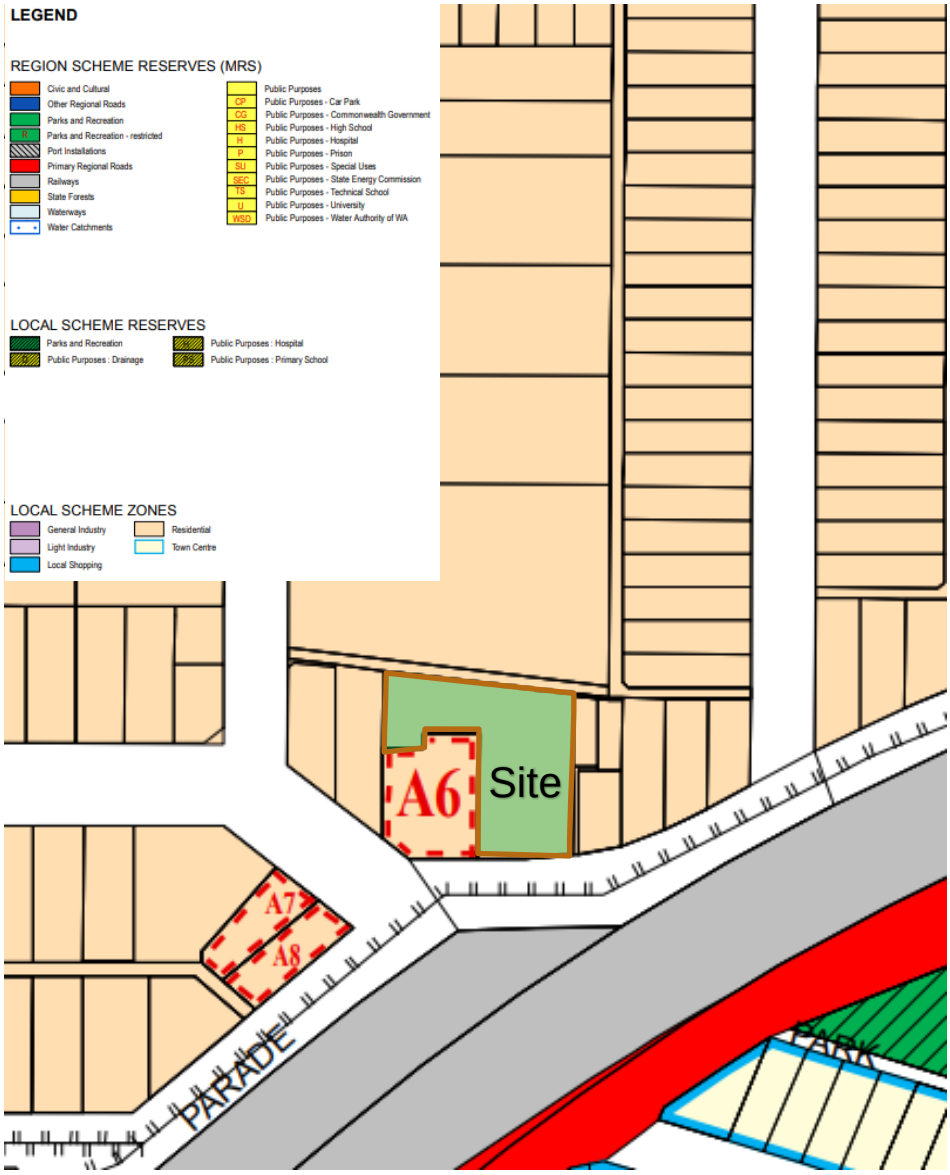


Source: Google Maps

2.2 Surrounding Land Use

According to the *Town of Bassendean Local Planning Scheme No.10,* the Site is zoned as 'residential'. A detailed zoning map showing the land uses around the Site within the *Town of Bassendean* is shown in **Figure 2-2.** The surrounding area is zoned as Residential.

Figure 2-2 Zoning Map

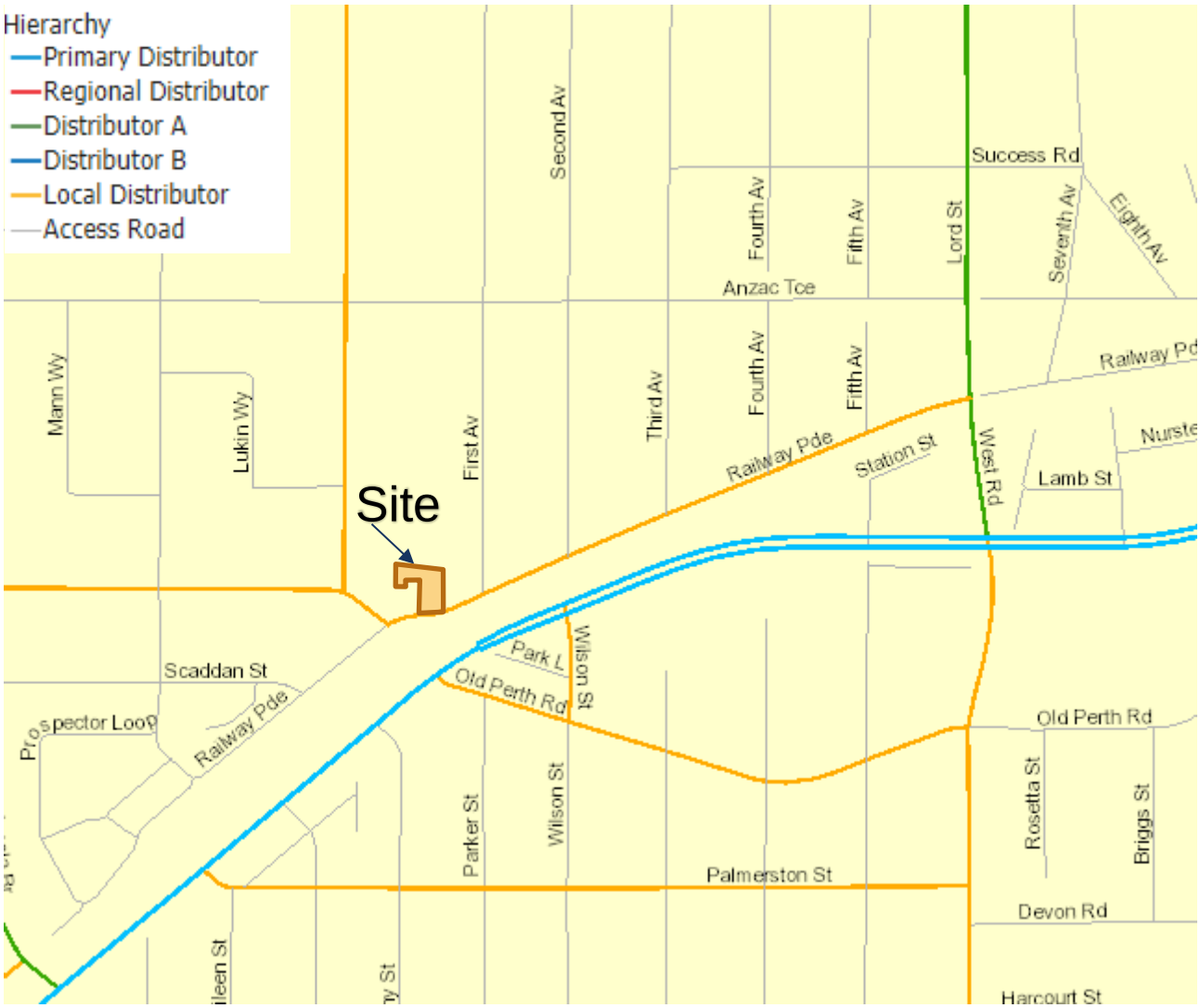


Source: Town of Bassendean

2.3 Existing Road Network

The layout and classification of the roads surrounding the Site is presented in **Figure 2-3.**

Figure 2-3 Road Network Classification



Source: Main Roads Road Information Mapping Centre

The characteristics of the surrounding road network are presented in **Table 2-1**.

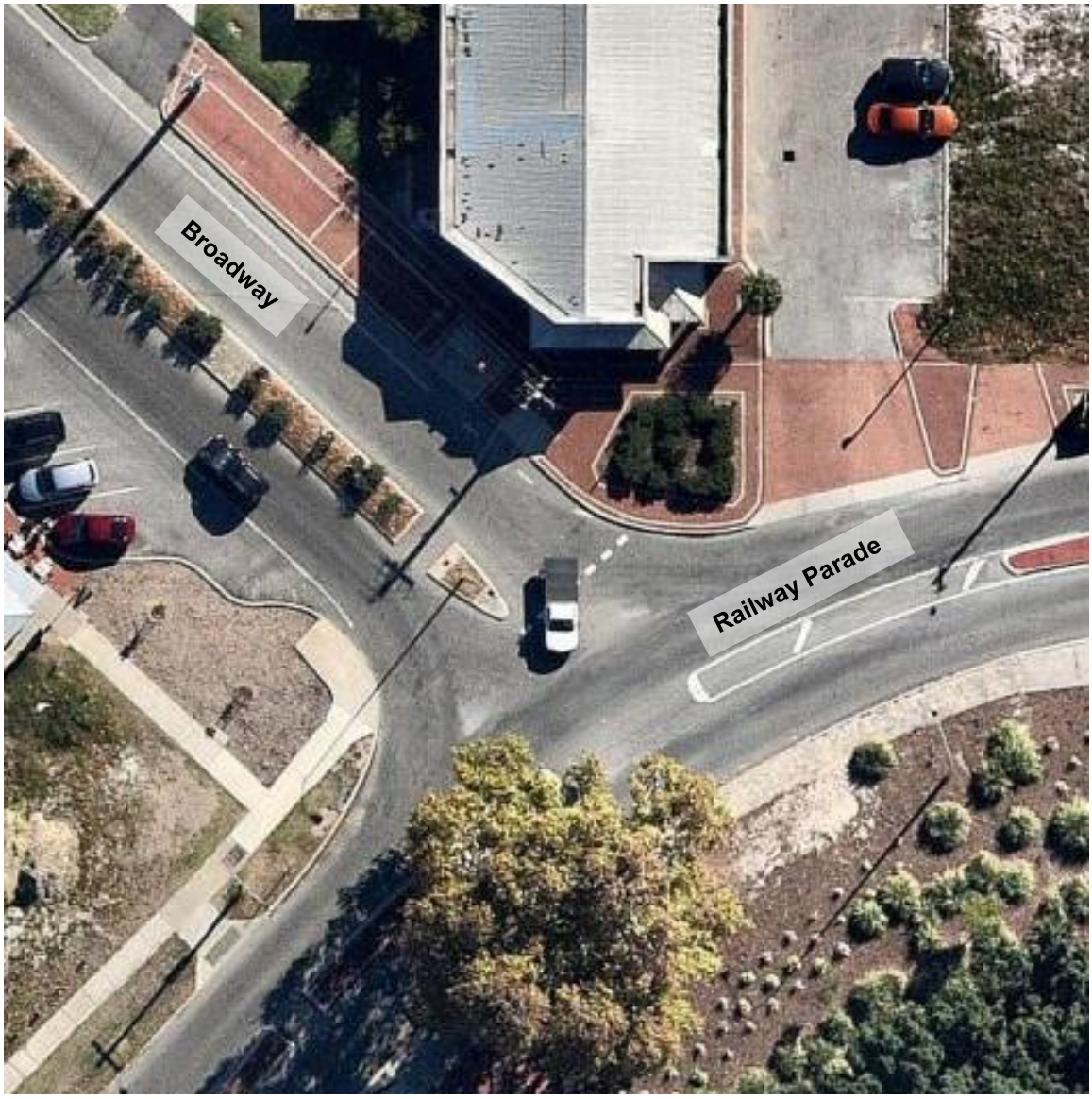
Table 2-1 Road network Description

Road Name	Road Hierarchy	Jurisdiction	Road Network			
			No. of Lanes	No. of Footpaths	Width (m)	Posted Speed Limit (km/h)
Railway Parade	Local Distributor	Local Govt.	2	2	9 (2 m median)	50
Broadway	Local Distributor	Local Govt.	2	2	13 (2.5 median)	50
First Avenue	Access Road	Local Govt.	2	1	7	50

2.4 Existing Intersections

> **Broadway and Railway Parade** is located to the southwest of the Site and is a 3-way give-way intersection with priority to Railway Parade.

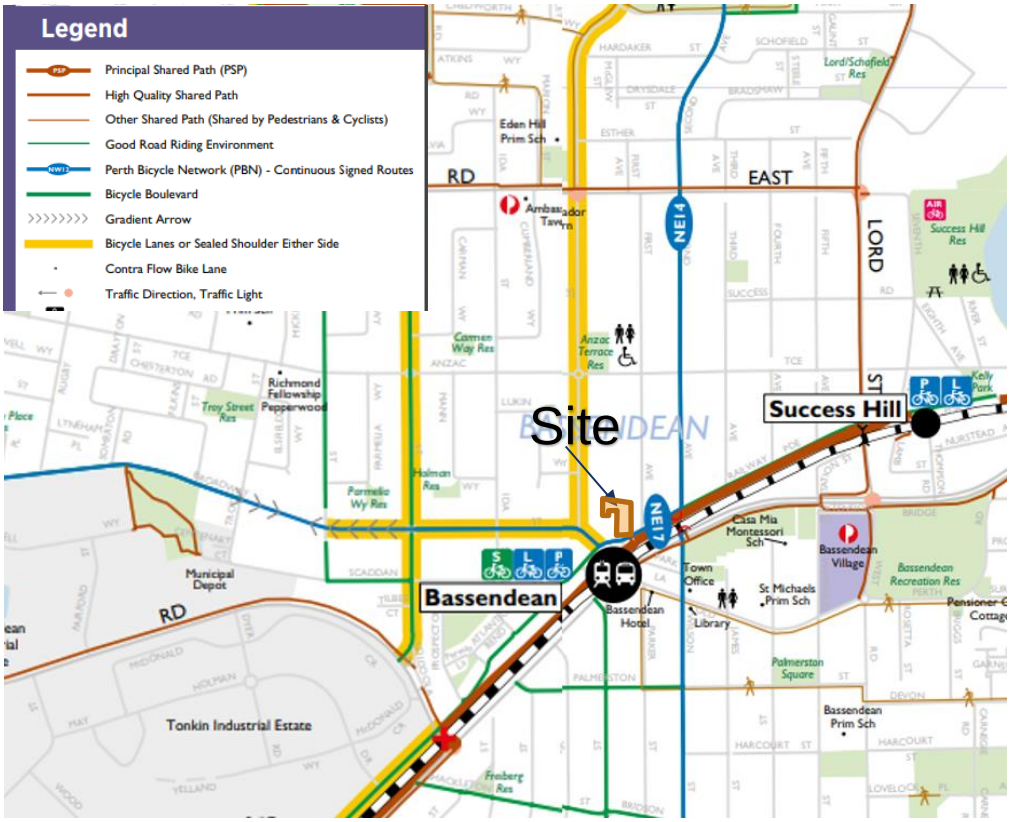
Figure 2-4 Broadway and Railway Parade



2.5 Existing Pedestrian / Cycle Networks

According to the *Department of Transport's Swan and Stirling Bike Maps*, bicycle lanes or sealed shoulders stretch along the arterial roads surrounding the Site such as Broadway and Ivanhoe Street. High quality shared paths cover most of the residential area within the suburb and the Perth Shared Path runs along Railway Parade opposite the Site. **Figure 2-5** shows the excellent provision of bicycle routes/facilities near the Site.

Figure 2-5 Bike Map

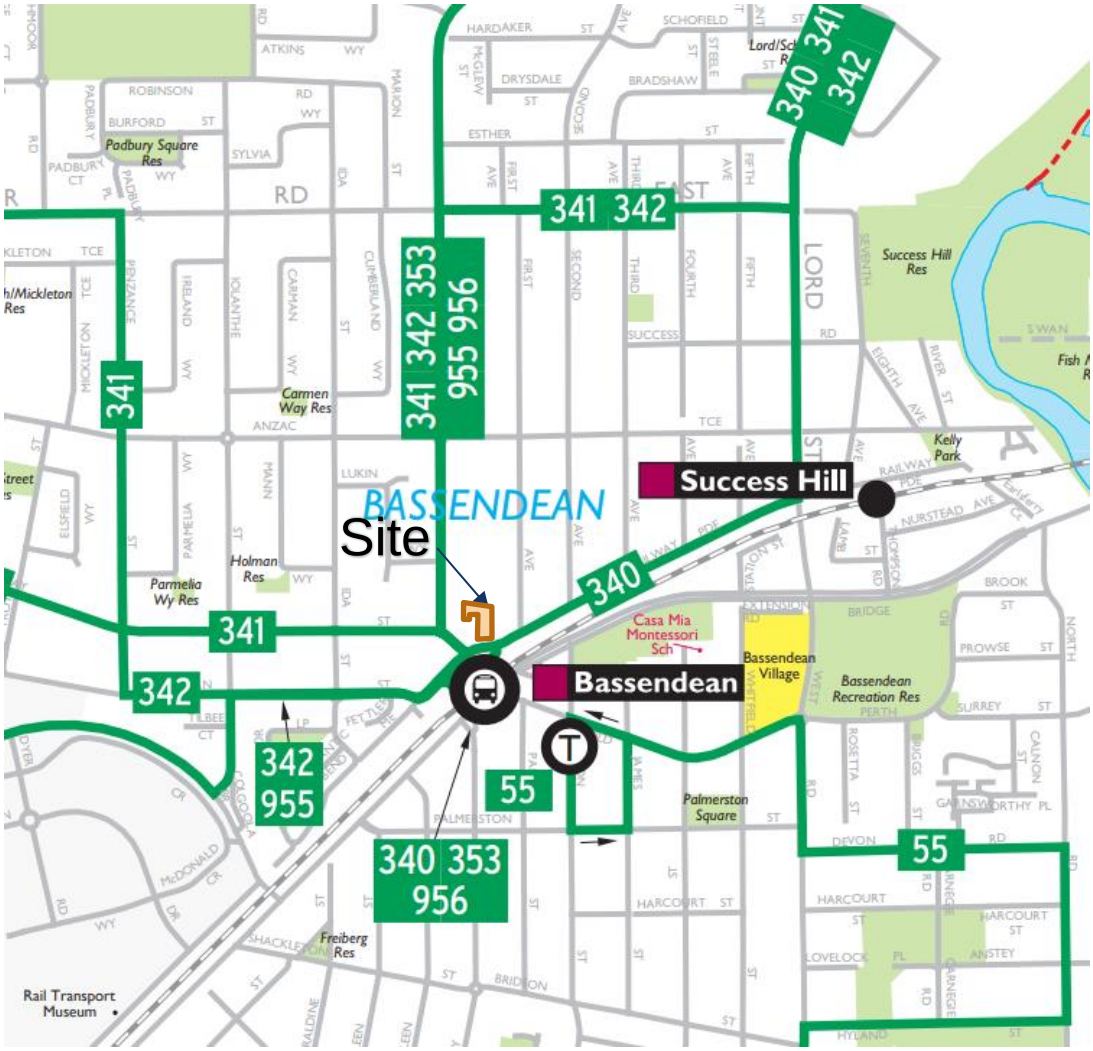


Source: Department of Transport -Swan and Stirling Bike Maps

2.6 Existing Public Transport Facilities

Existing public transport facilities around the Site are shown in **Figure 2-6.** The nearest bus stops to the Site are located next to Bassendean Train Station, approximately 50 m south of the Site. The bus stops are serviced by routes 341, 342, 353, 955 and 956 which provide connection to Morley Bus Station, Ellenbrook, Ellenbrook Transfer Station and Beechboro. The frequencies of the bus routes are presented in **Table 2-2.** Overall, the site benefits from excellent public transport services.

Figure 2-6 Public Transport Facilities



Source: Transperth

Table 2-2 Bus Service Frequency

Route	Route Description	Frequency	
		Weekdays	**Weekends**
Midland Line	Bassendean Station	2:31 AM to 11:55PM (15- 60+ minutes)	2:31AM to 11:46 PM (15 - 60 minutes)
341	Bassendean Station	7:20AM to 10:51PM	6:51 AM to 11:21PM (30-60 minutes)
353	Bassendean Station	6:05AM to 7:19PM (20-30 minutes)	7:19AM to 6:19PM (60 minutes)
955	Bassendean Station	6:22AM to 9:51PM (20-60 minutes)	8:06AM to 8:21PM (30-60 minutes)
342	Bassendean Station	9:01AM to 10:51PM (30-60 minutes)	6:51AM to 11:21PM (30-60 minutes)

2.7 Existing Traffic Volume

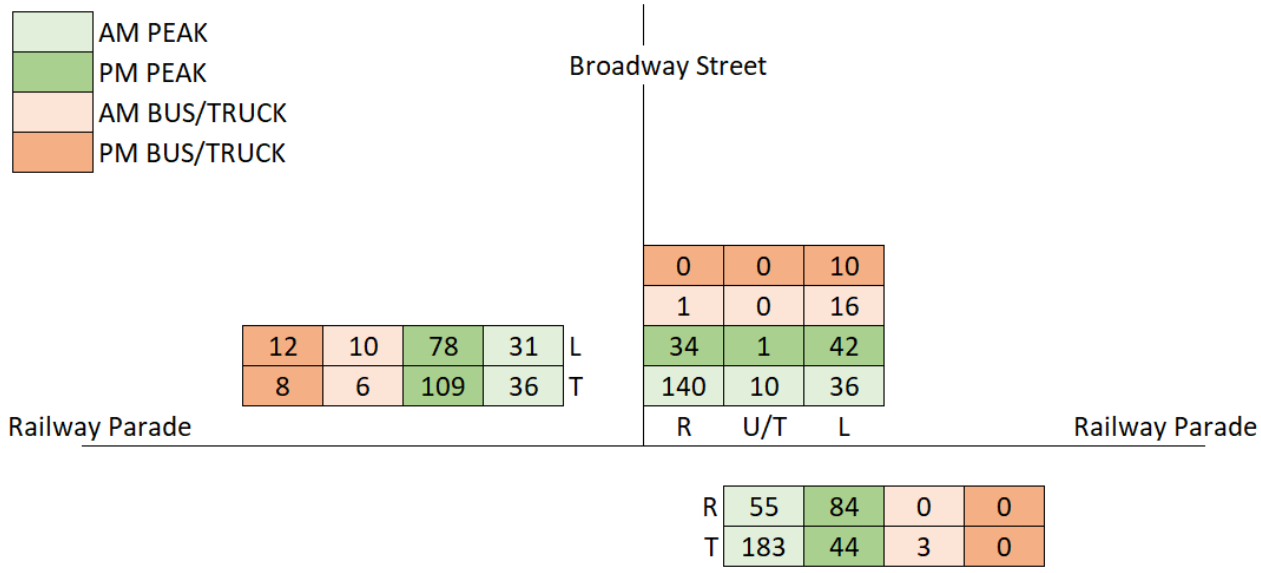
Existing traffic volumes were sourced from *Main Roads Western Australia's Traffic Map* and is shown in **Table 2-3.**

Table 2-3 Traffic Volume

Road Name	Date	Average Two-Way Daily Traffic Volume
Railway Parade (Mt Lawley)	2015/16	5,353

Due to the lack of relevant traffic data in close proximity to the site, Cardno undertook peak hour traffic counts on 23/7/2019 for the PM peak, and 24/7/2019 for AM peak hour at the Railway Parade / Broadway Street intersection. The traffic count data is shown in **Figure 2-7**.

Figure 2-7 Traffic Count



2.8 Crash Assessment

A search of the *Main Roads WA Reporting Centre* for crash data was undertaken for the period of 1 January 2014 and 31 December 2018. Crashes which occurred within 250 metres from the Site were plotted in a map shown in **Figure 2-8.** Six crashes were recorded where all crashes occurred at midblock sections. The crash data summary showing the type of crash and severity are shown in **Table 2-4,** and crash data for individual roads are presented in **Table 2-5** to **Table 2-8**.

Figure 2-8 Crash Locations within the Site Vicinity

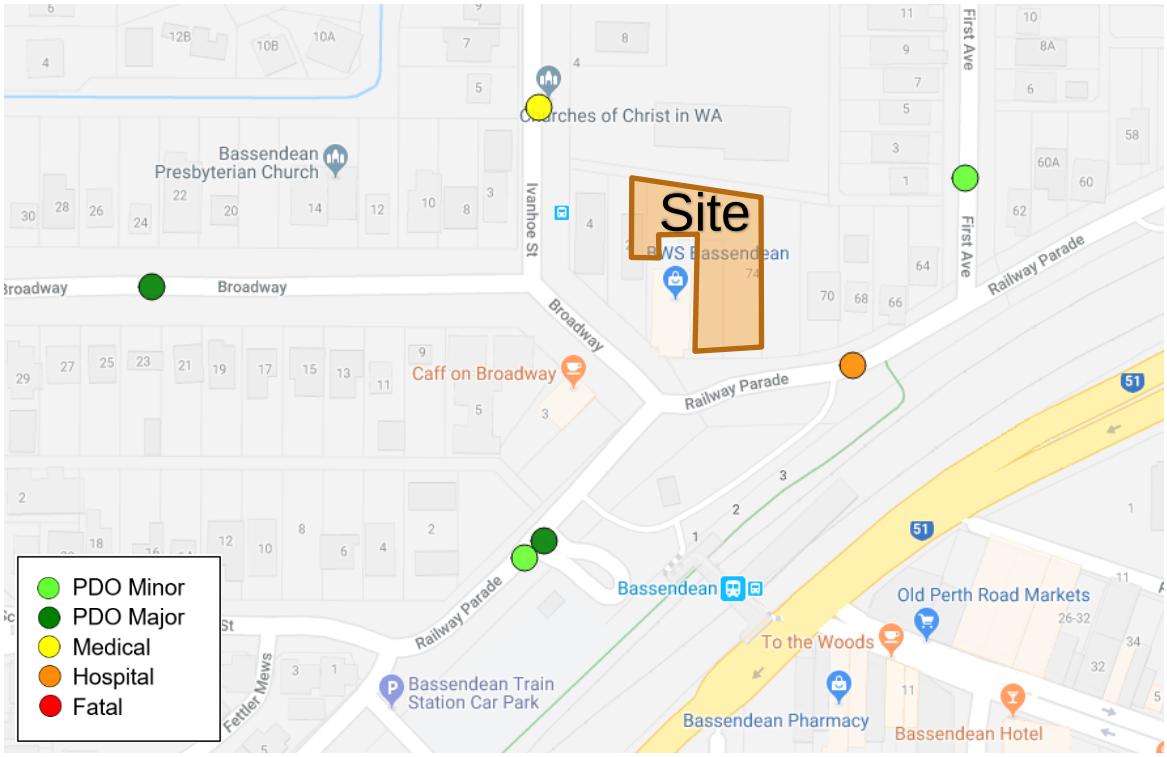


Table 2-4 Crash Data Summary

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	1	-	-	**1**
Sideswipe Same Direction	-	-	-	2	-	**2**
Unspecified	-	-	-	-	1	**1**
Hit Pedestrian	-	1	-	-	-	**1**
Right Angle	-	-	-	-	1	**1**
Total	**-**	**1**	**1**	**2**	**2**	**6**

Table 2-5 Ivanhoe Street (between Lukin Way and Broadway)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	1	-	-	**1**
Total	**-**	**-**	**1**	**-**	**-**	**1**

Table 2-6 Broadway (between Ida Street and Railway Parade)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Sideswipe Same Direction	-	-	-	1	-	**1**
Total	**-**	**-**	**-**	**1**	**-**	**1**

Table 2-7 Railway Parade (between Second Avenue and Scaddan Street)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Unspecified	-	-	-	-	1	**1**
Sideswipe Same Direction	-	-	-	1	-	**1**
Hit Pedestrian	-	1	-	-	-	**1**
Total	**-**	**1**	**-**	**1**	**1**	**3**

Table 2-8 First Avenue (between Railway Parade and Anzac Terrace)

Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Right Angle	-	-	-	-	1	**1**
Total	**-**	**-**	**-**	**-**	**1**	**1**

Crash data for the site vicinity are summarized below:

> No fatal crashes were recorded.

> A total of 6 crashes were recorded within 250 metres of the Site.

> All crashes occurred at midblock sections.

It is unlikely that the proposed child care centre will cause any material impact on the traffic safety of the surrounding road network due to the relatively low vehicle trips generated during the peak period and the compliant on-site parking being provided.

2.9 Site Observation

Cardno conducted site visits during the PM peak period (4PM-5PM) on 23/7/2019 and AM peak period (7AM-8AM) on 24/7/2019. Due to the lack of site relevant traffic data, the peak period was determined by identifying the peak periods from other road links in the vicinity of the Site.

Directly opposite the Site is a bus layby area to service the Bassendean Train Station. It was observed that the majority of buses turn right into this area and at times momentarily block the proposed access/egress for the development. The situation where a vehicle wishing to access the Site while turning right in from Railway Parade could be blocked by a bus wishing to turn right into the station at the same time, is expected to be rare. In addition, as the trips generated by the proposed development are relatively low and traffic volumes along Railway Parade are also sufficiently low enough to provide suitable regular gaps for the Buses to undertake their right turns, the momentary obstruction of the access by the buses is not expected to be a significant hinderance to the operation of the development.

It is also important to note that should a vehicle be waiting to turn right into the Site, the buses can still turn right into the layby area unobstructed.

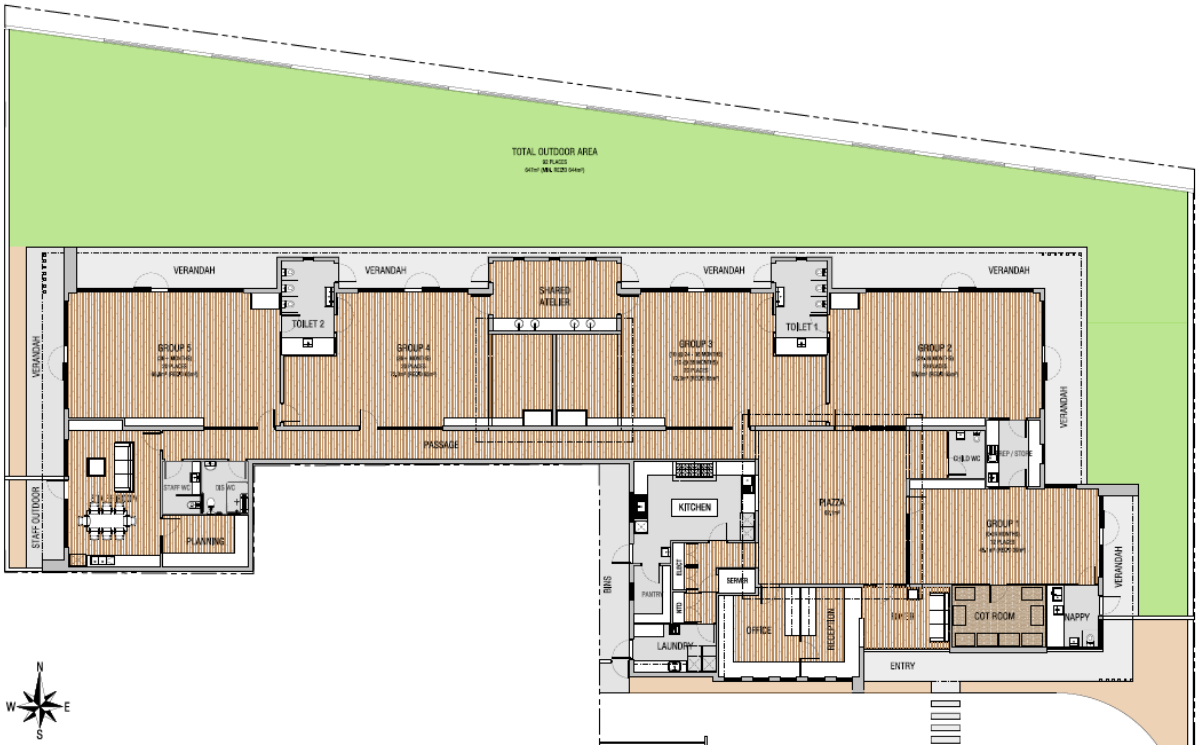
Figure 2-9 Site Observation – bus entering bus stops (right turn in)

3 Development Proposal

3.1 Proposed Land Use

The proposed development (**Figure 3-1**) is a childcare facility which includes an office room, reception area, outdoor area, staff room and activity areas. The development plans are attached in **Appendix C.**

Figure 3-1 Ground Floor Plan



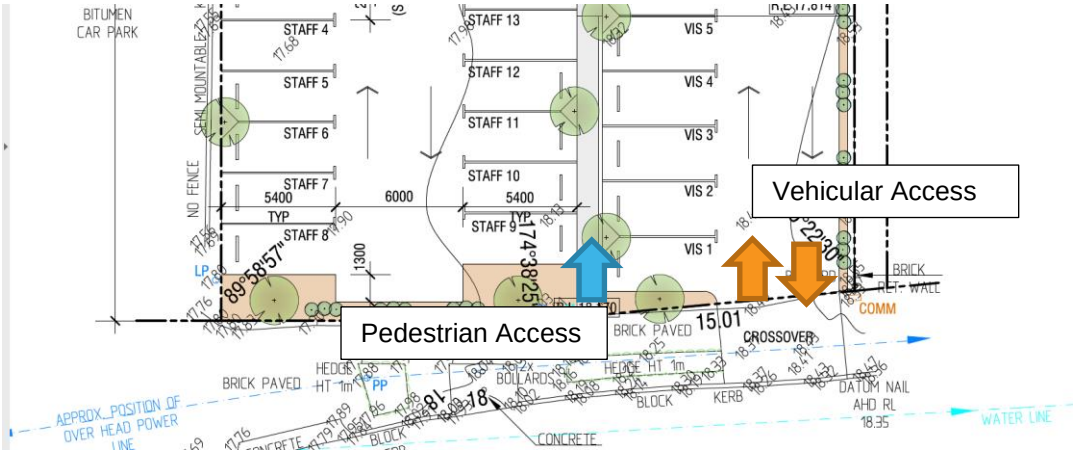
Source: GDD Design Group

3.2 Site Access

3.2.1 Vehicular and Pedestrian Access

Vehicular access into the Site is proposed to be via Railway Parade against the eastern boundary of the Site. The Site is easily accessible via footpaths along Railway Parade, where a dedicated pedestrian path to the Site has been provided away from the proposed vehicular access. The access arrangement of the Site is shown in **Figure 3-2**

Figure 3-2 Site Access – Railway Parade



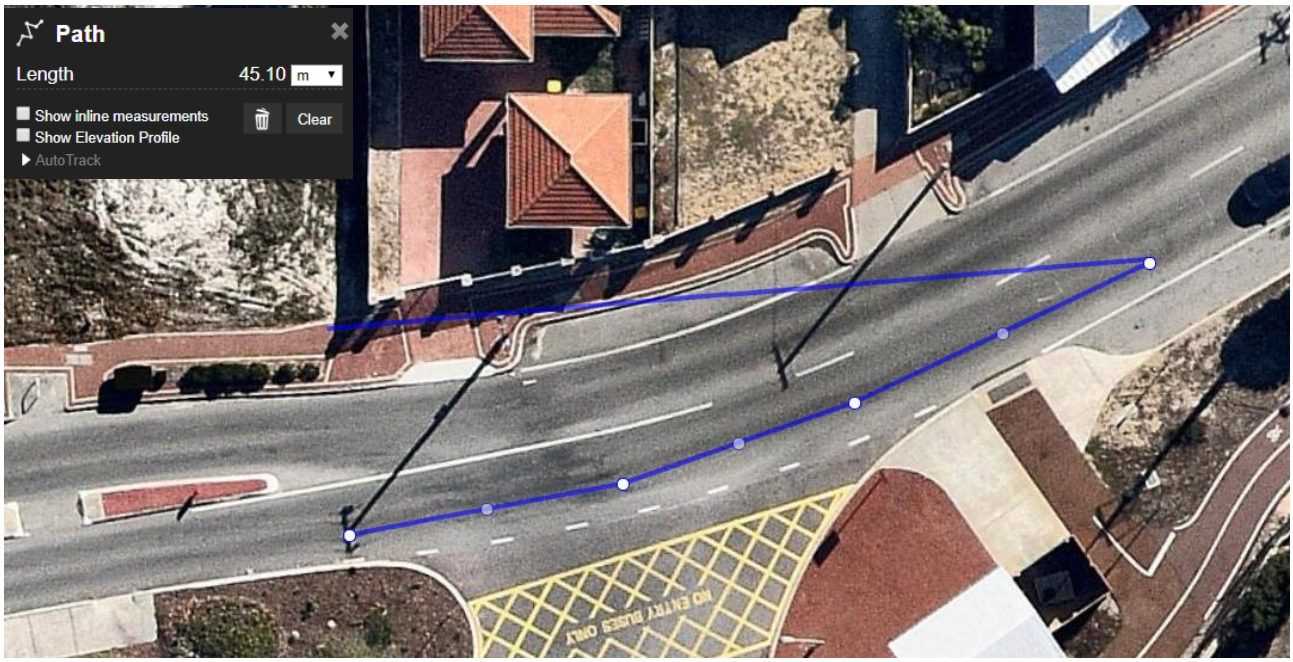
3.2.2 Sightlines of Vehicular Access

Cardno conducted a site visit on the 23/7/2019 to observe the visibility at the proposed vehicular access location for the Site. It was observed that the location of the proposed vehicular access provides a sightline for eastbound traffic that exceeds the desirable minimum sight line requirement as shown within *AS2890.1*.

For westbound traffic, a desktop sightline assessment was undertaken to check the minimum Entering Sight Distance (45m) as required within *AS 2890.1* and is shown to be achieved in **0**. On-site sightline observations are shown in **Figure 3-4** and **Figure 3-5**.

According to *AS2890.1, Figure 3.2, note 3,* parking within the vehicle sightline 'may need' to be restricted on street to ensure that the sight distance required is satisfied. The existing parking bays on the frontage road to the east of the proposed site access is currently restricted for "15 min parking only" at all times, meaning the bays are unlikely to be used for long term parking which may pose a regular sight line obstruction. These short-term bays are expected to be high turnover and, during the peak periods, the parking bays may be utilised by parents who drop-off and pick-up their children. On site observations suggest that the use of the bays to drop off and pick up children from the bus / train station appears to be the primary use of the bays currently. The vehicle shown in **Figure 3-4** is the vehicle that our team drove to the Site.

Figure 3-3 Desktop Sightline Assessment



Source: Nearmap, 2019

Figure 3-4 Sightline Observation (westbound)

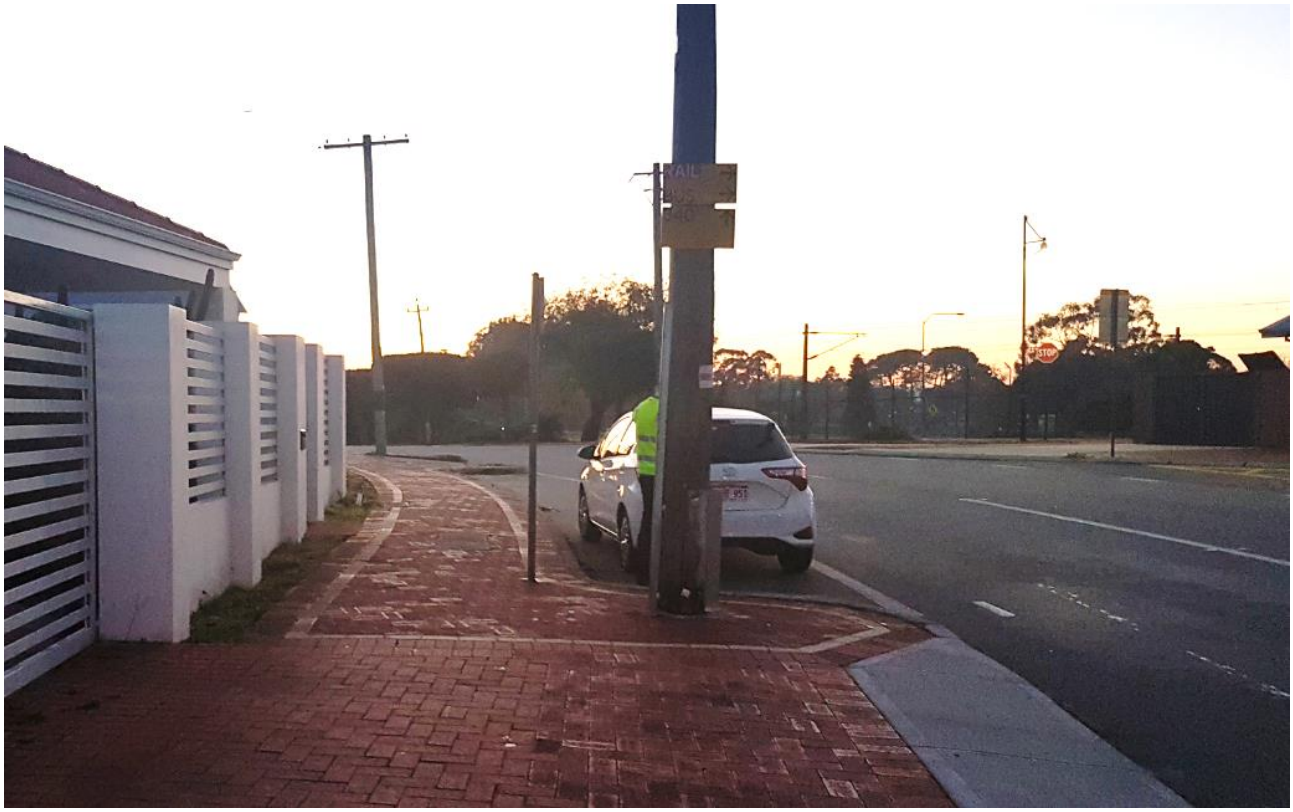
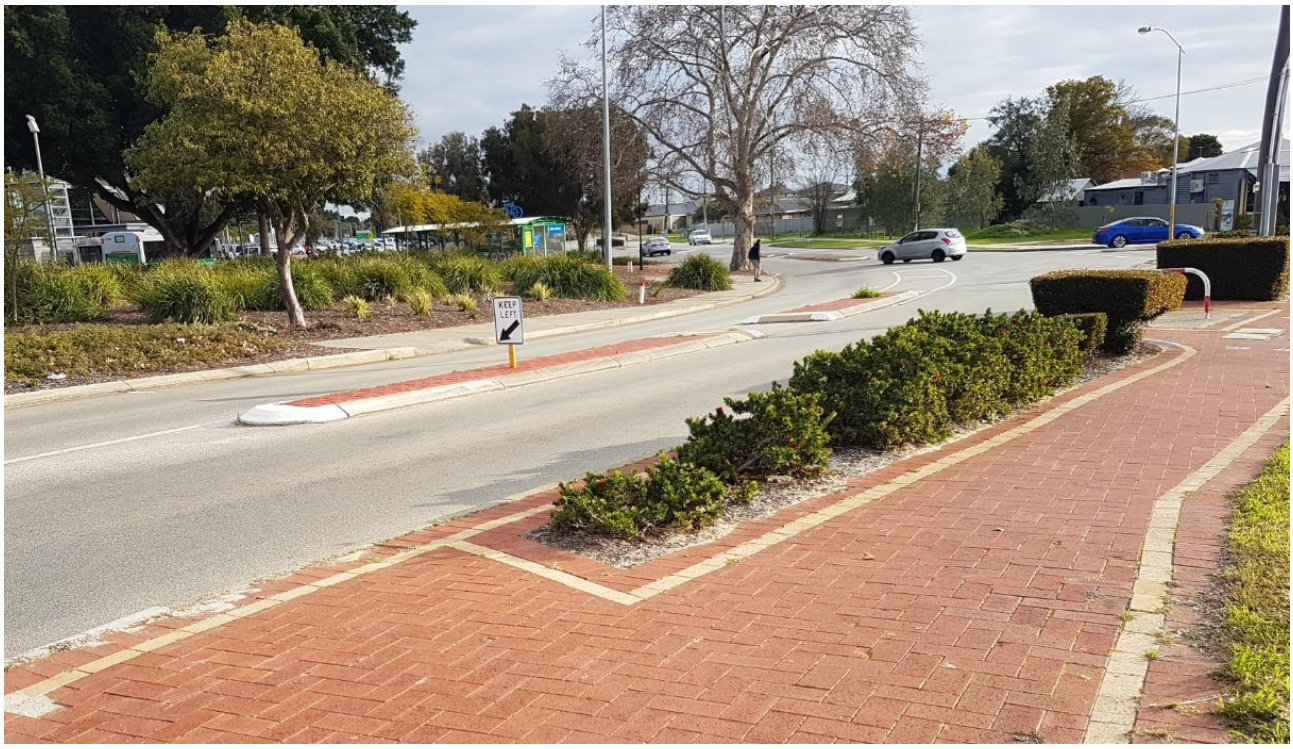


Figure 3-5 Sightline Observation (eastbound)



3.3 Car Parking Provision

The car parking requirements for child care centres as required in the *Town of Bassendean Local Planning Scheme* (the LPS) *No.10* has been calculated. **Table 3-1** shows the car parking requirements and the provision on-site.

Table 3-1 Car Parking Provision

Land Use	Car Parking Requirements		Car Parking Provision
Day Care/Child Minding Centre	1 per employee	16 bays for 16 Staff	16 bays
	1 per 6 children	15.3 bays for 92 Children	16 bays
Total	**32 Bays**		**32 Bays**

As shown in the calculation, the parking provision of the proposed development satisfies the parking requirement as defined in the LPS. Due to the nature of the proposed development as a child care centre, car parking is expected to be high-turnover.

3.4 Bicycle Parking Provision

As per the *Town of Bassendean Local Planning Scheme No.10:*

"**4.7.6 Bicycle Facilities** The local government may require the provision of facilities that provide for and encourage cycling as part of any private development. Such facilities shall provide for storage and parking of bicycles and change rooms/showers for cyclists"

For the purpose of this assessment, bicycle racks can be installed on Site to provide sufficient bicycle parking. Staff toilet / change room are provided within the development.

3.5 Provision for Service Vehicles

The waste generated from the proposed development is expected to be serviced as per the existing arrangement for the adjacent developments. Rubbish bins will be wheeled out and placed along the street during the scheduled collection day and returned after the bins are emptied.

4 Changes to Surrounding Area

4.1 Road Network

Cardno contacted the Town of Bassendean and was advised that there are no proposed road network changes in the foreseeable future in the vicinity of the Site.

4.2 Intersection Controls

Cardno contacted the Town of Bassendean and was informed that there are no intersection controls changes in the foreseeable future in the vicinity of the Site.

4.3 Pedestrian/Cycle Networks

Cardno contacted the Town of Bassendean and was informed that the Town is partnering with Public Transport Authority (PTA) to provide on-road bicycle lane along Broadway and Ivanhoe Street between Iolnathe Street and Railway Parade.

4.4 Public Transport Services

Cardno contacted the PTA and were advised that there are no major changes proposed to the public transport services within Bassendean at this stage. Long term changes may come associated with the Forrestfield Airport Link.

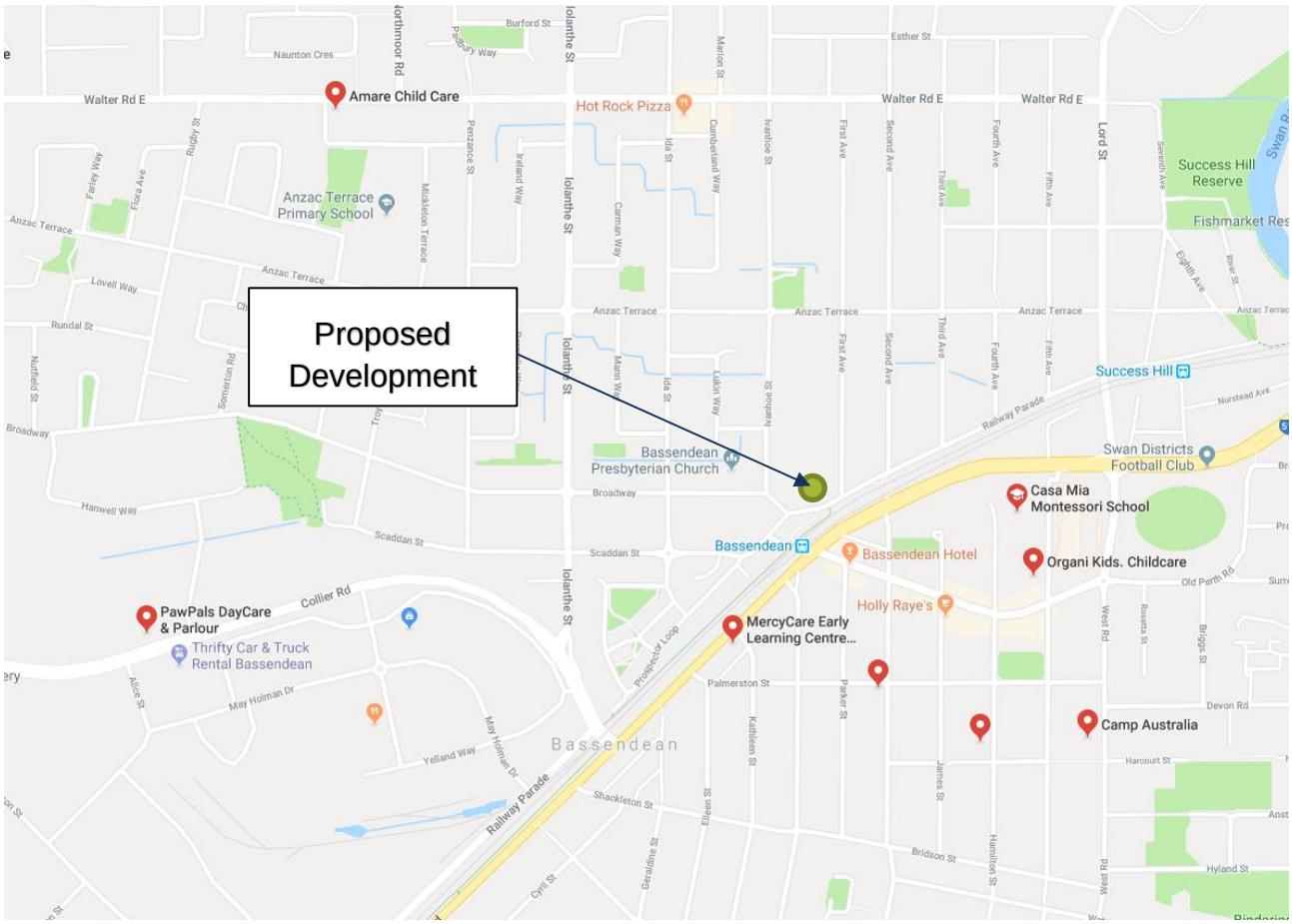
5 Integration with Surrounding Area

5.1 Surrounding Attractors/Generators

The traffic generators for the Site will primarily be the residents from the surrounding residential area who use the facilities of the child care centre.

A search on google map shows that the nearest Early Learning Centre (ELC) / child care is located approximately 300m south of the Site. However, this ELC is located on the other side of Guildford Road, which does not have direct vehicular connections to the proposed development. The nearest childcare located to the north of the Site is approximately 1km away as illustrated in **Figure 5-1.**

Figure 5-1 Potential Catchment Area



5.2 Proposed Changes to Surrounding Land Use

Cardno contacted the Town of Bassendean and was advised that there are no plans to change the land use in the vicinity of the Site.

5.3 Level of Accessibility

The Site benefits from excellent public transportation facilities from the Bassendean Train Station and the bus stops nearby. It is possible that existing users of the Bassendean train station and bus exchange area could utilise this developments childcare services resulting in lower additional trips generated by the site onto the surrounding road network. The Site is also surrounded by excellent footpaths and cycling paths facilitating pedestrian travel to and from the residential developments in the vicinity of the Site.

6 Analysis of Transport Network

6.1 Assessment Years and Time Period

Peak times selected are 7:00 AM – 8:00 AM and 4:00 PM – 5:00 PM respectively for the morning and afternoon peak periods. The following model scenarios have therefore been analysed as part of this assessment:

- Scenario 1 – 2019 background traffic without development
- Scenario 2 – 2020 background traffic with proposed development
- Scenario 3 – 2030 background traffic with proposed development

6.2 Traffic Generation

Trip generation has been calculated using various sources for the different components of the development: *Institute of Transportation Engineers (ITE) "Trip Generation" 10th Edition, Roads and Traffic Authority Guide to Traffic Generating Developments* and *WAPC Transport Impact Assessment Guidelines -Volume 4 - Technical Guidance.*

Table 6-1 Trip Generation Rate Distribution

Land Use	Peak Hour Generation		AM Peak Hour		PM Peak Hour	
	AM Peak	PM Peak	IN	Out	IN	OUT
Child care	0.8	0.7	53%	47%	47%	53%

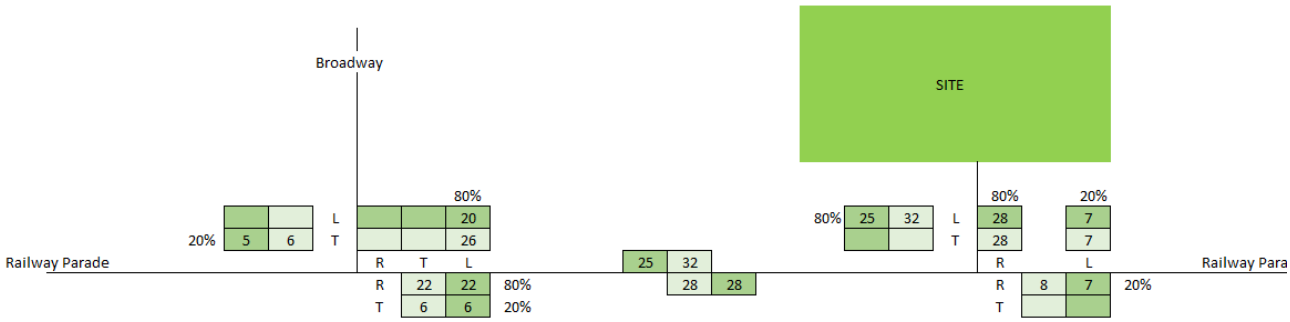
Table 6-2 Trip Generation

Land Use	AM Peak Hour		PM Peak Hour	
Child care	39	35	30	34

6.3 Traffic Distribution

As discussed in **Section 5.1**, the main catchment area of the proposed child care is expected to be north of the Site. Hence, it is assumed that 80% of the trip generated by the proposed development is distributed to the north, while 20% of the trips will be generated from the east and west. The distribution of the traffic generated by the proposed development is shown in **Figure 6-1**.

Figure 6-1 Proposed Development Traffic Distribution



6.4 Key Assumptions

The following key assumptions has been made for this assessment.

- For robust assessment, the peak hour of the proposed development (childcare) is the same as the existing traffic network peak hour
- Staff members would leave outside of the peak period of the proposed development, and this has been reflected in the trip generation calculation
- The growth rate of background traffic has been assumed for 1% growth per annum, including the growth of buses and heavy vehicles

6.5 Intersection Performance

Analysis of the traffic impacts of the proposed development has been carried out for the Railway Parade / Broadway intersection.

The identified intersection has been analysed using the SIDRA analysis program. This program calculates the performance of intersections based on input parameters, including geometry and traffic volumes. As an output SIDRA provides values for the Degree of Saturation (DOS), queue lengths, delays, level of service, and 95th Percentile Queue. These parameters are defined as follows:

- **Degree of Saturation (DOS)**: is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The theoretical intersection capacity is exceeded for an un-signalized intersection where DOS > 0.80;
- **95% Queue**: is the statistical estimate of the queue length up to or below which 95% of all observed queues would be expected;
- **Average Delay**: is the average of all travel time delays for vehicles through the intersection. An unsignalised intersection can be considered to be operating at capacity where the average delay exceeds 40 seconds for any movement; and
- **Level of Service (LOS)**: is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. The different levels of service can generally be described as shown in **Figure 6-2.**

Figure 6-2 Level of Service (LoS) Performance Criteria

LOS	Description	Signalised Intersection	Unsignalised Intersection
A	Free-flow operations (best condition)	≤10 sec	≤10 sec
B	Reasonable free-flow operations	10-20 sec	10-15 sec
C	At or near free-flow operations	20-35 sec	15-25 sec
D	Decreasing free-flow levels	35-55 sec	25-35 sec
E	Operations at capacity	55-80 sec	35-50 sec
F	A breakdown in vehicular flow (worst condition)	≥80 sec	≥50 sec

A LOS exceeding these values indicates that the road section is exceeding its practical capacity. Above these values, users of the intersection are likely to experience unsatisfactory queueing and delays during the peak hour periods.

6.6 Analysis Results

The results of SIDRA analysis show that the nearest intersection will perform satisfactorily after the proposed development is operating, and for the 10 year-horizon with LOS A on all legs during both AM and PM peak. The traffic distributions of all scenarios are presented in **Figure 6-3** to **Figure 6-5**. The analysis results output from SIDRA is contained within **Appendix B** of this report.

Figure 6-3 Traffic Distribution – Scenario 1

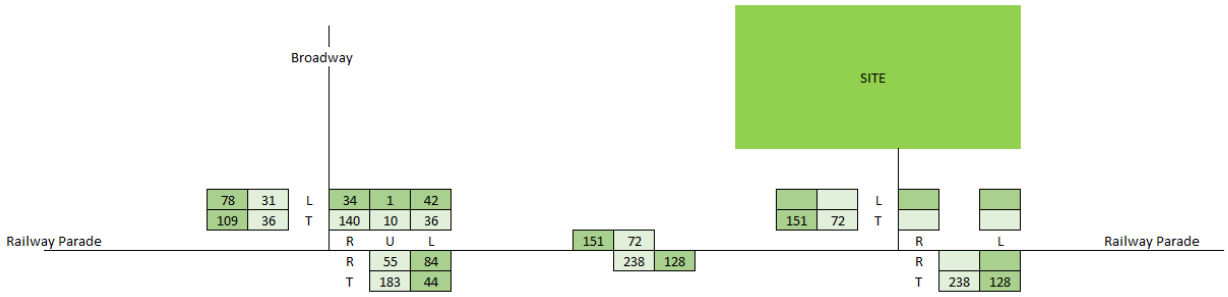


Figure 6-4 Traffic Distribution – Scenario 2

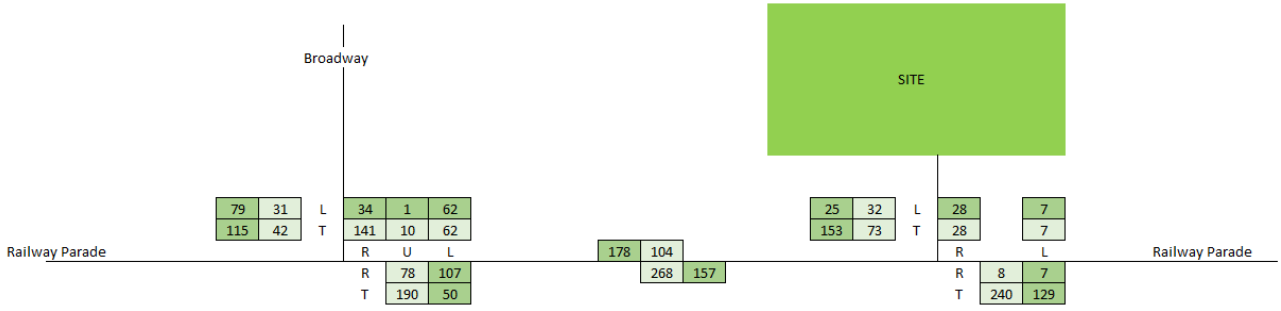
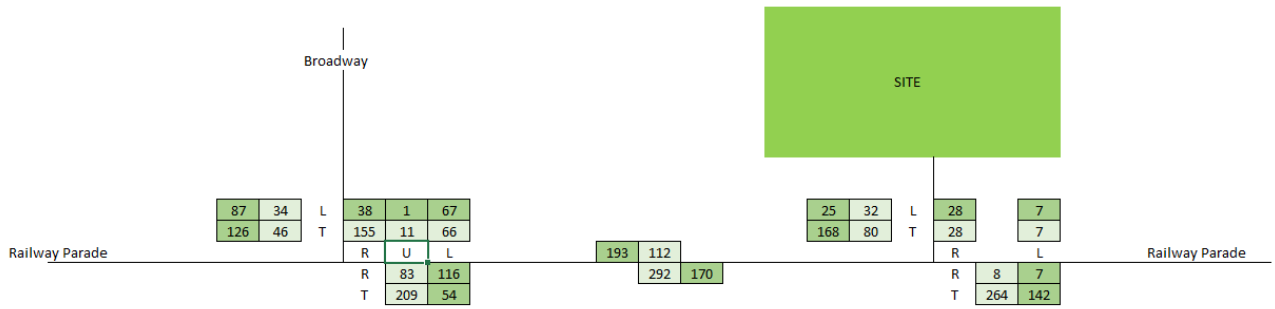


Figure 6-5 Traffic Distribution – Scenario 3



7 Summary

This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) *Transport Assessment Guidelines for Developments: Volume 4 – Individual Development*.

The following conclusions have been made with regards to the proposed development:

- The Site will generate approximately 74 vehicle trips during the AM peak period and 64 vehicle trips during the PM peak period.
- The car parking provision of the proposed development satisfies the parking requirement of the *Town of Bassendean Local Planning Scheme.*
- The Site benefits from excellent public transport facilities with bus stops and train station located approximately 50m to 100m of the Site.
- The Site benefits from excellent pedestrian and cycling facilities with footpaths and shared paths provided in the vicinity of the Site.
- The vehicular sightlines of the proposed access satisfy the minimum sightline requirements as described within *AS2890.1.*

APPENDIX

A

WAPC CHECKLIST

Item	Provided	Comments/Proposals
Summary		
Introduction/Background	Section 1	
name of applicant and consultant	Section 1	
development location and context	Section 2	
brief description of development proposal	Section 2	
key issues	N/A	
Background information	Section 1	
Existing situation	Section 2	
existing site uses (if any)	Section 2	
existing parking and demand (if appropriate)	N/A	
existing access arrangements	Section 3	
existing site traffic	Section 2	
surrounding land uses	Section 2	
surrounding road network	Section 2	
traffic management on frontage roads	Section 2	
traffic flows on surrounding roads (usually am and pm peak hours)	Section 6	
traffic flows at major intersections (usually am and pm peak hours)	Section 6	
operation of surrounding intersections	Section 5	
existing pedestrian/cycle networks	Section 2	
existing public transport services surrounding the development	Section 2	
Crash data	Section 2	
Development proposal	Section 3	
regional context	Section 4	
proposed land uses	Section 3	
table of land uses and quantities	Section 3	
access arrangements	Section 3	
parking provision	Section 3	
end of trip facilities	N/A	
any specific issues	N/A	
road network	Section 2	
intersection layouts and controls	Section 4	
pedestrian/cycle networks and crossing facilities	Section 4	

Item	Provided	Comments/Proposals
public transport services	Section 4	
Integration with surrounding area	Section 5	
surrounding major attractors/generators	Section 5	
committed developments and transport proposals	N/A	
proposed changes to land uses within 1200 metres	Section 4	
travel desire lines from development to these attractors/generators	N/A	
adequacy of existing transport networks	Section 2	
deficiencies in existing transport networks	N/A	
remedial measures to address deficiencies	N/A	
Analysis of transport networks	Section 6	
assessment years	Section 6	
time periods	Section 6	
development generated traffic	Section 6	
distribution of generated traffic	Section 6	
parking supply & demand	Section 3	
base and "with development" traffic flows	Section 6	
analysis of development accesses	N/A	
impact on surrounding roads	N/A	
impact on intersections	Section 6	
impact on neighbouring areas	N/A	
traffic noise and vibration	N/A	
road safety	N/A	
public transport access	Section 2	
pedestrian access / amenity	Section 2	
cycle access / amenity	Section 2	
analysis of pedestrian / cycle networks	Section 2, Section 5	
safe walk/cycle to school (for residential and school site developments only)	N/A	
Traffic management plan (where appropriate)	N/A	

APPENDIX B

SIDRA ANALYSIS

2019 Background Traffic

AM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	183	2.0	0.128	0.1	LOS A	0.3	2.4	0.09	0.14	0.09	54.7
6	R2	55	0.0	0.128	5.7	LOS A	0.3	2.4	0.09	0.14	0.09	43.7
Approach		238	1.5	0.128	1.4	NA	0.3	2.4	0.09	0.14	0.09	52.3
North: Broadway												
7	L2	42	44.0	0.175	4.9	LOS A	0.7	5.0	0.19	0.60	0.19	32.9
9	R2	140	1.0	0.175	6.0	LOS A	0.7	5.0	0.19	0.60	0.19	37.7
Approach		182	10.9	0.175	5.7	LOS A	0.7	5.0	0.19	0.60	0.19	36.6
West: Railway Parade												
10	L2	31	32.0	0.041	5.9	LOS A	0.0	0.0	0.00	0.27	0.00	30.9
11	T1	36	17.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.27	0.00	53.0
Approach		67	23.9	0.041	2.7	NA	0.0	0.0	0.00	0.27	0.00	40.9
All Vehicles		487	8.1	0.175	3.2	NA	0.7	5.0	0.11	0.33	0.11	44.2

PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	44	0.0	0.079	0.6	LOS A	0.4	2.6	0.30	0.39	0.30	47.0
6	R2	84	0.0	0.079	6.1	LOS A	0.4	2.6	0.30	0.39	0.30	37.0
Approach		128	0.0	0.079	4.2	NA	0.4	2.6	0.30	0.39	0.30	40.7
North: Broadway												
7	L2	42	24.0	0.066	5.1	LOS A	0.2	1.9	0.23	0.57	0.23	35.3
9	R2	34	0.0	0.066	5.7	LOS A	0.2	1.9	0.23	0.57	0.23	38.4
Approach		76	13.3	0.066	5.4	LOS A	0.2	1.9	0.23	0.57	0.23	36.7
West: Railway Parade												
10	L2	78	15.0	0.105	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	109	7.0	0.105	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.2
Approach		187	10.3	0.105	2.4	NA	0.0	0.0	0.00	0.24	0.00	42.5
All Vehicles		391	7.5	0.105	3.6	NA	0.4	2.6	0.14	0.35	0.14	40.8

2020 Background Traffic + Development Traffic

AM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	190	2.0	0.146	0.1	LOS A	0.5	3.4	0.12	0.17	0.12	53.4
6	R2	78	0.0	0.146	5.7	LOS A	0.5	3.4	0.12	0.17	0.12	42.6
Approach		268	1.4	0.146	1.7	NA	0.5	3.4	0.12	0.17	0.12	50.5
North: Broadway												
7	L2	62	44.0	0.198	4.9	LOS A	0.8	6.0	0.18	0.60	0.18	32.8
9	R2	141	1.0	0.198	6.2	LOS A	0.8	6.0	0.18	0.60	0.18	37.6
Approach		203	14.1	0.198	5.8	LOS A	0.8	6.0	0.18	0.60	0.18	36.1
West: Railway Parade												
10	L2	31	32.0	0.044	5.9	LOS A	0.0	0.0	0.00	0.25	0.00	31.1
11	T1	42	17.0	0.044	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	53.5
Approach		73	23.4	0.044	2.5	NA	0.0	0.0	0.00	0.25	0.00	42.2
All Vehicles		544	9.1	0.198	3.4	NA	0.8	6.0	0.13	0.34	0.13	43.4

PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	50	0.0	0.098	0.6	LOS A	0.5	3.3	0.31	0.40	0.31	46.6
6	R2	107	0.0	0.098	6.1	LOS A	0.5	3.3	0.31	0.40	0.31	36.7
Approach		157	0.0	0.098	4.4	NA	0.5	3.3	0.31	0.40	0.31	40.0
North: Broadway												
7	L2	62	24.0	0.082	5.2	LOS A	0.3	2.5	0.24	0.57	0.24	35.3
9	R2	34	0.0	0.082	5.9	LOS A	0.3	2.5	0.24	0.57	0.24	38.3
Approach		96	15.5	0.082	5.4	LOS A	0.3	2.5	0.24	0.57	0.24	36.4
West: Railway Parade												
10	L2	79	15.0	0.109	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	115	7.0	0.109	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.4
Approach		194	10.3	0.109	2.3	NA	0.0	0.0	0.00	0.24	0.00	42.8
All Vehicles		447	7.8	0.109	3.7	NA	0.5	3.3	0.16	0.37	0.16	40.5

2030 Background Traffic + Development Traffic

AM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	209	2.0	0.159	0.1	LOS A	0.5	3.7	0.12	0.17	0.12	53.5
6	R2	83	0.0	0.159	5.7	LOS A	0.5	3.7	0.12	0.17	0.12	42.6
Approach		292	1.4	0.159	1.7	NA	0.5	3.7	0.12	0.17	0.12	50.6
North: Broadway												
7	L2	66	44.0	0.221	4.9	LOS A	0.9	6.7	0.20	0.61	0.20	32.5
9	R2	155	1.0	0.221	6.4	LOS A	0.9	6.7	0.20	0.61	0.20	37.3
Approach		221	13.8	0.221	6.0	LOS A	0.9	6.7	0.20	0.61	0.20	35.8
West: Railway Parade												
10	L2	34	32.0	0.049	5.9	LOS A	0.0	0.0	0.00	0.25	0.00	31.1
11	T1	46	17.0	0.049	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	53.5
Approach		80	23.4	0.049	2.5	NA	0.0	0.0	0.00	0.25	0.00	42.1
All Vehicles		593	9.0	0.221	3.4	NA	0.9	6.7	0.14	0.34	0.14	43.4

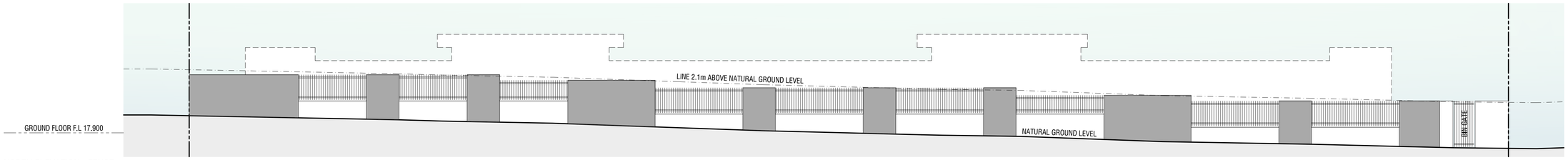
PM

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Railway Parade												
5	T1	54	0.0	0.108	0.7	LOS A	0.5	3.7	0.33	0.41	0.33	46.5
6	R2	116	0.0	0.108	6.2	LOS A	0.5	3.7	0.33	0.41	0.33	36.5
Approach		170	0.0	0.108	4.5	NA	0.5	3.7	0.33	0.41	0.33	39.9
North: Broadway												
7	L2	67	24.0	0.092	5.2	LOS A	0.3	2.8	0.26	0.58	0.26	35.2
9	R2	38	0.0	0.092	6.1	LOS A	0.3	2.8	0.26	0.58	0.26	38.2
Approach		105	15.3	0.092	5.5	LOS A	0.3	2.8	0.26	0.58	0.26	36.3
West: Railway Parade												
10	L2	87	15.0	0.119	5.7	LOS A	0.0	0.0	0.00	0.24	0.00	31.5
11	T1	126	7.0	0.119	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	53.3
Approach		213	10.3	0.119	2.3	NA	0.0	0.0	0.00	0.24	0.00	42.7
All Vehicles		488	7.8	0.119	3.8	NA	0.5	3.7	0.17	0.37	0.17	40.4

APPENDIX

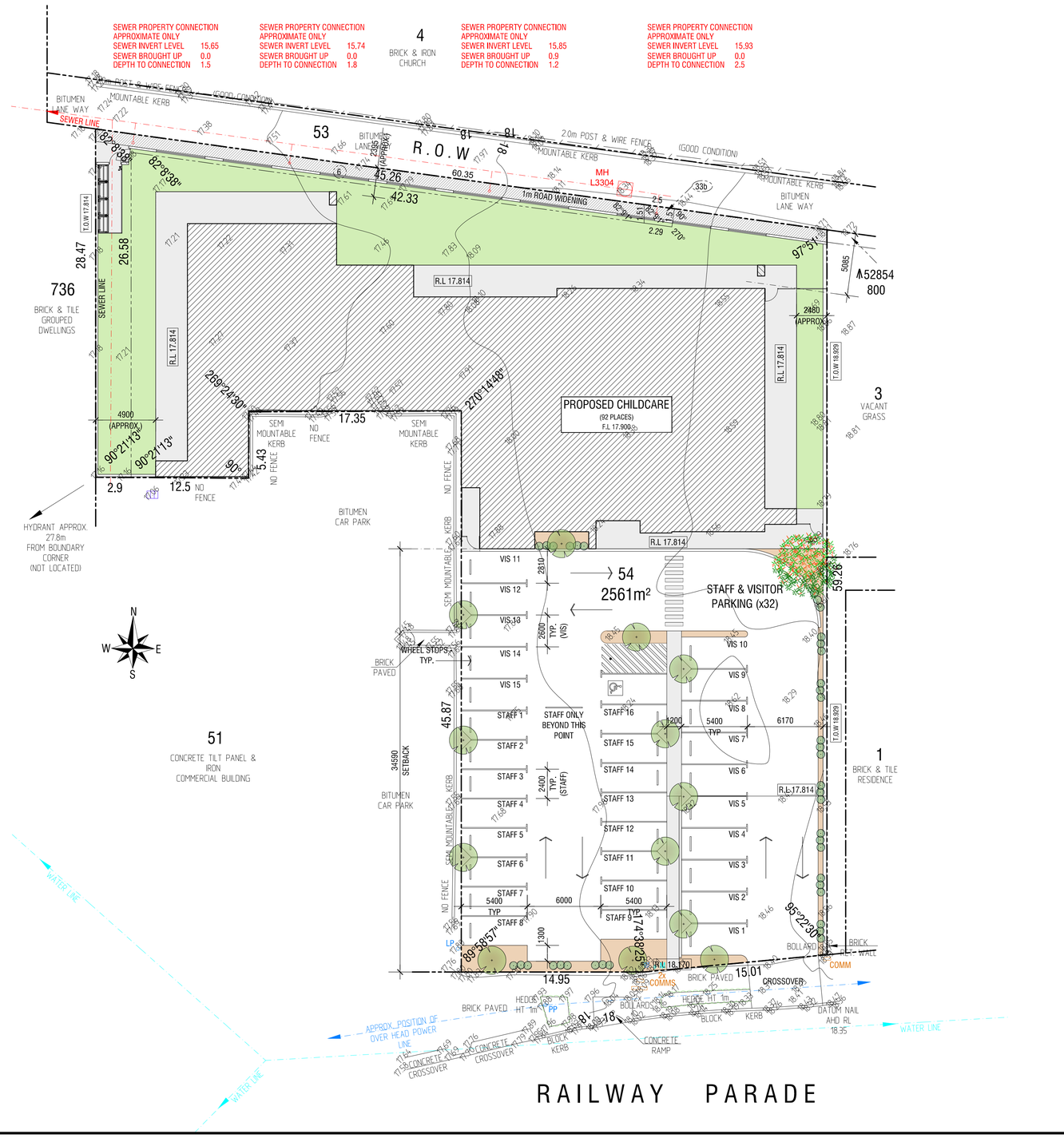
C

DEVELOPMENT PLANS



NORTH ELEVATION - FENCE

SCALE 1:100



OVERALL SITE PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT

PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING

CONCEPT DESIGN
- SITE PLAN

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A01	2

CAD FILE NAME 8123-SD_A00

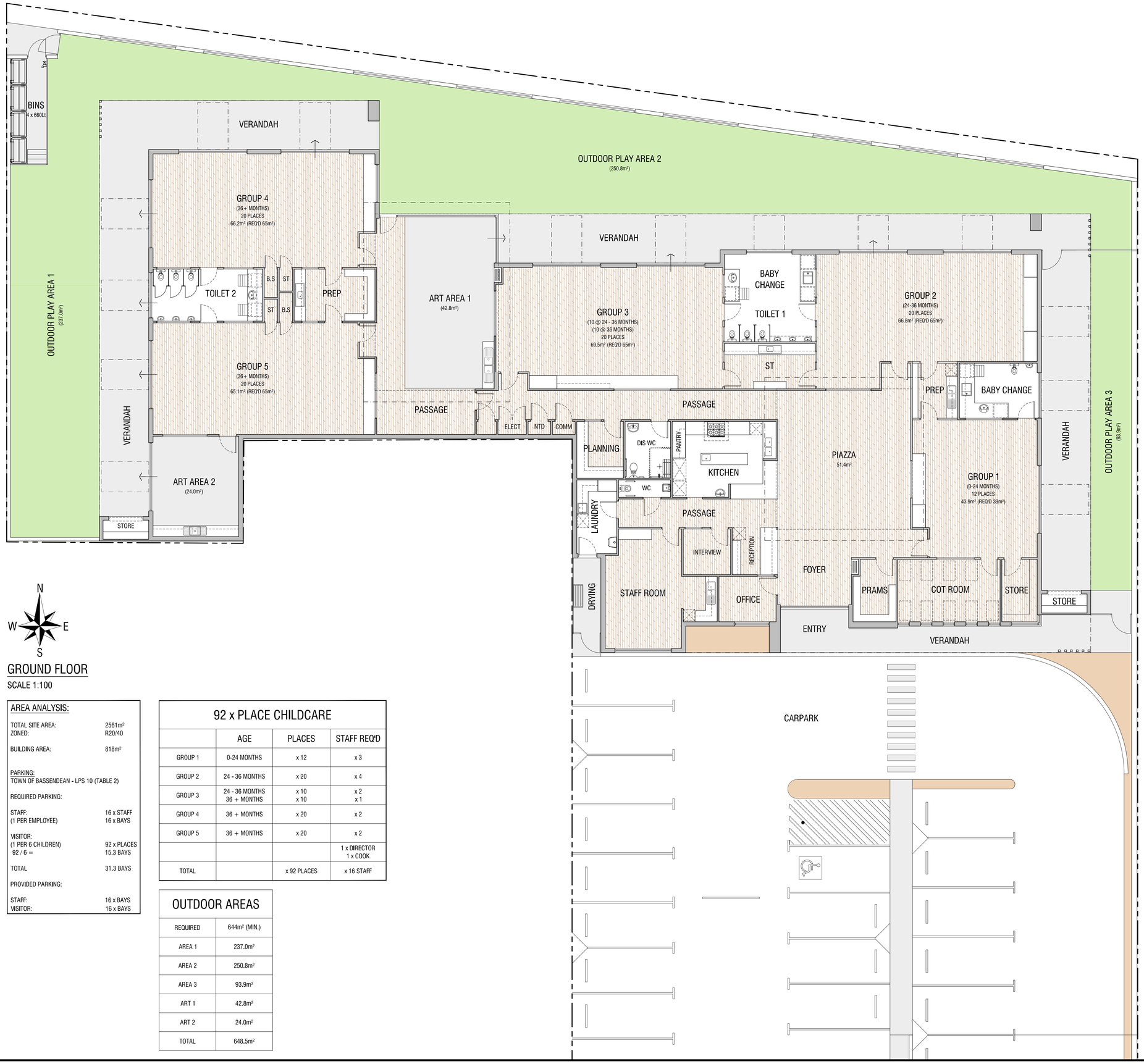
SCALE 1:200 @ A1

DRAWN MJG

CHECKED MJG

GDD DESIGN GROUP

Web : www.gdddesigngroup.com
Tel : (08) 9388 8846



N
W E
S

GROUND FLOOR

SCALE 1:100

AREA ANALYSIS:

TOTAL SITE AREA:	2561m²
ZONED:	R20/40
BUILDING AREA:	818m²
PARKING:	
TOWN OF BASSENDEAN - LPS 10 (TABLE 2)	
REQUIRED PARKING:	
STAFF:	16 x STAFF
(1 PER EMPLOYEE)	16 x BAYS
VISITOR:	
(1 PER 6 CHILDREN)	92 x PLACES
92 / 6 =	15.3 BAYS
TOTAL	31.3 BAYS
PROVIDED PARKING:	
STAFF:	16 x BAYS
VISITOR:	16 x BAYS

92 x PLACE CHILDCARE

	AGE	PLACES	STAFF REQ'D
GROUP 1	0-24 MONTHS	x 12	x 3
GROUP 2	24 - 36 MONTHS	x 20	x 4
GROUP 3	24 - 36 MONTHS 36 + MONTHS	x 10 x 10	x 2 x 1
GROUP 4	36 + MONTHS	x 20	x 2
GROUP 5	36 + MONTHS	x 20	x 2
			1 x DIRECTOR 1 x COOK
TOTAL		x 92 PLACES	x 16 STAFF

OUTDOOR AREAS

REQUIRED	644m² (MIN.)
AREA 1	237.0m²
AREA 2	250.8m²
AREA 3	93.9m²
ART 1	42.8m²
ART 2	24.0m²
TOTAL	648.5m²

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- FLOOR PLAN

PROJECT No.	8123
STAGE	SD
DRAWING NO.	A02
REVISION	2
CAD FILE NAME	8123-SD_A00
SCALE	1:100 @ A1
DRAWN	MJG
CHECKED	MJG

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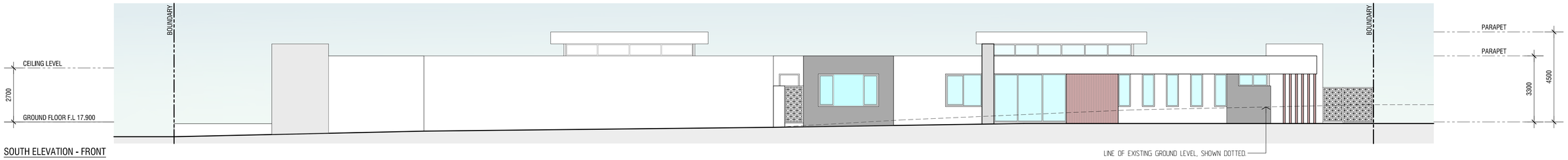
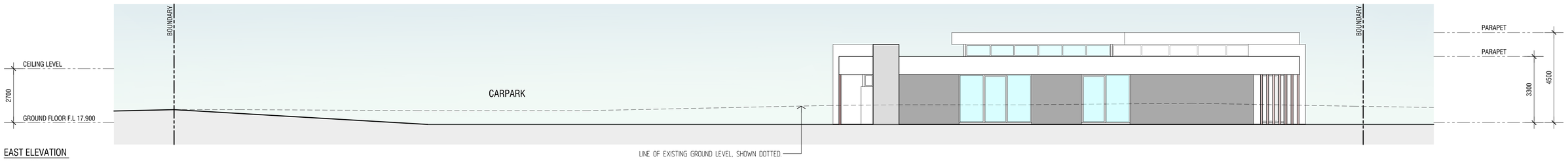
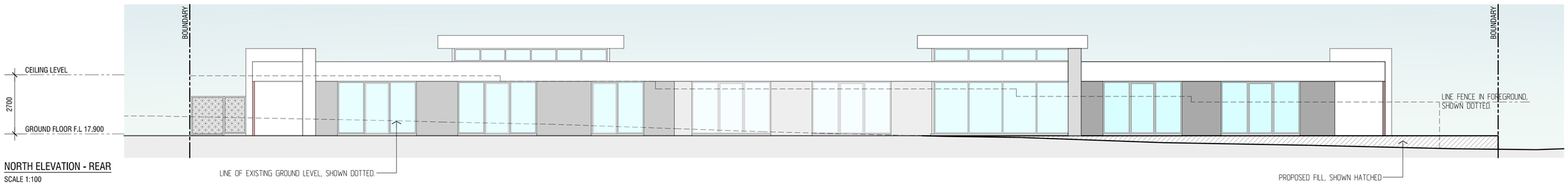


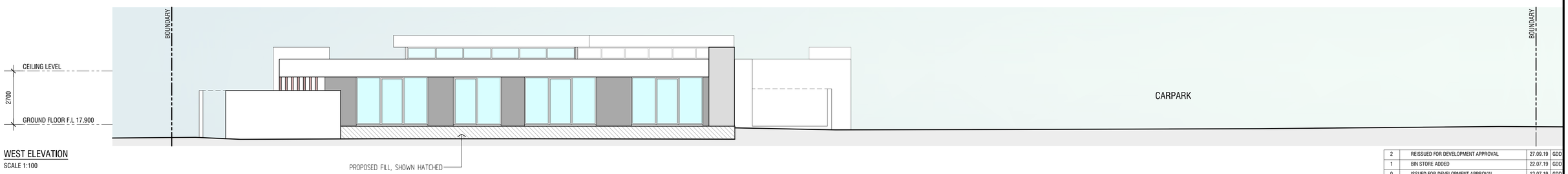
SOUTH ELEVATION - FRONT
SCALE 1:100



EAST ELEVATION
SCALE 1:100



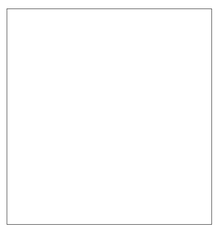
NORTH ELEVATION - REAR
SCALE 1:100



WEST ELEVATION
SCALE 1:100

FEATURE COLOUR:
'DOMINO GREY'

CLADDING:
VERTICAL JARRAH CLADDING



MAIN COLOUR:
'LEXICON WHITE'

FEATURE COLOUR:
'WALLABY GREY'

MATERIALS PALETTE

REV	DESCRIPTION	DATE	APP
2	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
1	BIN STORE ADDED	22.07.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	12.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- ELEVATIONS

PROJECT No.	STAGE
8123	SD
DRAWING NO.	REVISION
A03	2

CAD FILE NAME
8123-SD_A00

SCALE
1:100 @ A1

DRAWN
MJG

CHECKED
MJG

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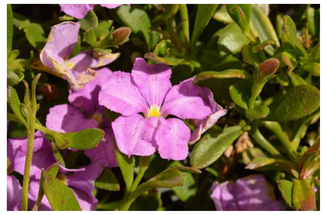
BRACHYCHITON ACERIFOLIA


LAGERSTROEMIA INDICA BILOXI


DAMPIERA LINEARIS


EREMOPHILA GLABRA PROSTRATA


GREVILLEA THELEMANNIANA


SCAEVOLA

LEGEND

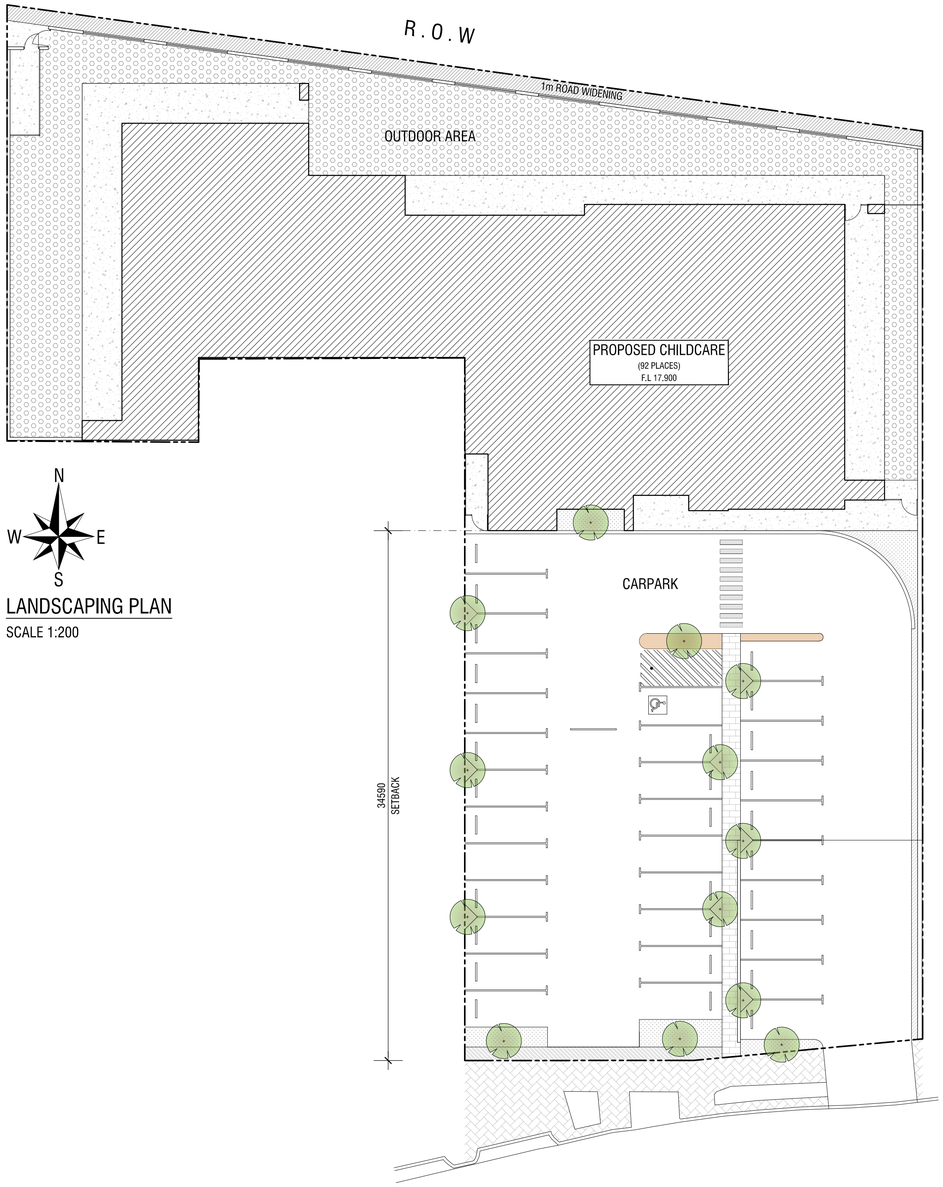
- NON-SLIP CONCRETE
- PAVING
- EXISTING VERGE PAVING (TO REMAIN)
- NATURE PLAY AREA
- PLANTING MIX 'A'
- PLANTING MIX 'B'
- ORGANIC MULCH (75mm DEPTH)

PLANT SCHEDULE

BRACHYCHITON ACERIFOLIA (ILLAWARRA FLAME TREE)

LAGERSTROEMIA INDICA BILOXI (CREPE MYRTLE)

SPECIES	POT SIZE	QUANTITY	PLANT MIX
TREES			
BRACHYCHITON ACERIFOLIA	200L	1	N/A
LAGERSTROEMIA INDICA BILOXI	90L	13	N/A
GROUNDCOVERS			
DAMPIERA LINEARIS	130/140mm	4/m2	A
EREMOPHILA GLABRA PROSTRATA	130/140mm	4/m2	A
GREVILLEA THELEMANNIANA	130/140mm	4/m2	B
SCAEVOLA	130/140mm	4/m2	B



LANDSCAPING PLAN

SCALE 1:200

REV	DESCRIPTION	DATE	APP
1	REISSUED FOR DEVELOPMENT APPROVAL	27.09.19	GDD
0	ISSUED FOR DEVELOPMENT APPROVAL	22.07.19	GDD

REVISION

PROJECT
PROPOSED CHILDCARE CENTRE
92 x PLACES
72 RAILWAY PARADE, BASSENDEAN

DRAWING
CONCEPT DESIGN
- LANDSCAPE PLAN

PROJECT No. 8123
STAGE SD
DRAWING NO. A04
REVISION 1
CAD FILE NAME 8123-SD_A00
SCALE 1:200 @ A1
DRAWN MJG
CHECKED MJG

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Schedule of submissions and Applicant's Response

Submission No 1	Applicant's Response
I am writing to you with my objections and concerns with the proposed Child Care Facility situated at No.72 Railway Parade Bassendean within very close proximity of my residence. I have lived in Bassendean for over 55 years and resided here at my premises for over 30 years & have been a loyal rate payer to the shire over this period. I live together with my younger brother and his wife & we all work on different shifts, especially nights in our current employment. We have our long-term goal to remain in Bassendean for many years to come and calmly retire here in our home. Our main objections to the proposed Child Care Facility being built nearby is that it would bring a considerable amount of **new traffic** and **increased traffic noise** to the area and create further **congestion** over and above what we currently deal with. Morning traffic in our area is very high, greatly because of commuters leaving by train, lots of them parking everywhere around our property and adjacent areas including the BWS Bottle shop and laneway at the rear, sometimes blocking access to the rear of our property. To have provision for a further 32 car bays plus a need to facilitate parents of 92 children, 16 plus staff & Centre Mini Bus, would be detrimental to the excess of **traffic & parking congestion** on Railway Parade and Broadway which already host public buses, taxis, uber, Ola and emergency services. Furthermore, 92 children as you could imagine is not a small group especially with the **daily noise levels** created by them in the playground & drop offs during weekdays between the operating hours of 7am – 6pm & weekends 8am – 1pm. Also, not to mention that the noise from Airconditioning units during the winter and summer periods would contribute to excess noise levels. **As night shift workers** this Child Care Centre would **deprive us of normal sleeping pattern and affect our health**, as we already experience with the local church events on Sundays. We are also concerned about the control of **waste management** and **pollution** in the air due to high number of used nappies being exposed in bins and the facility cooking amenities. Last of all, our other concerns is the **safety of the children** as there's a train Station and Bottle Shop adjacent to the proposed Child Care Facility, both of them are a daily disturbance with noise created from bad behaving, antisocial, drunk or drug addicted individuals. There is nearly constant Police presence at the Train station, Police vehicle parked at BWS Bottle Shop on a daily basis for months due to regular theft. There is also an electronic Board with Police Warning of Burglary which depicts the level of Safety in this area.	• The proposed traffic can easily be accommodated by the surrounding road network which has been demonstrated in the traffic report. In addition the proposed development is compliant with respect to parking. • The proposed acoustic impacts have been appropriately addressed through the submitted acoustic report and any further detailed noise concerns can be addressed through a noise management plan as a condition of approval. • The proposed bin store has been relocated to be further away from adjoining residences. In addition the regular collections will ensure odour is not a concern. • The peak periods of each land use will not overlap and when the bottle shop is busy and likely to create anti-social behaviour the children will not be at the site

Schedule of submissions and Applicant's Response

Submission No 2	Applicant's Response
I would like to know if the B WS liquor store is closing if not then the Town of Bassendean is setting a Precedent. Are you aware a Police Van is parked in BWS car park nearly all its opening hours, also a security guard at the liquor store - What does that tell you. I have noticed a lot of the customers that purchase alcohol and then consume it near by eg -1- church lawn 2- Alley that runs from Ivanhoe St to First Ave. They urinate on my fence break glass bottles and leave a mess If BWS closes, I think the Child Care Centre would be a good option But certain conditions should apply - 1/ Noise Level (I am a shift worker) *21* No Gate on Fence Facing the Rear Alley 3/ Single Storey. When I purchased my home there were Two Bollards along the Alley Three years ago these where removed by The Town of Bassendean Since then Cars and Motor Bikes use the Alley way to take short cuts at Great Speed Despite the Speed Hump been installed two years ago No courtesy is Given by these drivers to people accessing their own drive way. My concern is during construction Delivery Trucks and Tradies accessing the building site via the Alley Way and blocking access to owners property (Have had a truck parked on my paving in front of my Tilt a Door). By Reinstalling the bollards, a lot of these problems could be Rectified and residence would feel safer exiting their property	• As noted above, the anti-social behaviour is not expected to occur during the operating hours of the childcare and as result there are not expected to be any negative impacts on the operation of the childcare. • Construction vehicles are not likely to obstruct the laneway and this aspect of construction can be addressed through a construction management plan as a condition of approval.