



Metro North-West Joint Development Assessment Panel Agenda

Meeting Date and Time: 9 May 2019, 11:00am
Meeting Number: MNWJDAP/255
Meeting Venue: City of Joondalup
90 Boas Avenue
Joondalup

Attendance

DAP Members

Ms Karen Hyde (Presiding Member)
Mr Brian Curtis (A/Deputy Presiding Member)
Mr Fred Zuideveld (Specialist Member)

Item 8.1

Cr Giovanni Italiano (Local Government Member, City of Stirling)
Cr David Boothman (Local Government Member, City of Stirling)

Item 8.2

Cr Philippa Taylor (Local Government Member, City of Joondalup)
Cr Sophie Dwyer (Local Government Member, City of Joondalup)

Officers in attendance

Item 8.1

Ms Giovanna Lumbaca (City of Stirling)
Mr Chris Fudge (City of Stirling)

Item 8.2

Mr Chris Leigh (City of Joondalup)
Mr Tim Thornton (City of Joondalup)

Minute Secretary

Ms Deborah Gouges (City of Joondalup)

Applicants and Submitters

Item 8.1

Mr Kris Nolan (Urbis)
Mr Behnam Bordbar (Transcore)
Ms Emma Dunning (Urbis)

Item 8.2

Ms Ingrid Maher (Planning Solutions)



Members of the Public / Media

Nil

1. Declaration of Opening

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

2. Apologies

Ms Sheryl Chaffer (Deputy Presiding Member)
Cr Christine Hamilton-Prime (Local Government Member, City of Joondalup)

3. Members on Leave of Absence

DAP Member, Ms Sheryl Chaffer has been granted leave of absence by the Director General for the period of 6 May 2019 to 7 June 2019 inclusive.

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 Kris Nolan (Urbis) presenting in support of the application at item 8.1. The presentation will address items for refusal and seek a approval for the proposal subject to conditions which address the reasons for refusal.

7.2 Mr Behnam Bordbar (Transcore) presenting in support of the application at item 8.1. The presentation will address reasons 1 and 3 of the refusal in the RAR.

The City of Joondalup and City of Stirling 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: Lots 76 and 100, House Numbers 50 and 52
Porter Street, Gwelup
Development Description: Child Care Premises
Applicant: Msp Gwelup Pty Ltd (Planning Consultant:
Urbis Pty Ltd)
Owner: Mr Giuseppe Marino & Msp Gwelup Pty Ltd
Responsible Authority: City of Stirling
DAP File No: DAP/18/01537
- 8.2** Property Location: Lot 60 (71) Kinross Drive, Kinross
Development Description: Residential Aged Care Facility (dementia care)
Applicant: Planning Solutions
Owner: Amana Living Inc
Responsible Authority: City of Joondalup
DAP File No: DAP/19/01578

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 Joondalup	Portion of 9040 (34) Kallatina Drive, Iluka	Mixed Commercial Centre (Iluka Plaza)
City of Joondalup	Lot 33 and Lot 34 Tuart Trail, Edgewater	Fourteen (14) Multiple Dwellings
City of Stirling	Lot 100 (304) Scarborough Beach Road, Osborne Park	Motor Vehicle Sales and Repair
City of Stirling	Lot 101 (191) Balcatta Road, Balcatta	Extension to the Existing Bunnings Warehouse
City of Wanneroo	Lot 801 (28K) Caloundra Road, Clarkson	Proposed 24 hour drive-through fast food outlet (McDonalds)

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.



Form 1 – Responsible Authority Report
(Regulation 12)

Property Location:	Lots 76 and 100, House Numbers 50 and 52 Porter Street, Gwelup
Development Description:	Child Care Premises
DAP Name:	Metro North-West JDAP
Applicant:	Msp Gwelup Pty Ltd (Planning Consultant: Urbis Pty Ltd)
Owner:	Mr Giuseppe Marino & Msp Gwelup Pty Ltd
Value of Development:	\$3.3 million
LG Reference:	DA18/2010
Responsible Authority:	City of Stirling
Authorising Officer:	Ross Povey, Director Planning and Development
DAP File No:	DAP/18/01537
Report Due Date:	30 April 2019
Application Received Date:	28 November 2018
Application Process Days:	162 days
Attachments:	<p>Attachment 1 Development Application Plans (all date stamped 15 April 2019, unless otherwise stated):</p> <ul style="list-style-type: none">a. Site Survey – Drawing DA00 date stamped 10 April 2019b. Site Plan – Drawing DA01, Rev Ic. Ground Floor Plan – Drawing DA02, Rev Fd. Upper Floor Plan – Drawing DA03, Rev Fe. Plans / Boundaries – Drawing DA04, Rev Gf. Elevations – Drawing DA05, Rev Gg. Elevations – Drawing DA06, Rev Gh. Landscape Concept Plan – Drawing LP-001, Rev D date stamped 10 April 2019i. Landscape Concept Plan – Drawing LP-002, Rev C date stamped 10 April 2019 <p>Attachment 2 Aerial Location Plan</p> <p>Attachment 3 Metropolitan Region Scheme (MRS) Zoning Map</p> <p>Attachment 4 City of Stirling Local Planning Scheme No.3 (LPS3) Zoning Map</p> <p>Attachment 5 Applicant's Planning report received 20 November 2018</p> <p>Attachment 6 Applicant's Transport Impact Statement prepared by Transcore received 20 November 2018</p>



	<p>Attachment 7 Applicant's Environmental Acoustic Assessment prepared by Herring Stroder Acoustics received 20 November 2018</p> <p>Attachment 8 Applicant's Bushfire Management Plan prepared by Strategen received 14 February 2019</p> <p>Attachment 9 Applicant's Bushfire Emergency Evacuation Plan prepared by Strategen received 14 February 2019</p> <p>Attachment 10 Applicant's Waste Management Plan prepared by Encycle Consulting received 14 February 2019</p> <p>Attachment 11 Applicant's written response to the City's Design Review Panel – dated 1 April 2019 and received 10 April 2019</p> <p>Attachment 12 Applicant's written response to the City's Request for Further Information received 15 April 2019</p> <p>Attachment 13 The City's Design Review Panel – Design Quality Evaluation Report following a meeting held 21 March 2019</p> <p>Attachment 14 Department of Fire and Emergency Services (DFES) comments dated 16 April 2019</p> <p>Attachment 15 Public consultation submissions received</p> <p>Attachment 16 The City's Request for Further Information dated 4 April 2019 and forwarded to the Applicant on the 8 April 2019</p>
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Officer Recommendation:

That the Metro North-West JDAP resolves to:

Refuse DAP Application reference DAP/18/01537 and accompanying plans (Attachment 1) for a Child Care Premises at Lots 76 and 100, House Numbers 50 and 52, Porter Street, Gwelup, in accordance with *Schedule 2, Clause 68 (2) of the Planning and Development (Local Planning Schemes) Regulations 2015*, for the following reasons:



1. The proposed development does not satisfy the objectives of the City's Local Planning Policy 6.7 – Parking & Access as the proposal does not ensure that the development will not result in a major parking problem in the locality.
2. The proposed development does not satisfy the objectives of the City's Local Planning Policy 6.6 – Landscaping as the proposal does not ensure landscaping improves the visual appeal of the development and provides a green buffer to lot boundaries.
3. The proposed development does not satisfy *Clause 67, Matters required to be considered by the Local Government of the Planning and Development (Local Planning Schemes) Regulations 2015, Schedule 2, subclause (s) (ii)*, as the adequacy of arrangements for the parking of vehicles on-site has not been demonstrated.
4. The proposed development does not satisfy *Clause 67, Matters required to be considered by the Local Government of the Planning and Development (Local Planning Schemes) Regulations 2015, Schedule 2, subclause (p)*, as the landscaping provision is not adequate for the development.

Background

Property Address	Lots 76 and 100, House Number's 50 and 52 Porter Street, Gwelup	
Zoning	MRS:	Urban
	LPS:	Residential – R25
Use Class:	Child Care Premises	
Strategy Policy:	Not Applicable	
Development Scheme:	Local Planning Scheme No.3	
Lot Size:	6,054m ²	
Existing Land Use:	Single House	
Value of Development:	\$3.3 million	

The subject site comprises two (2) lots, and is located in the local municipality of Stirling, approximately 11km north-west of the Perth CBD. The subject site is bounded by Porter Street to the south, North Beach Road to the west, Erindale Road to the north, and residential lots coded R20 to the east. Each of the subject lots contains a Single House. Should the JDAP be of the mind to approve the application, the two (2) lots would be required to be amalgamated.

The subject site is zoned 'Urban' under the Metropolitan Region Scheme (MRS) (Attachment 3) and 'Residential – R25' under the City of Stirling's Local Planning Scheme No.3 (LPS3) (Attachment 4).

To the west (on the opposite side of North Beach Road) of the site are lots zoned Residential, with a density coding of R30. To the south (on the opposite side of Porter Street) of the site is Lake Gwelup Pre-Primary and Primary Schools.

Outline of Development Application



The development application proposes the construction of a two (2) storey Child Care Premises development, comprising:

- A total of 1,465m² built form across two levels in addition to two (2) external outdoor play areas;
- Capacity for 112 children and 22 staff; and
- Provision of 30 car parking bays on-site.

Legislation & Policy

Legislation

- Planning and Development Act 2005
- Metropolitan Region Scheme (MRS)
- Local Planning Scheme No.3 (LPS3)
- Planning and Development (Local Planning Schemes) Regulations 2015

State Government Policies

- Residential Design Codes of Western Australia (R-Codes)

Local Planning Policies

The following policy documents are applicable to the development:

- Local Planning Policy 2.6 – Residential Building Heights (LPP 2.6)
- Local Planning Policy 6.1 – Advertising Signs (LPP 6.1)
- Local Planning Policy 6.2 – Bicycle Parking (LPP 6.2)
- Local Planning Policy 6.3 – Bin Storage Areas (LPP 6.3)
- Local Planning Policy 6.4 – Child Day Care Centres (LPP 6.4)
- Local Planning Policy 6.6 – Landscaping (LPP 6.6)
- Local Planning Policy 6.7 – Parking & Access (LPP 6.7)
- Local Planning Policy 6.11 – Trees & Development (LPP 6.11)

The following extracts of LPS3 and Local Planning policies are relevant to the determination of the application.

Clause 4.2.12 of Local Planning Scheme No.3 – Residential Zone

LPS3 provides the following objectives for the Residential zone:

- a) To provide for residential development at a range of densities with a variety of housing type and size, to meet the current and future needs of the community.*
- b) To provide for a range of non-residential uses, which are compatible with and complementary to residential development.*

Clause 5.8 – Cash-In-Lieu of Car Parking

In relation to any car parking shortfall, Clause 5.8.1 of LPS3 states that:-

Subject to the remaining provisions of this Clause 5.8, an applicant for planning approval for a non-residential development or use may, if Council agrees, make a cash payment to the Council in lieu of providing all or any of the number of car parking spaces required under a Local Planning Policy for the development or use for which planning approval has been sought by the applicant.



Clause 5.8.2 of LPS3 states that:-

Before Council agrees to accept a cash-in-lieu payment under Clause 5.8.1, it must have:-

- a) A reasonable expectation that a cash payment can be applied to provide additional transport infrastructure in the vicinity of the development site.*

Local Planning Policy 2.6 – Residential Building Heights

The objectives of the Residential Building Heights Policy are as follows:

- To ensure that the height of buildings are consistent with the desired scale in a given locality; and*
- To ensure that the height of a building does not overly impact on the streetscape or on neighbouring properties.*

Local Planning Policy 6.1 – Advertising Signs

The objectives of the Advertising Signs Policy are as follows:

- To ensure that the display of advertisements on private sites does not adversely impact on the amenity of surrounding land;*
- To avoid the proliferation of signs on individual sites and buildings;*
- To improve the streetscape of major roads;*
- Encourage the rationalisation of advertising signs on individual premises;*
- Encourage the incorporation of advertising signs into the design consideration of buildings;*
- To ensure that signs are not discriminatory or offensive; and*
- To ensure that signs only relate to services and products on the site.*

Local Planning Policy 6.2 – Bicycle Parking

The objectives of the Bicycle Parking Policy are as follows:

- To facilitate the development of adequate bicycle parking facilities;*
- To ensure the provision of end of journey facilities; and*
- To encourage the use of bicycles for all types of journeys.*

Local Planning Policy 6.3 – Bin Storage Areas

The objectives of the Bin Storage Policy are as follows:

- To provide sufficient space for the storage of bulk refuse bins; and*
- To ensure that bin areas are screened from the street and are in harmony with the materials and finishes of the building.*

Local Planning Policy 6.4 – Child Day Care Centres

The objectives of the Child Day Care Centre Policy are as follows:

- To provide for the establishment of Child Day Care Centres in appropriate locations; and*
- To minimise any adverse impact on the amenity of the area.*

Local Planning Policy 6.6 – Landscaping

The objectives of the Landscaping Policy are as follows:

- To promote improved landscaping provision and design;*



- *To improve the visual appeal of development, screen service areas and provide a buffer to boundaries;*
- *To provide shade and 'green relief' in built up areas; and*
- *To promote more environmentally sustainable landscaping.*

Local Planning Policy 6.7 – Parking & Access

The City's Local Planning Policy 6.7 - Parking & Access (LPP 6.7) contains development standards relating to the provision of on-site car parking and allows for the reduction in on-site car parking where certain criteria are met.

LPP 6.7 also allows for the provision of cash-in-lieu of parking bays in instances where non-residential developments are unable to meet Scheme parking requirements.

Variations to the policy are to be considered against the following objectives of LPP 6.7:-

- *To prioritise access by public transport, walking and cycling;*
- *To facilitate the provision and development of adequate parking facilities within the City;*
- *To ensure safe, convenient and efficient access for pedestrians, cyclists and motorists;*
- *To ensure that a major parking problem is unlikely to occur;*
- *To provide a balanced parking supply that does not exceed the capacity of the road network, with sufficient publicly accessible parking; and*
- *To ensure that an oversupply of parking does not occur that discourages alternative forms of transport and is detrimental to the urban design and character of the locality.*

The policy specifies that any further parking concessions beyond those allowed for in the Policy must be determined by "...*having due regard to the circumstances of a particular case, any justification submitted by the applicant and the likely impact on the amenity of the surrounding area and residents.*"

Local Planning Policy 6.11 – Trees & Development

The objectives of the Trees & Development Policy are as follows:

- *To promote and facilitate development that enables existing significant trees to be retained;*
- *To minimise the removal of significant trees on zoned land as a consequence of development;*
- *To protect significant trees which are to be retained on zoned land and existing street trees during the demolition and construction phase of development;*
- *To ensure appropriate advanced trees are planted which are suited to their environment and location where significant trees have been removed or do not exist on zoned land;*
- *To ensure suitable advanced trees are planted on verges forming part of the road reserves abutting a development site where street trees have been removed;*
- *To protect and increase the long term viability of City trees on verges adjacent to development sites; and*
- *To preserve the existing streetscapes within the City.*



Clause 67 of Planning and Development (Local Planning Schemes) Regulations 2015 –
Matters to be considered by Local Government

The City is to have due regard to the matters contained under Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015* when exercising its discretion and the following matters are considered most relevant to this application:-

- c. *Any approved State planning policy;*
- g. *Any local planning policy for the Scheme area;*
- 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;*
- y. *Any submissions received on the application;*
- za. *The comments or submissions received from any authority consulted under clause 66.*

Public Consultation

The application was advertised in accordance with the City's Planning Consultation Procedure. The 21 day consultation period commenced on 20 March 2019 and concluded on 10 April 2019. Letters were sent to owners and occupiers of adjacent properties within a 200m radius, a notice being placed on the City's website and signs erected on-site on all street frontages, being Porter Street, North Beach Road, Erindale Road, and Bindoon Close.

During the public consultation period, a total of 49 submissions were received, comprising of 38 letters of objection, two (2) letters of support, and nine (9) other submissions, which are summarised with their relative locations in the table below.

Submissions Received	Within 200m of site	More than 200m from subject site	All submissions
SUPPORT	0%	4.1%	4.1%
OBJECT	26.5%	51%	77.5%
OTHER (Not stated / no opinion / 'conditional')	14.3%	4.1%	18.4%



All issues raised in submissions received during the consultation period have been summarised in the table below. Also provided is the number of submissions in which the issue was raised, and the City's response to the issue.

Number of times issue was raised	Issue	Officer's Comment
38	Concerns regarding traffic generation and flow.	Traffic generation is discussed in further detail later in this report.
24	Concerns regarding car parking provision.	Car parking is discussed in further detail later in this report.
19	Safety of students attending Lake Gwelup Pre-Primary and Primary Schools crossing the street.	Road users are required to obey traffic regulations. Traffic generation is discussed in further detail later in this report.
6	Safety for pedestrians crossing the street.	Road users are required to obey traffic regulations. Traffic generation is discussed in further detail later in this report.
5	Impact of proposal of local amenity (noise, visual, operational times).	The development meets the deem-to-comply requirements for visual privacy under the R-Codes. The acoustic report has been assessed by the City's Environmental Health Business Unit which is discussed later in this report. The proposed operational hours are discussed later in this report.
3	Child Care Premises not required in the locality.	The City's local planning framework allows for consideration of a Child Care Premises land use on the subject site. The City's assessment of the appropriateness of this specific proposal is contained in sections 1 – 10 later in this report.
2	Concerns regarding impact of demolition on residential dwellings in close proximity to site (dust, noise, property damage, asbestos, general safety).	Should the Metro North-West JDAP be of the mind to approve the application a Site Management Plan would be required to be submitted and approved by the City. The plan would include details of measures to be implemented with respect to the control of dust, waste management, parking, storage of materials, traffic, noise and vibration from the site during the construction phase.
1	Devaluation of property.	Impact on property values is not a valid planning consideration.
1	Concerns regarding the accuracy of the site feature survey undertaken.	The applicant is responsible for ensuring that all lot boundaries as shown on the development plans are correct.
1	Proposed operational times will limit conflict with school pick up & drop off times.	Noted.
1	Child Care Premises should not be allowed to operate on a Saturday.	Noted. The applicant seeks operational hours between Monday and Friday only.



1	What is to be built on the remainder of the subject site?	The City is required to assess the proposal on the subject site against the relevant planning framework. Any future development will be subject to separate developments approval(s).
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The City forwarded the outcomes of advertising to the applicant on 17 April 2019 to allow the applicant the opportunity to respond to each submission received. To date no response to the submissions has been provided by the applicant. The submissions received during the advertising of the application are provided in Attachment 15.

Consultation with other External Agencies

Department of Fire and Emergency Services

Consultation was undertaken with the Department of Fire and Emergency Services (DFES) as the site is partially located within a bushfire prone area and the Child Care Premises proposed is classified as a sensitive land use. The comments from DFES on the proposal are contained in Attachment 14 and are discussed later in this report.

Internal Referrals

Referrals to the City's Engineering Design, Parks & Sustainability, Community Safety, Waste Services and Environmental Health Business Units were undertaken as part of the City's assessment, with relevant comments contained further in this report.

Design Review Panel

The City of Stirling Design Review Panel (DRP), established earlier this year, acts in an advisory capacity to assist in the delivery of high quality developments within the locality.

The DRP reviewed the original development proposal on 21 March 2019 and provided City officers and the applicant with their Design Quality Evaluation Report on 1 April 2019 (refer Attachment 13). The DRP panel comprised of three (3) professionally accredited architects and one (1) experienced urban designer.

A summary of the DRP Design Quality Evaluation Report is provided below:

Design Quality Evaluation Report	
Principle	Panel Commentary
Context and Character	<p>The Panel acknowledges the internal layout is designed by the operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design.</p> <p>The Panel made note the texture and materials choice is positive, however would like to see more detail relating to the use of these in terms of form and pallet to gain an understanding of context in relation to the neighbourhood.</p> <p>Elevations that extend beyond the development to the streetscape would be useful to consider if the use of the proposed brickwork reflects the area.</p>
Landscape Quality	The Panel made comment a detailed landscape design including play areas and management plan should be provided to ensure the success of the landscaped areas.



	<p>The Panel comment fencing detail should be provided in order to understand the full aesthetic.</p> <p>Elevated planter boxes need to be well designed and consideration given to access and maintenance to ensure their success.</p> <p>The landscape plan provided is not consistent with the architectural site plan, in particular details of the proposed verge treatment.</p> <p>The width of the landscape strip to the east edge of the car park needs to wide enough to sustain decent size planting.</p>
Built Form and Scale	<p>The Panel commented the break up to the bulk and scale of the building is acceptable, subject to development of the design in more detail.</p>
Functionality and Build Quality	<p>The Panel acknowledges the internal layout is designed by the operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design.</p> <p>There is an opportunity to flip the orientation of the building to improve daylight penetration and natural ventilation.</p> <p>There is opportunity to re-design the internal layout to reduce long corridors; specifically the location of room 5, the Laundry and rooms 6 & 7 could be reviewed. A redesign could improve functionality of the layout and improve opportunities for cross ventilation.</p> <p>The Panel commented there is no office for private administrative purposes.</p> <p>No furniture layout is provided.</p> <p>The location of the bins store and store 1 are unacceptable as they are within the street setback zone and they block pedestrian access from the street via the footpath.</p>
Sustainability	<p>The Panel believes more consideration should be given to the orientation of the building to create a design that is solar passive.</p> <p>More detail is required relating to the location of the air-conditioning condensers.</p> <p>More detail is required relating to provision of shade to the carpark, north and west facing windows, and play areas.</p>
Amenity	<p>There is an opportunity to improve the overall arrival experience for families by creating an improved interface between the carpark and the entry. This could include an integrated landscape solution.</p> <p>The Panel made note that the West facing play area will get the sea breeze and afternoon sun, this could be resolved by flipping the building to the north and thus in line with a solar passive design.</p> <p>The rooms have limited access to natural light and cross ventilation.</p>



	<p>The Panel commented the current orientation would require a substantial amount of shading.</p> <p>Where shading may not be required (south facing openings), consider providing some weather protection to door and window openings.</p>
Legibility	<p>More planting and shade to the carpark would improve the pedestrian experience and legibility, whilst also acting as a tool for traffic calming.</p> <p>Consideration should be given to linking the verge and pavement access via the disabled car bay, ensuring paving levels flow through.</p> <p>Entry ways and pathways need to be wide enough to accommodate pram access.</p> <p>The Panel requests more detail relating to the proposed signage to the building.</p>
Safety	<p>The car park should be designed as a pedestrian friendly zone. Consider paving materials, visibility and easy access to the entry with prams.</p>
Community	<p>The Panel note there is currently a parking shortfall of nine car bays and defers to the City on this point.</p>
Aesthetics	<p>As noted elsewhere, the current design has potential but requires further development.</p>

The DRP concluded that they did not support the original proposal in its current form and they expected to be presented with a revised proposal. In response to the DRP findings and the City's request for further information the applicant provided the City with revised development plans and an amended written planning submission, however the applicant did not agree to an extension to the statutory timeframes to enable a further DRP review to be undertaken.

Notwithstanding this, the applicant provided the City with a written response to the findings of the DRP (refer Attachment 11) and modified the plans in response to the comments raised by the DRP.

Planning Assessment

The development proposal has been assessed against the City's LPS3 and applicable Local Planning Policies. LPS3 provides guidance in respect to zoning and objectives of zones, however, more specific development standards are provided in relevant local planning policies.

Given the number of Scheme elements and Local Planning Policies that are applicable to the proposed development, the planning assessment part of this report has been broken down into the following sections:

1. Proposed Land Use
2. Residential Design Codes
3. Local Planning Policy 2.6 – Residential Building Heights
4. Local Planning Policy 6.1 – Advertising Signs



5. Local Planning Policy 6.4 – Child Day Care Centres
6. Local Planning Policy 6.6 – Landscaping
7. Local Planning Policy 6.7 – Parking & Access
8. Planning and Development (Local Planning Schemes) Regulations 2015
9. Internal Referrals
10. External Referrals

1. Proposed Land Use

The table below summaries the zoning permissibility of the proposed land use, as set out in Table 1 of LPS3.

USE	LPS3 ZONING PERMISSABILITY	
Child Care Premises	A	The use is not permitted unless the Council has exercised its discretion by granting planning approval after giving special notice in accordance with Clause 9.4.

A Child Care Premises in a Residential zone is listed as an ‘A’ discretionary use under Table 1 of LPS3 – with the City required to advertise Child Care Premises proposals prior to determining an application, or this instance providing a recommendation to the Metro North-West JDAP.

The provision of a Child Care Premises within the Residential zone is supported by the objectives of the Residential Zone (Clause 4.2 of LPS3), specifically “to provide for a range of non-residential uses, which are compatible with and complementary to residential development”. Furthermore the provision of a Child Care Premises is also supported by the Local Planning Policies applicable to the subject site including Local Planning Policy 6.4 – Child Day Care Centres, which seeks “to provide for the establishment of Child Day Care Centres in appropriate locations”.

As discussed in further detail earlier in this report, the application was advertised for a period of 21 days in accordance with the City’s Planning Consultation Procedure (Clause 9.4 of LPS3).

In light of the above, the proposed land use can be considered in the Residential zone. The City’s assessment of the appropriateness of this specific proposal is contained in the below sections 2 – 10.

2. Residential Design Codes

The City’s Local Planning Policy 6.4 - Child Day Care Centres requires building setbacks and all other design requirements as specified in the Residential Design Codes (R-Codes) to be applied to Child Care Premises proposals within a Residential zone. Accordingly the development requires consideration against the design principles of the R-Codes with respect to the following design elements:



- Clause 5.1.2 – Street Setback;
- Clause 5.2.4 – Street Walls and Fences; and
- Clause 5.2.5 – Sight Lines

Other than the above elements, the application has been assessed as being in compliance with the balance of the deemed-to-comply standards of Part 5 of the R-Codes. Building Height is discussed later in this report under Local Planning Policy 2.6 – Residential Building Heights.

Clause 5.1.2 – Street Setback

Table 1 of the R-Codes requires a 6m primary street setback and a 1.5m secondary street setback be provided. The application proposes a 0.6m setback to the primary street (Porter Street) and a 1m setback to the secondary street (North Beach Road), which require consideration under the following design principles of the R-Codes:

P2.1 Buildings set back from street boundaries an appropriate distance to ensure they:

- *contribute to, and are consistent with, an established streetscape;*
- *provide adequate privacy and open space for dwellings;*
- *accommodate site planning requirements such as parking, landscape and utilities; and*
- *allow safety clearances for easements for essential service corridors.*

P2.2 Buildings mass and form that:

- *uses design features to affect the size and scale of the building;*
- *uses appropriate minor projections that do not detract from the character of the streetscape;*
- *minimises the proportion of the façade at ground level taken up by building services, vehicle entries and parking supply, blank walls, servicing infrastructure access and meters and the like; and*
- *positively contributes to the prevailing or future development context and streetscape as outlined in the local planning framework.*

Assessment of the street setbacks against the above design principles is as follows:

Design Principle	Primary Street setback of 0.6m in lieu of permitted 3m minimum	Secondary Street setback of 1m in lieu of the required 1.5m minimum
<i>Contribute to, and are consistent with, an established streetscape</i>	The adjacent residential properties to the east of the subject site are zoned Residential R20 and require an average primary street setback of 6m in accordance with the R-Codes. Buildings are permitted to be setback a minimum 3m from the primary street as part the averaging calculation outlined by Clause 5.1.2, C2.1 iii. The residential properties to the west of the subject site, on the opposite side of North Beach Road, are zoned Residential R30 and require an	The adjacent residential properties to the west of the subject site, on the opposite side of North Beach Road – which face the subject sites secondary street frontage, maintain a variety of setbacks from their rear lot boundaries – with the closest setback being 1m.



	<p>average primary street setback of 4m. Buildings are permitted a minimum 2m setback from the primary street, as part of the aforementioned R-Code averaging calculation.</p> <p>The proposed 0.6m setback of the canopy supports from Store 1 to Porter Street is inconsistent to the established primary street setbacks of Porter Street.</p> <p>The established streetscape to the east of the subject site retains generous primary street setbacks, aligned with their R-coding. Despite being a higher density of Residential R30, the established streetscape to the west of the subject site, on the opposite side of North Beach Road, also maintains primary street setbacks consistent with their R-Coding.</p>	
<i>Provide adequate privacy and open space for dwellings</i>	Adequate privacy and open space provision is provided to the proposed building.	Adequate privacy and open space provision is provided to the proposed building.
<i>Accommodate site planning requirements such as parking, landscape and utilities</i>	The proposed setbacks do not inhibit the development's provision of parking, landscaping and utilities.	The proposed setbacks do not inhibit the development's provision of parking, landscaping and utilities.
<i>Allow safety clearances for easements for essential service corridors</i>	This provision is not relevant in this instance.	This provision is not relevant in this instance.
<i>Uses design features to affect the size and scale of the building</i>	The building façade to Porter Street utilises a number of contrasting materials and protrusions, including the canopy to Store 1, that assists in softening the building mass on the streetscape.	The building façade to North Beach Road consists of several openings and two contrasting render finishes that assists in breaking up the building mass as viewed from the wider streetscape.
<i>Uses appropriate minor projections that do not detract from the character of the streetscape</i>	Window shrouds, contrasting façade materials and colours, and the elevated planter to the upper floor assist in ensuring minor projections are appropriate and do not detract from the Porter Street streetscape. Notwithstanding this, the canopy to Store 1 detracts from the established streetscape by protruding well forward of the remainder of the building.	The use of window shrouds to the upper floor openings and the façade features detailed above assist in ensuring minor projections and elevations generally do not detract from the character of the streetscape. The large road reserve immediately adjacent the building also minimises the impact of the reduced secondary street setback.
<i>Minimises the proportion of the façade at ground level taken up by building services, vehicle entries and parking supply,</i>	The intent of the canopy to Store 1 is to assist in minimising the visibility of the blank wall to Store 1 facing Porter Street and	The North Beach Road elevation contains several openings to ground and upper floor, window shrouds, and



<i>blank walls, servicing infrastructure access and meters and the like</i>	to provide weather cover for pedestrians.	contrasting colours which soften the impact of building mass on the streetscape.
<i>Positively contributes to the prevailing or future development context and streetscape as outlined in the local planning framework</i>	The proposed primary street setback of 0.6m is inconsistent with the established streetscape and foreseen future context.	The proposed secondary street setback of 1m is consistent with setbacks provided within the immediate North Beach Road streetscape.

In light of the above, the proposed secondary street setback of 1m satisfies the design principles of Clause 5.1.2, however the primary street setback of 0.6m does not satisfy the applicable design principles.

Notwithstanding this, should the Metro North-West JDAP be of the mind to approve the application, the City would recommend the canopy forward of Store 1 be revised to have a permeable roof structure as a condition of approval, thus qualifying the structure as a pergola, in accordance with the definitions of the R-Codes.

Clause 5.2.4 – Street Walls and Fences

Clause 5.2.4 of the R-Codes requires all front fencing within the primary street setback area to be visually permeable above 1.2m of natural ground level, measured from the primary street side of the front fence. The application proposes front fencing in the Porter Street primary street setback area that consists of solid panels with aluminium slats above, however there is a lack of detail to determine if visual permeability is provided above 1.2m.

Notwithstanding this, the City is satisfied that the visual permeability of the front fence can be addressed through an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

Clause 5.2.5 – Sight Lines

Clause 5.2.5 of the R-Codes requires all walls, fences and other structures to be truncated or reduced in height to a maximum of 0.75m within 1.5m of where a wall, fence or other structure adjoins a vehicle access point, where a driveway meets a public street, or where two streets intersect.

The application proposes a section of front fencing at a height of 1.8m from natural ground level within 1.5m from the vehicle entry point to the site. As discussed earlier in this report, the visual permeability of the front fencing above the solid panels is uncertain due to a lack of detail on the development plans and submission.

Nevertheless, the City is satisfied that compliant sight lines can be addressed through an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

3. Local Planning Policy 2.6 – Residential Building Heights

The provisions of the City's LPP 2.6 apply to all development within a Residential zone. The table below identifies the non-compliant aspects of the proposed development:



LPP 2.6 Provision	Comment
<i>Skillion Roof –</i> <i>Lower Skillion Wall Height – 6m</i> <i>Higher Skillion Wall Height – 8m</i>	The development proposes lower skillion wall heights of 6.4m in lieu of the permitted 6.0m maximum.

Accordingly the variation to building height requires consideration against the following objectives of LPP 2.6 and the design principles of Clause 5.1.6 of the R-Codes (Building Height):

Objectives of LPP 2.6

- *To ensure that the height of buildings are consistent with the desired scale in a given locality; and*
- *To ensure that the height of a building does not overly impact on the streetscape or on neighbouring properties.*

Design Principles of Clause 5.1.6 of the R-Codes

P6 Building height that creates no adverse impact on the amenity of adjoining properties or the streetscape, including road reserves and public open space reserves; and where appropriate maintains:

- *Adequate access to direct sun into buildings and appurtenant open spaces;*
- *Adequate daylight to major openings into habitable rooms; and*
- *Access to views of significance.*

Assessment of the building height against the above objectives is as follows:

Policy Objective	Lower Skillion Wall Height 6.4m in lieu of 6.0m
<i>To ensure that the height of buildings are consistent with the desired scale in a given locality</i>	The existing single house at House Number 50 Porter Street is two storey in height and there are several examples of two storey developments within Porter Street; demonstrating that the proposal is consistent with the desired scale of the locality.
<i>To ensure that the height of a building does not overly impact on the streetscape or neighbouring properties</i>	<p>The Child Care Premises is setback approximately 18.5m from the eastern lot boundary – with the nearest lower skillion wall height variation setback a further 5.5m and is positioned behind a complaint higher skillion wall height. Accordingly the City is satisfied that the building height variations will not have an adverse impact on the amenity of the adjoining residential properties to the east.</p> <p>The Child Care Premises is separated from the adjacent residential properties to the west by the North Beach Road reserve which spans approximately 55m in width. Accordingly the City is satisfied that the building height variations will not have an adverse impact on the amenity of the adjoining residential properties to the west.</p> <p>The significant upper floor setback of the Child Care Premises from Porter Street ensures that the proposed building height variations will have</p>



	a negligible impact on the primary street streetscape amenity. The 9m depth of the North Beach Road reserve immediately adjacent the western elevation of the building ensures the building heights will have minimal impact on the secondary street streetscape amenity.
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Assessment of the building height against the above design principles is as follows:

Design Principle	Lower Skillion Wall Height 6.4m in lieu of 6.0m
<i>Building height that creates no adverse impact on the amenity of adjoining properties or streetscape</i>	<p>The Child Care Premises is setback approximately 18.5m from the eastern lot boundary – with the nearest lower skillion wall height variation setback a further 5.5m and is positioned behind a complaint higher skillion wall height. Accordingly the City is satisfied that the building height variations will not have an adverse impact on the amenity of the adjoining residential properties to the east.</p> <p>The Child Care Premises is separated from the adjacent residential properties to the west by the North Beach Road reserve which spans approximately 55m in width. Accordingly the City is satisfied that the building height variations will not have an adverse impact on the amenity of the adjoining residential properties to the west.</p> <p>The significant upper floor setback of the Child Care Premises from Porter Street ensures that the proposed building height variations will have a negligible impact of the primary street streetscape amenity. The 9m depth of the North Beach Road reserve immediately adjacent the western elevation of the building ensures the building heights will have minimal impact of the secondary street streetscape amenity.</p>
<i>Adequate access to direct sun into buildings and appurtenant open spaces</i>	<p>The Porter Street road reserve is positioned directly due south of the Child Care Premises ensuring there will be no overshadowing implications to any major openings and/or outdoor living areas to adjoining residential properties, in accordance with Clause 5.4.2 of the R-Codes (Solar Access for Adjoining Sites).</p> <p>Moreover the Child Care Premises is setback approximately 18.5m from the eastern lot boundary.</p>
<i>Adequate daylight to major openings into habitable rooms</i>	As above.
<i>Access to views of significance</i>	There are no views of significance in the immediate locality. Notwithstanding this, the positioning of the building to the south-western corner of the subject site and the absence of any adjoining residential properties to the north of the site ensures general views are not prohibited.

In light of the above, the City is satisfied that the proposal meets the objectives of the City's LPP 2.6 and the design principles of the R-Codes in regards to building height.

4. Local Planning Policy 6.1 – Advertising Signs

The application initially sought the consideration of two (2) Wall Signs as part of the development proposal, with the requirements of the City's Local Planning Policy 6.1 – Advertising Signs (LPP 6.1) addressed in the applicant's original planning report received by the City on 20 November 2018 (refer Attachment 5).

Subsequently in response to the City's request for further information, the applicant has informed the City that the proposed signage no longer forms part of the development application (refer Attachment 12) and will be subject to a future development application, should the Metro North-West JDAP be of the mind to approve the subject application.

The City is satisfied this matter can be addressed through an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

5. Local Planning Policy 6.4 – Child Day Care Centres

The application has been assessed against the provisions of the City's Local Planning Policy 6.4 – Child Day Care Centres (LPP 6.4) and the table below identifies the non-compliant aspects of the proposed development:

LPP 6.4 Provision	Comment
LOCATION CRITERIA	
Local Land Uses	
<i>To minimise impact on residential areas, to allow improved servicing and to promote multi-function trips, locations adjacent to non-residential uses, particularly shopping centres, medical centres, schools and other educational facilities and civic uses are preferred</i>	The proposed development is adjacent to residential land uses to the east and west.
Road Hierarchy	
<i>In assessing the suitability of a site, consideration will be given to impact on residential amenity. In this regard, preferred locations and configurations are those which do not propose direct access into Primary Regional Roads, or Local Access roads. The use of District Distributor B Roads and Local Distributor Roads are generally preferred</i>	The development proposes vehicle access via Porter Street – a Local Road.
AMENITY	
<i>Unless otherwise approved by Council, with due regard to impact on residential amenity, the hours of operation of Centres will be restricted 7.00am to 6.30pm weekdays and 8.00am to 6.00pm on weekends</i>	<p>The applicant's written response to the City's request for further information, dated 15 April 2019, identifies that the premises will operate 7am to 6pm Monday to Friday with staff arriving/departing within half an hour of these times to set up/clean the centre.</p> <p>However the same submission continues on to state that the premises will operate 7am to 7pm Monday to Friday with staff arriving/departing within half an hour of these times to set up/clean the centre.</p>



As identified in the table above, the following elements of the proposal do not comply with the development standards contained in the City's LPP 6.4:

- Local Land Uses;
- Road Hierarchy; and
- Operating Hours

Accordingly these variations require consideration against the following objectives:

- *To provide for the establishment of Child Day Care Centres in appropriate locations; and*
- *To minimise any adverse impact on the amenity of the area.*

Local Land Uses

The adjacent residential properties to the west are separated from the subject site by the North Beach Road reserve which is approximately 55m wide. Moreover Lake Gwelup Pre-Primary and Primary School is located on the opposite side of Porter Street to the south, and the David Buttfeld aged care facility further south of the school, which promotes multi-function vehicle trips in accordance with LPP 6.4.

Moreover, despite the proximity of the subject site to the adjacent residential properties to the east, the development positions the footprint of the Child Care Premises on the western corner of the site, at the junction of Porter Street and North Beach Road, which assists in providing an adequate separation between the subject premises and House Number 54A Porter Street of approximately 18.5m in the aim of minimising any adverse impact on the amenity of the area.

Road Hierarchy

Vehicle access to the development is proposed solely from Porter Street – a Local Road. North Beach Road immediately to the west of the site is classified as a District Distributor A. The City has assessed the impact of the proposal on Porter Street and the City's Engineering Design Business Unit is satisfied that the applicant's Traffic Impact Statement has demonstrated that the proposal will not have an unacceptable impact on the surrounding road network. This matter is discussed in further detail later in this report. Accordingly in this instance vehicle access from a Local Road can be supported.

Operating Hours

The applicant's recent written submission to the City, in response to the City's request for further information, contained conflicting information regarding the proposed operating times for the premises. Notwithstanding this, in the interests of minimising the impact of the proposal on adjoining residents and the wider locality, the City does not support proposed operating times outside the provisions of LPP 6.4 - which are 7:00am to 6:30pm on weekdays compared to the applicant's requested hours of 7:00am to 6:00pm (with staff arrival/departure 30 minutes either side).

In light of the above, the proposal is considered to meet the objectives of the City's LPP 6.4 in regard to Local Land Uses and Road Hierarchy, however the proposal does not satisfy the objectives of LPP 6.4 in regards to Operating Hours.

Notwithstanding this, the City is satisfied that the operational hours of the premises can be addressed to align with the provisions of LPP 6.4 through an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

6. Local Planning Policy 6.6 – Landscaping

The provisions of the City's LPP 6.6 apply to all non-residential development. The table below identifies the non-compliant aspects of the proposed development:

LPP 6.6 Provision	Comment
DEVELOPMENT PROVISIONS	
Street Trees	
<i>The provision of new street tree(s) are required where no street tree(s) currently exist. Species must be approved by the City's Parks Department</i>	<p>It is noted the Landscape Concept Plan received on 10 April 2019 depicts the provision of a street tree to the west of the vehicle access point via Porter Street. However the City notes the Landscape Concept Plan is inconsistent with the built form and further design modifications made to the further revised development plans received by the City on 15 April 2019.</p> <p>Notwithstanding this, the City is satisfied that the provision of street trees on the Porter Street road reserve can be addressed via an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.</p>
SPECIFIC LANDSCAPING PROVISIONS FOR COMMERCIAL DEVELOPMENTS	
<i>Development applications for commercial development must contain a minimum of 10% landscaping of the total site area. This must include 'soft' landscaped buffers, where setbacks are provided, to adjacent properties with a minimum width of 1.5m</i>	<p><u>10% landscaping provision</u></p> <p>The Landscape Concept Plan received on 10 April 2019 identifies that the children's play areas are proposed to be a mixture of artificial grass, turf and rubber softfall mulch. The applicant has informed the City that the final design of the outdoor play areas, including their landscaping provision, will be subject of further discussions with their client and at this stage are not finalised.</p> <p>The City does not consider artificial turf as contributing to the minimum 10% landscaping requirement on site. Moreover, as discussed later in this report, the City's Parks & Sustainability Business Unit have confirmed that the proposed trees to the eastern edge of the car park do not have sufficient soil space to thrive. Accordingly the City is unable to accurately confirm if the proposal achieves the minimum 10% landscaping area provision on site due to a lack of detail on the plans and submission.</p> <p><u>Soft landscape buffer</u></p>

	The development does not provide a soft landscape buffer between the car park and the boundary to the adjoining residential property to the east.
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As identified in the table above, the following element of the proposal does not comply with the development standards contained in the City's LPP 6.6:

- Specific Landscaping Provisions for Commercial Developments.

Accordingly these variations require consideration against the following objectives:

- *To promote improved landscaping provision and design;*
- *To improve the visual appeal of development, screen service areas and provide a buffer to boundaries;*
- *To provide shade and 'green relief' in built up areas; and*
- *To promote more environmentally sustainable landscaping.*

Specific Landscaping Provisions for Commercial Developments

The development proposal has the ability to demonstrate and promote a high level of landscaping design and provision on-site, however in the absence of a detailed landscaping plan that is consistent with the most recent revised development plans received on 15 April 2019, and the confirmation of the final design of the outdoor playing areas, the City is unable to determine whether the landscaping provision on site is both environmentally sustainable and will provide suitable green relief.

The removal of the existing buildings on site as part of this development proposal provides a blank canvas to design and orientate the Child Care Premises and associated car parking. The current design provides no landscaping buffer between the car parking area and the adjoining residential property to the east. Furthermore the absence of such a buffer has a detrimental impact on the visual appeal of the development. Moreover, as discussed later in this report, the proposed trees to the eastern edge of the car park do not have sufficient soil space to thrive which further reduces shade afforded on site.

In light of above, the proposal does not satisfy the objectives of LPP 6.6 in regards to the specific landscaping provisions for commercial developments. Furthermore compliance with LPP 6.6 cannot be achieved through appropriate conditions of approval, should the Metro North-West JDAP be of the mind to approve the application, as modifications to the built form of the proposal would be required.

7. Local Planning Policy 6.7 – Parking & Access

Table 1 of the City's Local Planning Policy 6.7 – Parking & Access (LPP 6.7) sets out the number of car parking bays required for the proposed Child Care Premises.

LPP 6.7 permits a total on-site car parking concession of 15%, as follows:

- 10% - The proposed development is within 400m from a stop on a high frequency bus route; and



- 5% - The development provides more than 10% additional bicycle bays than required for the development in accordance with Local Planning Policy 6.2 – Bicycle Parking

The parking requirement for the development proposal is summarised in the table below:

Use	Policy Provision	Variable	Bays Required
Child Care Premises	1 bay per staff member	22 staff members	22 bays
	1 bay per 7 children	112 children	16 bays
	1 dedicated service bay		1 bay
Subtotal			39 bays
Concessions:			15%
<ul style="list-style-type: none"> - 10% as within 400m from stop on a high frequency bus route - 5% as development provides more than 10% additional bicycle bays 			
Total Bays required			33.15 (33) bays
Bays provided			30 bays
Shortfall / Surplus			3 bay shortfall

The car parking requirement for the Child Care Premises is 33 bays, with 30 bays provided. Accordingly the car parking shortfall requires consideration against the following objective:

- *To ensure that a major parking problem is unlikely to occur.*

As evidenced by the applicant's amendments to the original development proposal, specifically the increase in car parking numbers from 24 to 30 bays, it is clear the subject site is not constrained by a fixed rear boundary line and lack of space to which further revisions to the car parking provision on site can be provided.

The applicant's Transport Impact Statement (TIS) (refer Attachment 6) suggests that the proposed on-site car parking shortfall can be supported by the presence of established public on-street bays in close proximity to the subject site – with the TIS recognising 18 public on-street car parking bays on the southern side of Porter Street, and a further eight (8) on-street bays west of the site. As identified by the City's Community Safety Business Unit, whose comments are detailed in full later in this report, the City has received a significant number of complaints of illegal parking in this locality within the last 12 months; with several cautions and infringements being given to motorists.

The comments of the City's Community Safety Business Unit are reinforced by the outcomes of public consultation, with a significant proportion of comments received identifying concerns regarding the existing parking situation in the locality and that a car parking shortfall generated by the Child Care Premises will only aggravate the matter for local residents.

It is evident that the on-site car parking shortfall would only exacerbate an existing parking problem in the area, as there is limited option for overflow parking without a detrimental effect on the surrounding residential properties and locality.

Accordingly, the City is not supportive of considering cash in lieu of the development providing all of the car parking spaces required under LPP 6.7, in accordance with Clause 5.8 of LPS3, as a consequence of the parking problem in the locality.

In light of above, the proposal does not satisfy the relevant objectives of LPP 6.7 in regards to ensuring that a major parking problem is unlikely to occur.

8. Planning and Development (Local Planning Schemes) Regulations 2015

Clause 67 Matters to be considered by Local Government – Planning and Development (Local Planning Schemes) Regulations 2015

The proposal is also required to be considered against the relevant matters listed under Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations 2015*. In this case, the relevant matters for consideration are:-

- c. *Any approved State planning policy;*
- g. *Any local planning policy for the Scheme area;*
- 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;*
- y. *Any submissions received on the application;*
- za. *The comments or submissions received from any authority consulted under clause 66.*

The City's response to each point requiring consideration is outlined in the table below:-

Matter	City Comment
<i>Any approved State planning policy.</i>	The proposal has been assessed against Part 5 of the R-Codes. Despite variations to the deemed-to-comply provisions of Clauses 5.1.2, 5.2.4 and 5.2.5 of the R-Codes, the City is satisfied the development meets the applicable design principles and/or may be addressed by appropriate conditions of approval, should the Metro North-West JDAP be of the mind to approve the application.
<i>Any local planning policy for the Scheme area.</i>	The City's assessment of the development application against relevant City Local Planning Policies is discussed earlier in this report in sections 2 – 10.
<i>The compatibility of the development with its setting including the relationship of the</i>	The proposal has been assessed in accordance with the provisions of the City's LPP 2.6 –



<i>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.</i>	Residential Building Heights. The proposed building height of the Child Care Premises satisfies the objectives of the City's LPP 2.6 and the design principles of Clause 5.1.5 of the R-Codes (Building Height).
<i>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.</i>	The applicant's Environmental Acoustic Assessment (refer Attachment 7) has been reviewed by the City's Environmental Health Business Unit. This matter is discussed later in this report. The development would generate employment within the locality.
<i>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.</i>	The proposal has been assessed in accordance with the provisions of the City's LPP 6.6 – Landscaping and LPP 6.11 – Trees & Development. As a consequence of significant variations to LPP 6.6 compliance with the policy cannot be achieved through appropriate conditions of approval, should the Metro North-West JDAP be of the mind to approve the application, as modifications to the built form of the proposal would be required.
<i>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.</i>	The car parking provision proposed fails to satisfy the relevant objectives of the City's LPP 6.7 – Parking & Access.
<i>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.</i>	The applicant's Traffic Impact Statement (refer Attachment 6) has been reviewed by the City's Engineering Design Business Unit. This matter is discussed later in this report.
<i>Any submissions received on the application.</i>	The application was formally advertised in accordance with the City's Planning Consultation Procedure with comments received. These submissions have been considered as part of the City's assessment.
<i>The comments or submissions received from any authority consulted under clause 66.</i>	The development application was referred to DFES for comment. This matter is discussed later in this report. Should the Metro North-West JDAP resolve to approve the application, a condition of approval is required to address the recommendations of the applicant's Bushfire Management Plan and Bushfire Emergency Evacuation Plan.

9. Internal Referrals

Referral to Engineering Design Business Unit

The application has been referred to the City's Engineering Design Business Unit who raised concerns regarding the following items. These concerns are considered in the following table:

Concern	Comment	Action
Engineering Design Business Unit have reviewed the Traffic Impact Assessment report prepared in support of the	The applicant noted the City's comments and stated that no changes are proposed in response.	In reference to safety measures being incorporated into the design of the premises, the City is satisfied that this matter can



<p>development application and are satisfied that the report has demonstrated that the proposal will not have an unacceptable impact on the surrounding road network.</p> <p>Please note the City does not consider this location to be inherently unsafe and would not consider implementing measures to alleviate perceived traffic risks. The location may be appropriate for certain land uses and the applicant should assess the risks in light of the proposed land use.</p> <p>In particular it should be brought to the attention of the applicant that the City will not consider, either now or in the future, installing any kind of barriers or other devices to prevent vehicles from impacting with the property fence and encroaching into the children's play area.</p> <p>The applicant should be strongly advised to consider incorporating safety measures into the design of the property as the City will not consider retrofitting any remedial measures in the future.</p>		<p>be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.</p>
<p>A 2.1m wide footpath located at the back of the kerb is to be provided along the developments Porter Street frontage from the proposed site crossover to link with the existing roundabout footpath.</p>	<p>The revised Site Plan received 15 April 2019 illustrates a concrete footpath on the Porter Street road reserve however does not detail a width.</p>	<p>Notwithstanding the absence of a footpath width, the City is satisfied that this matter can be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.</p>
<p>The applicant's Waste Management Plan (WMP) shows that the development proposes waste pickup using 660 and 1100 litre bulk bins collected from the verge in Porter Street (3x660ltr and 2x1100ltr collected daily). This is not supported, the City does not permit bulk bins to be wheeled out and collected from the verge. Only 360 and 240 litre MGB's can be collected from the verge.</p>	<p>The applicant has requested that the WMP be revised to align with the City's requirements via a condition of approval.</p>	<p>The applicant's WMP (refer Attachment 10) has been reviewed by the City's Waste Services Business Unit. This matter is discussed later in this report.</p> <p>The City is satisfied that the WMP revisions can be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.</p>



A revised WMP is required detailing how waste will be collected from the site. The proposed waste truck hardstand within the verge is not supported and needs to be removed from the plans.		
The locality has high groundwater. The applicant is required to demonstrate how the site will be drained.	The applicant has stated that all stormwater is to be contained on site and disposed of in accordance with the City's Engineering requirements and that detailed engineering calculations will be provided at detailed design stage.	The City is satisfied that this matter can be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.
The proposed crossover will be located over an existing fire hydrant within the verge. FESA and Water Corporation comment / approval will be required for relocation.	The applicant noted the City's comments.	The City is satisfied that this matter can be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.
Appropriate safety boundary fencing is required along the developments road frontages.	The applicant noted the City's comments.	The City is satisfied that this matter can be addressed by an appropriate condition of approval, should the Metro North West JDAP be of the mind to approve the application.

Referral to Senior Development Engineer

The application has been referred to the City's Senior Development Engineer who identified concerns with several elements of the proposal, including but not limited to, tandem car parking bays (bays numbered 10 to 16 inclusive) and the car park grades. Notwithstanding this, the City considers the issues raised by the City's Senior Development Engineer can be addressed through appropriate conditions of approval, should the Metro North-West JDAP be of the mind to approve the application.

Referral to Community Safety Business Unit

The application has been referred to the City's Community Safety Business unit who raised concerns regarding the impact of the car parking shortfall, and in particular state that:

Within the last 12 months there has been a minimum of 30 visits by the City's Rangers to the area surrounding the proposed development. These attendances have stemmed from complaints regarding illegally parked vehicles attending the Primary School directly across the road.

During the attendance eight (8) cautions and two (2) infringements were issued, with many of the other vehicle owners being verbally cautioned.

Based on the above history, time restrictive signage within the area and the proposed shortfall of three (3) on site car parking bays, Community Safety have significant concerns with the proposal as there is no option for overflow parking without having an effect on the surrounding properties.



Community Safety's comments further emphasize the City's concerns that the proposed on-site car parking shortfall will likely result in a major parking problem in the locality.

Referral to Parks & Sustainability Business Unit

The application has been referred to the City's Parks & Sustainability Business Unit who raised concerns regarding the following items:

- *There is no soft landscape buffer between the car park and the adjacent property to the east, in accordance with the provisions of LPP 6.6;*
- *The trees proposed on the eastern side of the car park do not have sufficient soil space to establish. Additionally, they are too close to the adjoining property and dividing fence. In accordance with LPP 6.6, one (1) tree per six (6) car parking bays needs to be provided, but in an arrangement that will enable the trees to thrive, without impacting the adjacent property owner;*
- *The site plan indicates a substantial area of hardstand on the Porter Street road reserve which is in conflict with the City's verge policy; and*
- *It is still unclear from the revised submission whether the development will provide the requisite 10% landscaping for a commercial development, in accordance with LPP 6.6. Despite there being generous outdoor playing areas, the extent of landscaping versus hardstand has not been indicated. Furthermore the City does not include artificial turf as contributing to the landscaping provision.*

The comments of the City's Parks & Sustainability Business Unit align with the concerns raised earlier in this report regarding the developments non-compliance with LPP 6.6.

Notwithstanding this, the City is satisfied that the remaining matters can be addressed by an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

Referral to Waste Services Business Unit

The application has been referred to the City's Waste Services Business Unit who provided the following comment:

Based on previous Child Care Premises applications received and advice from the City's Rates Department, this development will remain under the existing Residential Dwelling status. Therefore the WMP will need to be amended to accommodate residential collections.

Based on the estimated waste generation rate of 1,980Ltr per week the City has determined the following 2 Options of bin allocations and collections:

- *Option 1:*
 - *1 x 660Ltr general waste bin collected 3 times/week*
 - *1 x 660Ltr coming led recycling (including cardboard) collected weekly*
 - *Bulk bin to be left in bin compound for collection*
 - *Waste staff to handle bins for collection and will return bins to compound once completed*
- *The City is now able to provide larger bins to Mixed Use Development properties and properties such as the proposed day care facility.*
- *Option 2:*



- 3 x 240Ltr general waste bin collected 3 times/week
- 3 x 360Ltr coming led recycling (including cardboard) collected weekly
- Collection for MGB's will be undertaken from the verge
- Centre management will be responsible for bringing the bins to the verge for collection and returning them as soon as possible after collection.

The WMP will need to be amended accordingly and re-submitted.

In response to the City's request for further information the applicant has confirmed preference for 'Option 2' provided by the City's Waste Services Business Unit and requested that the WMP be revised to align with the City's requirements via a condition of approval.

Should the Metro North-West JDAP be of the mind to approve the application, an amended WMP demonstrating compliance with the above bin provision and servicing procedure will be required, to the satisfaction of the City.

Referral to Environmental Health Business Unit

The application has been referred to the City's Environmental Health Business Unit who raised concerns regarding the acoustic performance of the proposal following the re-orientation of the upper floor as part of the revised development plans, and in particular state that:

The change of the upper floor layout could potentially change the noise effect, as the original acoustic assessment takes various physical factors into account when establishing noise contours in modelling, for prediction of sound levels at other nearby "noise sensitive" premises. Accordingly either a revised assessment or a simple "no difference" confirmation from the Acoustic Specialists is warranted.

The City is satisfied that this matter can be addressed by an appropriate condition of approval, should the Metro North-West JDAP be of the mind to approve the application.

10. External Referral

Agency	Agency Comment	Officer Comment
Department of Fire and Emergency Services (DFES)	<p>The submitted documentation indicates that the proposed development does not fall into an area designated as bushfire prone pursuant to the <i>Fire and Emergency Services Act 1998</i> (as amended) as identified on the <i>Map of Bush Fire Prone Areas</i>.</p> <p>On this basis, application of <i>State Planning Policy 3.7 – Planning in Bushfire Prone Areas</i> (SPP 3.7) to this proposal may not be necessary.</p> <p>Exemptions from the requirements of SPP 3.7 should be applied pragmatically by the decision</p>	<p>Exemptions from the requirements of State Planning Policy 3.7 and the deemed provisions should be applied pragmatically by the decision maker. SPP 3.7 does not exempt a Child Care Premises proposal from a BAL assessment and it is acknowledged the proposal will intensify development / land use on the subject site.</p> <p>Accordingly the recommendations of the applicant's Bushfire Management Plan and Bushfire Emergency Evacuation Plan are to be applied as a condition of approval, should the Metro North-West JDAP be of the mind to approve the application.</p>



	maker and are identified in Planning Bulletin 111/2016.	
--	--	--

Conclusion

The proposed development extends across two lots located in Gwelup, abutting Porter Street and North Beach Road. The lots are zoned 'Urban' under the Metropolitan Region Scheme and 'Residential R25' under the City of Stirling's Local Planning Scheme No.3.

The proposal conflicts with the local planning framework with respect to on-site car parking provision, as it does not facilitate the provision of adequate parking facilities and does not ensure that a major car parking problem is unlikely to occur, in accordance with LPP 6.7.

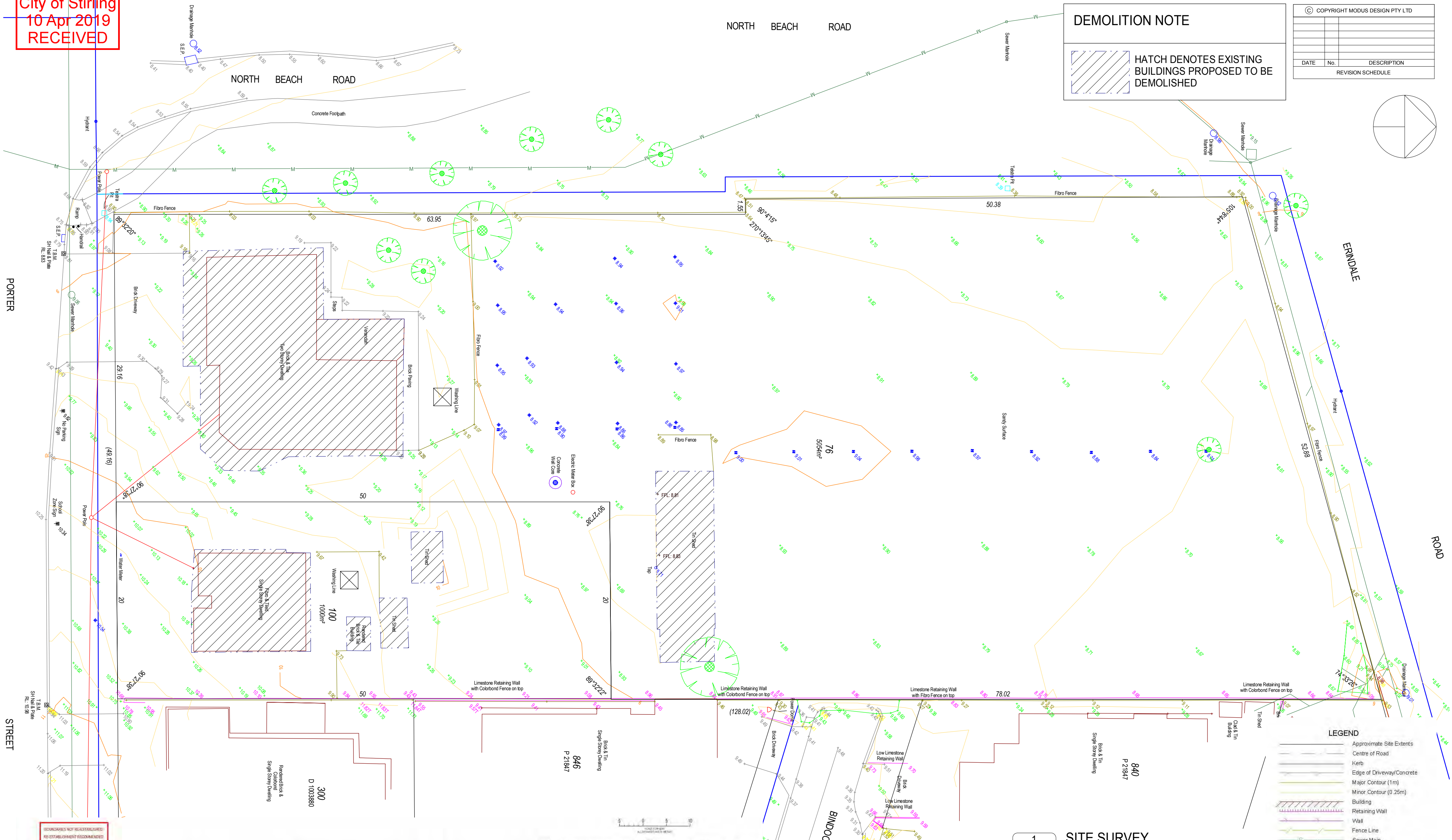
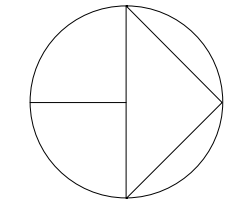
Furthermore the development does not provide landscaping provision that improves the visual appeal of the development and provides a green buffer to lot boundaries, in accordance with LPP 6.6. The application is therefore recommended for refusal for the above reasons.

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10 Apr 2019
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DEMOLITION NOTE

HATCH DENOTES EXISTING
BUILDINGS PROPOSED TO BE
DEMOLISHED

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DATE	No.	DESCRIPTION
REVISION SCHEDULE		



LEGEND	
	Approximate Site Extents
	Centre of Road
	Kerb
	Edge of Driveway/Concrete
	Major Contour (1m)
	Minor Contour (0.25m)
	Building
	Retaining Wall
	Wall
	Fence Line
	Sewer Main
	Sewer Pressure Main
	Sewer (not in use)
	Water Main
	Overhead Power
	Edge of Blume
	Significant Tree
	Retic Control Valve
	Sprinkler

1 SITE SURVEY
SCALE 1 : 250

ISSUE	REVISION	BY	DATE
A	Original Issue	GJ	4/04/18

JUROVICH SURVEYING
ABN 60 146 230 944
3/47 MONASH AVE COMO, WA 6152
PO BOX 3086 SHELLEY, WA 6148
Phone (08) 9368 6225
admin@jurovichsurveying.com.au
www.jurovichsurveying.com.au

FEATURE AND LEVEL SURVEY			
LOTS 76 ON D 65078 & 100 ON D 67263 C/T 1686-411 & 1686-410 50 & 52 PORTER STREET, GWELUP CITY OF STIRLING			
CLIENT: METROWEST			
AD SCALE: 1:500	JS JOB No: 78177	DWG Name: 78177-01	REV A

GROSS BUILDING AREAS		
Level	Name	Area
FFL (GROUND)	GROUND FLOOR	716 m ²
FFL (GROUND)	STORE 1	9 m ²
FFL (GROUND)	BIN STORE	22 m ²
FFL (GROUND)	STORE 2	10 m ²
FFL (LEVEL 1)	OUTDOOR PLAY AREA	324 m ²
FFL (LEVEL 1)	SOUTHERN PLANTER	25 m ²
FFL (LEVEL 1)	UPPER FLOOR	360 m ²
FFL (LEVEL 1)	STORE/ESCAPE STAIRCASE	39 m ²
FFL (LEVEL 1)	NORTHERN PLANTER	34 m ²
Total Area		1540 m ²

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29.03.2019	D	REVISED FOR DA
25.03.2019	C	REVISED FOR DA
02.10.2018	B	REVISED FOR DA SUBMISSION
21.09.2018	A	DRAFT FOR DA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		

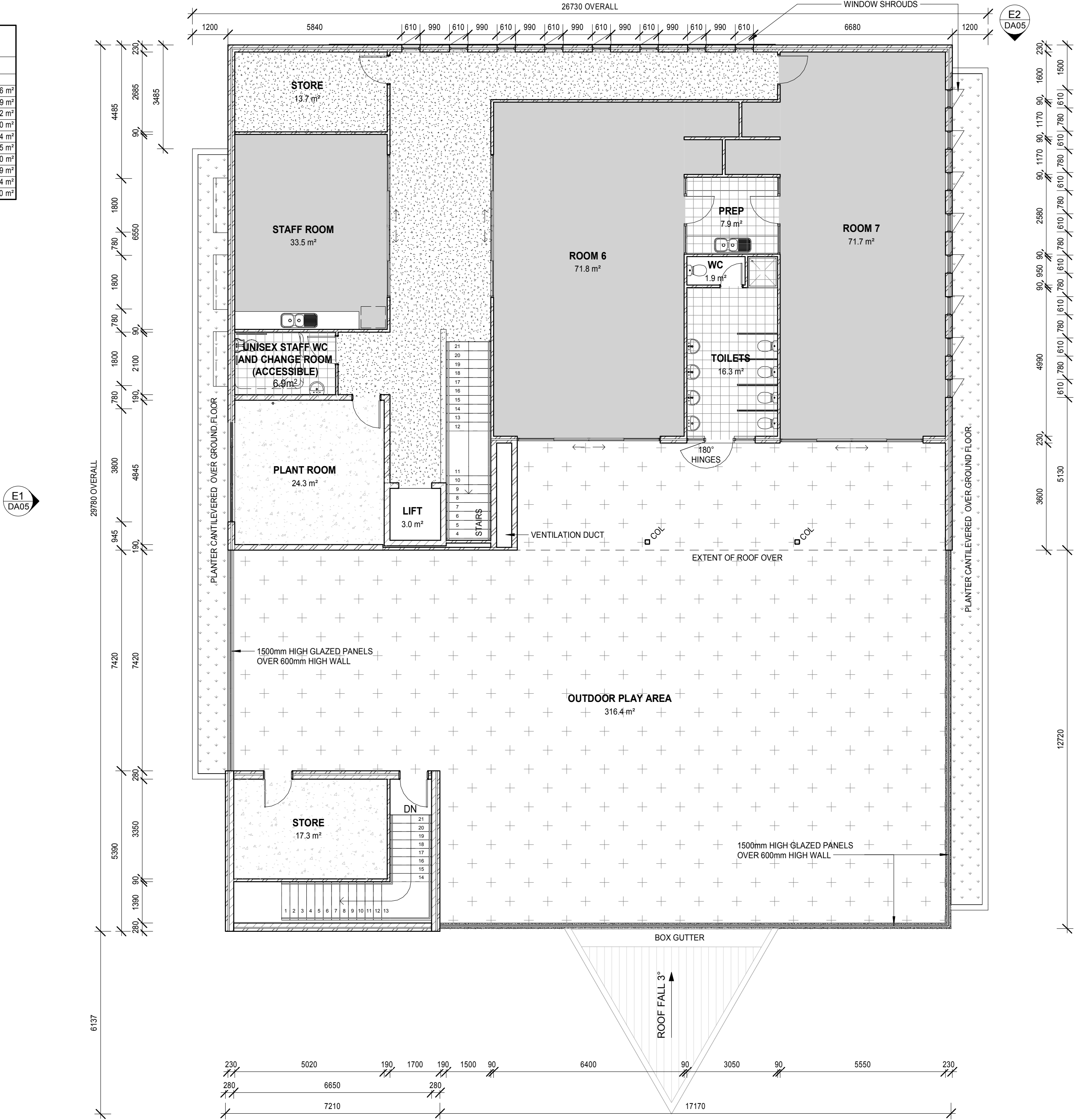
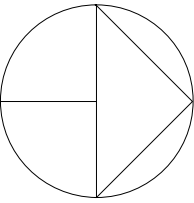


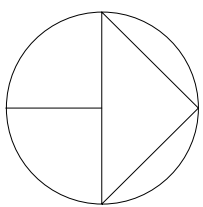
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FFL (LEVEL 1)	STORE/ESCAPE STAIRCASE	39 m ²
FFL (LEVEL 1)	NORTHERN PLANTER	34 m ²
Total Area		1540 m ²

NOTE: UPPER LEVEL NATURAL CROSS-VENTILATION
VIA CEILING DUCTS CONNECTED TO ROOF COWLS

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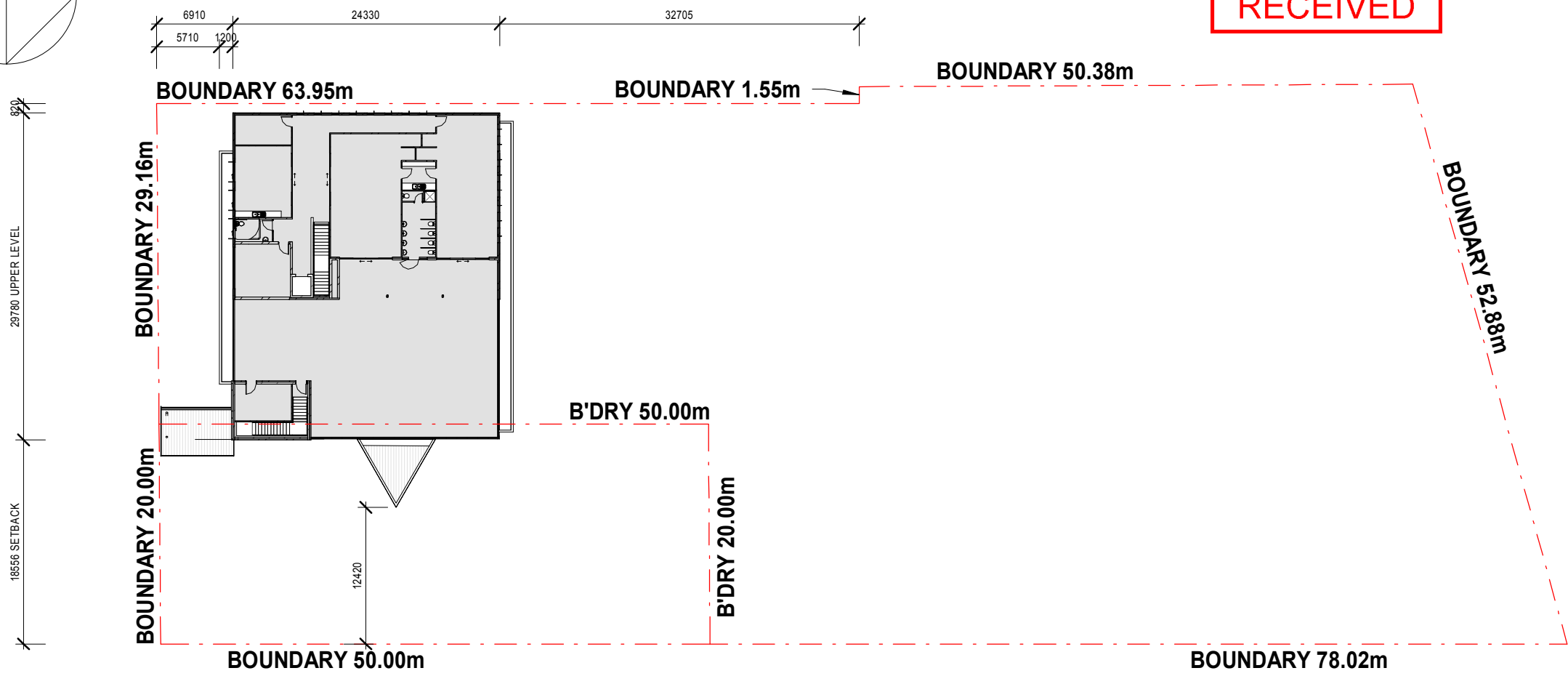
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21.09.2018	A	DRAFT FOR DA COMMENT
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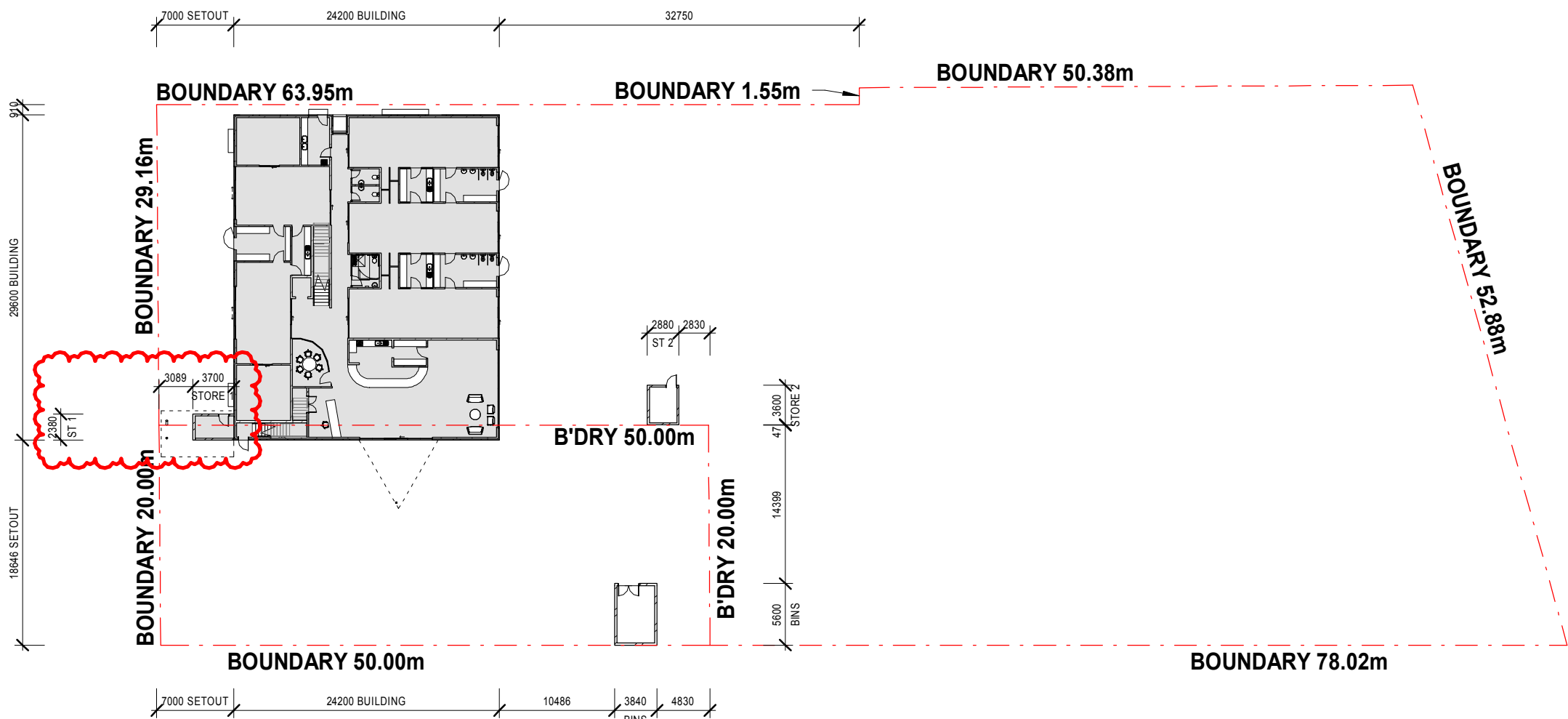


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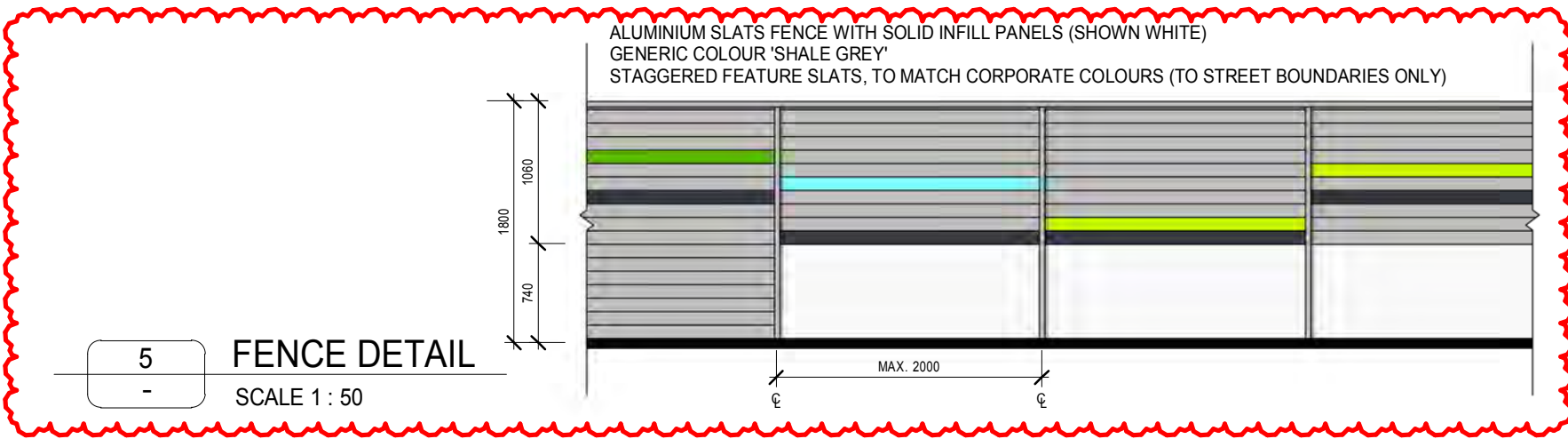
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14.01.2019	C	BIN STORE & COLLECTION HARDSTAND
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



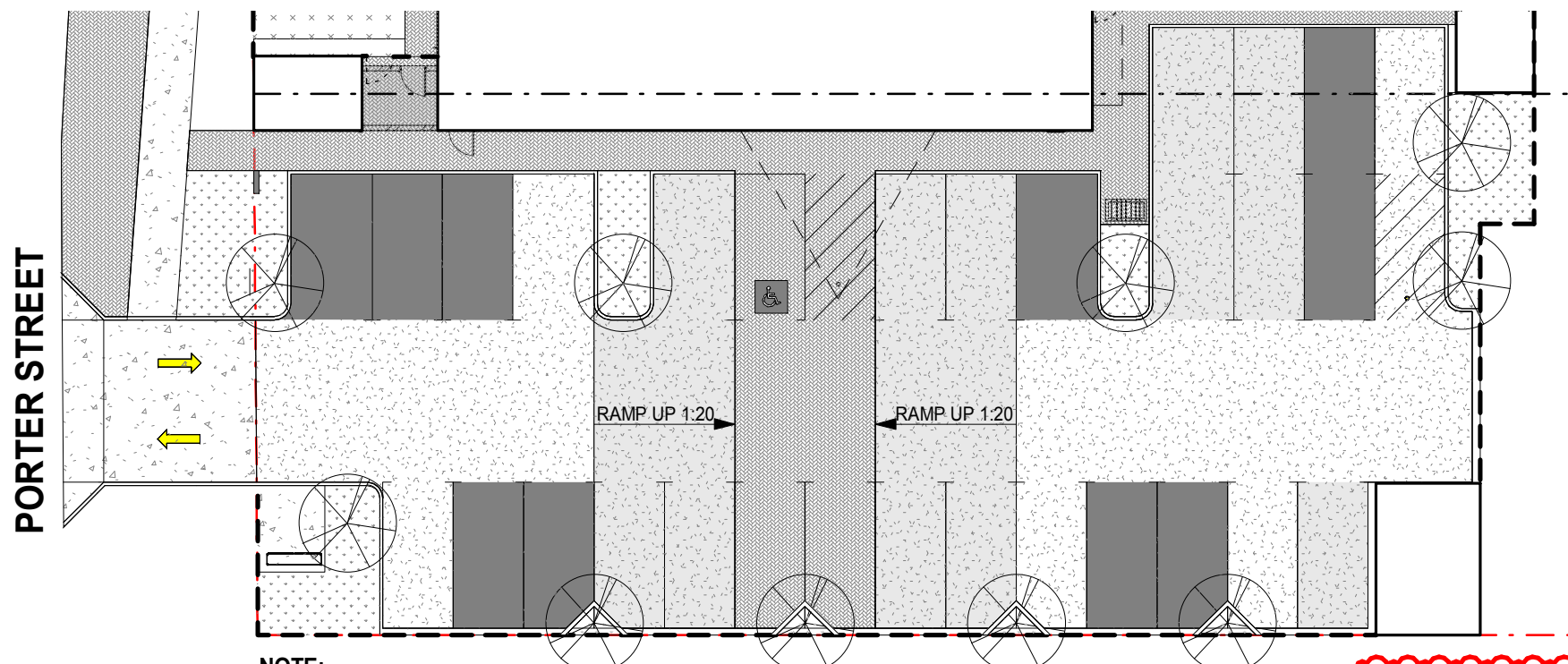
2 LEVEL 1 - BOUNDARY REFERENCE
SCALE 1 : 500



1 GROUND FLOOR - BOUNDARY REFERENCE
SCALE 1 : 500



5 FENCE DETAIL
SCALE 1 : 50



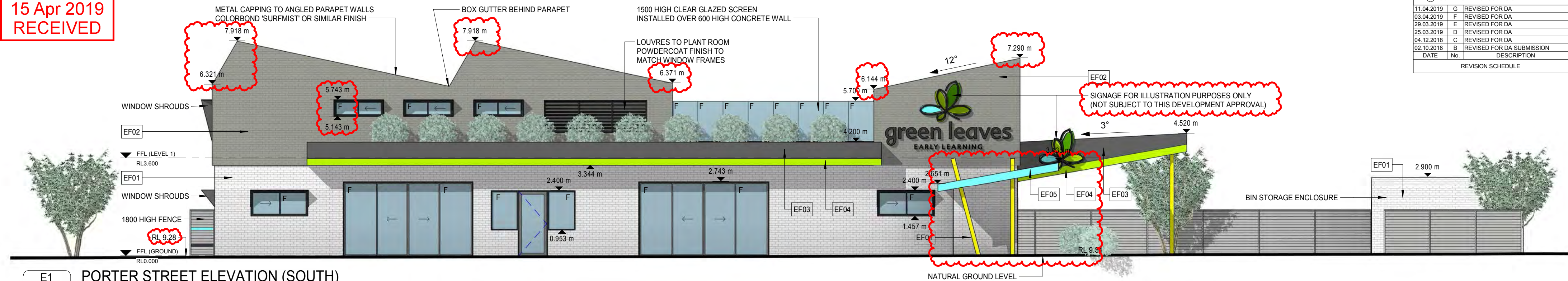
NOTE: DIFFERENT COLOURED PAVING TO BE USED FOR CARPARK, AS INDICATED SHADED LIGHT/DARK GREY. IN COMPLIANCE WITH AS2890.1 FINAL MATERIALS, TEXTURES AND COLOUR PALETTE TO BE CONFIRMED WITH CLIENT.

3 CAR PARK DETAIL
SCALE 1 : 250



4 AERIAL PERSPECTIVE
SCALE

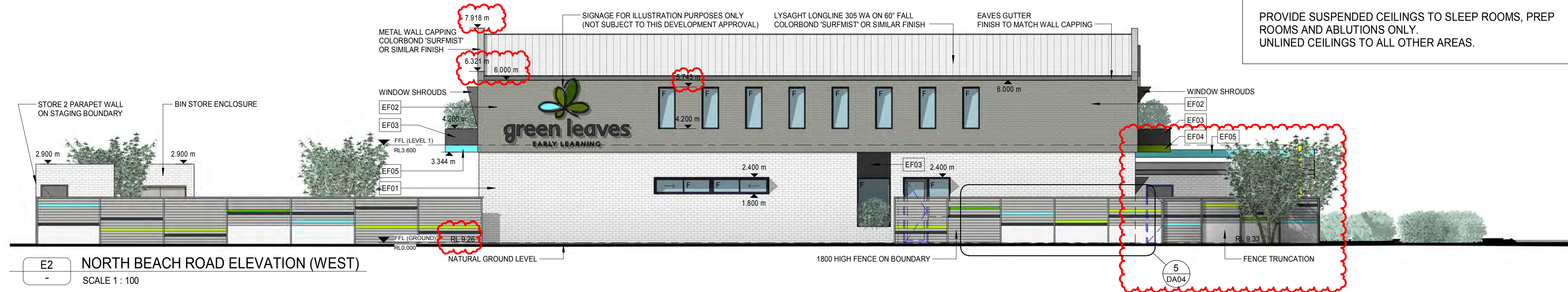
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02.10.2018	B	REVISED FOR DA SUBMISSION
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E1 PORTER STREET ELEVATION (SOUTH)
SCALE 1 : 100

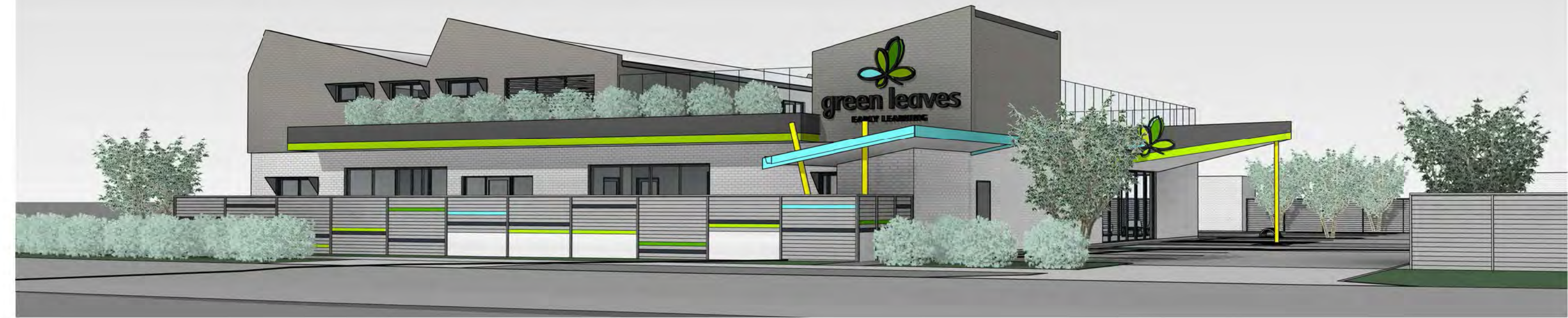
CEILING NOTE

PROVIDE SUSPENDED CEILINGS TO SLEEP ROOMS, PREP
ROOMS AND ABLUTIONS ONLY.
UNLINED CEILINGS TO ALL OTHER AREAS.



E2 NORTH BEACH ROAD ELEVATION (WEST)
SCALE 1 : 100

P1 PORTER ST PERSPECTIVE
SCALE



EXTERNAL FINISHES



EF 01 RECYCLED BRICKWORK WITH
DISTRESSED FINISH
(IMAGE FOR ILLUSTRATION ONLY)



EF 02 PAINTED BRICKWORK
COLOUR 'SURFMIST' OR SIMILAR
(IMAGE FOR ILLUSTRATION ONLY)

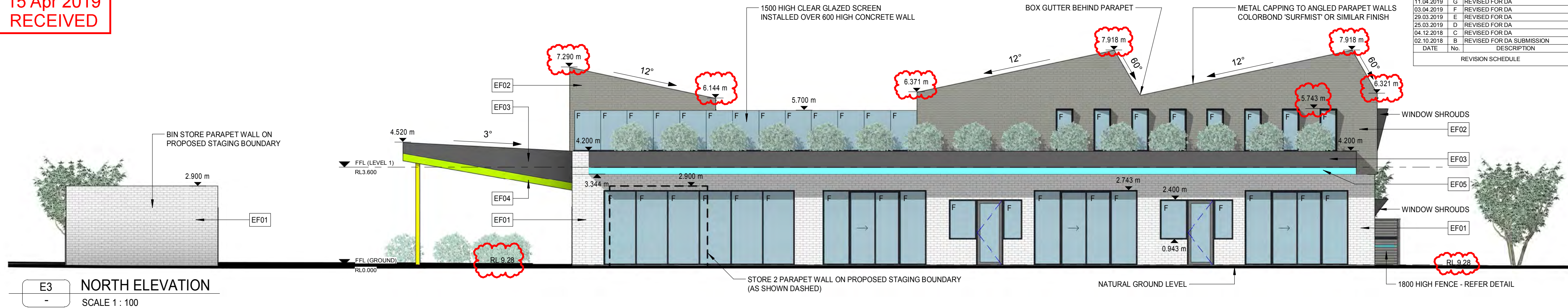
EF 03 PAINTED RENDER
COLOUR DARK GREY
(TO MATCH CORPORATE LOGO)

EF 04 PAINTED RENDER
COLOUR YELLOW-GREEN
(TO MATCH CORPORATE LOGO)

EF 05 PAINTED RENDER
COLOUR LIGHT BLUE
(TO MATCH CORPORATE LOGO)

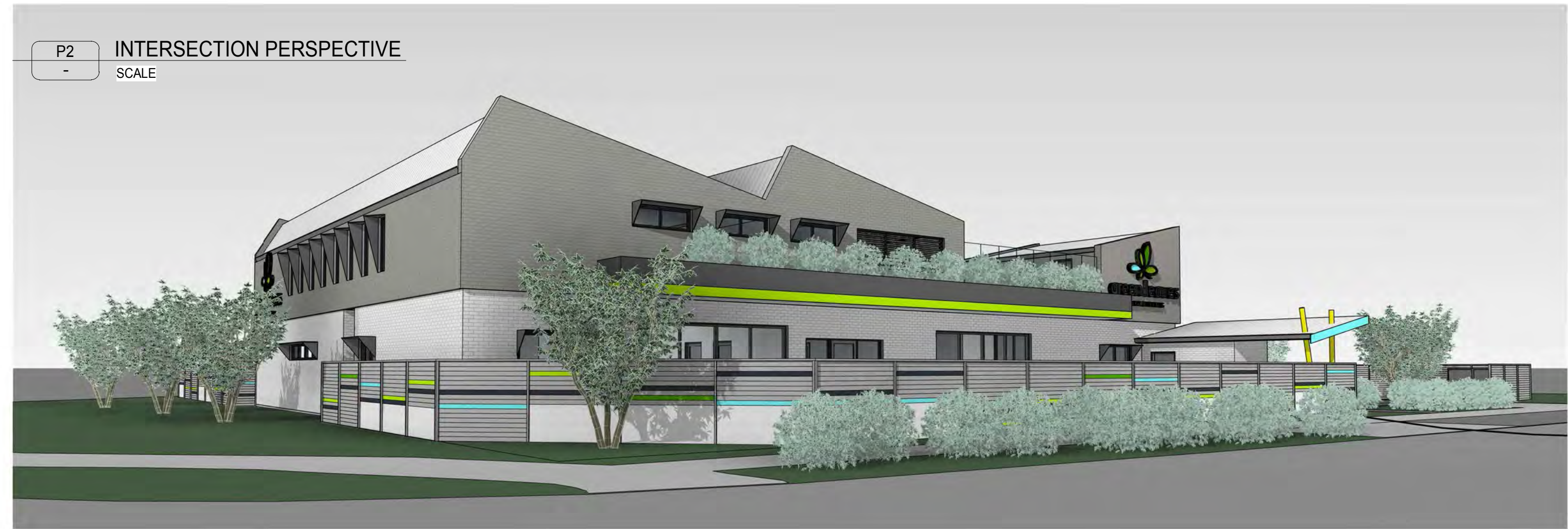
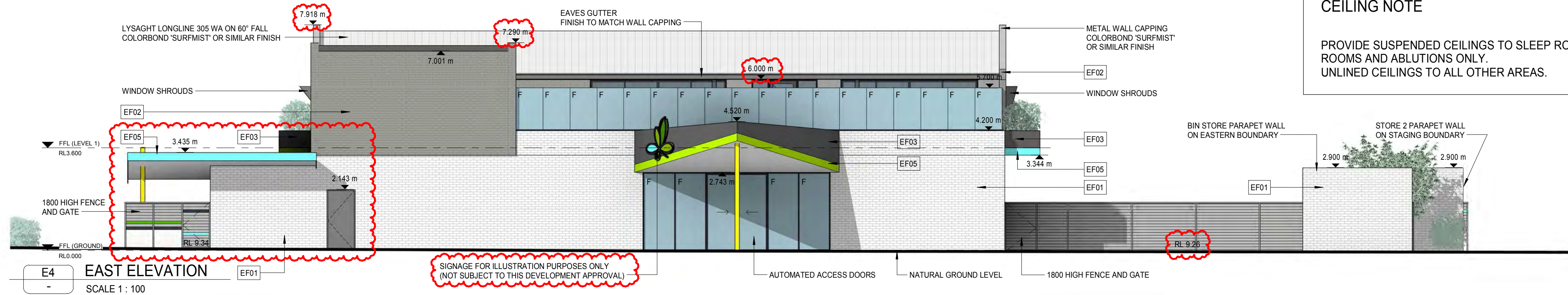
NOTE: ALL WINDOWS FRAMES, DOOR FRAMES AND
WINDOW SHROUDS TO BE POWDERCOATED 'MONUMENT'

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CEILING NOTE

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UNLINED CEILINGS TO ALL OTHER AREAS.



- EXTERNAL FINISHES**
- EF 01 RECYCLED BRICKWORK WITH DISTRESSED FINISH (IMAGE FOR ILLUSTRATION ONLY)
 - EF 02 PAINTED BRICKWORK COLOUR 'SURFMIST' OR SIMILAR (IMAGE FOR ILLUSTRATION ONLY)
 - EF 03 PAINTED RENDER COLOUR DARK GREY (TO MATCH CORPORATE LOGO)
 - EF 04 PAINTED RENDER COLOUR YELLOW-GREEN (TO MATCH CORPORATE LOGO)
 - EF 05 PAINTED RENDER COLOUR LIGHT BLUE (TO MATCH CORPORATE LOGO)
- NOTE: ALL WINDOWS FRAMES, DOOR FRAMES AND WINDOW SHROUDS TO BE POWDERCOATED 'MONUMENT'

The diagram illustrates the extent of landscape works, showing various plant and material options. It consists of a grid of colored squares, each representing a different material or plant type, with corresponding labels to the right.


- EXTENT OF LANDSCAPE WORKS** (Red square)
- PLANT MIX 1** (Green square)
- PLANT MIX 2** (Dark green square)
- SHRUB PLANTING LOM Hys** (Light green square)
- SHRUB PLANTING RHA Spi** (Light green square)
- EUCALYPTUS TORQUATA** (Light green square)
- EUCALYPTUS VICTRIX** (Light green square)
- PAVEMENT (BY ARCHITECT)** (Grey square)
- CARPARK (BY OTHERS)** (Dark grey square)
- PLAY AREAS- MIXTURE OF ARTIFICIAL GRASS, TURF, RUBBER SOFTFALL MULCH, SANDPITS, PLAY EQUIPMENT, PAVING AND PLANTER BEDS** (Light green square)

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PLANTING SCHEDULE: GWELUP CHILDCARE CENTRE			
CODE	BOTANICAL NAME	POT SIZE	PLANT SPACING
PLANTING MIX 1			
HIB SCA	HIBBERTIA SCANDENS	140MM	3/ M2
PIM FER	PIMELIA FERRUGINEA	140MM	3/ M2
SCA ALB	SCAEVOLA ALBIDA 'MAUVE CLUSTERS'	140MM	3/ M2
PLANTING MIX 2			
ADE CUN	ADENANTHOS CUNEATUS 'CORAL CARPET'	140MM	3/ M2
ERE GLA	EREMOPHILA GLABRA 'CARRAMAR CARPET'	140MM	3/ M2
SHRUB PLANTING			
LOM HYS	LOMANDRA HYSTRIX 'KATIE BELLES'	140MM	3/ M2
RHA SPI	RHAGODIA SPINESCENS	140MM	3/ M2
TREES			
EUC VIC	EUCALYPTUS VICTRIX 'LITTLE GHOST GUM'	90LT	AS SHOWN
EUC VIX	EUCALYPTUS VICTRIX 'LITTLE GHOST GUM'	45LT	AS SHOWN
EUC TOR	EUCALYPTUS TORQUATA 'CORAL GUM'	90LT	AS SHOWN

PROPOSED PLANT PALETTE SELECTION:

PROPOSED TREES




Eucalyptus victrix




Eucalyptus torquata


PLANTING MIX 1



Hibbertia scandens




Pimelea ferruginea




Scaevola albida 'mauve clusters'

PLANTING MIX 2




Adenanthos cuneatus 'coral carpet'




Eremophila glabra 'carramar carpet'

SHRUB PLANTING

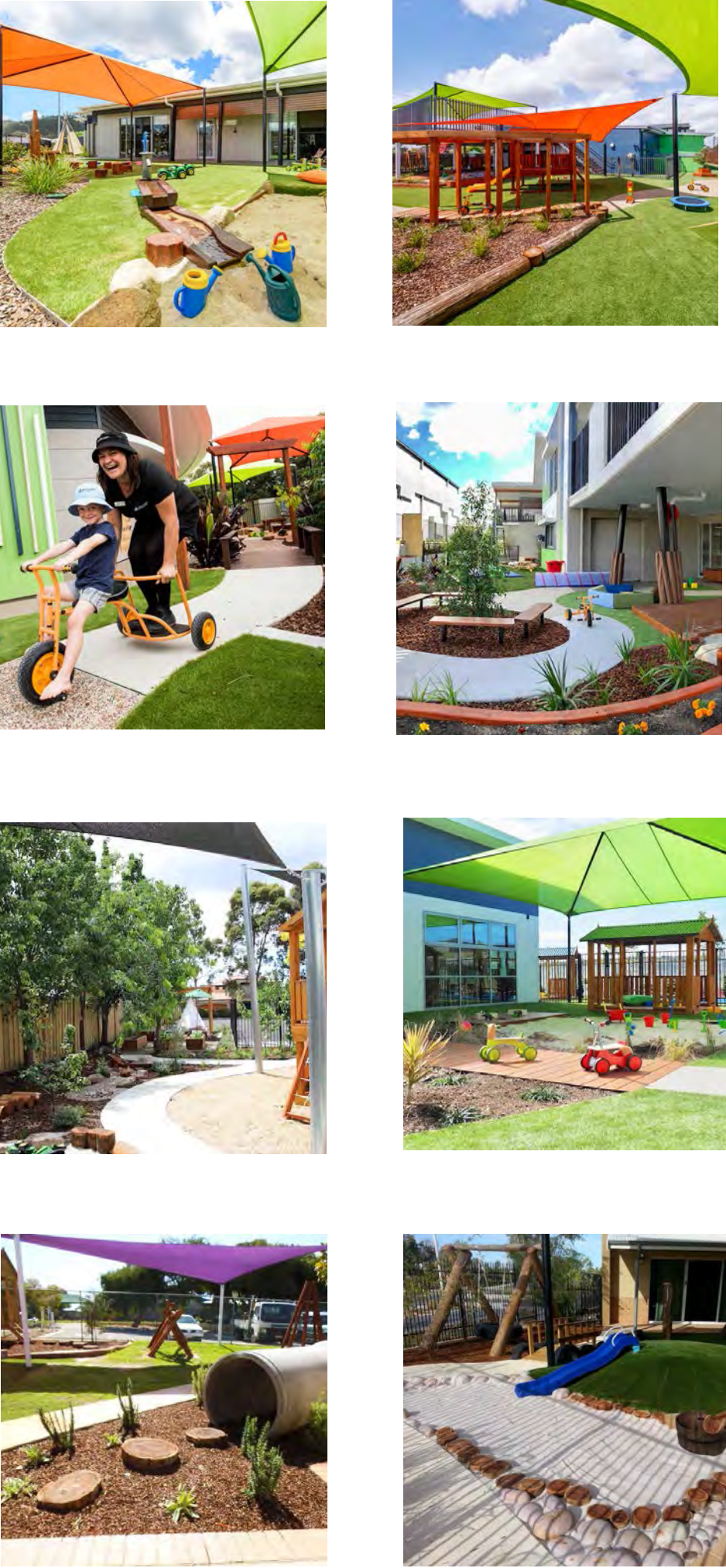


Lomandra hystrix 'Katie belles'



Rhagodia spinescens

PLAY AREA EXAMPLE IMAGERY:



NOTE:

- Design and layout of play area to be confirmed by operator.

NOTES:

- All garden beds to be mulched with a pathogen free product
- All trees to be planted minimum 1m from proposed paths and hardstands
- Planting to be setback 500mm from footpaths, plus half the spread of the species when mature



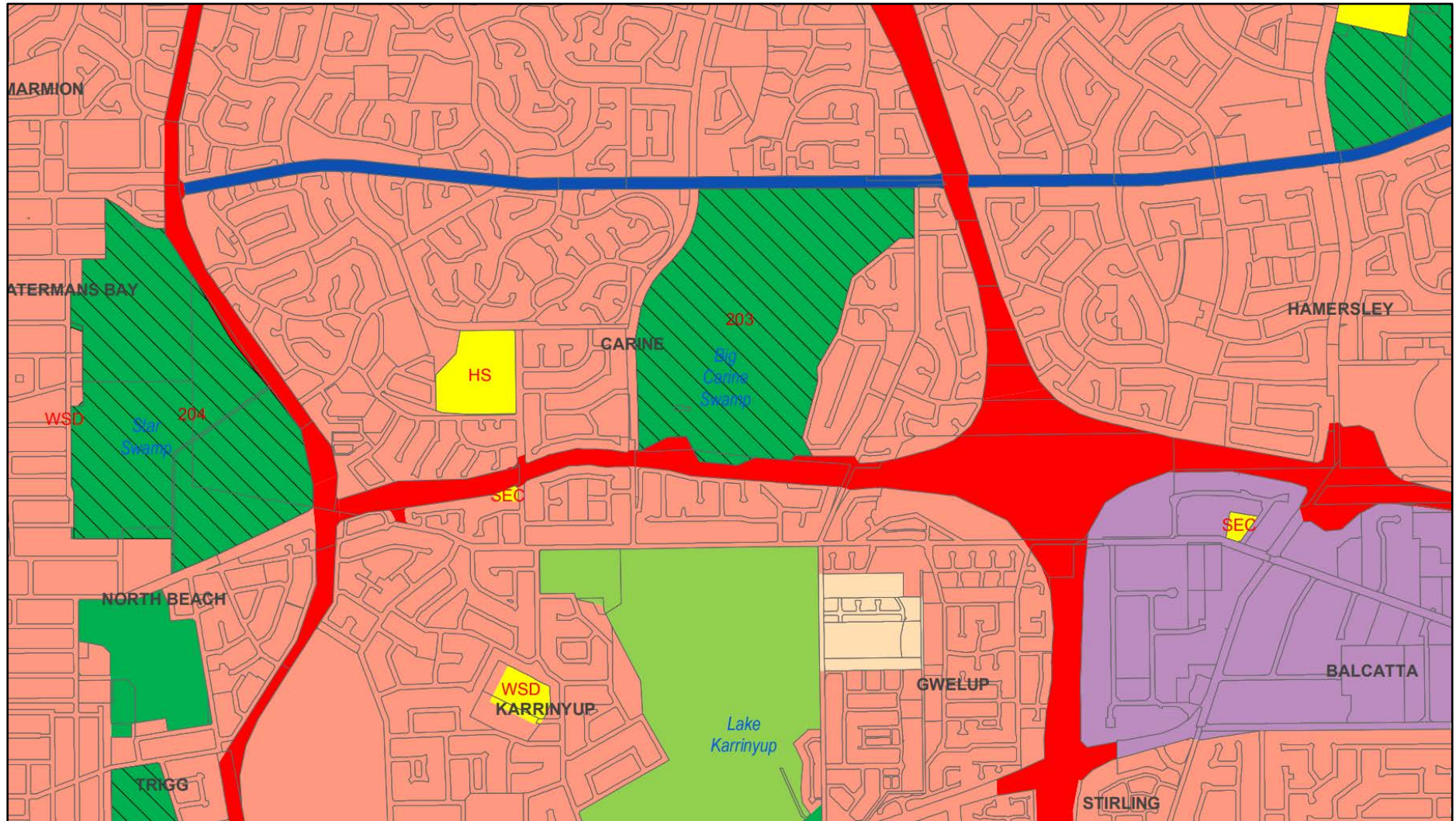
Plant Density Example - 3 Plants p/m2



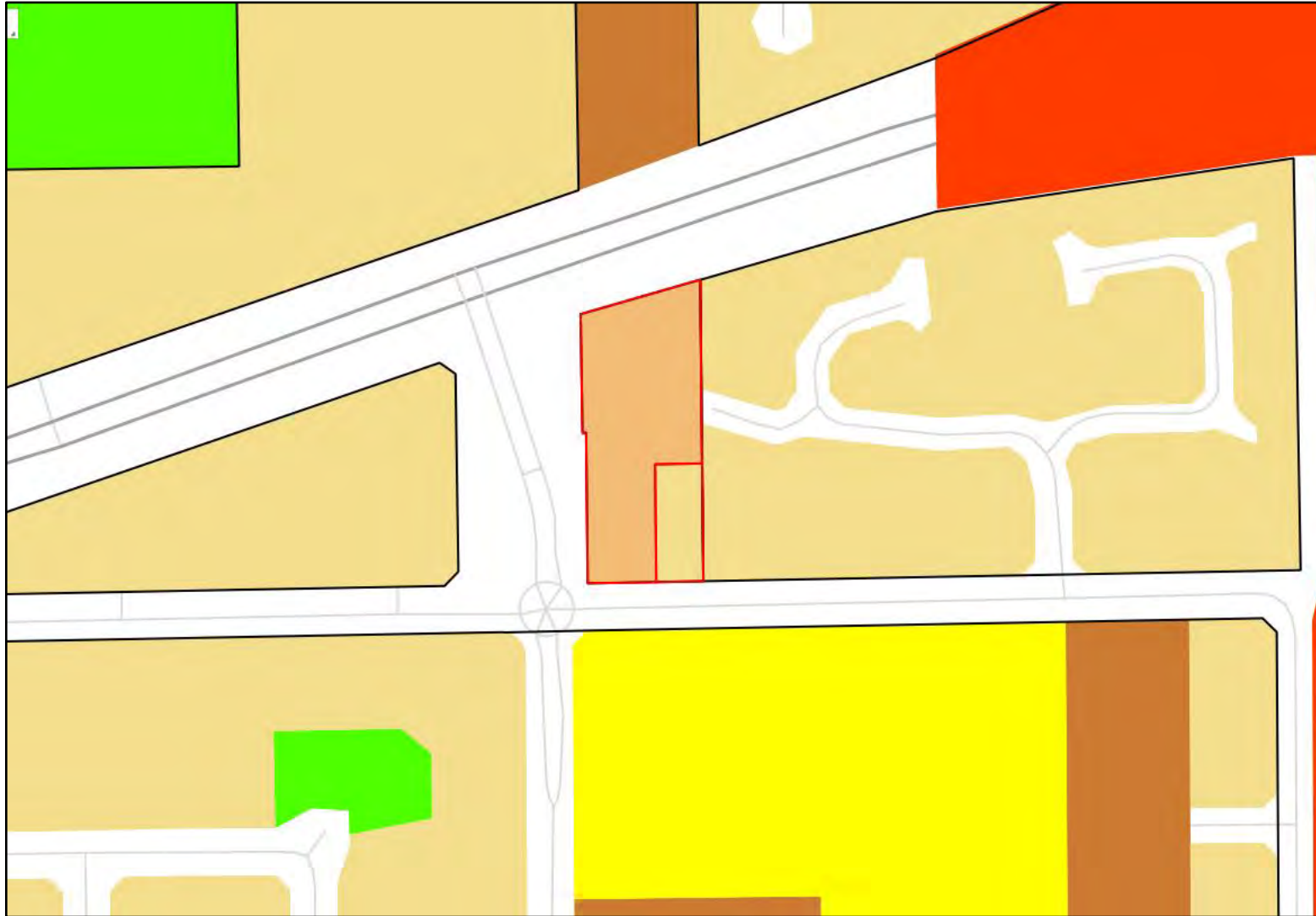
Attachment 2 – Aerial Location Plan



Attachment 3 – Metropolitan Region Scheme (MRS) Zoning Map



Attachment 4 – City of Stirling Local Planning Scheme (LPS3) Zoning Map



DEVELOPMENT APPLICATION - EARLY LEARNING CENTRE

50 - 52 PORTER STREET, GWELUP



City of Stirling
20 Nov 2018
RECEIVED

19 NOVEMBER 2018
PA1611
DA REPORT
PREPARED FOR METROWEST



URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Kris Nolan
Senior Consultant	Emma Dunning
Project Code	PA1611
Report Number	DA Report

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INTRODUCTION

This report has been prepared by Urbis on behalf of Metrowest Special Projects (Metrowest) as part of an application for planning approval for an Early Learning Centre at Lots 76 and 100 (No 50-52) Porter Street, Gwelup.

Child care is a growing industry within Western Australia which seeks to meet the demands of working parents in providing easily accessible and affordable care.

This report considers the planning context of the proposed development and provides an assessment of the application against the relevant State and local planning framework. The information contained in this report confirms that the proposed convenience store is an appropriate and consistent outcome that reflects the applicable planning framework. The report has been set out in the following manner:

- **Site Details:** a brief contextual discussion and description of the site.
- **Proposal:** a description of the proposed development.
- **Planning Assessment:** an assessment of the proposal against applicable local and regional framework.

The following **Table 1** provides a summary of the site and proposal.

Table 1 – Summary of Proposal

Property Location	50 Porter Street	52 Porter Street
MRS Zoning:	Urban	Urban
LPS3 Zoning:	Residential R25	Residential R25
Town Planning Scheme	City of Stirling Local Planning Scheme No. 3	
Existing Land Use	Single Residential	Single Residential
Lot Size	5054sq.m	1000sq.m

Copies of the required applications forms, fees, development plans and supporting technical reporting have been attached to this report.

1. SITE LOCATION AND CONTEXT

This section provides an overview of the key background information relating to the property at Lots 76 and 100 (No 50-52) Porter Street, Gwelup. In particular, this section outlines subject site's location, context and site characteristics.

1.1. LOCATION

The subject site comprises two lots, Lots 76 and 100 (No 50-52) Porter Street, Gwelup, and is located within the City of Stirling. The subject site is located within an established residential locality within close proximity to existing commercial centres, the Lake Gwelup Primary School and community-based uses as outlined in section 1.4.

A location plan showing the site in proximity to the Perth CBD and Stirling City Centre is set out in **Figure 1**.

Figure 1 – Location Plan



1.2. LEGAL DESCRIPTION

This development application refers to Lots 76 and 100 (No 50-52) Porter Street, Gwelup, the details of which are provided in **Table 2** and **Figure 2** below.

Table 2 – Lot Details

Lot	Plan	Vol/Folio	Area (sq.m)	Address	Proprietor
76	65078	1686-411	5054sq.m	50 Porter Street, Gwelup	Marino Giuseppe
100	67263	1686-410	1000sq.m	52 Porter Street, Gwelup	MSP Gwelup Pty Ltd
Total Area			6054sq.m		

The Certificate of Title for the subject lots is attached at **Appendix A**.

Figure 2 – Cadastre



1.3. SITE DESCRIPTION

The subject site consists of two residential dwellings (one per lot) as depicted in **Figure 2** on the previous page. The sites have historically been used for market gardening purposes.

The sites have frontage onto Porter Street, with Lot 50 having dual frontage to North Beach Road.

1.4. LOCAL CONTEXT

Gwelup is located 12.7km from the Perth CBD and was settled in the late 1800s for the purposes of market gardens, a handful of which can still be found in the suburb today. Gwelup began to change from rural to residential in the 1970s, with a greater rate of development occurring once the Mitchell Freeway extended to Erindale Road in 1984 and further north in 1986.

The surrounding development is predominantly residential with a handful of education and community based uses occurring. Further afield significant expanses of public open space and the Gwelup local centre are located.

The surrounding land uses are set out in **Table 3** below:

Table 3 – Surrounding Land Uses

	Immediately Adjacent	Zoning	Further Surrounds	Zoning
North	Erindale Road and residential	Local Road R20	Residential	R20 with pockets of R30
South	Lake Gwelup Primary School	Public Purpose Primary School	Aged care villages Residential Gwelup Local Centre	R20 with pockets of R30 and R40 Gwelup Local Centre
East	Residential Mitchell Freeway	R20 with pockets of R30 Primary Regional Road	Balcatta commercial Residential	Commercial R40
West	Residential	R20 with pockets of R30	Residential Public Open Space	R20 with pockets of R30 Public Open Space

Bus routes 424 and 427 run along North Beach Road to and from Stirling Station, Warwick Station and Karrinyup Shopping Centre.

Figure 3 – Community and Commercial facilities in proximity to the subject site



1.5. DEMOGRAPHICS

The subject site is located within the suburb of Gwelup, which has a notable proportion of families with children and working parents. A summary of the demographics as at the 2016 Census is outlined below:

Table 4 – Demographic Statistics

Statistics	Gwelup
Population	4539
Median age	41
Families	1252
No. of children per family (average)	1.9
No. of children under 5 years of age	345
Median household income	\$2664
Occupational data	
No. of families with both parents working in some capacity (full time and/or part time)	599
No. of persons travelling to work via car	1588

2. PROPOSAL

The proposal includes the development of an Early Learning Centre on the southern portion of the subject site. The northern portion of the site constitutes stage 2 and will be subject to a separate development application once the final proposal has been determined. It is acknowledged that a boundary realignment will be required in order to facilitate the development and this will be undertaken prior to development occurring on the site.

2.1. GWELUP EARLY LEARNING CENTRE

The childcare centre encompasses a total of 1465sq.m of built form across two levels in addition to outdoor play areas and car parking. The operational details are as follows:

- 112 Children
- 22 Staff (FTE) – 20 carers and 2 administrators
- The centre will be open from 7:00am till 6:00 pm (with staff arrival/departure 30mins either side)

Table 5 sets out the components and areas associated with the early learning centre:

Table 5 – Description of Proposal by Component

Component	Area / Dimensions	Inclusions
Ground Floor	774sq.m	Foyer (office, reception, laundry, staff room, administration, meeting room, kitchen) 5 education rooms, sleep rooms, toilet facilities and prep rooms. Store/utilities/stairwell Bin store and external store
Play Areas – ground floor	708sq.m	Play space 1 – 461sq.m Play space 2 – 247sq.m
Upper Floor	293sq.m	2 rooms, toilets and prep. Staff room Plant Store/utilities, stairwells
Play Areas – upper floor	369sq.m	Play space 1 – 360.9sq.m
Car Parking		24 parking bays (incl disabled parking bay)
Bicycle Parking		8 racks
Fencing	1800mm colorbond fencing to side boundaries 1800mm feature fencing and planting to front boundaries – visually permeable	

Component	Area / Dimensions	Inclusions
Access	6.0m crossover	

Table 6 – Outline of Planning Controls

Control	Proposed
Site Coverage	37.3%
Setback – Porter Street	15.226m
Setback - North Beach Road	910m
Side setback – East	13.536 (to bin store)
Height	Walls – 6.0m to eave level Roof – 9.0m to roof pitch

2.2. DESIGN

The proposal has been designed as a fit for purpose building whilst maintain sympathies to the surrounding residential environment.

The built form has been broken up to avoid bulk and to ensure presentation in a manner which is sympathetic to the residential development whilst maintaining an appropriate level of design flair. The built form includes a main built form component, and an open-air deck area towards the corner of Porter Street and North Beach Road. This significantly reduces the bulk associated with the development and provides for an outlook which is consistent with the existing structures on the site and the two story dwellings on the western side of North Beach Road. The angled roof structure breaks up the roof structure and bulk providing not only visual interest but a greater suitability to the surrounding locality.

Materials included within the built form include a range of high quality construction materials which are consistent with that of a residential setting. The use of face brick, seam cladding, timber panels and rendered brickwork provide for visual interest and articulation of the facades. Colours include “surfmist”, “woodland grey” and “monument” consistent with the character of the surrounding locality. It is noted corporate colours are limited to the proposed signage associated with the operator.

The screening the upper level play area and a combination of the fencing and planting to the ground floor play area soften the built form and provide for an appropriate level of screening to the play area whilst ensuring casual surveillance to the street. The outdoor play areas are proposed to include a combination of grass, synthetic grass, garden paving, planting, shade sails, and play equipment.

2.3. DEMOLITION

The proposal includes the demolition of all existing structures and development located on the subject site. This proposed demolition includes the removal and make good of the following:

- Dwellings and ancillary structures including carport, alfresco, garage/sheds
- Large tin shed
- Driveway and paved areas
- Fencing

Further details of the proposed demolition are included within the architectural plans provided in **Appendix B**. A demolition licence will be applied for and appropriate site management in place prior to demolition works commencing.

3. PLANNING FRAMEWORK AND ASSESSMENT

The below section includes an assessment and the justification of the proposed development in the context of the state and local planning documents.

3.1. STATE PLANNING

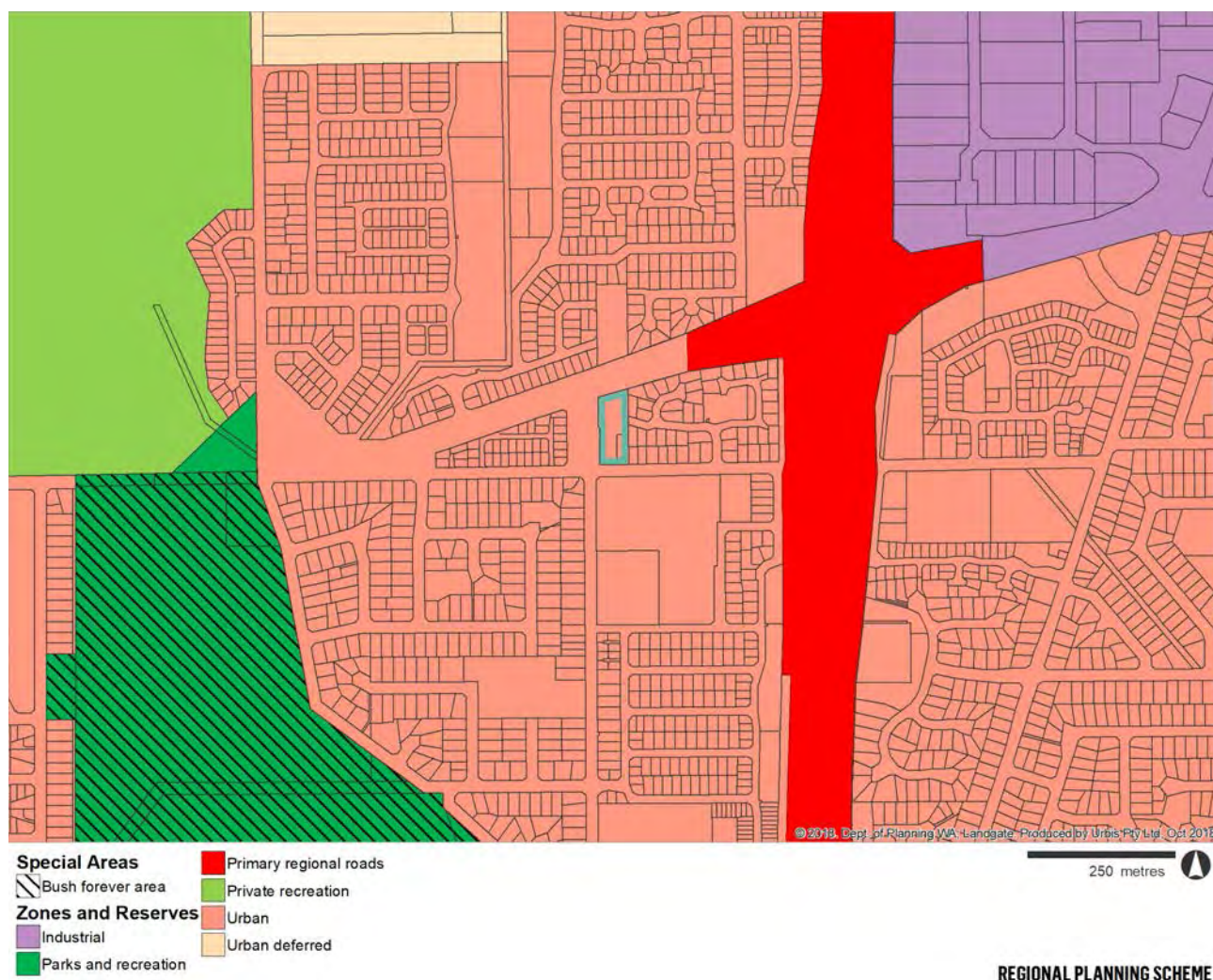
The proposed convenience store and ancillary/associated uses strongly aligns with the relevant State planning framework as detailed in **Table 4** below.

Table 7 – Key State Planning Documents

Document	Relevant Provisions/Objectives	Compliance
Metropolitan Region Scheme <i>The Metropolitan Region Scheme (MRS) is a high level statutory land use plan over the metropolitan region.</i>	<p>The subject site is zoned 'Urban' – which allows for a range of activities including residential, commercial, recreational and light industry (Refer Figure 4).</p>	<p>The proposed early learning centre is a commercial land use and is therefore considered consistent with the intentions of the MRS 'Urban' zoning.</p>
Directions 2031 and Beyond <i>High level strategic spatial plan which sets the vision for the future expansion of the Perth and Peel area.</i>	<p>This high-level spatial framework establishes a vision for the future expansion of Perth and a population of 3.5 million people by 2031.</p>	<p>The proposed early learning centre is consistent with the strategic intentions of Directions 2031 providing for necessary services within the Joondanna locality.</p>
Perth and Peel @ 3.5 Million <i>Perth and Peel @ 3.5million is an overarching document that buildings on the objectives of Directions 2031 and Beyond and provides a common link between the four sub-regional planning frameworks.</i>	<p>Perth and Peel @ 3.5million is an overarching document that buildings on the objectives of Directions 2031 and Beyond and provides a common link between the four sub-regional planning frameworks.</p> <p>The subject site has been zoned 'Urban - Developed' under the Perth and Peel @ 3.5million spatial plan. The 'Urban - Developed' zoning refers to areas that are currently zoned 'Urban' and have been developed.</p>	<p>The proposal will have no implications on the zoning of the subject site under the Perth and Peel @ 3.5million. Nor will the proposal have any implications on the indicative future locations of regional roads and public infrastructure.</p>
Central Metropolitan Sub-Regional Planning Framework (May 2015) <i>The draft framework considers where future homes and jobs will be</i>	<p>The sub-regional framework estimates that the population of the central metropolitan subregion will grow by approximately 205,000 people by 2031.</p>	<p>The proposed early learning centre will contribute to the areas employment sufficiency target with the creation of a number of new jobs as well as providing a necessary service for the growing population.</p>

Document	Relevant Provisions/Objectives	Compliance
<i>located and provides the spatial plan of the Perth and Peel regions for the next 35 – 40 years.</i>		

Figure 4 – MRS Extract



3.2. LOCAL PLANNING

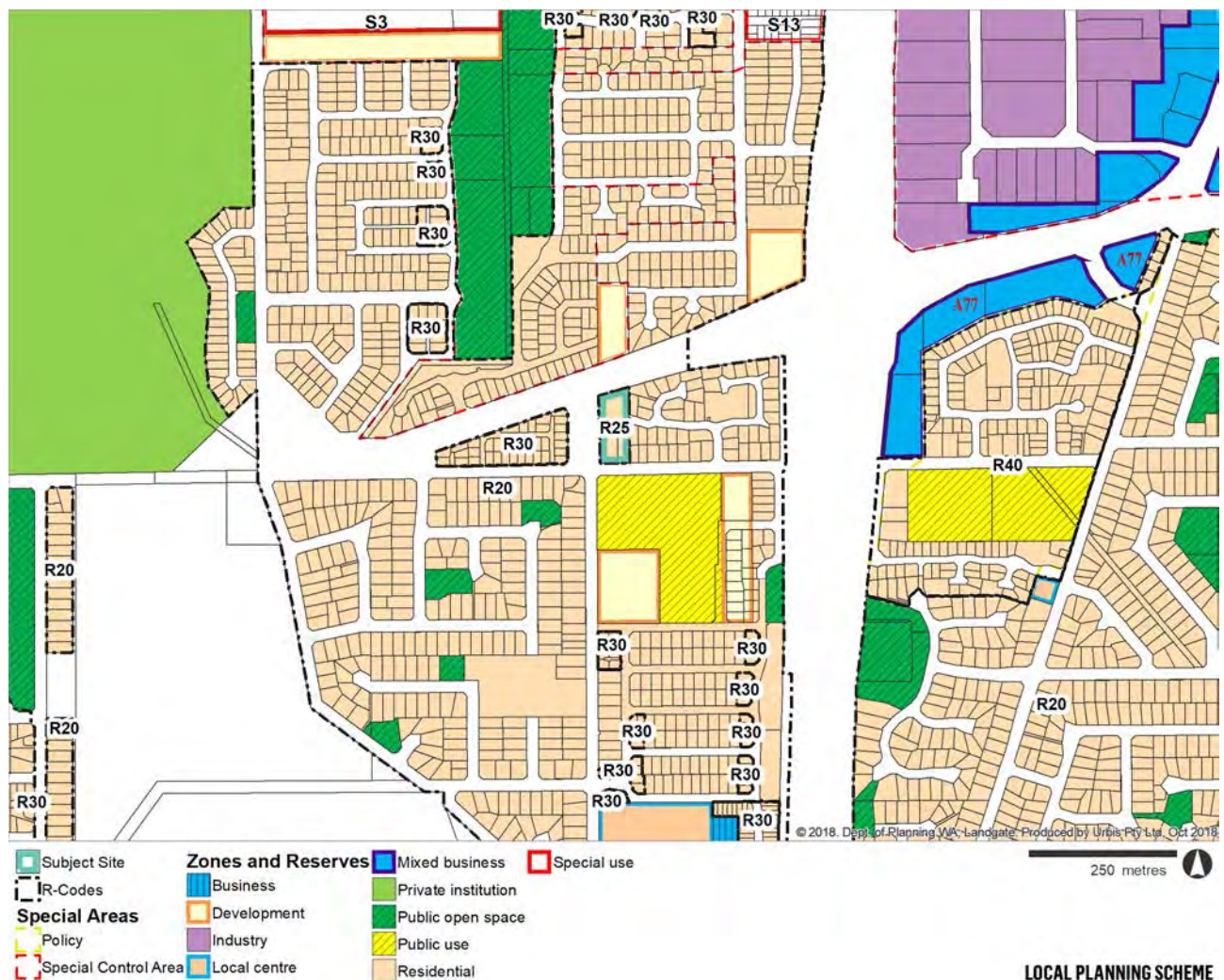
3.2.1. City of Stirling Local Planning Scheme

The subject site is zoned as 'Residential R25' under the City of Stirling Local Planning Scheme No.3 (LPS3). An extract of the LPS3 zoning map has been provided in **Figure 5**.

The objective of the Residential zone is to allocate land to provide for a range of residential densities to meet current and future needs of the community, and to provide for a range of compatible and complementary non-residential land uses.

It is considered that an early learning centre provides a non-residential use which is compatible with the surrounding locality. The use provides for a service which is directly related to ensuring local residents are provided with the services required to meet their everyday needs and as such is considered to be complementary to ensuring the liveability of the locality.

Figure 5 – Local Planning Scheme Extract



b

Under the LPS3, the proposed use falls under the 'Child Care Premises' land use classifications.

The land use permissibility for the proposed use is set out in **Table 5** below:

Table 8 – Land Use Permissibility

Land Use	Zone	Use Class
Child Care Premises	Residential	A
<i>A – means that the Council may, at its discretion and after giving due notice, permit the use.</i>		

As such, the Council has discretion to approve the proposed development subject to being satisfied that proper and orderly planning has been undertaken.

3.2.2. Residential Design Codes

The subject site is zone Residential R25 and as such is subject to Table 1, Tables 2a and 2b, and Part 6 of the R-Codes. An assessment of compliance is set out in Table 9 below:

Table 9 – Assessment against R-Codes

Provision	Requirement	Provided	Compliance (deemed to comply/design principles)
Site Coverage	Max. 55%	12.29% (staging boundary 32.39%)	Complies
Open Space	Min. 50%	87.71% (staging boundary 67.61%)	Complies
Setback - Porter Street	6.0m	15.226m	Complies
Setback – North Beach Road	1.5m	0.910m	Minor variation requested
Side setback - East	1m	13m	Complies
Side setback – North	1m	In excess of 1m	Complies
Height	Wall – 6m	Walls – Category B – 6m to top of external wall	Complies
	Roof – 9m	Roof – Category B – 9m to top of pitched roof	Complies
Street Surveillance	Elevations to address street with facades generally parallel,	Complies	Complies

Provision	Requirement	Provided	Compliance (deemed to comply/design principles)
	Clearly defined entry points		
Street Walls and Fences	Visually permeable above 1.2m in height	The proposed fencing is to comply with the permeability requirements.	Complies
Sightlines	Fences to be reduced to 0.75m within 1m of where a driveway meets a public street.	The fencing is in excess of 5m from the driveway.	Complies
Visual Privacy	Setback of 7.5m for unenclosed outdoor active habitable spaces Permanent screening to restrict views	Screening, highlight windows and opaque glazing incorporated to northern and eastern facades.	Complies
Solar Access for adjoining sites	Max. shading of 35%	The shading created by the proposal is limited to Porter Street and North Beach Road.	Complies
External fixtures, utilities and facilities	Not visible from the primary street, designed to be integrated with the building, not be visually obtrusive.	All utilities have been sufficiently screened from the street.	Complies

3.2.3. Local Planning Policy – Childcare

The City of Stirling Local Planning Policy 6.4 sets out to provide for the establishment of child care facilities within appropriate locations and to ensure any adverse impacts on the amenity of the surrounding locality are minimised.

Location Criteria

The policy gives consideration to the compatibility of child care facilities with surrounding land uses. Preferred locations are noted to be abutting commercial centres or locations which promote multi-function uses and improve servicing.

As demonstrated in section 1, the subject site is located adjacent the Lake Gwelup Primary School and is in proximity of the Gwelup local centre, which is less than 800m to the south. The proximity to the primary school allows for multi-purpose trips to occur for parents of children at the centre and primary school.

The site layout and design considerations have been carefully detailed to ensure there are no adverse impacts on the adjacent residential dwellings to the east. The bulk of the building and use has been situated to address the corner of Porter Street and North Beach Road, with the larger outdoor play areas facing outwards to these roads also. This ensures the impacts on the adjacent residential properties is minimised.

Traffic, road hierarchy and parking

The policy gives consideration to the traffic impacts from child care facilities on the surrounding environment and preferred access locations. The use of District Distributor B roads and Local Distributor Roads is preferred.

The traffic impact statement prepared by Transcore and appended to this report confirms the suitability of the location for the purposes of the proposed use in terms of parking, access and manoeuvring as well as capacity of the adjacent road network.

Access to the site is achieved from Porter Street, a local road. This is considered to be generally consistent with the requirements of the policy.

Unsuitable Locations

The policy sets out a number of locations considered to be unsuitable for the establishment of child care facilities. The subject site does not fall within any of these locations and is therefore considered appropriate.

Amenity

The policy sets out design requirements to ensure impacts on residential amenity are reduced. Assessment against these requirements is set out in Table 10 below:

Table 10 – Policy assessment

Requirement	Proposal	Compliance
Bulk, scale and architectural style of buildings to harmonise with the local streetscape	The proposed structure is true to form in that it provides the required spaces and outdoor areas for an early learning centre, however has consideration to how it sits within the locality. The proposal is generally compliant with the height and setback requirements of the R-Codes presenting as a double story building similar in bulk to that currently seen on the subject site. The proposed form seeks to replicate the double story dwellings in the locality and the roof pitch and angled roofing treatment breaks up the bulk to provide a terrace like effect.	✓
Setbacks and other design requirements specified in the Residential Design Code to be applied to developments in residential zones;	An assessment of the proposal against the R-Codes has been set out in Table 9. The proposal demonstrates compliance with the deemed to comply or design principles of the relevant R-Code requirements.	✓
Activity room windows facing residential properties to be double glazed and not be able to be opened;	All activity rooms along the northern or eastern facades are to be double glazed and windows will not be able to be opened.	✓
Unless otherwise approved by Council, with due regard to impact on residential amenity, the hours of operation of Centres will be restricted 7.00am to 6.30pm on weekdays and 8.00am to 6.00pm on weekends.	The operations of the activity will comply with the hours of operation as set out by the policy.	✓

3.2.4. Local Planning Policy – Signs

The City of Stirling Local Planning Policy 6.1 sets out the development requirements for signage to ensure the display of advertisements does not impact the amenity of surrounding land. The policy seeks to avoid a proliferation of signs, to improve the streetscape, to rationalise the number of signs and to ensure signs are appropriately incorporated into the design of buildings to which they relate.

The proposal includes the following signs:

Table 11 – Assessment of signage typologies

Sign Type	Requirements	Details	Compliance
Wall Signs	1 sign per lot Max. area of 1.2sq.m	The proposal includes 2 on wall signs, 1 facing Porter Street and 1 facing North Beach Road. The signs are 3000x1600.	A minor variation is requested in regards to the maximum area for each lot

3.2.5. Local Planning Policy – Car parking

The City of Stirling Local Planning Policy 6.7 sets out the requirements for parking as follows:

Table 12 – Car Parking Assessment

Car Parking Ratio	Requirement	Provision
The car parking rate for Child Care Premises is detailed as 1 bay per staff member and 1 bay per 7 children.	Children – 112 = 16 bays Staff – 22 = 22 bays - 10% reduction – 4 bays	24 bays provided
TOTAL	34 bays	10 bay parking shortfall

* A car parking reduction of 10% is applicable for the provision of bicycle parking and end of trip facilities.

The car parking shortfall is considered to be and will not impact the operation of the early learning centre or the surrounding road network. The nature of the use sees drop off and pick up spread across a few hours within the morning and a longer stretch in the afternoon. As such, it is not anticipated that all car bays on the site will be in use at one time. This has been further explored within section 3 of the Transport Impact Assessment attached at **Appendix C** which takes into account the trip generation rates associated with child care centres and considers the number of parking bays provided are sufficient for the proposed activity.

Further, it is considered that proximity to the surrounding residential development, schools and public transport routes also advocates for pedestrian drop off/pick up which undertaking other activities such as drop off of older children and transit to work.

3.2.6. Local Planning Policy – Landscaping

The City of Stirling's Local Planning Policy 6.6 provides for the use of landscaping to improve the visual appeal of sites, provide for a green canopy and shade options and to promote environmentally sustainable design within the City.

The proposal has been designed to incorporate landscaping which is consistent with the requirements of the policy as far as practicable.

3.2.7. Local Planning Policy – Significant Trees

The City of Stirling's Local Planning Policy 6.11 seeks to minimise the depletion of the tree canopy in the local government area. The policy seeks to retain existing trees where practicable or where existing trees

cannot be retained to provide for the planting of advanced trees on site in order to preserve amenity of zoned land and streetscapes.

In accordance with the policy the proposal is required to provide 2 advanced trees with a minimum of 9sq.m of soil space at ground level, free of intrusions. The proposal includes the provision of 4 advances trees across the site, the location of these trees has been detailed on the site plan and landscaping plan.

4. CONCLUSION

The proposed early learning centre has been designed to be site responsive with strong synergies to the surrounding residential development and adjacent commercial centre. The proposal is consistent with the relevant State and local planning framework and will provide a compatible non-residential land use which supports the local community within the Gwelup locality.

The following key matters should be considered on the assessment of this development application:

- The proposed 'child care premises' land use is consistent with the MRS 'Urban' zoning.
- The proposal will have no implications of the broader strategic planning of the Gwelup/City of Stirling area outlined in Perth and Peel @ 3.5 million and associated state planning documents.
- The proposed use is a "A" use and is considered to be consistent and compatible with the subject site's zoning, objectives and development intentions under the local planning scheme.
- Council has discretion to approve the application provided it has given consideration to the matters in Clause 67 of the *Planning and Development Regulations 2015*.
- The proposal is in accordance with the requirements of the relevant Local Planning Policies, in particular with the Child Care Local Planning Policy.
- The proposed development proposes an appropriately designed and laid out built form incorporating appropriate design features and high-quality landscaping outcomes.
- The proposal will provide the local community and broader area with an everyday commercial service, supporting the residential uses and adjacent/nearby commercial uses within the locality.

For these reasons, and the reasons outlined in this report, it is respectfully requested that the City of Stirling have regard to merits and broader benefits of the proposal when undertaking their assessment of the proposal and approve the application subject to fair and reasonable conditions.

DISCLAIMER

This report is dated 19 November 2018 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Metrowest (**Instructing Party**) for the purpose of Development Application (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

REGISTER NUMBER	
76/D65078	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
1	24/2/2009

VOLUME
1686FOLIO
411

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

LAND DESCRIPTION:

LOT 76 ON DIAGRAM 65078

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

GIUSEPPE MARINO OF 50 PORTER STREET, GWELUP

(ND K861703) REGISTERED 24/2/2009

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

1. THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE. VOL 1686 FOL 411.

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.

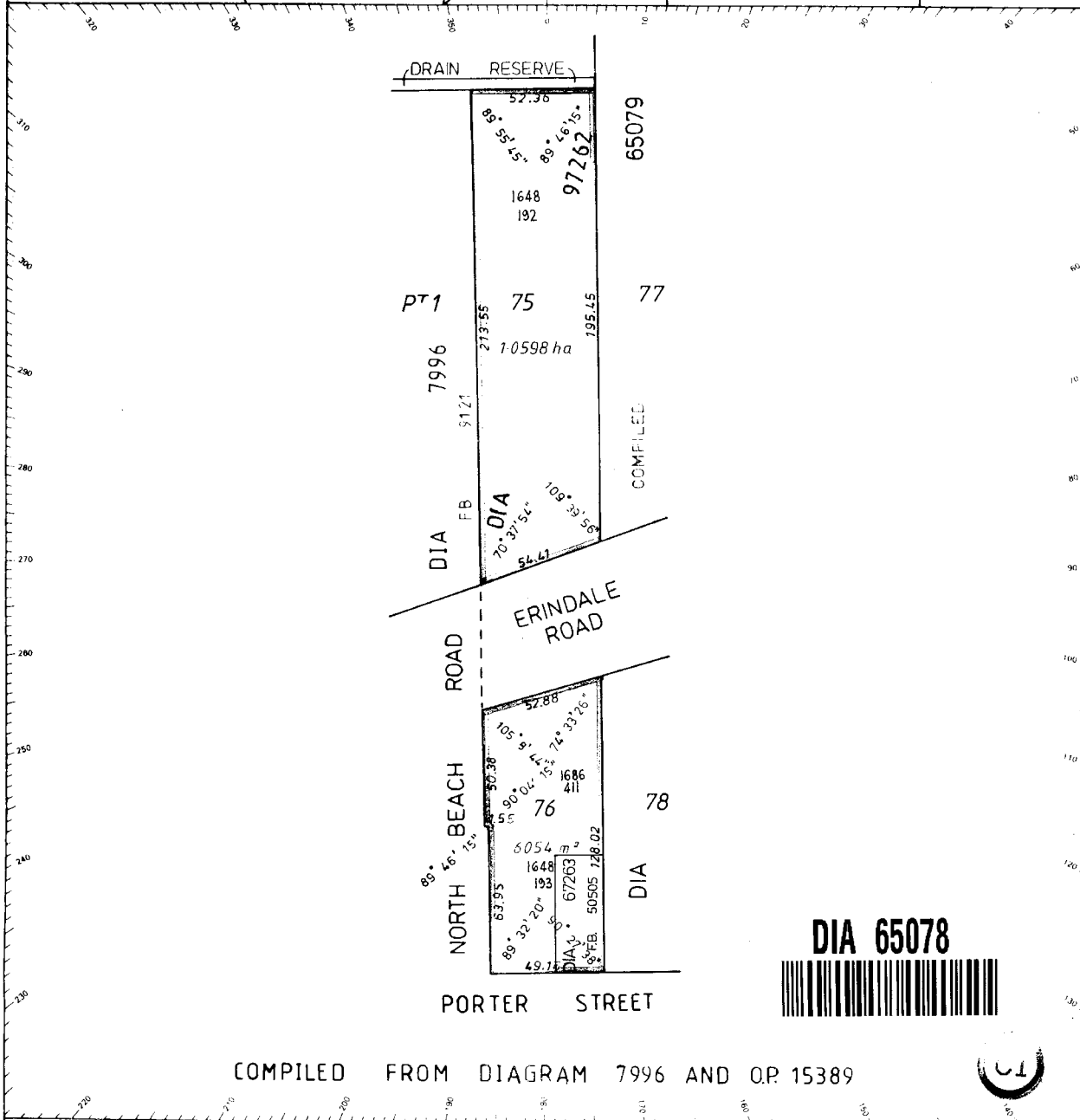
-----END OF CERTIFICATE OF TITLE-----

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: 1686-411 (76/D65078)
PREVIOUS TITLE: 1648-193
PROPERTY STREET ADDRESS: 50 PORTER ST, GWELUP.
LOCAL GOVERNMENT AUTHORITY: CITY OF STIRLING

Town or District.	Number of Lot or Location.	Field Book.	Scale.	Certificate in which Land is Vested.	Area
SWAN	PT LOT 2 OF PT LOC 92.		1:2000	Vol. 1002 Fol. 781...	1.6652 ha Total.



DIA 65078

COMPILED FROM DIAGRAM 7996 AND O.P. 15389

<p>CERTIFICATE</p> <p>I hereby certify that this survey was performed by me personally (or under my own personal supervision, inspection and field check) in strict accordance with the Licensed Surveyors (Guidance of Surveyors) Regulations, 1961</p> <p>Date.....</p> <p>COMPILED Licensed Surveyor</p>		<p>TOWN PLANNING DEPARTMENT by Town Planning Board</p> <p>17 JUN 1983</p> <p>FI 62974</p> <p>Date 21st June 1983</p> <p>Chairman</p>	
<p>Approved <i>B. E. Campbell</i></p> <p>Examined <i>J. Chernouski</i> 9 FOL 8</p> <p>Date 13.7.83</p>	<p>On</p> <p>Plan Diagram 7996</p> <p>Index Plan PERTH 260 (9.54)</p>	<p>Registered</p> <p>OFFICE OF TITLES</p> <p>FFR PAID</p>	<p>Diagram No</p> <p>65078</p>

18117/11/B1-2M-S/530 DKT. DIA 12304

WESTERN



AUSTRALIA

REGISTER NUMBER 100/D67263	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

RECORD OF CERTIFICATE OF TITLE **UNDER THE TRANSFER OF LAND ACT 1893**

VOLUME
1686FOLIO
410

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

LAND DESCRIPTION:

LOT 100 ON DIAGRAM 67263

REGISTERED PROPRIETOR: **(FIRST SCHEDULE)**

MSP GWELUP PTY LTD OF 70 BELMONT AVENUE BELMONT WA 6104

(T O008768) REGISTERED 16/10/2018

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

1. *O008769 MORTGAGE TO FREESTILES HOLDINGS PTY LTD OF 70 BELMONT AVENUE BELMONT WA 6104 REGISTERED 16/10/2018.
2. *O008770 MORTGAGE TO KENNETH CHRISTOPHER WOODWARD, AMANDA ELIZABETH WOODWARD, BOTH OF 12 RIVER STREET BRIAR HILL VIC 3088, AS JOINT TENANTS REGISTERED 16/10/2018.

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-----

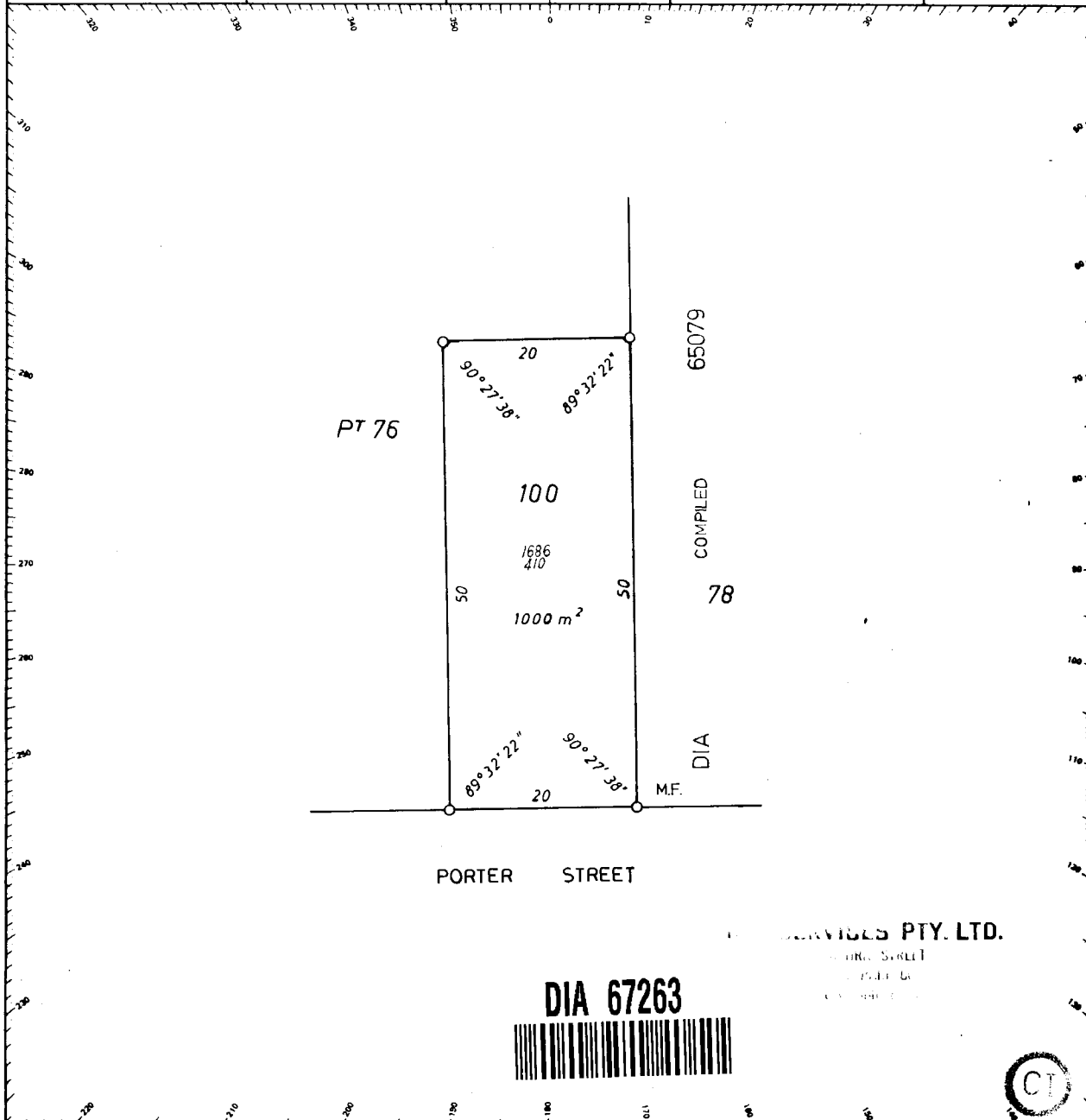
STATEMENTS:

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: 1686-410 (100/D67263)
 PREVIOUS TITLE: 1648-193
 PROPERTY STREET ADDRESS: 52 PORTER ST, GWELUP.
 LOCAL GOVERNMENT AUTHORITY: CITY OF STIRLING

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING O008769

Town or District.	Number of Lot or Location.	Field Book.	Scale.	Certificate in which Land is Vested.	Area
SWAN	PT LOT 76 OF LOC 92	50505	1:500	Vol. 1648 Fol. 193..	



PORTER STREET

LANDGATE SERVICES PTY. LTD.

DIA 67263



CERTIFICATE I hereby certify that this survey was performed by me personally (or under my own personal supervision, inspection and field check) in strict accordance with the Licensed Surveyors (Guidance of Surveyors) Regulations, 1961. Date <u>21/6/84</u> <i>T. Hollister</i> Licensed Surveyor		TOWN PLANNING Approved by Town Planning Board 11 OCT 1984 FILE <u>64712</u> <i>W. A. P. P.</i> Date <u>16th October 1984</u> Chairman	
Approved <i>L. Harrison</i> Inspector of Plans and Surveys Examined <i>R. W. Harrison</i> Date <u>7.11.84</u>	On Plan Diagram <u>65078</u> Index Plan <u>PERTH 2000 09.34</u>	Registered FEE <u>\$10</u> <u>69812</u> <u>18/10/84</u>	Diagram No. 67263

16117/11/81-2M-S/630 DKT DIA 12304



City of Stirling
20 Nov 2018
RECEIVED

Proposed Child Care Centre
50-52 Porter Street, Gwelup
Transport Impact Statement

PREPARED FOR:
Metrowest Power Systems Pty
Ltd

October 2018

Document history and status

Author	Revision	Approved by	Date approved	Revision type
Tamara Albaz	r01	B Bordbar	24/10/2018	Draft
Tamara Albaz	r01a	B Bordbar	26/10/2018	Final

File name: t18.080.ta.r01.docx

Author: Tamara Albaz

Project manager: Behnam Bordbar

Client: Metrowest Power Systems Pty Ltd

Project: 50-52 Porter Street, Gwelup

Document revision: r01a

Project number: t18.080

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The Client alone shall have a license to use the documents referred to above for the purpose of completing the Project, but the Client shall not use, or make copies of, such documents in connection with any work not included in the Project, unless written approval is obtained from the Consultant or otherwise agreed through a separate contract.

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1.0 Introduction

This Transport Impact Statement (TIS) has been prepared by Transcore on behalf of Metrowest Power Systems Pty Ltd with regard to the proposed Child Care Centre (CCC) to be located at 50-52 Porter Street, Gwelup, City of Stirling.

The subject site is located at the northeast corner of Porter Street/ North Beach Road roundabout intersection in Gwelup as shown in **Figure 1**. The site is bound by Porter Street to the south, North Beach Road to the west, vacant land to the north and residential units to the east. There is a primary school on the other side of Porter Street opposite the subject site. Lots 50 and 52 are proposed to be amalgamated and existing buildings will be demolished as part of this proposed development.

The key issues that are addressed in this report include the traffic generation and distribution of the proposed development, parking, access and egress, and access to the site for alternative modes of transport.

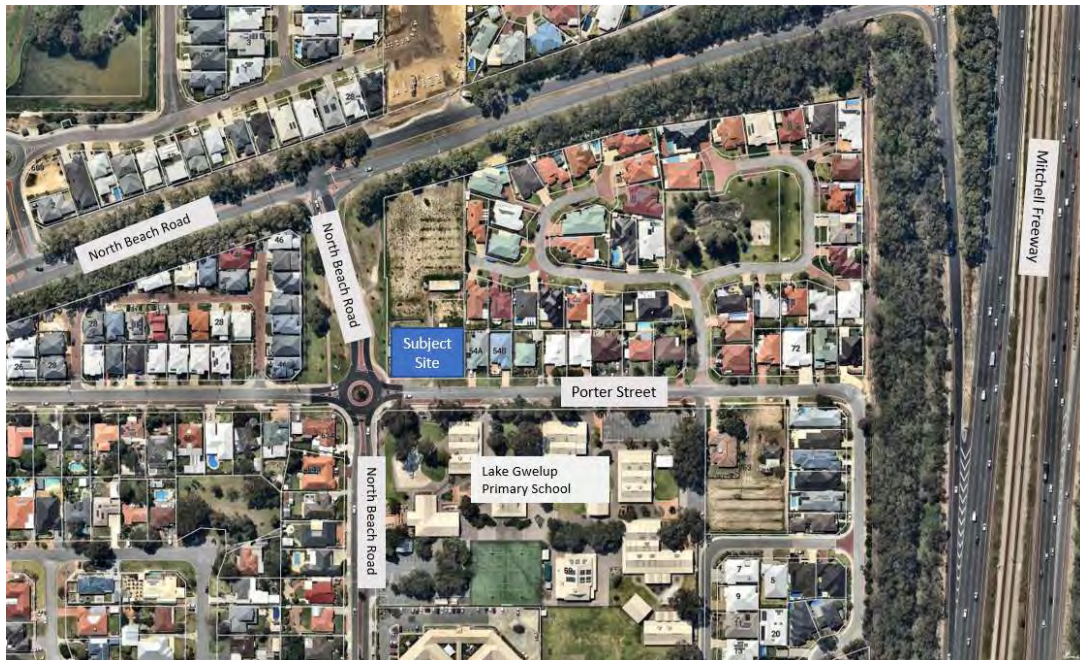


Figure 1: Location of the subject site

2.0 Proposed Development

The development proposal is for a Child Care Centre (hereafter CCC) at the subject site – 50-52 Porter Street, Gwelup, City of Stirling.

A double-story building is proposed to be constructed for the CCC which would cater for 112 children. The centre is proposed to be serviced by 22 staff.

It is proposed to provide vehicular access and egress via one crossover on Porter Street.

The development plan shows the CCC building occupying the western portion of the subject site. The eastern portion of the site is proposed to accommodate a 25-bay car park area inclusive of one ACROD bay and one turn around bay.

Pedestrian access to the CCC is available via existing external pedestrian footpaths along North Beach Road and Porter Street.

Rubbish bins and waste collection will occur kerbside as per existing arrangement along Porter Street.

Detailed development plans are included for reference in **Appendix A**.

3.0 Vehicle Access and Parking

3.1 Access

According to the plans prepared by Modus Design Pty Ltd, the proposed vehicular access to the CCC car park is proposed via a single crossover on Porter Street. The proposed location of the crossover satisfies the minimum separation to the roundabout in accordance with Main Roads WA Driveway Policy guidelines.

3.2 Parking Demand and Supply

The City of Stirling Parking and Access Policy 6.7: *Child Care Premises* specifies the following car parking requirement:

- Car Parking: 1 bay per staff member and 1 bay per 7 children; and,
- Applicable Performance Criteria for parking reduction as detailed in Table 1.

Reduction %	Performance Criteria
5% or 10%	The proposed development is to provided 5 bicycle bays greater than required (as per specifications in 6.2 Bicycle Parking); or Where the above concession is sought and “end-of-journey” facilities are provided (as per specifications in 6.2 Bicycle Parking).
15% or 10%	The proposed development is within 200 meters of a stop on a high frequency bus route or a bus station shown in Figure 1 of the Policy 6.7; or The proposed development is within 400 meters of a stop on a high frequency bus route or a bus station shown in Figure 1 of the Policy 6.7.

Table 1: Proposed Car Parking Reductions (source: City of Stirling Parking Policy 6.7)

The CCC has been designed to accommodate 112 children, which requires (16) car parking spaces, with no reduction factors applied.

The CCC has been designed to accommodate 22 staff members, which requires (22) car parking spaces, with no reduction factors applied.

Total parking spaces required is therefore 38 spaces with no reduction factors applied, however the proposed development is planning to provide bicycle parking and end of trip facilities so that the development could be eligible for a 10% parking reduction under the City's Parking Policy 6.7. Also, as the subject site is located within 400m of the high frequency bus route shown in Figure 1 of the Policy 6.7 and bus services identified in section 8 of this report, a further 10% reduction is applicable. Accordingly, 31 bays are required after the application of the Performance Criteria in Policy 6.7.

A total of 25 car parking spaces (including one ACROD bay and one turn around bay) are provided which represents a theoretical shortfall of 7 bays from City of Stirling requirements.

The City of Stirling Policy 6.2: *Bicycle Parking Policy* specifies that the following bicycle parking requirement:

- 1 space per 400 square meter of the gross floor area (GFA).

The Policy requires 4 bicycle parking spaces. However, to qualify for a 10% reduction in car parking requirements, provision of 9 bicycle parking is required.

Further assessment of the actual parking demand for the CCC has been undertaken in the following section of the report.

3.3 Estimated Actual Parking Demand Based on Trip Generation

Transcore has undertaken a parking analysis based on the anticipated peak hour traffic generation of the proposed CCC, to estimate the actual peak parking demand of the CCC.

Section 6.1 of this report details the anticipated peak hour traffic generation of the proposed CCC. It was established that the calculated morning peak hour trip generation of the proposed child care centre is 44 vehicles in and 40 vehicles out of the car park. (afternoon peak hour is expected to generate less trips). Please refer to section 5 and 6 of the report for more details on peak hour times and traffic generation. This represents a potential 44 vehicles using the child care centre car park during the peak hour.

The RTA NSW "*Guide to Traffic Generating Developments*" section on childcare centres provides commentary on parking length of stay. It should be noted that the commentary provided in the RTA guide is based on surveys of actual parking activity undertaken in New South Wales. The RTA guide indicates the average recorded length of stay for all surveyed child care centres of 6.8 minutes.

Conservatively assuming that the length of stay for pick-up/drop-off parking for the proposed child care centre is 10 minutes it is calculated that each parking bay can accommodate a turnover of up to 6 vehicles per hour.

It is therefore established that at least 8 bays ($44/6 = 7.3$) should be reserved for drop-off and pick-up activities during peak hour periods based on 112 children. However, to have

more flexibility for drop off and pick up activity, it is recommended that 10 bays should be allocated for this purpose and 14 bays should be allocated to staff. Under this scenario, the balance of staff members should arrive at the CCC by public transport, walking, cycling or car share/lift.

In addition to the onsite parking supply for the CCC, there are 18 public on street parking bays provided within the southern verge of Porter Street, south of the subject site and around 8 public on-street parking bays west of the subject site which can also be used.

4.0 Provision for Service Vehicles

It is anticipated that the proposed development will generate a small volume of service vehicle traffic, primarily associated with deliveries for the child care centre. It is recommended that smaller vehicles such as vans to be used for deliveries. Delivery vehicles may park for a short time within the car park for loading and unloading activities. Any such service vehicle should access the site outside the peak operating conditions.

With respect to waste collection, waste bins are wheeled out on the day of the collection for verge collection on Porter Street.

5.0 Hours of Operation

The proposed CCC is proposed to operate during weekdays between 6:30AM and 6:00PM.

6.0 Daily Traffic Volumes and Vehicle Types

In order to assess the potential traffic impact from the proposed CCC, a traffic generation and distribution exercise was undertaken. The aim of this exercise was to establish the traffic that would be generated from the proposed development and to establish the level of traffic increases on the surrounding road network.

6.1 Traffic Generation/Distribution

In order to establish an accurate traffic generation rate for this Centre, traffic count surveys undertaken by Transcore at similar Centres in the Perth metropolitan area, were sourced.

Discussions with the respective centre managers revealed that the peak drop-offs and pick-ups for each of these centres occur between the hours of 7:00AM– 10:00AM and 3:00PM–6:00PM.

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

- ✚ 7:00AM–10:00AM: 1.58 trips per child (52% in/48% out); and,
- ✚ 3:00PM–6:00PM: 1.67 trips per child (47% in/53% out).

From this information, the traffic generation rate for the combined period of 7:00AM– 10:00AM and 3:00PM–6:00PM was calculated as 3.25 trips per child. To convert this figure to a daily generation rate, this figure was increased to 3.5 trips per child to account for any trips outside of the surveyed times. It was assumed that the daily in and out split for vehicle trips was 50/50.

Furthermore, the following average peak hour generation rates were established from the surveys for the Child Care Centres:

- ✚ Morning peak hour: 8:00AM–9:00AM: 0.75 trips per child (52% in/48% out); and,
- ✚ Afternoon peak hour: 4:30PM–5:30PM: 0.49 trips per child (43% in/57% out).

Comparison of the six-hour generation rates and the peak hour generation rates confirms that the distribution of traffic from these Centres is spread over the peak periods and that full concentration of traffic does not occur in the peak hour. The AM peak hour represents 47% of the 3-hour AM peak period traffic generation and the typical school PM and road network PM peak hours represent 36% and 29% of the 3-hour PM peak period traffic generation, respectively. As such, childcare centres operate quite differently to schools as their peak period is spread out.

Accordingly, the following number of trips was estimated for the proposed Child Care Centre, assuming a maximum scenario of 112 children being present (i.e. Centre at full capacity):

- ✚ AM peak hour: 84 trips generated (44 in/ 40 out);
- ✚ PM peak hour: 55 trips generated (24 in / 31 out); and,
- ✚ Daily traffic generation: 392 trips generated (196 in / 196 out).

6.2 Traffic Flow

Considering that all access to the site is available solely via Porter Street, it is concluded that all of the estimated development-generated traffic would arrive/depart to and from the site via Porter Street and then dissipate throughout the local road network.

As with similar centres, an overwhelming majority of patrons would originate from within the local area with only a marginal number of patrons arriving from afar.

Hence, based on the general spatial distribution of residential developments in the immediate area (existing and future), permeability of the local road network and the assumption that all traffic attracted to the proposed Centre would arrive/depart via Porter Street, the Centre's traffic distribution adopted for this analysis is as follows:

- ✚ 90% to/from the residential areas north/south/west of the subject site; and,
- ✚ 10% to/from the residential areas east of the subject site;

Figure 2 illustrates trip generation and traffic distribution over the development crossover.



Figure 2. Estimated traffic movements for the proposed development – morning peak, afternoon peak and total daily trips

The vehicles expected to access the subject site are likely to be private passenger cars with a portion of 4WD.

6.3 Impact on Surrounding Roads

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

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore any section of road where the development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The proposed development will not increase traffic flows anywhere near the quoted WAPC threshold to warrant further detailed analysis. The proposed development will not increase traffic on any lanes on the surrounding road network by more than 100vph, therefore the impact on the surrounding road network is insignificant. Further, the standard and classification of the surrounding road network is such that it can accommodate the CCC traffic comfortably.

7.0 Traffic Management on the Frontage Streets

North Beach Road west of the subject site is a two-lane divided road with a footpath along both sides of the road. North Beach Road is classified as *Distributor B* in the Main Roads WA *Metropolitan Functional Road Hierarchy* and operates under a speed limit of 60km/h. The existing traffic counts sourced from Main Roads WA indicate that North Beach Road in this vicinity carried about 11,500 vehicle per day (average weekday) in 2018.

Porter Street south of the subject site is a two-lane undivided street with a footpath along the southern side of the road. Porter Street is classified as *Access Road* in the Main Roads WA *Metropolitan Functional Road Hierarchy* and operates under a speed limit of 50km/h.

Porter Street and **North beach Road** form a roundabout intersection at the south-west corner of the subject site.

8.0 Public Transport Access

Bus routes 424 and 427 are the nearest bus service which runs to the west of the subject site. Those routes run from the subject site to Karrinyup Bus Station and to Stirling train station. Routes are shown in **Figure 3**.



Figure 3: Existing bus services (source: TransPerth)

9.0 Pedestrian Access

Pedestrian access to the site will be available from the constructed pedestrian paths on the surrounding road network.

10.0 Cycle Access

The subject site has direct cycle access to Perth Bicycle Network (PBN) –via continuous signed route NW7 to the south of the subject site. Please refer to Perth’s Bicycle Network map illustrated in **Figure 4**.

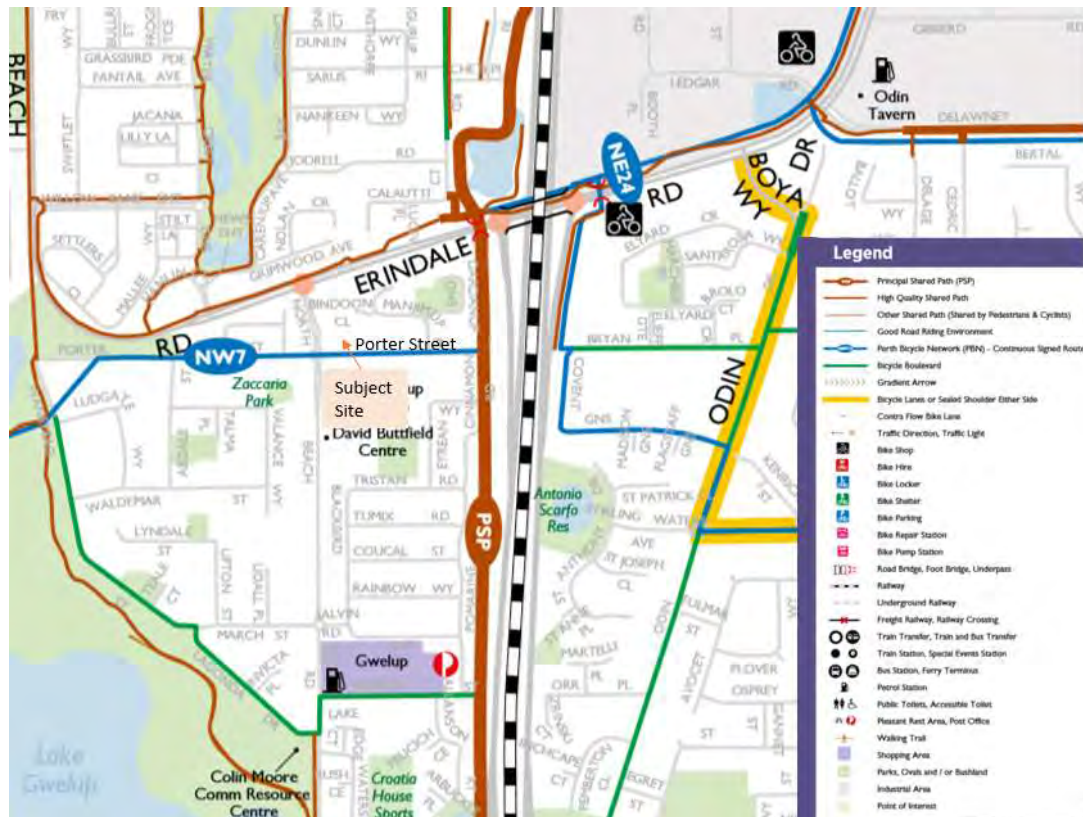


Figure 4: Extract from Perth Bicycle Network (Department of Transport)

11.0 Site Specific Issues

The onsite parking supply for the CCC does not meet the requirements of Policy 6.7, however assessment of the actual parking demand demonstrates that the onsite parking supply should meet the typical parking demand.

12.0 Safety Issues

No specific safety issues have been identified for this proposed Child Care Centre.

13.0 Conclusions

This Transport Impact Statement Report provides information on the proposed Child Care Centre to be located at 50-52 Porter Street, Gwelup, City of Stirling.

The Centre is proposed to cater for 112 children with a total of 22 staff members.

Vehicle access to and from the site will be via a single crossover on Porter Street which leads to 25 on-site parking bays (including one ACROD bay and one turn around bay). The proposed location of the crossover satisfies the minimum separation to the roundabout in accordance with Main Roads WA Driveway Policy guidelines.

Total parking spaces required for the proposed CCC is 31 in accordance with requirements of City Parking Policy 6.7. This represents a theoretical shortfall of 7 bays from City of Stirling requirements. However, actual parking demand assessment suggest that 10 bays should be allocated for drop off/pick up activities and 14 bays should be allocated to staff. The balance of staff members should arrive at the CCC by public transport, walking, cycling or car share/lift.

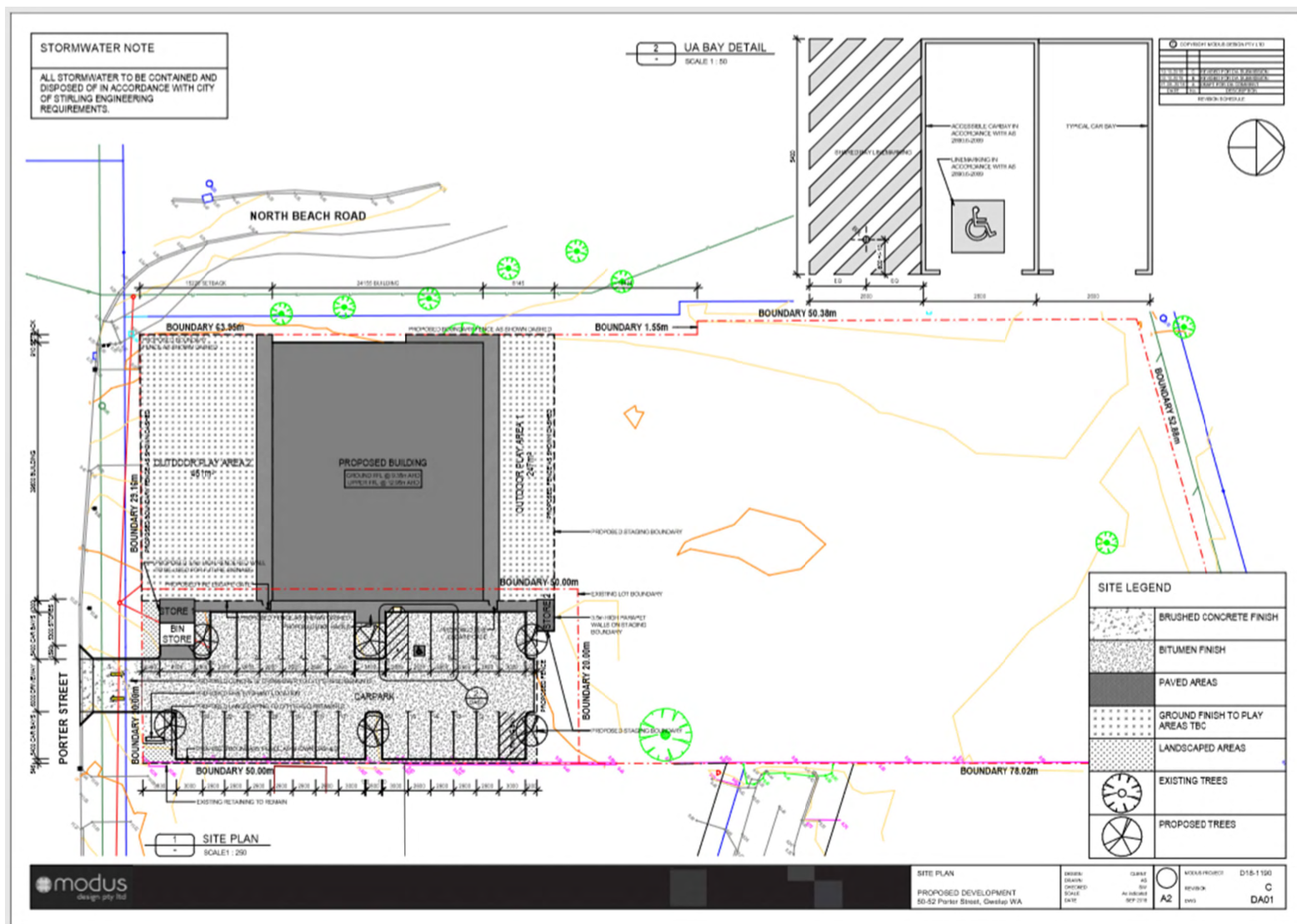
In addition to the onsite parking supply for the CCC, there are 18 public on street parking bays are provided within the southern verge of Porter Street.

The traffic analysis undertaken in this report shows that the traffic generation of the proposed development would have insignificant impact on the surrounding road network.

It is concluded that the findings of this Transport Impact Statement are supportive of the proposed Child Care Centre.

Appendix A

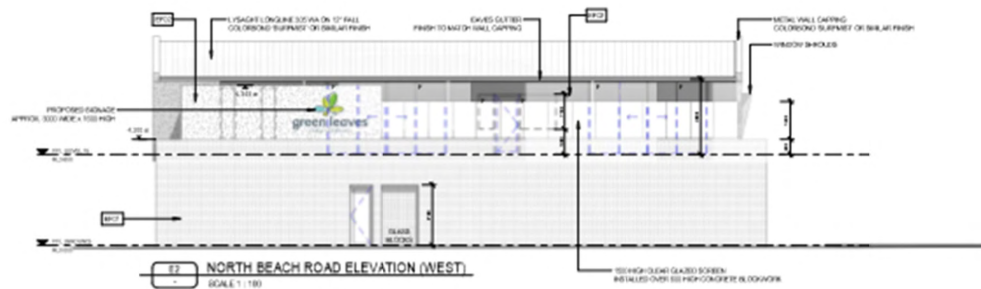
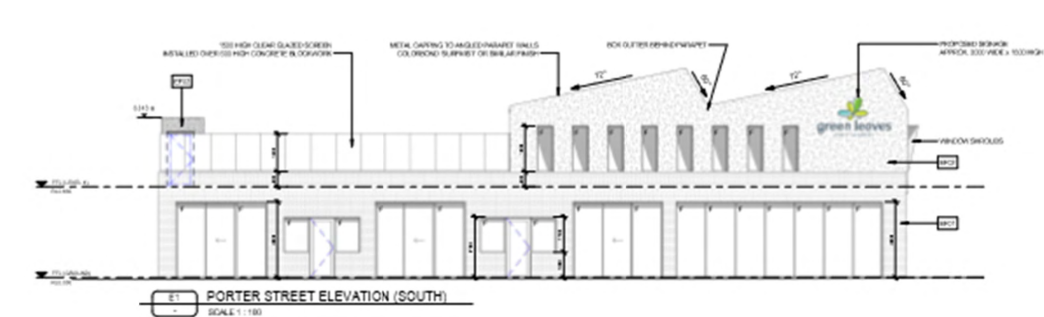
PROPOSED DEVELOPMENT PLAN



GROUND FLOOR PLAN

PROPOSED DEVELOPMENT
60-62 Porter Street, Quekwap VIA

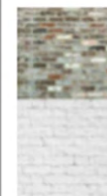
UNIT NO.	BR	BATH	CL	STAIRS
1	1	1	1	1
2	1	1	1	1
3	1	1	1	1
4	1	1	1	1
5	1	1	1	1
6	1	1	1	1
7	1	1	1	1
8	1	1	1	1
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10	1	1	1	1
11	1	1	1	1
12	1	1	1	1
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58	1	1	1	1
59	1	1	1	1
60	1	1	1	1
61	1	1	1	1
62	1	1	1	1



CEILING NOTE

PROVIDE SUSPENDED CEILINGS TO SLEEP ROOMS, PREP ROOMS AND ABUTMENTS ONLY.
UNLINED CEILINGS TO ALL OTHER AREAS.

EXTERNAL FINISHES



EP01
RECYCLED BRICKWORK WITH
DISTRESSED FINISH

EP02
PAINTED BRICKWORK
COLOUR 'SURFIMET' OR SIMILAR

NOTE: ALL WINDOWS FRAMES, DOOR FRAMES AND WINDOW SHROUDS TO BE POWDERCOATED 'MONUMENT'



City of Stirling
20 Nov 2018
RECEIVED

PROPOSED CHILD CARE CENTRE

**50 – 52 PORTER STREET
GWELUP**

ENVIRONMENTAL ACOUSTIC ASSESSMENT

NOVEMBER 2018

OUR REFERENCE: 23683-1-18210



DOCUMENT CONTROL PAGE

ENVIRONMENTAL ACOUSTIC ASSESSMENT
CHILD CARE CENTRE - GWELUP

Job No: 18210

Document Reference : 23683-1-18210

FOR

MODUS DESIGN Pty Ltd

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This report has been prepared in accordance with the scope of services and on the basis of information and documents provided to Herring Storer Acoustics by the client. To the extent that this report relies on data and measurements taken at or under the times and conditions specified within the report and any findings, conclusions or recommendations only apply to those circumstances and no greater reliance should be assumed. The client acknowledges and agrees that the reports or presentations are provided by Herring Storer Acoustics to assist the client to conduct its own independent assessment.

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APPENDICIES

A	Plans
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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 50 – 52 Porter Street, Gwelup.

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 :

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

We note that from recent 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 are attached in Appendix A.

2. SUMMARY

An environmental noise assessment has been undertaken for the noise received at the surrounding residences from the proposed child care centre to be located at 50-52 Porter Street, Gwelup. It is understood that the child care centre would operate between 7am and 7pm. Thus, noise emissions from the premises need to comply with the assigned day 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.

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

Finally, although at this stage of the design process the mechanical services have not been finalised, based on the possible location of the condensing units, noise received at the neighbouring premise would also comply with the assigned noise level.

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.

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 FACILITY

The neighbouring residences of concern are shown in Figure 3.1. The Influencing Factor at the neighbouring residences has been determined to be either +4 or +6 dB, as outlined in Table 3.3 below.

TABLE 3.3 – INFLUENCING FACTORS

Influencing Factor Parameter	Influencing Factor (dB)	
	Residences with IF of +4 dB	Residences with IF of +6 dB
Major Road within inner circle	-	-
Major Road within outer circle	+2 (Michell Freeway)	+2 (Michell Freeway)
Secondary Road within inner circle	+2 (North Beach Road)	+2 (Erindale Road) +2 (North Beach Road)
Commercial Premises within the inner	0.4	0.4
Commercial Premises within the outer	0	0
TOTAL IF	+4.4 (rounded down to +4)	+6.4 (rounded down to +6)

Based on the above influencing factors, the assigned outdoor noise levels for the neighbouring residential locations would be as listed in Tables 3.4 and 3.5.

**TABLE 3.4 - ASSIGNED OUTDOOR NOISE LEVEL
(INFLUENCING FACTOR OF +4 dB)**

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	49	59	69
	0900 - 1900 hours Sunday and Public Holidays	44	54	69
	1900 - 2200 hours all days	44	54	59
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	39	49	59

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 3.5 - ASSIGNED OUTDOOR NOISE LEVEL
(INFLUENCING FACTOR OF +6 dB)**

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.

4. PROPOSAL

From information supplied, we understand that the child care centre normal hours of operations would be between 7:00am and 7:00pm, Monday to Friday (closed on public holidays). It is understood that the proposed childcare centre will cater for a maximum of 112 children, including a number of babies.

From information provided we understand the outdoor area to the north of the development would be used for babies, with the other outdoor areas to the south and first floor for other children.

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 in the sound power levels listed in Tables 4.1 and 4.2.

TABLE 4.1 – GENERAL SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Children Playing	83 (per 10 children)
Air Conditioning Condensing Units	4 @ 68
Cars moving	79
Car Start	85
Car Door	87

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

- | | | |
|-------------------|---|---|
| L _{A10} | - | Mechanical services. |
| L _{A1} | - | Car Movements, ordering speaker and voices. |
| 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. At this stage of the project, the mechanical service has not been designed. Therefore, the noise sources have been based on designs used for the same or similar developments.
- 2 From information received, we understand that the mechanical services would, except for one unit that would be located on the southern side of the first floor store, be located on the western side of the child care centre at ground level.
- 3 The noise modelling includes the boundary fencing around the proposed development. It is noted that in this case, colourbond fences are acceptable for this application.
- 4 The outdoor area to the north side of the child care centre would be for small groups of babies. The noise emission from babies is minimal. However, to be conservative, noise modelling included a group of babies with a sound power level of 80 dB(A).
- 5 Given the size of the outdoor play area, acoustic modelling of outdoor play noise was made, based on 30 children playing within the ground floor outdoor play area to the south; and another 30 children within the first floor outdoor play area at the one time. This utilising 6 groups of 10 children with sound power levels distributed as plane sources, plus 1 group of babies.
- 6 Where residences have been grouped, (ie residence to west with IF of +6 and to south west with IF of +4; and possible residence to north) modelling was undertaken to all residences. However, to simplify the assessment, the results for the worst case location have been used.

- 7 It is noted that the residences to the west, are 2 storey, thus, calculations were undertaken to both the ground and first floors. Similarly, it has been assumed that for the possible future residences to the north, that these could be 2 storeys, and again calculation were undertaken for both the ground and first floors. As noted above, to simplify the assessment, only the results for the worst case location have been reported.

6. RESULTS

The results of the noise modelling are listed in Table 5.1.

TABLE 5.1 – CALCULATED NOISE LEVELS

Location	Noise Source / Calculated Noise Levels (dB(A))				
	Outdoor Play	Mechanical services	Car Movement	Car Start	Car Door
Residence to West (IF = +4 dB)	28	26 (31)	28 (33)	30 (35)	30 [40]
Residence to West (IF = +6 dB)	27	28 (33)	27 (32)	28 (33)	28 [38]
Possible residence to North	46	34 (39)	46 (51)	50 (55)	51 [61]
Residence to North East	39	13 (18)	39 (44)	42 (47)	43 [53]
Residence to East	40	12 (17)	40 (45)	43 (48)	44 [54]
Residence to South West (IF = +4 dB)	30	26 (31)	30 (35)	33 (38)	33 [43]

() Includes +5 dB(A) penalty of a tonal component

[] Includes +10 dB(A) penalty for impulsiveness

7. ASSESSMENT

Given the above possible noise sources, we believe that assessments of the following scenarios are required.

Again, it is noted that to simplify the analysis only the assessment of the worst case noise level associated with noise source has been assessed (ie; if compliance is achieved at the worst case, then compliance would be achieved at all other locations). 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 summarises the applicable Assigned Noise Levels, and assessable noise level emissions associated for the scenarios associated with the proposed child care development.

**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)
Residence to West (IF = +4 dB)	28	Day Period	49	Complies
Residence to West (IF = +6 dB)	27	Day Period	51	Complies
Possible residence to North	46	Day Period	51	Complies
Residence to North East	39	Day Period	51	Complies
Residence to East	40	Day Period	51	Complies
Residence to South West (IF = +4 dB)	30	Day Period	49	Complies

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

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L _{A10} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residence to West (IF = +4 dB)	31	Day Period	49	Complies
Residence to West (IF = +6 dB)	33	Day Period	51	Complies
Possible residence to North	39	Day Period	51	Complies
Residence to North East	18	Day Period	51	Complies
Residence to East	17	Day Period	51	Complies
Residence to South West (IF = +4 dB)	31	Day Period	49	Complies

7.2 L_{A1} NOISE EMISSIONS

Table 7.3 summarises the applicable Assigned Noise Levels, and assessable noise level emissions for each identified case that needed to be considered.

**TABLE 7.3 – ASSESSMENT OF L_{A1} NOISE LEVEL
FOR CAR MOVEMENTS**

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L _{A1} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residence to West (IF = +4 dB)	33	Day Period	59	Complies
Residence to West (IF = +6 dB)	32	Day Period	61	Complies
Possible residence to North	51	Day Period	61	Complies
Residence to North East	44	Day Period	61	Complies
Residence to East	45	Day Period	61	Complies
Residence to South West (IF = +4 dB)	35	Day Period	59	Complies

7.3 L_{AMAX} NOISE EMISSIONS

Tables 7.4 and 7.5 summarises the applicable Assigned Noise Levels, and assessable noise level emissions for each identified case that needed to be considered.

**TABLE 7.4 – ASSESSMENT OF L_{AMax} NOISE LEVEL
FOR CAR STARTS**

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L _{A1} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residence to West (IF = +4 dB)	35	Day Period	69	Complies
Residence to West (IF = +6 dB)	33	Day Period	71	Complies
Possible residence to North	55	Day Period	71	Complies
Residence to North East	47	Day Period	71	Complies
Residence to East	48	Day Period	71	Complies
Residence to South West (IF = +4 dB)	38	Day Period	69	Complies

**TABLE 7.5 – ASSESSMENT OF L_{AMax} NOISE LEVEL
FOR CAR DOORS**

Location	Assessable Noise Level, dB(A)	Applicable Times of Day	Applicable Assigned L _{A1} Noise Level (dB)	Exceedance to Assigned Noise Level (dB)
Residence to West (IF = +4 dB)	40	Day Period	69	Complies
Residence to West (IF = +6 dB)	38	Day Period	71	Complies
Possible residence to North	61	Day Period	71	Complies
Residence to North East	53	Day Period	71	Complies
Residence to East	54	Day Period	71	Complies
Residence to South West (IF = +4 dB)	43	Day Period	69	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.

APPENDIX A

PLANS

STORMWATER NOTE

ALL STORMWATER TO BE CONTAINED AND
DISPOSED OF IN ACCORDANCE WITH CITY
OF STIRLING ENGINEERING
REQUIREMENTS.

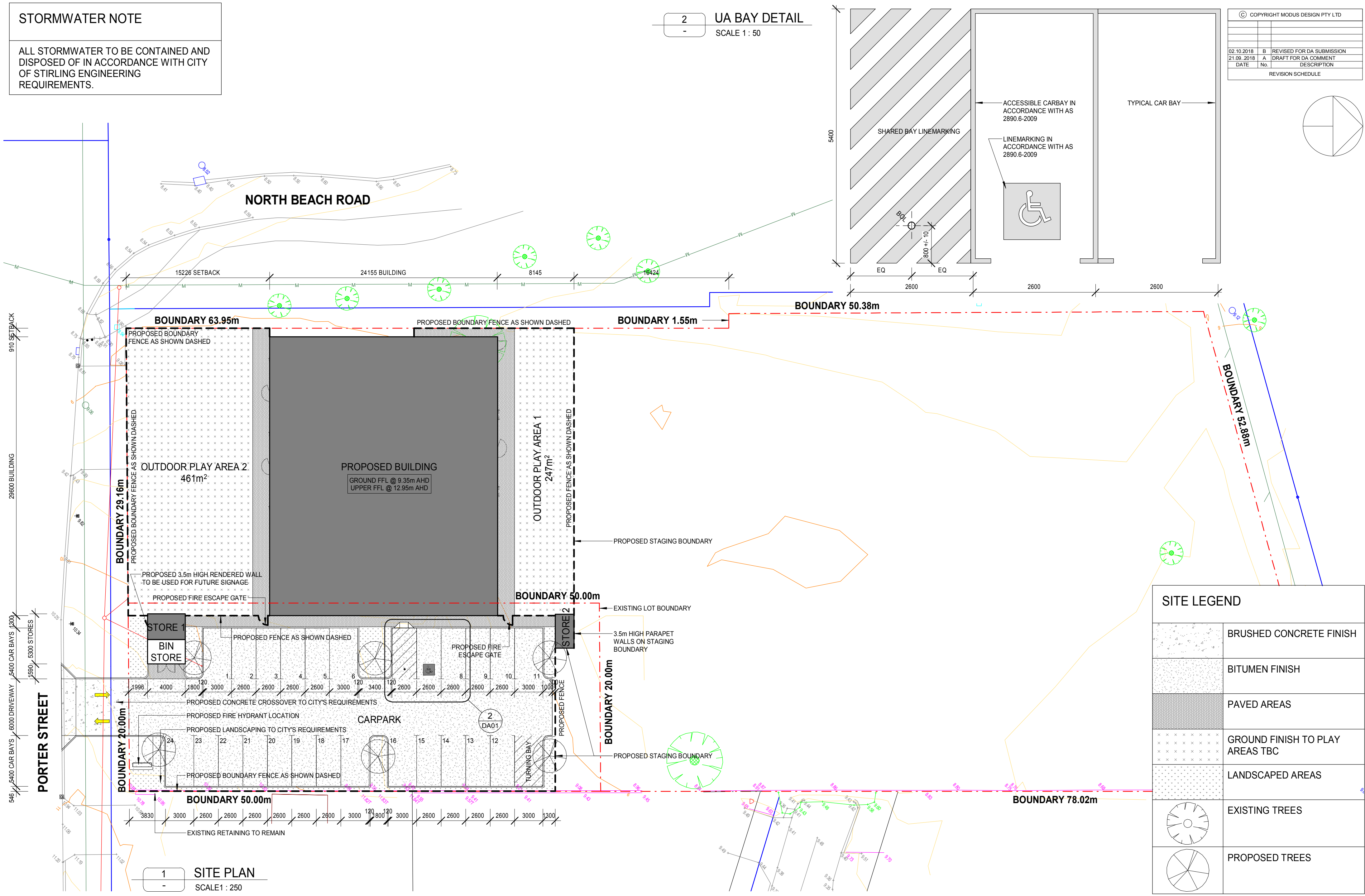
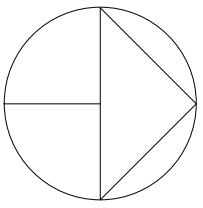
2

UA BAY DETAIL

SCALE 1 : 50

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21.09.2018	A	DRAFT FOR DA COMMENT
DATE	No.	DESCRIPTION
REVISION SCHEDULE		



1

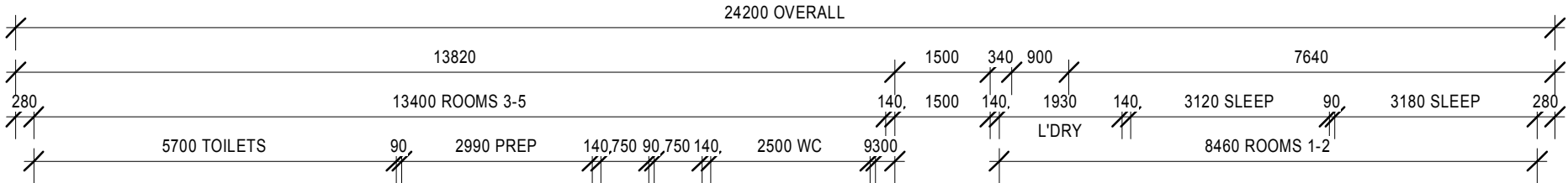
SITE PLAN

SCALE 1 : 250

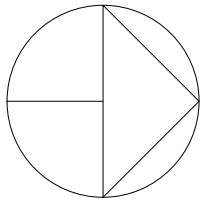
SITE LEGEND

	BRUSHED CONCRETE FINISH
	BITUMEN FINISH
	PAVED AREAS
	GROUND FINISH TO PLAY AREAS TBC
	LANDSCAPED AREAS
	EXISTING TREES
	PROPOSED TREES

AREA SCHEDULE (Per Area Name)		
Level	Name	Area
Not Placed	COVERED ENTRY	0 m²
FFL (GROUND)	GROUND FLOOR	716 m²
FFL (GROUND)	STORE 1	11 m²
FFL (GROUND)	BIN STORE	10 m²
FFL (GROUND)	STORE 2	7 m²
FFL (LEVEL 1)	UPPER FLOOR	293 m²
FFL (LEVEL 1)	OUTDOOR PLAY AREA	369 m²
FFL (LEVEL 1)	NORTHERN PLANTER	14 m²
FFL (LEVEL 1)	SOUTHERN PLANTER	30 m²
FFL (LEVEL 1)	ESCAPE STAIRCASE	14 m²
Total Area		1465 m²



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BOUNDARY 63.95m



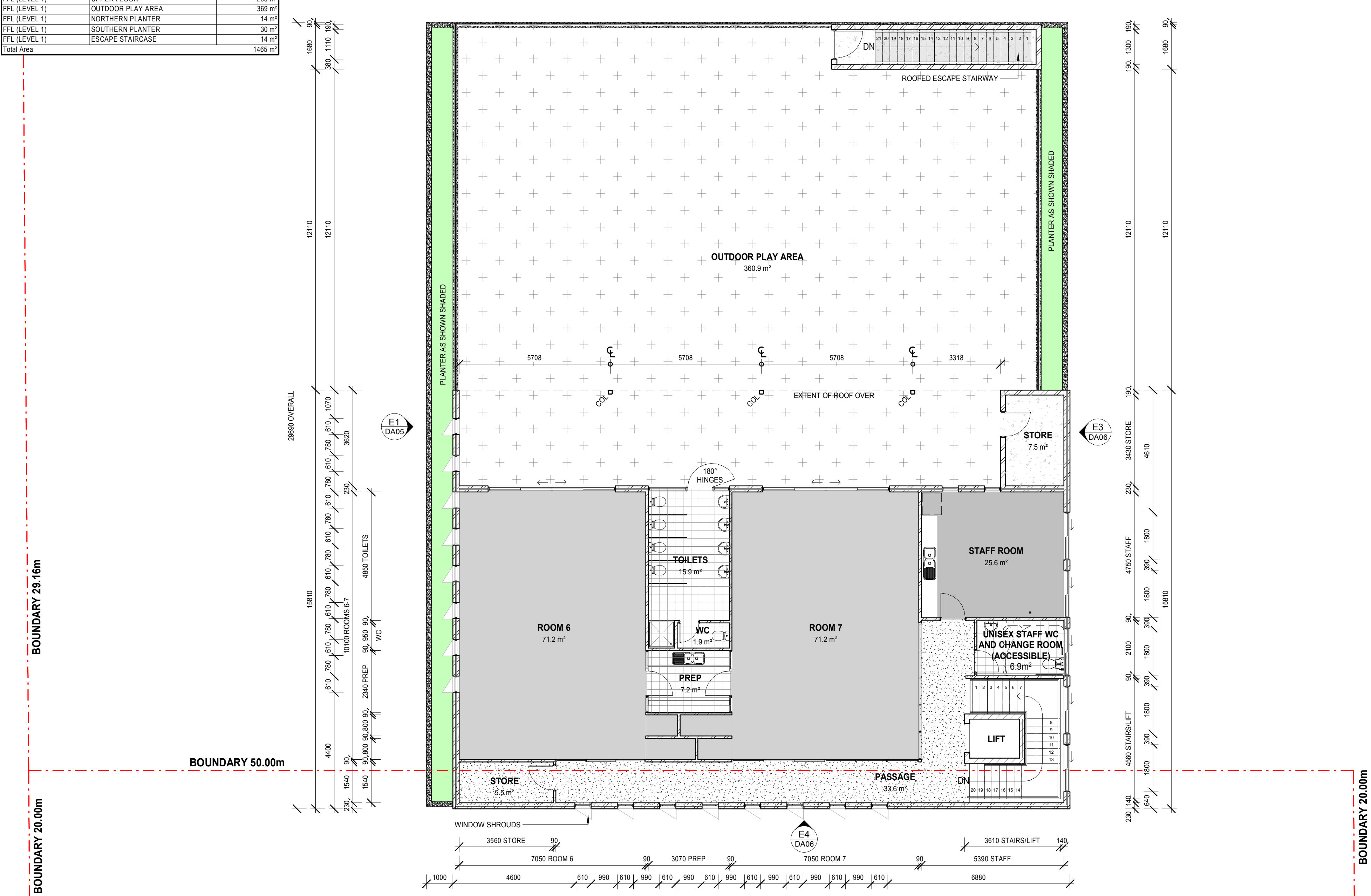
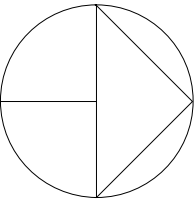
BOUNDARY 29.16m

BOUNDARY 50.00m

BOUNDARY 20.00m

AREA SCHEDULE (Per Area Name)		
Level	Name	Area
Not Placed	COVERED ENTRY	0 m²
FFL (GROUND)	GROUND FLOOR	716 m²
FFL (GROUND)	STORE 1	11 m²
FFL (GROUND)	BIN STORE	10 m²
FFL (GROUND)	STORE 2	7 m²
FFL (LEVEL 1)	UPPER FLOOR	293 m²
FFL (LEVEL 1)	OUTDOOR PLAY AREA	369 m²
FFL (LEVEL 1)	NORTHERN PLANTER	14 m²
FFL (LEVEL 1)	SOUTHERN PLANTER	30 m²
FFL (LEVEL 1)	ESCAPE STAIRCASE	14 m²
Total Area		1465 m²

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Fire Protection
Association Australia
Life. Property. Environment.

City of Stirling
14 Feb 2019
RECEIVED



BPAD
Bushfire
Planning & Design

Bushfire Management Plan Coversheet

This Coversheet and accompanying Bushfire Management Plan has been prepared and issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme.

Bushfire Management Plan and Site Details

Site Address / Plan Reference: 50-52 Porter Street

Suburb: Gwelup

State: WA

P/code: 6018

Local government area: City of Stirling

Description of the planning proposal: Development Application

BMP Plan / Reference Number: MWE18673.01 R001

Version: Rev 0

Date of Issue: 23/01/2019

Client / Business Name: MSP Gwelup Pty Ltd

Reason for referral to DFES

Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?

☐
☒

Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the BPC elements)?

☐
☒

Is the proposal any of the following special development types (see SPP 3.7 for definitions)?

Unavoidable development (in BAL-40 or BAL-FZ)

☐
☒

Strategic planning proposal (including rezoning applications)

☐
☒

Minor development (in BAL-40 or BAL-FZ)

☐
☒

High risk land-use

☐
☒

Vulnerable land-use

☒
☐

If the development is a special development type as listed above, explain why the proposal is considered to be one of the above listed classifications (E.g. considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

Development Application for the construction of a Childcare Centre.

Note: The decision maker (e.g. local government or the WAPC) should only refer the proposal to DFES for comment if one (or more) of the above answers are ticked "Yes".

BPAD Accredited Practitioner Details and Declaration

Name	Accreditation Level	Accreditation No.	Accreditation Expiry
Linden Wears	Level 3	19809	June 2019
Company		Contact No.	
Strategen Environmental		9380 3100	

I declare that the information provided within this bushfire management plan is to the best of my knowledge true and correct

Signature of Practitioner

Date 23/01/2019



intelligent outcomes | respected experience

50 – 52 Porter Street, Gwelup

Bushfire Management Plan

Prepared for
MSP Gwelup Pty Ltd
by Strategen

January 2019



50 - 52 Porter Street, Gwelup

Bushfire Management Plan

Strategen is a trading name of
Strategen Environmental Consultants Pty Ltd
Level 1, 50 Subiaco Square Road Subiaco WA 6008
ACN: 056 190 419

January 2019

Limitations

Scope of services

This report ("the report") has been prepared by Strategen Environmental Consultants Pty Ltd (Strategen) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, Strategen has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen has also not attempted to determine whether any material matter has been omitted from the data. Strategen will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen. The making of any assumption does not imply that Strategen has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

Document control

Client: MSP Gwelup Pty Ltd

Report Version	Revision No.	Purpose	Strategen author	Reviewed by	Submitted to Client	
					Form	Date
Draft Report	A	For client review	Euan Sutherland	Linden Wears (BPAD19809)	Electronic (email)	18/01/2019
Final Report	0	Issued for use: to accompany DA	Euan Sutherland	Linden Wears (BPAD19809)	Electronic (email)	23/01/2019

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Appendix 1 APZ standards (Schedule 1)
Appendix 2 Vegetation plot photos and description
Appendix 3 City of Stirling Firebreak Notice (2018)

1. Proposal details

1.1 Proposal summary

Table 1 provides a summary of the proposed development. The site plan and proposed development is included in Figure 1 and 2.

A portion of the proposed development is designated as bushfire prone on the *Map of Bush Fire Prone Areas* (DFES 2018).

Table 1: Proposal summary

Site details	
Property address	50 and 52 Porter Street Gwelup
Lot size	0.6 ha
Landowner	MSP Gwelup Pty Ltd
Local government area	City of Stirling
Development application	
Proposed development	<p>Proposed construction of a double storey Childcare centre and associated carpark.</p> <p>The proposed development will comprise the following elements:</p> <ul style="list-style-type: none"> • Building 1 – Childcare centre (716 m²) • Two Ground floor outdoor play areas (461 m² and 247 m²) • Rooftop Outdoor Play Area (369 m²) • parking bays
Applicable policy and guidelines	<p><i>State Planning Policy 3.7 Planning in Bushfire Prone Areas</i> (SPP 3.7; WAPC 2015)</p> <p><i>Guidelines for Planning in Bushfire Prone Areas</i> (the Guidelines; WAPC 2017)</p>
Applicable Policy Measures of SPP 3.7	<p>Policy Measure 6.5 Information to accompany development applications</p> <p>Policy Measure 6.6 Vulnerable or high-risk land uses</p>
Requirements	<p>Bushfire Management Plan (BMP; this document)</p> <p>Bushfire Emergency Evacuation Plan (BEEP; refer to Strategen 2019)</p>

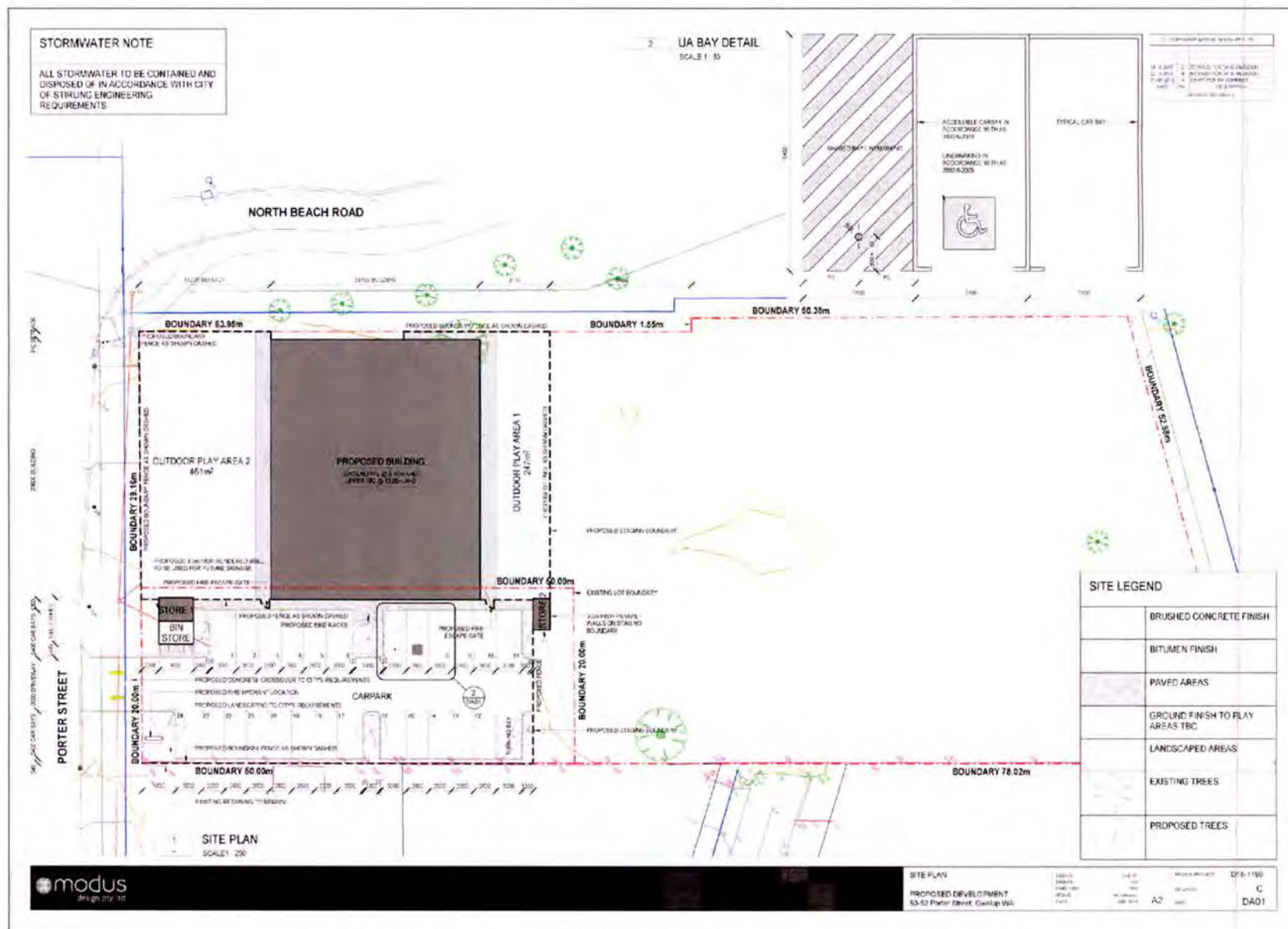
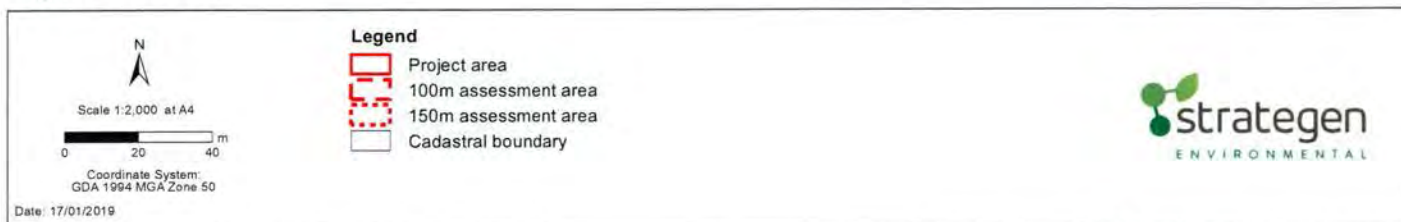




Figure 2: Site Plan



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Data source: Nearmap: Aerial image, flown 12/2018. Landgate: Cadastre, 07/2018. Created by: e.sutherland

2. Environmental considerations

2.1 Native vegetation – modification and clearing

As the proposal area is completely cleared the proposal will not result in clearing of any significant native vegetation. A search of publicly available environmental databases did not indicate the presence of any significant environmental values within or adjacent to the proposal area.

No revegetation is proposed as part of the proposal. Any landscaping proposed will consist of low threat and managed gardens and street scaping in accordance with *AS 3959—2009 Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2009) Clause 2.2.3.2 (f) and Schedule 1 of the Guidelines (refer to Appendix 1)

3. Bushfire assessment results

3.1 Assessment inputs

3.1.1 Effective slope

Strategen assessed effective slope under classified vegetation within the 150 metre (m) assessment area through on-ground verification on 13 December 2018 in accordance with AS 3959—2009 *Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2009). Results were cross-referenced with Department of Agriculture and Food WA 2 m contour data and are depicted in Figure 3.

All plots of classified vegetation within the assessment area were assessed as flat or upslope.

3.1.2 Vegetation classification

Strategen assessed effective slope and classified vegetation and exclusions within the 150 m assessment area through on-ground verification on 13 December 2018 in accordance with AS 3959 and the *Visual Guide for Bushfire Risk Assessment in Western Australia* (DoP, 2016). Georeferenced site photos and a description of the vegetation classifications and exclusions are contained in Appendix 2.

3.1.3 Summary of inputs

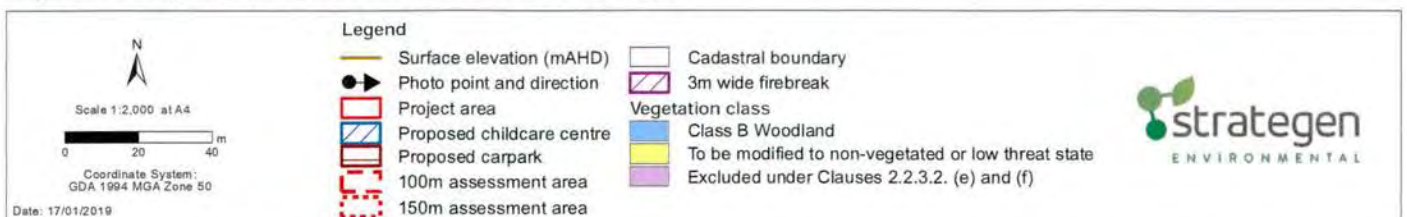
Figure 3 illustrates the anticipated post-development vegetation classifications and exclusions following completion implementation of low threat landscaping throughout the proposal area. The post-development vegetation classifications/exclusions and effective slope are summarised in Table 2.

Table 2: Summary of post-development vegetation classifications, exclusions and effective slope

Vegetation plot	Post-development vegetation classification	Effective slope	Comments
1	Class B Woodland	Flat/Upslope	Unmanaged verge along Erindale Road
2	Class B Woodland	Flat/Upslope	Unmanaged verge along Erindale Road
3	Class B Woodland	Flat/Upslope	Unmanaged verge along Erindale Road
4	Class B Woodland	Flat/Upslope	Unmanaged verge along Erindale Road
5	Exclusions 2.2.3.2 (e) and (f)	N/A	Non-vegetated areas and managed low threat vegetation/POS
6	Exclusions 2.2.3.2 (e) and (f)	N/A	Project area to be modified to non-vegetated or low threat vegetation



Figure 3: Vegetation Classification and Effective Slope



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Data source: Nearmap: Aerial image, flown 12/2018. Landgate: Cadastre, 07/2018. Created by: jrute

3.2 Assessment outputs

3.2.1 Bushfire Attack Level (BAL) contour assessment

Strategen has undertaken a BAL contour assessment in accordance with Method 1 of AS 3959 for the proposal area (Figure 4). The Method 1 procedure incorporates the following factors:

- state-adopted FDI 80 rating
- vegetation class
- effective slope
- distance maintained between proposed development areas and the classified vegetation.

The BAL rating gives an indication of the level of bushfire attack (i.e. the radiant heat flux) that may be received by proposed future development and subsequently informs the standard of building construction and/or setbacks required for proposed habitable development to potentially withstand such impacts.

The BAL contours are based on:

- the post-development vegetation class and effective slope observed at the time of inspection as well as consideration of the proposed on-site clearing extent, resultant vegetation exclusions and separation distances achieved in line with the Development Plan
- implementation and maintenance of the northern portion of the subject area in a low threat state until it is subject to development
- the implementation of a 14 m Asset Protection Zone (APZ) around the proposed development. The APZ will be maintained in a low threat state to the north by the landowner, and it is assumed that the council will continue to maintain the road verge to the west in a low threat state.

The results of the BAL contour assessment are detailed in Table 3 and illustrated in Figure 4. The highest BAL applicable to the proposed buildings and elements is BAL-12.5.

Table 3: BAL contour assessment results

Method 1 BAL determination				
Plot	Vegetation classification/exclusion clause	Effective slope	Separation distance	Highest BAL
1	Class B Woodland	Flat/Upslope	83 m	BAL-12.5
2	Class B Woodland	Flat/Upslope	84 m	BAL-12.5
3	Class B Woodland	Flat/Upslope	137	BAL-LOW
4	Class B Woodland	Flat/Upslope	109	BAL-LOW
5	Exclusions 2.2.3.2 (e) and (f)	N/A	N/A	N/A
6	Exclusions 2.2.3.2 (e) and (f)	N/A	N/A	N/A

Table 4 lists the BAL applicable to each building or element within the proposed development.

Table 4: BAL applicable to each building/ element

Building/ element	Initial BAL	APZ	Revised BAL
Building 1 (Childcare centre)	BAL-12.5	Entirety of subject lot	BAL-12.5

4. Identification of bushfire hazard issues

4.1 Bushfire context

The proposal area comprises cleared land with unmanaged roadside vegetation occurring to the north of the proposal area which has the potential to support short fire runs. Bushfire behaviour within the roadside vegetation to the north is unlikely to be significant but has the potential to result in elevated ember attack on the proposed development, particularly on days of extreme and catastrophic fire danger.

All other land within the proposal area and adjacent 150 m, is already excluded under Clauses 2.2.3.2 (e) or (f). A summary of these exclusions is provided as follows:

- existing non-vegetated land (i.e. existing buildings, roads, paths, etc) is excluded under Clause 2.2.3.2 (e)
- existing low threat managed land (i.e. road verges, vacant lots, managed gardens/landscaping, etc) is excluded under Clause 2.2.3.2 (f)

It is considered that the bushfire risk to the proposed development posed by these hazards can be managed through standard application of acceptable solutions under the Guidelines (see Table 5), as well as through a direct bushfire suppression response if required. On this basis, Strategen considers the bushfire hazards adjacent to the proposal area and the associated bushfire risks are readily manageable.

4.2 Bushfire hazard issues

The greatest permanent bushfire threat to the proposed development is from unmanaged vegetation within Erindale Road reserve to the north. Separation from these areas of vegetation is provided by an existing 3 m wide firebreak between the northern boundary and the classified vegetation, the remainder of the vacant block being maintained in a low threat state to the north and managed low threat road verge to the east.

While maintained in a low threat state, these areas will form a permanent and substantial buffer between the proposed development and classified vegetation.

If the roadside vegetation to the north of the proposal area subject to ongoing maintenance, the bushfire threat to the proposed development would be eliminated.

5. Assessment against the bushfire protection criteria

5.1 Compliance table

An acceptable solutions assessment against the bushfire protection criteria is provided in Table 5.

Table 5: Compliance with the bushfire protection criteria of the Guidelines

Bushfire protection criteria	Method of compliance	Proposed bushfire management strategies
	Acceptable solutions	
Element 1: Location	A1.1 Development location	The BAL contour map (Figure 4) demonstrates that through the implementation of a 14 m APZ and the landowner ensuring the remainder of the undeveloped lot is maintained in a low threat state, the highest BAL applicable to the building within the proposed development is BAL—12.5.
Element 2: Siting and design	A2.1 Asset Protection Zone	On completion of development, the entire subject lot is to be maintained in a low threat state with a 14 m APZ established in accordance with Schedule 1 of the Guidelines (refer to Appendix 1). In order to provide enough separation from the unmanaged woodland abutting the northern cadastral boundary, and to prevent the development of classifiable vegetation within the proposal area, the entirety of lot 50 is to be maintained in a low threat state, until such time as it is developed, and cannot become a bushfire hazard.
Element 3: Vehicular access	A3.1 Two access routes.	The existing road network will provide all occupants with the option of travelling to more than two different destinations. Porter Road east bound connects to North Beach Road. This connection allows for travel to Erindale Road to the north or Karrinyup Road to the south. In this regard, the proposed development is provided with at least two access routes which meets the requirements of Acceptable Solution A3.1.
	A3.2 Public road	N/A – no public roads are proposed as part of the development.
	A3.3 Cul-de-sac (including a dead-end-road)	N/A – no cul-de-sacs are proposed as part of the development and the proposal area is not serviced by an existing cul-de-sac.
	A3.4 Battle-axe	N/A – no battle-axes are proposed as part of the development and the proposal area is not serviced by an existing battle-axe.
	A3.5 Private driveway longer than 50 m	N/A – the proposed development is located within 50 m of a public road.
	A3.6 Emergency access way	N/A – the proposed development does not require Emergency Access Ways (EAWs) to provide through access to a public road.

Bushfire protection criteria	Method of compliance	Proposed bushfire management strategies
	Acceptable solutions	
	A3.7 Fire service access routes (perimeter roads)	
	A3.8 Firebreak width	
Element 4: Water	A4.1 Reticulated areas	The proposed development will be connected to the current reticulated water supply. Existing water hydrants are located at along Porter Road. The closet hydrant being located on 52 Porter Street, immediately to the front of the proposed development.
	A4.2 Non-reticulated areas	N/A – the proposed development is located within an existing reticulated area.
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A – the proposed development is located within an existing reticulated area.

6. Responsibilities for implementation and management of the bushfire measures

Implementation of the BMP applies to the developer, prospective landowners and the City of Stirling to ensure bushfire management measures are adopted and implemented on an ongoing basis. A bushfire responsibilities table is provided in Table 6 to drive implementation of all bushfire management works associated with this BMP.

Table 6: Responsibilities for implementation and management of the bushfire measures

Developer – prior to occupation of buildings	
No.	Implementation action
1	Establish the low threat vegetation state across the proposal area to establish the APZ in accordance with the BMP.
2	Adopt bushfire construction requirements of AS 3959 for all buildings to the relevant BAL identified in this BMP.
Landowner/occupier – ongoing	
No.	Management action
1	Maintain the Asset Protection Zone (APZ) and the remainder of Lot 50 to the dimensions and standards stated in the BMP.
2	Maintain buildings constructed in accordance with AS 3959 to the applicable standard.
3	Comply with the relevant local government annual firebreak notice issued under s33 of the Bush Fires Act 1954, if required..
Local government – ongoing	
No.	Management action
1	Maintain excluded areas of existing roads reserves in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959, including slashing/mowing of grassland and weeds to height of less than 100 mm.
2	Maintain firebreak within the road reserve directly north of the proposal area. This should be maintained in accordance with the City of Stirling's firebreak Notice.

7. References

- Department of Fire and Emergency Services (DFES) 2018, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from:
<https://maps.slip.wa.gov.au/landgate/bushfireprone/>, [04/01/2019].
- Department of Planning (DoP) 2016, *Visual guide for bushfire risk assessment in Western Australia*, Department of Planning, Perth.
- Standards Australia (SA) 2009, *Australian Standard AS 3959–2009 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.
- Strategen Environmental (Strategen) 2019, *Bushfire Emergency Evacuation Plan: 50-52 Porter Street, Gwelup*, Strategen, Perth.
- Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*, Western Australian Planning Commission, Perth.
- Western Australian Planning Commission (WAPC) 2016, *Planning Bulletin 111/2016 Planning in Bushfire Prone Areas*, Western Australian Planning Commission, Perth.
- Western Australian Planning Commission (WAPC) 2017, *Guidelines for Planning in Bushfire Prone Areas*, Version 1.3 August 2017, Western Australian Planning Commission, Perth.

Appendix 1
APZ standards (Schedule 1)

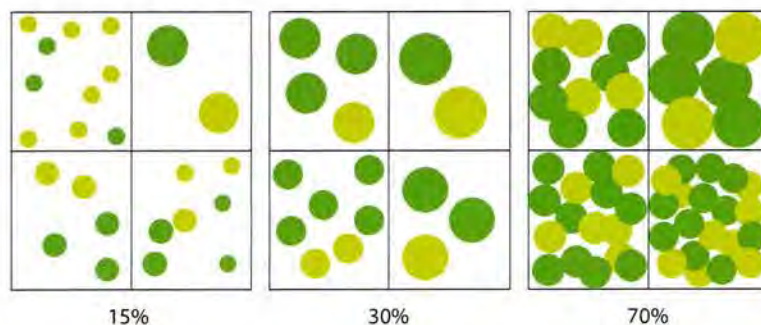
Contents	1	2	3	4	5	6	Appendices
	Introduction	Policy framework overview	Bushfire prone areas	Assessing bushfire risk in the planning context	Applying SPP 3.7	Roles and responsibilities	

ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

- **Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- **Fine Fuel load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- **Trees (> 5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.

Figure 18: Tree canopy cover – ranging from 15 to 70 per cent at maturity



- **Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- **Ground covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- **Grass:** should be managed to maintain a height of 100 millimetres or less.

Appendix 2
Vegetation plot photos and description

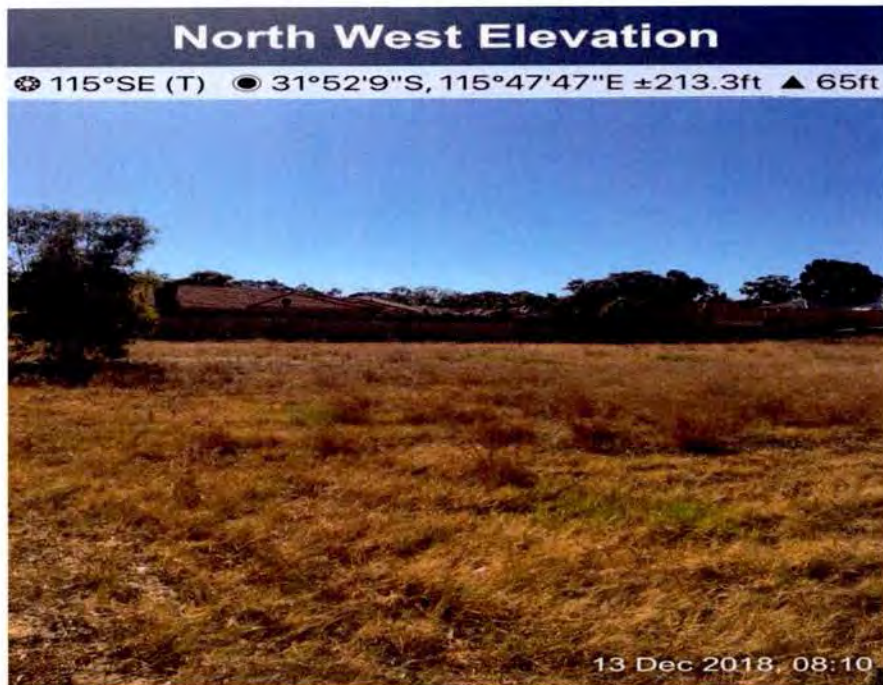


Photo ID: 1

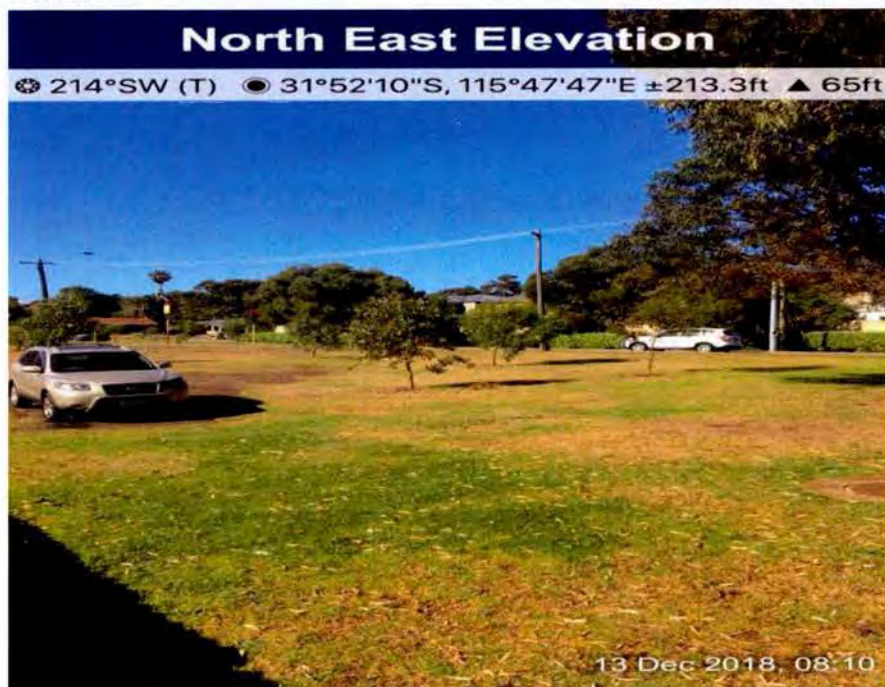


Photo ID: 2

Plot number		N/A
Vegetation classification	Pre-development	Excluded – Low threat (Clause 2.2.3.2 [f])
	Post-development	Excluded – Low threat (Clause 2.2.3.2 [f])
Description / justification		Northern portion of Lot 50 to be modified and maintained in a low threat state. Managed road verge in a low threat vegetated state.



Photo ID: 3



Photo ID: 4



Photo ID: 5



Photo ID: 6

Plot number		Plot 1
Vegetation classification	Pre-development	Class B Woodland
	Post-development	Class B Woodland
Description / justification		Unmanaged roadside vegetation with 3 m wide firebreak to the north of the proposal area. Photo demonstrates long unkept grass under relatively dense tree canopy.



Photo ID: 14



Photo ID: 15

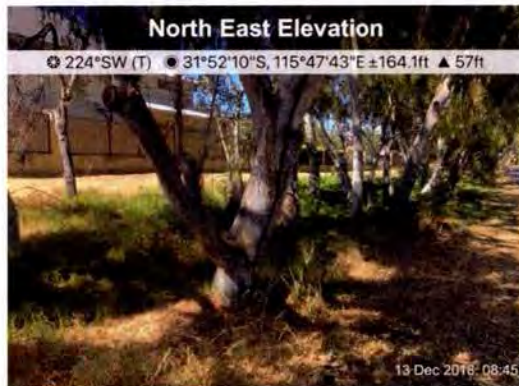


Photo ID: 16

Plot number		Plot 2
Vegetation classification	Pre-development	Class B Woodland
	Post-development	Class B Woodland
Description / justification		Unmanaged roadside vegetation to the north east of the proposal area.



Photo ID: 7



Photo ID: 8



Photo ID: 9



Photo ID: 10

Plot number		Plot 3
Vegetation classification	Pre-development	Class B Woodland
	Post-development	Class B Woodland
Description / justification		Unmanaged roadside vegetation broken up with a section of low threat non-vegetated land

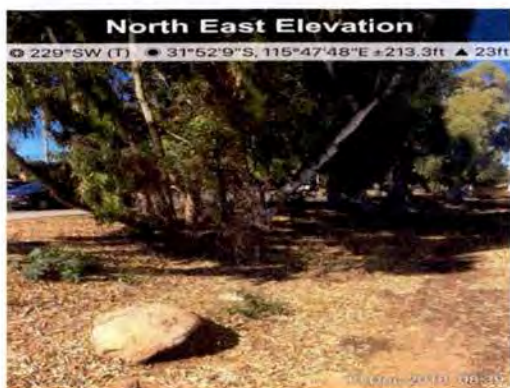


Photo ID: 11



Photo ID: 12



Photo ID: 13

Plot number		Plot 4
Vegetation classification	Pre-development	Class B Woodland
	Post-development	Class B Woodland
Description / justification		Unmanaged roadside vegetation

South Elevation

☉ 10°N (T) ● 31°52'12"S, 115°47'46"E ±98.4ft ▲ 40ft



Photo ID: 17

North West Elevation

☉ 138°SE (T) ● 31°52'12"S, 115°47'46"E ±164.1ft ▲ 40ft



Photo ID: 18

Plot number		N/A
Vegetation classification	Pre-development	Excluded – Non-vegetated & Low threat (Clauses 2.2.3.2 [e] and [f])
	Post-development	Excluded – Non-vegetated & Low threat (Clauses 2.2.3.2 [e] and [f])
Description / justification		Managed low threat vegetation and road/footpath

Appendix 3
City of Stirling Firebreak Notice (2018)



Administration Centre
25 Cedric Street Stirling WA 6021

Telephone (08) 9205 8555
Email stirling@stirling.wa.gov.au
Web www.stirling.wa.gov.au
Facebook /citystirlingwa

BUSH FIRES ACT 1954 FIREBREAK NOTICE 2018-2019

Notice to all property owners and occupiers within the City of Stirling.

Pursuant to Section 33 of the Bush Fires Act 1954, you are hereby required, on or before 30 November 2018 or within 14 days of becoming the owner or occupier after 30 November 2018, to remove from the land owned or occupied by you, all flammable material and/or clear firebreaks in accordance with the following land areas and thereafter to maintain that land or firebreaks up to and including 31 March 2019:

Where the area of the land is less than 2,000 square metres -

Slash/mow all grass to a height no greater than five (5) centimetres and remove all slashed matter and other flammable material from the land.

Where the area of the land is greater than 2,000 square metres -

Install a continuous firebreak of three (3) metres wide, clear of all bush and flammable material around all structures and along all external boundaries of the land.

Prune trees and shrubs and remove dead flammable material around all structures. Ensure the roofs, gutters and walls of all buildings on the land are free of flammable material.

These standards must be maintained until 31 March 2019.

'Flammable material' is defined for the purpose of the notice to include any mineral, vegetable, substance, object, thing or matter that may, or is likely to, catch fire and burn, or any other thing deemed by an authorised officer to be capable of combustion. It does not include green standing trees, growing bushes, and plants in gardens and/or lawns - unless deemed otherwise.

If it is considered impracticable to clear a firebreak or to remove flammable material from the land as required by this notice, an application to the City of Stirling in writing may be made prior to 14 November 2018 for permission to take alternative action to mitigate the fire hazard. Until written permission is received from the City, compliance with this notice is required.

Burning off without written authorisation is strictly prohibited within the City of Stirling.

The penalty for failing to comply with this notice is a fine of up to \$5,000. If the works are not carried out by the date required in this notice, the owner of the land is liable, whether prosecuted or not, to pay all costs for performing the works directed in this notice.

STUART JARDINE
Chief Executive Officer



intelligent outcomes | respected experience

Bushfire Emergency Evacuation Plan

50-52 Porter Street, Gwelup

Prepared for
MSP Gwelup Pty Ltd
by Strategen

January 2019

Bushfire Emergency Evacuation Plan

50-52 Porter Street, Gwelup

Strategen is a trading name of
Strategen Environmental Consultants Pty Ltd
Level 1, 50 Subiaco Square Road Subiaco WA 6008
ACN: 056 190 419

January 2019

Limitations

Scope of services

This report ("the report") has been prepared by Strategen Environmental Consultants Pty Ltd (Strategen) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, Strategen has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen has also not attempted to determine whether any material matter has been omitted from the data. Strategen will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen. The making of any assumption does not imply that Strategen has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

Document control

At any given time, there must be only one revision of the BEEP in circulation.

Revision No.	Revision Date	Purpose	Author	Reviewer
Rev A	18/01/2018	Draft for client review	Brodie Mastrangelo (Strategen; BPAD45985)	L Wears (Strategen; BPAD19809)
Rev 0	23/01/2018	For approval	Brodie Mastrangelo (Strategen; BPAD45985)	L Wears (Strategen; BPAD19809)

This Bushfire Emergency Evacuation Plan to be reviewed annually

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Appendix 1 On-site assembly point (evacuation) and on-site refuge (shelter-in-place)

1. Facility details

This Plan is for: A childcare centre at 50-52 Porter Street, Gwelup and has been designed to assist management to protect life and property in the event of a bushfire.

This Plan outlines procedures for **Evacuation** to enhance the protection of occupants from the threat of a bushfire, as well as **Sheltering-in-place** (remaining on site) as a last resort.

The Primary Action to follow under normal bushfire conditions is to:

EVACUATE ☒

Address	50-52 Porter Street, Gwelup
Contact person	To be established as the operator is yet to set up
Position / role	To be established as the operator is yet to set up
Phone number (BH)	To be established as the operator is yet to set up
Phone number (AH)	To be established as the operator is yet to set up
Type of facility	Childcare centre
Number of employees	Minimum of 6 and maximum of 22
Maximum number of children	112
Potential for occupants to have support needs	Yes
Description of support needs	Occupants will include pre-school children with undeveloped speech and mobility capabilities.

2. Bushfire risk analysis

Table 1 provides an assessment of the vulnerability of the development and location and extent of the bushfire hazard to understand how a bushfire may affect the facility and its occupants.

Analysis of the bushfire risk assessment has determined that the Primary Action should be to **Evacuate** occupants early to another location (primary off-site refuge) away from the effects of a bushfire. However, in the event that there is insufficient time to conduct an evacuation, **Shelter-in-place** procedures are to be carried out **as a last resort only**.

Table 1: Bushfire risk analysis

Bushfire risk element	Facility response
Type of facility	Childcare centre.
Type of occupants	Staff carers (adult) – 6 (minimum) to 22 (maximum) Parents (adult) – variable numbers Young children – 112 (maximum)
Needs of occupants	Given the nature of the proposed development, the anticipated occupants are expected to be a mixture of staff, parents and young children. Given the relative large number of young children and limited number of staff, evacuation of the childcare facility is likely to be prolonged as time is taken to organise and relocate the children. It is also likely that parents of the children may also be present to assist but will likely also return, or attempt to return, to the childcare centre to collect their children.
Accessibility	North Beach Road provides the site with access to the north and south, whilst Erindale Road provides the site with access to the east and Porter Street provides the site with access to the west. The site is located within a heavily urbanised environment dominated by built structure including roads, houses, shopping centres and industrial land uses within 5 km. The site is highly accessible from all directions and is located 400 m from Mitchell Freeway.
Quality of roads	Public roads servicing the site are well maintained, consisting of paved double lane roads, wider than 6 m. The proposed 50 m long private driveway and carpark servicing the site carpark has a 6 m wide crossover onto Porter Street and is a minimum of 6 m wide along its length.
Bushfire prone vegetation adjacent to transport routes	<ul style="list-style-type: none"> • Lake Gwelup Reserve approximately 500 m to the west and southwest, • Lake Karingup Country Club (golf course) approximately 500 m to the west • Mitchell Freeway reserve approximately 300 m to the east • Erindale Road reserve approximately 80 m to the north
Building condition / construction	As the childcare facility is located in an area with a BAL-12.5 rating, there is no BCA trigger to comply with any bushfire construction standards.
Defendable space	<p>The childcare centre will be surrounded by defendable space comprising:</p> <ul style="list-style-type: none"> • a 14 m wide APZ (Strategen 2019 BMP) over the adjacent land to the north comprising a proposed 8 m wide low threat outdoor play area and 6 m wide low threat area within the balance land. • 17 m wide non-vegetated bituminised carpark and existing residential development to the east • 50 m wide North Beach Road reserve and existing residential development maintained in a low threat state to the west • 20 m wide Porter Street reserve and existing residential development maintained in a low threat state to the south. <p>Implementation and ongoing maintenance is to be in accordance with the endorsed Bushfire Management Plan (BMP; Strategen 2018).</p>

2.1 Summary of bushfire risk

The facility will house young children with undeveloped motor skills. Access and egress via the public road network has potential to be restricted by a bushfire occurring within the Erindale Road reserve area, which is bordered by bushfire prone vegetation.

The childcare facility will be with sufficient, and well maintained, defensible space, in the form of APZs, to ensure it is well-placed to withstand bushfire attack which will likely only be from minor radiant heat and ember attack. The employees will be familiar with the area and evacuation procedures and will be available to organise children within the childcare building in the event of a bushfire emergency and assist them to evacuate, or assist parents to evacuate their children.

3. Roles and responsibilities

Table 2 and Table 3 outline the people and organisations who are responsible for implementing the emergency procedures in the event of a bushfire.

Table 2: Roles and responsibilities

Position	Name of person	Phone number

Table 3: Emergency contacts

Organisation	Office / contact	Information	Phone number / website
Local Fire Bridge	DFES Communications	Report a fire	000
Ambulance	Communications Centre	Report a medical emergency	000
Police	Communications Centre	Report other emergencies	000
Department of Fire and Emergency Services (DFES)	Communications Centre / website	Emergency warnings and incidents in local area	13 DFES (133 337) www.emergency.wa.gov.au
City of Stirling	Ranger and Emergency Services Coordinator	Evacuation centre and emergency management	(08) 9781 0444
Main Roads WA	Office / website	Road closures	138 138 www.mainroads.wa.gov.au
DFES State Emergency Service (SES)	Communications Centre	SES services	132 500

4. Bushfire preparation and awareness

4.1 Preparation

Preparation prior to, and during, the declared bushfire season is paramount to increasing the chance of surviving a bushfire event for a building and its occupants. The following provides a list of bushfire preparations that should be carried out within the facility prior to and during the bushfire season:

- ensure compliance with the City of Stirling annual firebreak notice
- ensure Asset Protection Zones are maintained to the standard and dimensions stated within the endorsed Bushfire Management Plan prepared by Strategen in 2019 to support the development application for the childcare centre
- ensure that this BEEP is reviewed and updated annually
- practice evacuation and shelter-in-place procedures as outlined within this BEEP
- ensure that an Evacuation Diagram is displayed within the facility and occupants are aware of the BEEP
- test any firefighting equipment present within the facility (e.g. fire hose reels, sprinklers)
- ensure compliance with Total Fire Bans.

4.2 Fire Danger Ratings

Fire Danger Ratings (FDRs) are issued by Department of Fire and Emergency Services (DFES) and provide advice about how dangerous a fire would be if one started on a particular day. An FDR of Catastrophic or Extreme means that a bushfire that starts is likely to be so intense that even well-prepared, well-constructed and actively defended homes may not survive. Under these conditions, DFES advice is to evacuate in the days or hours before a bushfire might threaten to increase the chances of survival.

Understanding the FDR categories and what they mean to the facility will help facility management to make decisions about what to do if a bushfire starts.

The FDR for your local area can be checked on the following websites:

- Emergency WA website (DFES): <https://www.emergency.wa.gov.au/#firedangerratings>
- Bureau of Meteorology website: <http://www.bom.gov.au/wa/forecasts/fire-danger.shtml>

4.3 Emergency warnings

During a bushfire, DFES and the Department of Biodiversity, Conservation and Attractions (DBCA) will issue community alerts and warnings for bushfires that threaten lives and property.

The following warnings may be issued:

- **Advice** – a fire has started but there is no known danger, this is general information to keep you informed and up to date with developments
- **Watch and Act** - there is a possible threat to lives and homes. Conditions are changing, you need to leave the area or prepare to actively defend your home to protect you and your family
- **Emergency Warning** - you are in danger as your area will be impacted by fire. You need to take immediate action to survive. Listen carefully as you will be advised whether you can leave the area or if you must shelter where you are as the fire burns through your area. An emergency warning may be supported with a siren sound called the Standard Emergency Warning Signal (SEWS). These factors should be reviewed on a regular basis as they may change at any time and without notice
- **All Clear** - the danger has passed and the fire is under control, but you need to remain vigilant in case the situation changes. It may still not be safe to return home.

4.4 Additional resources

Table 4 provides a list of publications that provide additional information relating to bushfire preparedness and awareness. It is recommended that facility management review these publications prior to and during the bushfire season.

Table 4: DFES preparation and awareness publications

Resource	Website
5 Minute Fire Chat online resource	https://www.dfes.wa.gov.au/firechat/Pages/default.htm
5 Minute Fire Chat publications	https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/Pages/publications.aspx
Bushfire Preparation Toolkit	https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DFES-Fire-Chat-Bushfire-Preparedness-Toolkit.pdf

5. Stand-by procedures

Stand-by procedures are triggered:

- when occupants of the facility are made aware that there is a bushfire in the surrounding area with the potential to impact the facility (DFES 'Advice' alert)
- on days with a Fire Danger Rating of Very High, Severe or Extreme - DFES recommends that residents seek information and be ready to leave if a bushfire starts on these days
- on days with a Fire Danger Rating of Catastrophic - DFES considers that the only safe place in these conditions is away from bushfire risk areas.

Table 5 lists the stand-by procedures to be followed when the threat of a bushfire is not immediate.

Table 5: Stand-by procedures

TRIGGER:	
On becoming aware that there is a bushfire in the surrounding area (DFES 'Advice' alert)	
On days with a Fire Danger Rating of Very High, Severe, Extreme or Catastrophic	
Action	Person responsible
Consult State Emergency Alerts and Warnings website, DFES phone (13 3337) and local ABC radio (684 am, 1152 am) for fire situation and updates	Chief fire warden (or delegate)
Chief fire warden (or delegate) to take charge; ensure that they have a mobile phone and are contactable	Chief fire warden (or delegate)
Inform staff (and any parents) of the fire situation	Chief fire warden (or delegate)
Account for all occupants especially children	Chief fire warden (or delegate)
Advise DFES (000) that the centre is operating as a child care facility with vulnerable occupants	Chief fire warden (or delegate)
Contact parents to organise collection of their children in order to minimise evacuation should it be required	Chief fire warden (or delegate)
Make arrangements for transportation for possible evacuation	Chief fire warden (or delegate)

6. Evacuation procedures (primary action)

Evaluation of the safety of occupants has determined that it would be safer for all persons to evacuate to a designated off-site refuge, if time permits.

6.1 On-site assembly point

An on-site assembly point is an area within the premise where facility occupants are to meet on becoming aware that there is a bushfire in the area and before carrying out evacuation procedures. The assembly point is to be clearly marked to identify its location to evacuees. The designated on-site assembly point is between the proposed childcare centre building and the proposed carpark, identified in Appendix 1.

6.2 Off-site safe refuge areas

DFES and the City of Stirling will provide advice on the day as to the locations of the designated off-site safe refuge areas/welfare centres.

In the event that this information is not yet available, Table 6 lists a potential refuge area that is to be considered during an evacuation. The refuge has been chosen based on:

- relative proximity to the facility
- relative safety of evacuation route
- whether the refuge is located away from the effects of a bushfire
- capacity to support the number of occupants in the facility
- capacity to support occupants with special needs
- whether it is listed as being a designated evacuation centre in the City's Local Emergency Management Arrangements.

Table 6: Designated potential off-site refuge

Karrinyup Shopping Centre	
Address	200 Karrinyup Road, Karrinyup
Nearest cross-street	Francis Avenue
Travel distance and time	3.5 km (4 mins) via North Beach Road / Karrinyup Road
Phone number	(08) 9445 1122

It is noted that this off-site safe refuge area has been selected based on preliminary information concerning the proposed use of the childcare building. Should the landowner or facility manager/operator wish to consider alternative refuge locations that better suit their circumstances, this should be undertaken in consultation with a BPAD Level 3 accredited bushfire practitioner to ensure the proposed alternative is appropriate to the anticipated bushfire behaviour and scenarios.

6.3 Transportation arrangements

Table 7 details the transportation arrangements required for evacuation of the facility.

Table 7: Transportation arrangements

Transportation arrangements	
Number of vehicles required	TBA - Transportation for evacuation will be the responsibility of the childcare facility and will include a combination of organised transportation and children's parents should they be able to return to the facility in time for safe evacuation
Type of vehicles	Organised transportation and parent's private vehicles

Transportation arrangements	
Special transport required	Yes—organised transportation will need to be appropriate to accommodate the children's seating arrangements (i.e. child/baby car seats)
Time required to organise transport	Immediate
Time required to evacuate to off-site refuge	10 minutes

6.4 Evacuation route

The safest evacuation route to the designated off-site refuge is illustrated in Appendix 1.

The primary evacuation route to **Karrinyup Shopping Centre** is:

Head south on North Beach Road, then west at intersection onto Karrinyup Road. Travel west along Karrinyup Road for 2 km. Turn right into the shopping centre carpark (north).

6.4.1 Safety considerations while driving

If there is a lot of smoke:

- slow down as there could be people, vehicles and livestock on the road
- turn your car headlights and hazard lights on
- close the windows and outside vents
- if you can't see clearly, pull over and wait until the smoke clears.

If you become trapped by a fire:

- park the vehicle off the roadway where there is little vegetation, with the vehicle facing towards the oncoming fire front
- turn the engine off
- close the car doors, windows and outside vents
- call 000
- stay as close to the floor as possible and cover your mouth with a damp cloth to avoid inhalation of smoke if smoke enters the vehicle or toxic fumes are released from the interior of the vehicle.
- stay covered in woollen blankets, continue to drink water and wait for assistance
- stay in the car until the fire front has passed and do not open windows or doors. Once the front has passed and the temperature has dropped, cautiously exit the vehicle. Internal parts may still be extremely hot.

6.5 Evacuation procedures

Evacuation procedures are triggered:

- when an approaching bushfire threatens to impact the facility (DFES 'Watch and Act' alert)
- in the situation where little warning has been received in relation to an approaching bushfire but there is still time to conduct a safe evacuation
- when advised by emergency services personnel that evacuation is necessary.

Table 8 lists the evacuation procedures to be followed during an evacuation of the facility.

Table 8: Evacuation procedures

TRIGGERS:	
<ul style="list-style-type: none"> • On becoming aware that an approaching bushfire threatens to impact the facility (DFES 'Watch and Act' alert) • When little warning of an approaching bushfire has been received but there is still time to perform a safe evacuation • When advised by emergency services that evacuation of the facility is necessary 	
Action	Person responsible
Move all occupants to the on-site assembly area	Chief fire warden (or delegate)
Remain calm and explain evacuation procedures to staff and parents (and children where relevant)	Chief fire warden (or delegate)
Advise DFES (000) that the centre is operating as a child care facility with vulnerable occupants and is performing an evacuation (advise number of occupants and where they are going)	Chief fire warden (or delegate)
Arrange for vehicles (organised transportation and/or parent vehicles) to meet at designated assembly point to pick up evacuees	Chief fire warden (or delegate)
Ensure all doors and windows are closed and evaporative air conditioners turned off prior to leaving the facility	Fire wardens (or delegate)
Notify fire brigade (000) if building is being impacted by fire	Chief fire warden (or delegate)
All occupants to travel to the off-site refuge designated by local emergency services or as identified in this BEEP	Chief fire warden (or delegate)
Ensure all persons are accounted for as they leave the facility	Chief fire warden (or delegate)
Once at the refuge, move all persons inside and ensure everyone is accounted for and safe	Chief fire warden (or delegate)
Report any unaccounted or injured persons to emergency services (000)	Chief fire warden (or delegate)
Maintain situational awareness through State emergency Alerts and Warnings website, DFES phone (13 3337) and local ABC radio (684 am, 1152 am)	Chief fire warden (or delegate)

6.6 Recovery procedures (evacuation)

Recovery procedures are triggered when emergency services have advised that the bushfire threat has passed and it is safe to return to the facility (DFES 'All Clear' alert). Table 9 lists the recovery procedures to be carried out during an evacuation of the facility.

Table 9: Recovery procedures

TRIGGER:

On being informed by emergency services that the bushfire threat has passed and it is safe to return to the facility (DFES 'All Clear' alert)

Action	Person responsible
Arrange for occupants to be moved back to the facility or to alternative location (if required)	Chief fire warden (or delegate)
Ensure all occupants accounted for on return to facility	Chief fire warden (or delegate)
If the facility has been impacted by fire, ensure no persons re-enter the facility until emergency services have declared it as being safe	Chief fire warden (or delegate)

7. Shelter-in-place procedures (last resort action only)

Evaluation of the safety of occupants has determined that there is insufficient time to conduct a safe evacuation and it would be safer for all persons to shelter in a designated on-site refuge.

Shelter-in-place procedures may need to be carried out when a DFES 'Emergency Warning' has been issued for the location advising that it is no longer safe for occupants to evacuate and that you must shelter where you are.

Shelter-in-place procedures are to be carried out as a last resort only.

7.1 On-site refuge

An on-site refuge is a building within the property that is able to adequately accommodate all occupants ideally away from the effects of a bushfire.

The designated on-site refuge is the Childcare centre building, identified in Appendix 1. The following criteria have been considered when choosing the most suitable on-site refuge:

- whether the building/room is situated away from the potential worst-case bushfire front and the possible effects of a bushfire
- whether the building/room has the capacity to house the maximum number of occupants
- whether the building/room has an easy escape route to the outside (e.g. door leading outside) and a water supply
- whether the building has been constructed to withstand bushfire attack and has an appropriate APZ.

7.2 Shelter-in-place procedures

Shelter-in-place procedures are triggered:

- in the situation where a bushfire threatens to impact the facility imminently and there is no time to perform a safe evacuation, and/or
- when advised by emergency services or a DFES 'Emergency Warning' that sheltering in place is necessary.

Table 10 lists the procedures to be followed when sheltering-in-place is required as a last resort.

Table 10: Shelter-in-place procedures

TRIGGERS:	
<ul style="list-style-type: none"> • When a bushfire threatens to impact the facility imminently and there is no time to perform a safe evacuation • When advised by emergency services or a DFES 'Emergency Warning' that sheltering in place is necessary 	
Action	Person responsible
Ensure all doors and windows are closed and evaporative air conditioners turned off	Fire warden (or delegate)
Remain calm and explain shelter-in-place procedures to occupants	Chief fire warden (or delegate)
Move occupants to designated on-site refuge	Chief fire warden (or delegate)
Ensure all persons are accounted for	Chief fire warden (or delegate)
Advise DFES (000) that the centre is operating as an accommodation facility with vulnerable occupants and occupants are sheltering-in-place (advise number of occupants and what building / room they are sheltering in)	Chief fire warden (or delegate)

TRIGGERS:

- When a bushfire threatens to impact the facility imminently and there is no time to perform a safe evacuation
- When advised by emergency services or a DFES 'Emergency Warning' that sheltering in place is necessary

Action	Person responsible
Maintain situational awareness through State emergency Alerts and Warnings website, DFES phone (13 3337) and local ABC radio (684 am, 1152 am)	Chief fire warden (or delegate)
Soak towels and rugs in water and lay them along the inside of external doorways. Soak woollen blankets and keep them available for protection against radiant heat. Take down curtains and push furniture away from windows	Fire warden (or delegate)
Occupants to get down low to limit exposure to smoke and drink plenty of water to avoid becoming dehydrated	Fire warden (or delegate)
Two persons to regularly inspect building exterior and roof cavity through the internal manhole (wearing suitable protective clothing - at a minimum long sleeves, trousers and leather boots) to identify embers and extinguish where possible	Chief fire warden (or delegate)
Stay in the building while the fire front is passing, if the building catches fire and conditions inside become unbearable, leave through the door furthest from the approaching fire and go to an area that has already burnt	Chief fire warden (or delegate)
Notify fire brigade (000) if building is being impacted by fire	Chief fire warden (or delegate)

7.3 Recovery procedures (shelter-in-place)

Recovery procedures are triggered when emergency services have advised that the bushfire threat has passed and it is safe to return to the facility (DFES 'All Clear' alert). Table 11 lists the recovery procedures to be carried out when sheltering-in-place.

Table 11: Recovery procedures

TRIGGER: On being informed by emergency services that the bushfire threat has passed (DFES 'All Clear' alert)	
Action	Person responsible
Inform emergency services that all occupants are safe and accounted for within refuge	Chief fire warden (or delegate)
If the facility has been impacted by fire, ensure no persons re-enter the facility until emergency services have declared it as being safe	Chief fire warden (or delegate)
Decision made to either reopen facility or remain as closed	Chief fire warden (or delegate)
Arrange for occupants to be relocated to alternative location if facility remains closed	Chief fire warden (or delegate)



waste less, achieve more

50-52 Porter Street, Gwelup

Waste Management Plan

21 January 2019

Rev_0

MSP Gwelup



21 January 2019

50-52 Porter Street, Gwelup



waste less, achieve more

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Revision	Drafted	Reviewed	Date issued
Rev_0	H Adkins	A Bremner	21 January 2019

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Glossary of terms and acronyms

Cart	Wheeled, open top bin often used for bulky items such as cardboard
Commingled recycling	Common recyclables, mostly packaging; such as glass, plastics, aluminium, steel, liquid paper board (milk cartons). Commingled recycling may include paper but often, and particularly in offices, paper and cardboard are collected separately.
Compactor	In commercial buildings, industrial compactors are used to literally 'compact' or compress the waste material into a smaller volume to allow for optimal use of space.
General Waste	Material that is intended for disposal to landfill (or in some States, incineration), normally what remains after the recyclables have been collected separately.
MGB	Mobile Garbage Bin – A wheeled bin with a lid often used for kerbside collection of waste or recyclables. (Often called a 'wheelie bin').
MRB	Mobile Recycling Bin – A wheeled bin ("wheelie" bin) with a lid often used for kerbside collection of recyclables (similar to an MGB). Generally have a different colour body and/or lid to MGBs.
Organic waste	Separated food and/or 'green' material (e.g. grass clippings or vegetation prunings).
Recyclable	Material that can be collected separately from the general waste and sent for recycling. The precise definition will vary, depending upon location (i.e. systems exist for the recycling of some materials in some areas and not in others).
Recycling	Where a material or product undergoes a form of processing to produce a feedstock suitable for the manufacture of new products.
Reuse	The transfer of a product to another user, with no major dismantling or processing required. The term "reuse" can also be applied in circumstances where an otherwise disposable item is replaced by a more durable item hence avoiding the creation of waste (e.g. using a ceramic coffee mug in place of disposable cups).

1 Introduction

This Waste Management Plan (WMP) has been prepared for Modus Design on behalf of their client MSP Gwelup for the Development Application for a proposed new childcare centre 50-52 Porter Street, Gwelup.

The proposed development will consist of 1465 m² of childcare centre

This WMP has been prepared based on the following information:

- Architectural plans provided by Modus Design (14 January 2019)
- Liaison with City of Stirling regarding Council waste management requirements 18 December 2018
- The Council of City of Sydney Policy for Waste Minimisation in New Developments, 2005 (as a guide for commercial activities)

1.1 Context

For efficient and effective waste management, the collection and centralisation of waste and recyclables should be carefully considered at the building design phase. Key factors to consider at the design phase include:

- The volumes of waste and recyclables likely to be generated during building operation
- Size of bin storage area
- Safety for all operatives involved in waste management
- Access to bins and storage areas from within the building
- Access for trucks for waste collection
- Local council requirements
- Amenity (odours and noise)
- The ongoing management of waste and recycling services

1.2 Key components of the WMP

This WMP consists of five core components. The following report will present detailed information on each of the following components.



2 Estimated waste and recycling volumes



2.1 Local government requirements for waste volumes and bin type

For the childcare centre areas, the Council of City of Sydney Policy for Waste Minimisation in New Developments, 2005 have been used in addition to Encycle's experience and knowledge.

For the prep and change areas as well as the play rooms and kitchen a childcare area rate has been applied. For the staff room a takeaway rate has been applied. For the reception area an office rate has been applied.

Premises type	Waste generation rate	Recycling generation rate	Percentage breakdown of recycling stream by material
Childcare Area	3.5 L /1m ² /day	3.5 L /1m ² /day	50% cardboard 50% commingled
Office	0.1 L /1m ² /day	0.1 L /1m ² /day	79% paper 14% cardboard 2% soft plastics 7% commingled
Takeaway	0.8 L /1m ² /day	0.4 L /1m ² /day	40% cardboard 10% soft plastics 40% commingled

2.2 Number and type of bins required for development

The bin numbers for the childcare centre, based on 504.3 m² of waste generating areas are shown in table 3.

Table 3: Number of general waste and recycling bins for childcare centre

	Bin size (L)	Number of bins	Collection frequency
General waste	660	3	Daily
Commingled recycling	1100	1	Daily
Cardboard	1100	1	Daily


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graph LR
    A[Bin storage requirements] --> B[Bin store location and amenity]
    B --> C[Internal transfer]
    C --> D[Collection and vehicle access]
    D --> E[Communication and management]
  
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Bin storage requirements **Bin store location and amenity** Internal transfer Collection and vehicle access Communication and management

The building will have a single bin store to allow for the storage and collection of all childcare centre waste and recycling.

[illegible]

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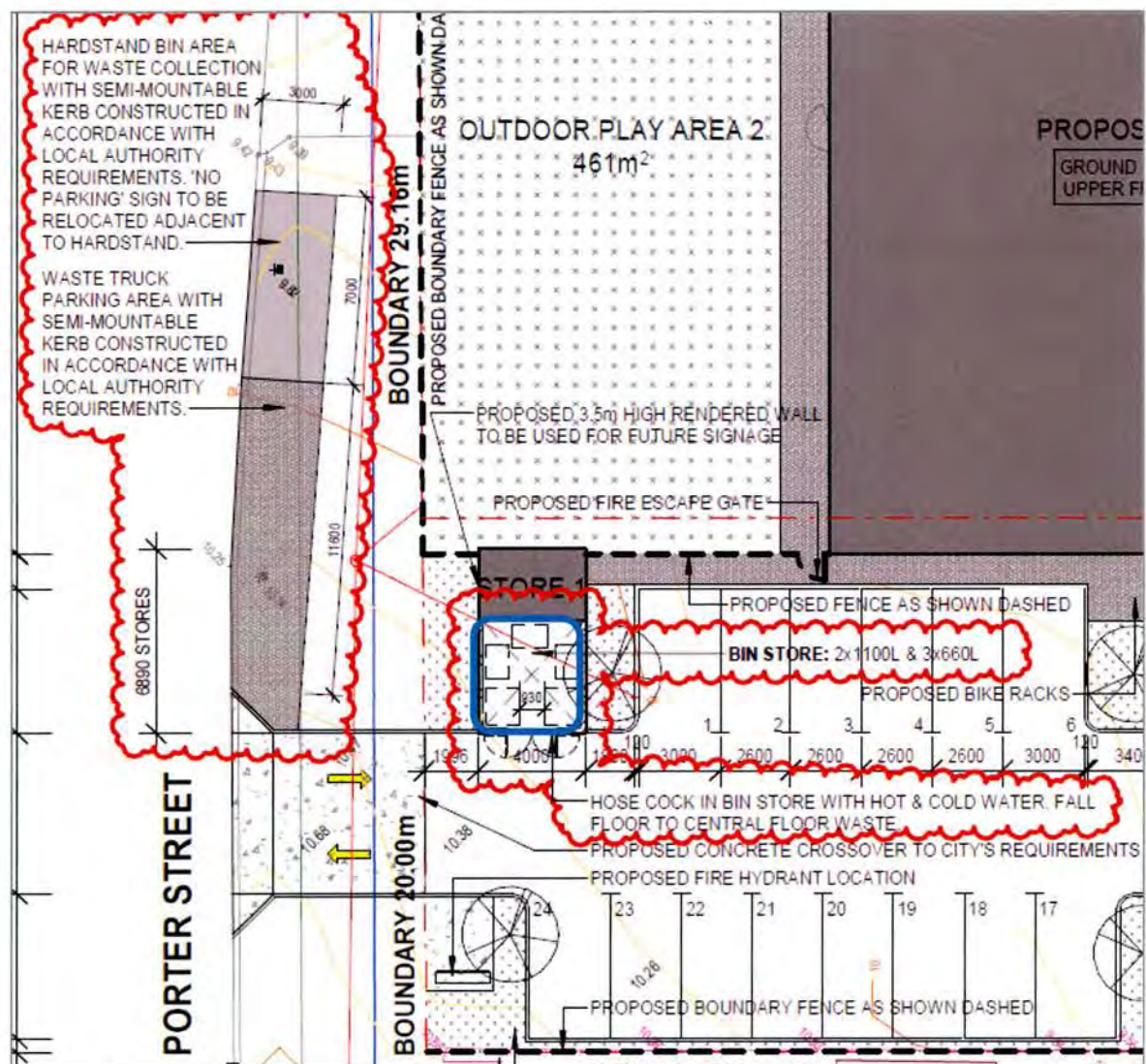


Figure 2: Plan showing the bin store

3.2 Bin store amenity

Bin Transfer	
Aisle door and lift width:	All doors, corridors and lifts on the transfer route are designed for the largest bin to fit through.
General health and safety:	Waste systems are designed to ensure that bins (particularly when full) are not required to be moved over any significant distances, up/down steep ramps (grade of slope <1:20) and definitely avoid stairs or other potential hazards.
	Manual handling of waste in garbage bags is excluded from the waste management systems where possible.
Bin store	
Washing bins and waste storage area:	Impermeable floors grading to an industrial floor waste (including a charged 'water-trap' connected to sewer or an approved septic system), with a hose cock to enable bins and /or the enclosure to be washed out. 100 mm floor waste gully to waste outlet. Both hot and cold water will be available.
Bin store walls and ceilings:	All internal walls in bin store will be cement rendered (solid and impervious) to enable easy cleaning. Ceilings will be finished with a smooth faced, non-absorbent material capable of being easily cleaned. Walls and ceilings will be finished or painted in a light colour.
Ventilation and odour:	The design of bin store will provide for adequate separate ventilation with a system that complies with Australian Standard 1668 (AS1668). The ventilation outlet is not in the vicinity of windows or intake vents associated with other ventilation systems.
Doors:	Ventilated roller doors will be specified both internally and externally to enable bins to be easily wheeled into and out of the bin stores.
Vermin:	Self-closing doors to the bin store will be installed to eliminate access by vermin
Lighting:	Bin store/s will be provided with artificial lighting, sensor or switch controlled both internal/external to the room.
Noise:	Noise is to be minimised to prevent disruption to occupants or neighbours.
Fully Enclosed:	The bin store will be fully enclosed and only be accessible by residents, tenancy staff and the waste service provider.
Aesthetics:	The bin store will be consistent with the overall aesthetics of the development.
Signage:	Visual aids and signage will be provided to ensure that the area works as intended.

4 Internal transfer



Staff from the childcare centre will manually transfer waste and recyclables to the bin store on the ground floor. Staff will use the lift to transfer general waste and recycling from each floor down to the bin store.

Centre management will be responsible for taking bins to and from the bin hardstand area on collection days. They will also be responsible for returning empty bins to the bin store when service is complete.

5 Collection and vehicle access



A private service provider will undertake the commercial waste and recycling collections for the childcare centre.

On collection days rear-lift vehicles for general waste and recycling will enter Porter Street from North Beach Road. The vehicle will drive in a forwards motion and park in the truck embayment outside the building where it will access full bins from the hardstand area directly behind the truck embayment. Once serviced, empty bins will be returned to the hardstand area where centre management will be responsible for returning empty bins to the bin store.

Swept path analysis for vehicle ingress and egress has been completed by Transcore taking into consideration the specifications of a 10m waste collection vehicles (see Figure 3).

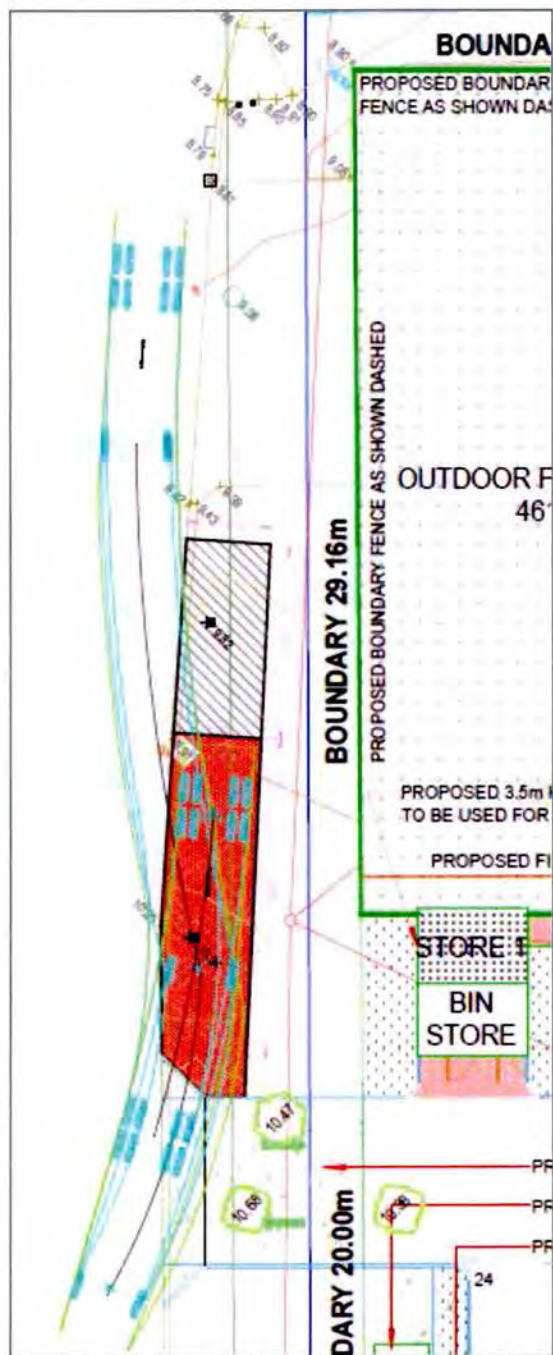
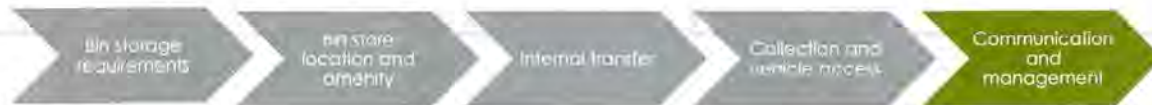


Figure 3: Swept path analysis showing access for waste collection vehicles

6 Ongoing communication and management



6.1 Management

The centre management will be responsible for overseeing the waste management systems. The staff will be trained and informed about their responsibility to work closely with the private service provider regarding the schedule for collection and presentation of bins. Centre management staff will be responsible for maintaining the bin store in a clean and tidy condition at all times and ensuring bins are washed regularly.

6.2 Communication

All staff will be made aware through a body corporate document (or equivalent) of the waste and recycling systems and how they should be used. An Operational Waste Management Plan suitable for presenting to building users, including how the plan should be communicated will be developed and implemented during both the initial occupation and ongoing management of the building.

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01 April 2019

Mr Chris Fudge
Acting Coordinator Planning Approvals
City of Stirling
25 Cedric Street
Stirling

Dear Chris,

DA18/2010: 50-52 PORTER STREET, GWELUP - DESIGN REVIEW PANEL RESPONSE

Further to the Design Review Panel (DRP) held on 21 March 2019, the project team have worked to review the development plans and provide a written response to queries and comments made by the DRP.

This letter and associated attachments provide our response to the various matters raised.

It is requested that the City review the attached plans and refer the application back to the DRP at its earliest convenience in order to facilitate the ongoing progress of the development application.

Design Review Panel	Response
<p>Principle 1 – Context and Character</p> <p>1a. The Panel acknowledges the internal layout is designed by the operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design.</p> <p>1b. The Panel made note the texture and materials choice is positive, however would like to see more detail relating to the use of these in terms of form and pallet to gain an understanding of context in relation to the neighborhood.</p> <p>1c. Elevations that extend beyond the development to the streetscape would be</p>	<p>a) The design has improved functionality and a more understandable legibility of the entrance. Additionally cross-flow ventilation and access to natural light has been better prioritised</p> <p>b) The proposed materials have been applied to the elevations in a more realistic fashion and the exterior palette has been added with photo realistic swatches. The proposed materials have consideration to the surrounding neighbourhood, utilising brickwork along with along with rendering to ensure the building form is functional whilst remaining sympathetic to the surrounding neighbourhood.</p> <p>c) Whilst there is brickwork in the neighbourhood, there is little consistency in any external materials</p>

Design Review Panel	Response
<p>useful to consider if the use of the proposed brickwork reflects the area.</p>	<p>amongst the 8-10 neighbouring residences. Some of the neighbouring houses have little design merit and are perhaps not worth referencing. 56 Porter Street and upward are residential abodes constructed in face brick. Photographic evidence of the surrounding streets can be provided if required.</p>
<p>Principle 2 – Landscape Quality</p> <p>2a. The Panel made comment a detailed landscape design including play areas and management plan should be provided to ensure the success of the landscaped areas.</p> <p>2b. The Panel comment fencing detail should be provided in order to understand the full aesthetic.</p> <p>2c. Elevated planter boxes need to be well designed and consideration given to access and maintenance to ensure their success.</p> <p>2d. The landscape plan provided is not consistent with the architectural site plan, in particular details of the proposed verge treatment.</p> <p>2e. The width of the landscape strip to the east edge of the car park needs to wide enough to sustain decent size planting.</p>	<p>a) The requirement for a detailed landscaping plan is anticipated to be imposed as a condition of approval, consistent with similar developments recently approved. This is due to the nature of the play areas being dictated by the operator.</p> <p>b) Fencing has been indicated on elevations; we have opted to include a mix of materials sympathetic to our palette to break-up the linear form.</p> <p>c) Elevated planter boxes have been widened to make these more practical. Maintenance will be from the upper floor where possible and otherwise from the ground. Very low maintenance slow-growing shrubbery is proposed to be planted in these boxes.</p> <p>d) The landscape plan has been updated to ensure consistency with the architectural plans.</p> <p>e) The landscaping beds along eastern boundary in carpark have been amended with the trees provided to create the buffer between the car park and residential property.</p>
<p>Principle 3 – Built Form and Scale</p> <p>3a. The Panel commented the break up to the bulk and scale of the building is acceptable, subject to development of the design in more detail.</p>	<p>a) Noting it was largely acceptable, the built-form and scale is similar to the original submission and it is anticipated that a focus on quality detail resolution during the design and construction phases will be ensure an attractive development is delivered.</p>
<p>Principle 4 – Functionality and build quality</p> <p>4a. The Panel acknowledges the internal layout is designed by the</p>	<p>a) The design has improved operationality and a better defined entrance from the street and carpark. Cross-flow ventilation and natural light has been better prioritised in the revised design.</p>

Design Review Panel	Response
<p>operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design.</p> <p>4b. There is an opportunity to flip the orientation of the building to improve daylight penetration and natural ventilation.</p> <p>4c. There is opportunity to re-design the internal layout to reduce long corridors; specifically the location of room 5, the Laundry and rooms 6 & 7 could be reviewed. A redesign could improve functionality of the layout and improve opportunities for cross ventilation.</p> <p>4d. The Panel commented there is no office for private administrative purposes.</p> <p>4e. No furniture layout is provided.</p> <p>4f. The location of the bins store and store 1 are unacceptable as they are within the street setback zone and they block pedestrian access from the street via the footpath.</p>	<p>b) Building has been redesigned to improve access to daylight and cross ventilation has been provided</p> <p>c) While we were unable to remove a corridor in the design, we were able to reposition the stairs and lift lobby further down the corridor to reduce the length of this element.</p> <p>d) We have confirmed with the operator that they do not require any meeting space beyond the combined formal meeting/programme room as meetings for this room are booked ahead of use. We are advised the staff room provides an additional internal ad hoc staff meeting space.</p> <p>e) It is not considered appropriate to include details of the internal fit out at the DA stage. This is a detailed design element and will be dictated by the operator / may be subject to change throughout the operations of the activity.</p> <p>f) The bin store has been relocated to the rear of the site. Noting outdoor play area 1 requires a store room, we incorporated this element into a more obvious pedestrian entry statement to improve the legibility of the entrance whilst providing for all of the play yard space storage requirements of the operator.</p>
<p>Principle 5 – Sustainability</p> <p>5a. The Panel believes more consideration should be given to the orientation of the building to create a design that is solar passive.</p> <p>5b. More detail is required relating to the location of the air-conditioning condensers.</p> <p>5c. More detail is required relating to provision of shade to the carpark, north</p>	<p>a) The building has been redesigned to deliver more ground floor yard space to the north and the upper floor has been flipped to reduce the amount of external yard space facing direct west</p> <p>b) A practically-sized HVAC plant room has been incorporated into the upper floor plan which has good access for mechanical maintenance staff.</p> <p>c) Architecturally, the north and west facing windows all have shrouds and the limited eastern glazing has now a roofed portico providing shade and a more obvious landing-zone for visitors. Shade for the play</p>

Design Review Panel	Response
and west facing windows, and play areas.	areas will be incorporated into the detailed landscaping plan at the detailed design stage.
<p>Principle 6 – Amenity</p> <p>6a. There is an opportunity to improve the overall arrival experience for families by creating an improved interface between the carpark and the entry. This could include an integrated landscape solution.</p> <p>6b. The Panel made note that the West facing play area will get the sea breeze and afternoon sun, this could be resolved by flipping the building to the north and thus in line with a solar passive design.</p> <p>6c. The rooms have limited access to natural light and cross ventilation.</p> <p>6d. The Panel commented the current orientation would require a substantial amount of shading.</p> <p>6e. Where shading may not be required (south facing openings), consider providing some weather protection to door and window openings.</p>	<p>a) Arrival experience for families has been improved by a more legible entry point for pedestrians into the site and a roofed portico over the building entry from the carpark</p> <p>b) Building upper floor has been redesigned to locate upper internal play spaces to the west</p> <p>c) Design enhanced to create increased natural light and cross ventilation opportunities</p> <p>d) (See 6b above)</p> <p>e) South facing windows where not protected by cantilevered garden bed, now have window shrouds offering all-weather protection</p>
<p>Principle 7 – Legibility</p> <p>7a. More planting and shade to the carpark would improve the pedestrian experience and legibility, whilst also acting as a tool for traffic calming.</p> <p>7b. Consideration should be given to linking the verge and pavement access via the disabled car bay, ensuring paving levels flow through.</p> <p>7c. Entry ways and pathways need to be wide enough to accommodate pram access.</p>	<p>a) The car parking design has been amended to include a range of paving and materials to act as traffic calming and improve legibility.</p> <p>b) The design has been revised to provide a direct and level path between the street and the front door. Raised platform introduced into carpark to provide a level interface between the DDA car bay and the front door; this will also provide a traffic calming opportunity, where most impactful, mid-way through the carpark</p>

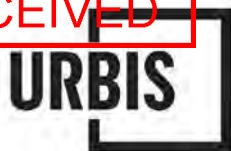
Design Review Panel	Response
7d. The Panel requests more detail relating to the proposed signage to the building.	<p>c) Entrance pathway widened to 1600mm which is sufficient for 2 x 500mm wide prams to pass each other</p> <p>d) Various signage opportunities around the building have been explored and are indicated on the 2d elevations and 3d perspectives.</p>
<p>Principle 8 – Safety</p> <p>8a. The car park should be designed as a pedestrian friendly zone. Consider paving materials, visibility and easy access to the entry with prams.</p>	<p>a) The carpark design has been revised to incorporate a raised platform DDA bay and a mixture of paving treatments to flag this as a pedestrian-friendly zone and thereby act as a traffic calming device</p>
<p>Principle 9 – Community</p> <p>9a. The Panel note there is currently a parking shortfall of nine car bays and defers to the City on this point.</p>	<p>a) Revised design provides 30 car bays not including the turning bay and DDA shared bay which provides an increase in parking of 6 bays over the previous design. This reduces the shortfall to 3 bays.</p>
<p>Principle 10 – Aesthetics</p> <p>10a. As noted elsewhere, the current design has potential but requires further development.</p>	<p>a) We acknowledge the feedback on all of the above elements from the committee has improved the design and how it interfaces with its occupants, visitors and the wider public. A focus on good resolution of architectural detailing and quality finishes will continue to improve this as the project moves forward</p>

If you have any further queries, please contact Kris Nolan or the undersigned at (08) 9346 0500.

Yours sincerely,



Emma Dunning
Senior Consultant



15 April 2019

Mr Chris Fudge
Acting Coordinator Planning Approvals
City of Stirling

Dear Chris ,

DA18/2010 - 50-52 PORTER STREET, GWELUP - RESPONSE TO REQUEST FOR FURTHER INFORMATION

In regard to the request for further information received on the 8th April 2019 please find below the following responses:

City Comment	Comment
Proposed Staged Development The development plans indicate a 'proposed staging boundary' to the north of the Child Care Premises proposal. Please provide the City with an indicative concept plan for the future land use of the remaining portion of Lots 76 and 100, HN's 50 & 52 Porter Street, Gwelup, specifically demonstrating that suitable vehicle access can be achieved and how the subject proposal fits in with the future staging.	<p>The design for the future use of the remaining portion of the lots is yet to be developed and as such an indicative concept plan is not available.</p> <p>The intended land use is aged persons accommodation with the number of units to be compliant with the R-Codes.</p> <p>Access will be obtained from Bindoon Close and internal site layout will ensure maneouvering for all required vehicles can be accommodated.</p> <p>A review of the relevant R-codes and City of Stirling Policies relating to aged persons accommodation / institutional buildings indicates the site is sufficiently sized and proportioned to allow a multitude of compliant configurations.</p>
Local Planning Policy 6.4 - Child Day Care Centres The provisions of LPP 6.4 apply to the development proposal.	<p>The subject site is adjacent to a school on the southern side of Porter Street in accordance with the policy. The residential land uses to the west are located in excess of 50m from the site boundary across a Distributor B road. It is considered the proposal will not impact these residences. It is acknowledged that there are residences to the east, however it is noted the site</p>

City Comment	Comment
<p>Location - To minimise the impact on residential areas, locations adjacent to non-residential uses, particularly shopping centres, medical centres, schools and other educational facilities and civic uses is preferred. The proposal is adjacent residential land uses to the East and West.</p> <p>Road Hierarchy - Preferred locations and configurations are those which do not propose direct access onto Primary Regional roads, or Local Roads. The development proposes vehicle access via Porter Street - a Local Road.</p> <p>Amenity - Activity room windows facing residential properties are to be double glazed and not be able to be opened. Furthermore, with due regard to the impact on residential amenity, the hours of operation of Centres is to be restricted at 7:00am to 6:30pm on weekdays, and 8:00am to 6:00pm on weekends.</p>	<p>layout has been considered to ensure the primary noise generating activities are in located to the North Beach Road frontage rather than onto the residential development. The acoustic report has confirmed there will be no noise impacts from the development on the adjacent residential.</p> <p>The site fronts onto North Beach Road which is a Distributor B Road, however it is noted that safe and efficient access cannot be achieved from North Beach Road due to the proximity to the roundabout and the signalised intersection with Erindale Road. Access from a local road is not uncommon with childcare centres, notably in the surrounding suburbs the following local roads provide access to childcare centres; Blackdown Way, Davenport Street, Francis Avenue and Gemstone Boulevard. The access from the local road will not generate any adverse impacts on the surrounding road network or the amenity of the local residents.</p> <p>The operating hours are to be 7am to 6pm Monday to Friday with the staff arriving/departing within half an hour of these times to set up/clean up the centre.</p> <p>The rooms facing the residential properties to the east open onto the upper level play area and as such cannot be fixed. As per the acoustic assessment the noise levels of the centre will not impact on the residential properties.</p>
<p>Local Planning Policy 6. 7 - Parking & Access</p> <p>The provisions of LPP 6. 7 specify a Child Care Premises a car parking ratio of 1 bay per staff member, and 1 bay per 7</p>	<p>The site plan has been amended to provide additional car parking to the site – resulting in 30 bays on site and reducing the shortfall to 3 bays.</p> <p>Given the nature of the vehicle movements associated with the development being drop off and pick up staggered over an extended period in the morning and evening it is considered that</p>

City Comment	Comment
<p>children.</p> <p>The development proposal, following applicable concessions, requires the provision of 33 car parking bays on site (including one dedicated service bay). The development provides a total of 24 car parking bays on site, which proposes a nine (9) bay shortfall.</p>	<p>the shortfall is negligible and will not result in any overflow parking onto the surrounding roads.</p>
<p>Traffic Engineer - Engineering Design Business Unit</p>	<p>Noted – no changes are proposed as part of these comments.</p>
<p>Environmental Health Business Unit</p> <p>It is noted that the Herring Storer Acoustic Report, 'Section 4 - Proposal' states that their assessment is based on proposed business operations between 7:00am and 7:00pm Monday to Friday (closed on Public Holidays). This is not specifically clarified in the Development Application, and should be confirmed by the applicant.</p>	<p>It is confirmed the childcare will operate 7:00am and 7:00pm Monday to Friday (closed on Public Holidays). Staff will arrive/depart within half an hour of these times to set up/clean up the centre.</p>
<p>Community Safety Business Unit</p> <p>Within the last 12 months there has been a minimum of 30 visits by the City's Rangers to the area surrounding the proposed development. These attendances</p>	<p>The amended proposal includes the provision of an additional 6 bays on the site, thus reducing the parking shortfall to 3 bays. It is considered due to the nature of the activity and the staggered pick up and drop off that the shortfall will not result in any overflow into the surrounding roads.</p>

City Comment	Comment
<p>have stemmed from complaints regarding illegally parked vehicles attending the Primary School directly across the road.</p> <p>During the attendance eight (8) cautions and two (2) infringements were issued, with many of the other vehicle owners being verbally cautioned.</p> <p>Based on the above history, time restrictive signage within the area and the proposed shortfall of nine (9) on site car parking bays, Community Safety have significant concerns with the proposal as there is no option for overflow parking without having an effect on the surrounding properties.</p>	
<p>Local Planning Policy 2.6 - Residential Building Heights</p> <p>The provisions of LPP 2.6 apply to all development within a Residential Zone. The proposed Lower Skillion height of 6.9m is in lieu of the permitted 6m maximum. The proposed High Skillion height of 8.3m is in lieu of the permitted 8m maximum.</p>	<p>Building heights have been amended to ensure compliance with LPP 2.6. Please see the plans attached.</p>
<p>Local Planning Policy 6.1 - Advertising Signs</p> <p>Wall Signs if located within a Residential Zone and attached to</p>	<p>Confirmation of the signage requirements is currently being undertaken. As such, the plans have been amended to note the signage on the plans is noted to be for illustrative purposes only and is not subject to this Development Application.</p>

City Comment	Comment
<p>a building used predominantly for a commercial use are not to exceed 1.2m² in area per lot, and not exceed one (1) wall sign per lot.</p> <p>The development proposes two (2) Wall Signs in lieu of the permitted one. The total area of the signage exceeds the 1.2m² maximum with a proposed area of approximately 9.6m²</p>	<p>An application for signage approval will be undertaken once further details are known.</p>
<p>Local Planning Policy 6.2 - Bicycle Parking</p> <p>The proposal requires the provision of three (3) bicycle spaces. The submitted Planning Report identifies that a total of eight (8) bicycle racks will be provided on-site however the development plans do not annotate this 8 rack provision.</p> <p>Notwithstanding this, the bicycle racks illustrated on the Site Plan are located within an area of high pedestrian activity - adjacent the main entrance to the facility. LPP 6.2 requires bicycle spaces to be located away from areas of high pedestrian activity in order to minimise inconvenience or danger to pedestrians.</p>	<p>The site plan has been updated to reflect the required number of bike racks. The location of the bicycle parking was amended in the previous set (in response to DRP comments) to avoid the conflicts.</p>
<p>Local Planning Policy 6.3 - Bin Storage Areas</p>	<p>The bin store was relocated in response to the DRP comments. See attached plans.</p>

City Comment	Comment
<p>Residential Design Codes</p> <p>Primary Street Setback - The proposed 'Bin Storage Area' and 'Store 1' are setback 2.0m from the front lot boundary in lieu of the permitted 3m minimum, as considered via primary street averaging.</p> <p>Secondary Street Setback - R25 requires a 1.5m minimum Secondary Street setback. A 1 m Secondary Street setback is proposed to North Beach Road.</p> <p>Lot Boundary Setbacks - An accurate lot boundary setback assessment of the development cannot be undertaken as side elevations of the external stores are not provided.</p> <p>Buildings on Boundary - It is noted that the Average Height of the walls to the 'Proposed Staging Boundary' are 3.5m in lieu of the permitted 3m maximum.</p> <p>Fencing - Side elevations of the proposed fencing detail are not provided (refer to Miscellaneous, Policy DC 1. 7 and Town Planning General By-Law sections below). The proposed fencing is to have regard to the Residential Design Codes and</p>	<p>The setback for Store 1 has been amended to comply with the street averaging requirements. We note this is inconsistent with the advice of the DRP which recommended an entry statement be incorporated into this feature.</p> <p>A variation to the secondary street setback of 500mm is requested. It is considered the existing verge is sufficiently wide to provide separation between the build form and the road, and subsequently adjacent dwellings.</p> <p>Details of external stores have been added to the elevations.</p> <p>The wall heights have been amended to ensure compliance.</p> <p>Details of fencing have been included on the plans.</p>

City Comment	Comment
<p>the aforementioned legislation.</p> <p>Site Works - Please clarify the proposed Relative Levels (RL's) to the external areas directly abutting the building.</p> <p>External Fixtures - Please confirm the location of the buildings services, having regard to Clause 5.4.4 - External Fixtures, Utilities and Facilities Deemed-to-Comply provisions.</p> <p>Town Planning (Height of Obstructions at Corners) General By-Laws 1975</p> <p>Subject to these by-laws, a person shall not have, erect or permit to be erected on land owned by him and referred to in sub-bylaw (2) a wall, fence, hedge, tree, shrub or other obstruction of a greater height than 0.75 metres measured from the level of the footpath, street, road or right-of-way adjoining the obstruction.</p> <p>a) shall apply within an area enclosed by the edges of intersecting streets, roads or rights-of-way and a line joining points located at a distance of 6 metres from the point of intersection along the edge of each intersecting street, road or right-of-way or from the point of</p>	<p>The relative levels have been noted on the elevations.</p> <p>All external fixtures have been shown on the plans and are compliant with the relevant clause.</p> <p>The site plan has been amended to provide the required corner truncation in accordance with the policy.</p>

City Comment	Comment
intersection of a prolongation of the said boundaries;	
Miscellaneous <ul style="list-style-type: none"> - The development plans are not to scale; - Side elevations of the proposed fencing are not provided; - Side elevations of the bin store and all the external structures are not provided; and 	<p>Scale is confirmed to be 1:100 at A2</p> <p>Elevations of the fencing and external structures have been provided.</p>
Engineering Design Business Unit <ul style="list-style-type: none"> • A 2.1 m wide footpath located at the back of the kerb is to be provided along the developments Porter Street frontage from the proposed site crossover to link with the existing roundabout footpath; • This locality has high groundwater. The applicant is to demonstrate how the site will be drained; and • The proposed crossover will be located over an existing fire hydrant within the verge. FESA and Water Corporation comment / approval are required for relocation. 	<p>Previous amended plans (in response to DRP comments) include the footpath.</p> <p>All stormwater is to be contained on site and disposed of in accordance with City of Stirling Engineering requirements. Detailed engineering calcs will be provided at detailed design stage.</p> <p>Noted.</p>

City Comment	Comment
Senior Engineer - Development Services <ul style="list-style-type: none"> • Site Plan scale of 1 :250 is incorrect. It actually scales 1 :359; • Bin store gates should not open out into the driveway; • The bay dimensions are acceptable; • It is suggested that the turning bay is to be located opposite the ACROD bay so that vehicles do not have to drive to the end to turn around; and • Finished paving levels need to be indicated to comply with AS2890.1. 	<p>As above</p> <p>The bin store has been relocated. This is no longer considered an issue.</p> <p>Noted</p> <p>Noted</p>
Local Planning Policy 6.6 - Landscaping <p>The provisions of LPP 6.6 apply to all non-residential development.</p> <p>Landscaping Provisions for Commercial Developments - A minimum of 10% landscaping of the total site is required. This is to include a 'soft' landscaping buffer to adjacent properties with a minimum width of 1.5m.</p>	<p>The landscape buffer was removed as per the comments from the DRP and replaced with larger shade trees to provide an appropriate buffer.</p> <p>A variation to the policy is requested in this regard.</p>
Miscellaneous	<p>An updated Landscape Plan was provide in response to the DRP comments which is consistent with the plans submitted a the</p>

City Comment	Comment
The dedicated landscaping plan is not consistent with the Site Plan, specifically in depicting an embayment on the Porter Street road reserve.	time. It is expected that a condition of approval will require a detailed landscape plan to be provided prior to occupation.
Parks & Sustainability Business Unit <ul style="list-style-type: none"> • It does not appear the required 10% landscaping has been provided for commercial site (LPP 6.6). Parks & Sustainability does not include artificial turf as landscaping; • There is no landscape buffer between the car park and the adjacent property (in accordance with LPP 6.6); • One tree appears to comply with LPP 6.11 - this is the 'Eucalyptus' in the car park that has a soil area of 1 0m2 The 'Eucalyptus' within the outdoor play areas could be made to comply, if the soil areas (without artificial turf) were increased; • The dedicated Landscape Plan does not align with the Site Plan. The Site Plan indicates a substantial area of hardstand on the verge; and • Plant species, spacing's and pot sizes are acceptable. 	<p>The proposal includes approximately 625sq.m of landscaping (not including the external elements on the upper level) which equates to 27% landscaping.</p> <p>Whilst some of the play areas will include pathways and play equipment, the soft landscaping will be the dominant factor and will remain above 10%. It is expected that a condition of approval will require a detailed landscape plan to be provided prior to occupation to confirm this is undertaken.</p> <p>As above</p> <p>The amended plans include 6 trees which are compliant with LPP 6.11. Urbis landscape architect has confirmed the compliance of the soil space required for each of these trees. In addition, a further tree can be provided within the corner truncation bringing the compliant trees to 7 – 2 in excess of the requirements for the site.</p> <p>As above</p> <p>Noted</p>

City Comment	Comment
<p>Local Planning Policy 6.11 - Trees & Development</p> <p>The provisions of LPP 6.11 apply to all development valued at over \$100,000 on land zoned under the City's LPS3. The development requires the planting of five (5) 'Advanced Trees'.</p>	<p>The amended plans include 6 trees which are compliant with LPP 6.11. In addition, a further tree can be provided within the corner truncation bringing the compliant trees to 7 – 2 in excess of the requirements for the site.</p>
<p>Engineering Design Business Unit</p> <ul style="list-style-type: none"> The applicant's Waste Management Plan (WMP) shows that the development proposes waste pickup using 660 and 1100 litre bulk bins collected from the verge in Porter Street (3x660ltr and 2x1100ltr collected daily). This is not approved, the City does not permit bulk bins to be wheeled out and collected from the verge. Only 360 and 240 litre MGB's can be collected from the verge. A revised WMP is required detailing how waste will be collected from the site. The proposed waste truck hardstand within the verge is not supported and needs to be removed from the plans; 	<p>The waste management plan has been prepared on the advice of the City of Stirling Waste Management team however the applicant does not have any concerns regarding the implementation of Option 2.</p> <p>We request an condition of approval requiring the Waste Management Plan be updated to reflect the City's preferred option and submitted to the City prior to building permit.</p>
<p>Waste Business Unit</p> <p>Based on previous Child Care Premises applications received and advice from the City's Rates</p>	<p>As above.</p>

City Comment	Comment
<p>Department, this development will remain under the existing Residential Dwelling status.</p> <p>Therefore the WMP will need to be amended to accommodate residential collections. Based on the estimated waste generation rate of 1,980Ltr per week the City has determined the following 2 Options of bin allocations and collections:</p> <ul style="list-style-type: none"> Option 1: <p>o1 x 660Ltr general waste bin collected 3 times/week</p> <p>o1 x 660Ltr comingled recycling (including cardboard) collected weekly</p> <p>oBulk bin to be left in bin compound for collection</p> <p>oWaste staff to handle bins for collection and will return bins to compound once completed</p> <ul style="list-style-type: none"> The City is now able to provide larger bins to Mixed Use Development properties and properties such as the proposed day care facility. <ul style="list-style-type: none"> Option 2: <p>o3 x 240Ltr general waste bin collected 3 times/week</p>	



City Comment	Comment
<p>o3 x 360Ltr comingled recycling (incl cardboard) collected weekly</p> <p>o Collection for MGB's will be undertaken from the verge</p> <p>o Centre management will be responsible for bringing the bins to the verge for collection and returning them as soon as possible after collection</p>	

We trust this provide sufficient additional information and justification to continue to progress the application.

If you have any further queries, please do not hesitate to contact Kris Nolan or myself.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Dunning".

Emma Dunning
Senior Consultant

Design Review Report		
Local government	City of Stirling	
Item no.	Item 1 - 50 & 52 Porter Street Gwelup - DA18/2010	
Date	Thursday 21 March 2019	
Scheduled Time	2pm to 3pm	
Location	City of Stirling, 25 Cedric Street Stirling, Challenger Room	
Panel Members	David Karotkin Emma Williamson Tony Blackwell Dominic Snellgrove	Chairperson Deputy Chair person
Local Government officers	Ross Povey Giovanna Lumbaca Chris Fudge Pauline Monaghan	Director Planning and Development Acting Manager Development Services Acting Coordinator Planning Design Review Panel Support Officer
Proponent/s	MSP Gwelup Pty Ltd Kris Nolan Simon Walker Peter Breckenridge	C/o Urbis Urbis Modus Metro-West
Observer/s		
Briefings		
Development assessment overview	Chris Fudge	Acting Coordinator Planning
Technical issues	Chris Fudge	Acting Coordinator Planning
Design Review		
Proposed development	Child Care Centre	
Property address	50 & 52 Porter Street Gwelup	
Background		
Proposal		
Applicant or applicant's representative address to the design review panel	Kris Nolan Simon Walker	Urbis Modus
Key issues / recommendations	Refer to attached Design Quality Evaluation Report	
Chair signature	David Karotkin .	

Design quality evaluation Item 1 - 50 & 52 Porter Street Gwelup DA18-2010 DRP Meeting – Thursday 21 March 2019	
	Supported
	Pending further attention
	Not supported
Principle 1 Context and character	<i>Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.</i>
	1a. The Panel acknowledges the internal layout is designed by the operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design. 1b. The Panel made note the texture and materials choice is positive, however would like to see more detail relating to the use of these in terms of form and pallet to gain an understanding of context in relation to the neighborhood. 1c. Elevations that extend beyond the development to the streetscape would be useful to consider if the use of the proposed brickwork reflects the area.
Principle 2 Landscape quality	<i>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.</i>
	2a. The Panel made comment a detailed landscape design including play areas and management plan should be provided to ensure the success of the landscaped areas. 2b. The Panel comment fencing detail should be provided in order to understand the full aesthetic. 2c. Elevated planter boxes need to be well designed and consideration given to access and maintenance to ensure their success. 2d. The landscape plan provided is not consistent with the architectural site plan, in particular details of the proposed verge treatment. 2e. The width of the landscape strip to the east edge of the car park needs to wide enough to sustain decent size planting.
Principle 3 Built form and scale	<i>Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.</i>
	3a. The Panel commented the break up to the bulk and scale of the building is acceptable, subject to development of the design in more detail.
Principle 4 Functionality and build quality	<i>Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.</i>

	<p>4a. The Panel acknowledges the internal layout is designed by the operators; however there are many issues around the functionality and efficiency of the internal and external layouts and the sustainability of the design.</p> <p>4b. There is an opportunity to flip the orientation of the building to improve daylight penetration and natural ventilation.</p> <p>4c. There is opportunity to re-design the internal layout to reduce long corridors; specifically the location of room 5, the Laundry and rooms 6 & 7 could be reviewed. A redesign could improve functionality of the layout and improve opportunities for cross ventilation.</p> <p>4d. The Panel commented there is no office for private administrative purposes.</p> <p>4e. No furniture layout is provided.</p> <p>4f. The location of the bins store and store 1 are unacceptable as they are within the street setback zone and they block pedestrian access from the street via the footpath.</p>
Principle 5 Sustainability	<i>Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.</i>
	<p>5a. The Panel believes more consideration should be given to the orientation of the building to create a design that is solar passive.</p> <p>5b. More detail is required relating to the location of the air-conditioning condensers.</p> <p>5c. More detail is required relating to provision of shade to the carpark, north and west facing windows, and play areas.</p>
Principle 6 Amenity	<i>Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.</i>
	<p>6a. There is an opportunity to improve the overall arrival experience for families by creating an improved interface between the carpark and the entry. This could include an integrated landscape solution.</p> <p>6b. The Panel made note that the West facing play area will get the sea breeze and afternoon sun, this could be resolved by flipping the building to the north and thus in line with a solar passive design.</p> <p>6c. The rooms have limited access to natural light and cross ventilation.</p> <p>6d. The Panel commented the current orientation would require a substantial amount of shading.</p> <p>6e. Where shading may not be required (south facing openings), consider providing some weather protection to door and window openings.</p>
Principle 7 Legibility	<i>Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.</i>
	<p>7a. More planting and shade to the carpark would improve the pedestrian experience and legibility, whilst also acting as a tool for traffic calming.</p> <p>7b. Consideration should be given to linking the verge and pavement access via the disabled car bay, ensuring paving levels flow through.</p> <p>7c. Entry ways and pathways need to be wide enough to accommodate pram access.</p> <p>7d. The Panel requests more detail relating to the proposed signage to the building.</p>
Principle 8 Safety	<i>Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.</i>
	<p>8a. The car park should be designed as a pedestrian friendly zone. Consider paving materials, visibility and easy access to the entry with prams.</p>
Principle 9 Community	<i>Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.</i>
	<p>9a. The Panel note there is currently a parking shortfall of nine car bays and defers to the City on this point.</p>

Principle 10 Aesthetics	<i>Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.</i>
	10a. As noted elsewhere, the current design has potential but requires further development.

Conclusion:

The design as it currently stands is not supported.

Design Review progress Item 1 - 50 & 52 Porter Street Gwelup DA18-2010 DRP Meeting – Thursday 21 March 2019			
	<i>Supported</i>		
	<i>Pending further attention</i>		
	<i>Not supported</i>		
	DR1 21/03/19	DR2 (Date)	DR3 (Date)
Principle 1 - Context and character			
Principle 2 - Landscape quality			
Principle 3 - Built form and scale			
Principle 4 - Functionality and build quality			
Principle 5 - Sustainability			
Principle 6 - Amenity			
Principle 7 - Legibility			
Principle 8 - Safety			
Principle 9 - Community			
Principle 10 - Aesthetics			

Attachment 14

External Referral Response - Lot 76 & 100 (50 & 52) Porter Street, Gwelup - Child Care Premise - DFES Response

DFES Ref: D09429

Dear Mr Fudge,

I refer to your email below in relation to the referral of a development application for a Child Care Premise at Lot 76 & 100 Porter Street, Gwelup.

The submitted documentation indicates that the proposed development does not fall into an area designated as bushfire prone pursuant to the *Fire and Emergency Services Act 1998* (as amended) as identified on the *Map of Bush Fire Prone Areas*.

On this basis, application of *State Planning Policy 3.7 – Planning in Bushfire Prone Areas* (SPP 3.7) to this proposal may not be necessary.

Exemptions from the requirements of SPP 3.7 should be applied pragmatically by the decision maker and are identified in Planning Bulletin 111/2016.

As a formal referral is not triggered for this application, DFES have not undertaken a full assessment of the Bushfire Management Plan submitted.

Should you require further clarification, please do not hesitate to contact me on the undersigned.

Kind regards

Sandeep Shankar

Senior Land Use Planning Officer | Rural Fire Division

Department of Fire and Emergency Services

Level 1, Albert Facey House, 469 Wellington Street WA 6000

E: advice@dfes.wa.gov.au | P: 6551 4080 | W: www.dfes.wa.gov.au



Government of Western Australia
Department of Fire & Emergency Services
Rural Fire Division



Consultation Submissions – HN 50 / 52 Porter Street, Gwelup

Submission #	Support / Object	Comments
1	Object	I am extremely concerned regarding the impact on traffic flow, traffic management and parking issues. The road related problems are an ongoing issue the school struggles to deal with. Our annual parent survey regularly indicates that parking and traffic are a major concern for parents. With school enrolment numbers presently sitting at 500 students, the addition of more vehicles on North Beach Road and Porter Street can only add to an already difficult situation. Ultimately it is student safety that concerns me and adding a development of this size will create much more complex problems.
2	Object	<p>I am a resident that has lived here long before the school was expanded and NO PARKING FOR PARENTS DROP OFF. Every day owners/ratepayers cannot get into or out of their houses around school start and finish times. We are constantly blocked in our driveways by cars parking on the roads, parents parking on lawn. There is nowhere near enough access or parking.</p> <p>Now you want to add 120 more parents at drop off, do you not care about residents AT ALL. Disgusting, 24 car parks for 122 students with 22 staff so now we will have even more traffic. What about our KIDS, our PETS and all the wildlife.</p> <p>Over the last year I have witnessed at least 3 near misses on our CHILDREN from tunnel vision drivers in a cul-de-sac, you have introduced cars to a no through road because you can't control parking.</p> <p>The City of Stirling and Lake Gwelup Primary has had so many complaints over these 20yrs and you still have the arrogance and ignorance to try and add more traffic and more parking problems.</p> <p>The City's Rangers are well aware of all the problems the school has caused and is causing. You would have to be the most ignorant council in the world to allow this to continue and then have a proposal to increase the problem.</p> <p>Proceed at your own peril, it's a disgusting proposal.</p>
3	Object	<p>We are not happy with this proposal. Porter Street is so busy in the morning and afternoon. I can tell you we have people blocking our driveway, pulling up on our lawn breaking sprinklers due to the lack of parking. You want to allow 112 kids and 22 staff (134 possible extra cars in peak hours) to congest our street and no doubt have cars blocking our driveway. 24 parking spots are nowhere near enough. The danger of our kids crossing roads will be put even more at risk with the extra traffic. The carpark next door to residential dwellings will be absolutely annoying... cars turning up from 6:00am - residents will hear car doors shutting and chatting between parents and kids at a ridiculous hour... possible car fumes blowing into entertaining areas will be an issue too.</p> <p>The building that has been proposed is not attractive and would look more in place in Osborne Park. Most child care centres around are a lot smaller most likely due to busy areas and lack of parking and look more like residential houses that blend into its surroundings.</p> <p>In summary please think about the safety of the kids and the serious lack of parking and congestion. Peak hour traffic avoiding the freeway always plays a major part in congestion and this added strain is really not necessary.</p>
4	Object	<p>Whilst I can see some advantages for having the premises in close proximity to the school I can see great disadvantages in parking and set down of children. Porter Street now is an extremely dangerous place now both before and after school as regards parking. The indiscriminate and often double parking and illegal U turns by some parents are a danger to children, parents and local residents alike. There is already a severe shortage of parking in the Porter Street area.</p> <p>We as residents are strongly opposed to this application.</p>
5	Object	<p>We wish to STRONGLY OBJECT to the above proposed development of Child Care Premises and Associated Parking.</p> <p>Our primary grounds for objection are:</p> <p>1) The Proposed Development Plan neglected the increased safety risks due to the significant transport and traffic impacts.</p> <p>a. The site is located at the corner of North Beach Road and Porter Street. Porter Street, particularly along the proposed development site is the main area for the parents to pick up and drop off the kids to the Lake Gwelup Primary School (Kindergarten to Year 6, more than 486 students and 32 staff) and YMCA Outside School Hours Care (39 children every day from 7:00am - 6:00pm). In addition, the residents living around Lake Gwelup Primary School use the Porter Street, particularly the portion of Porter Street at the proposed development site and North Beach Road to drive to the Erindale Road Exit of the freeway or Balcatta industrial area (Appendix A). Public transport buses Route 424 and Route 427 pass North Beach Road at every 15 minutes (Appendix A).</p> <p>b. However, many school students walk or ride bicycles cross the portion of Porter Street and/or North Beach Road which bound the proposed development site (Appendix A).</p>

		<p>c. The current traffic management based on the above facts has been a challenge to the Council. The number of the traffic incidents happened at the portion of North Beach Road which bounds the proposed development site has considerably increased in the past 3-5 years (Appendix B). RAC has increased the car insurance fee for the residents in this area due to the above reasons which I was told by a RAC staff. I witnessed at least 3 traffic incidents at this spot in the past 3-5 years. We recommend City of Stirling to check with RAC, WA Police, Main Roads and/or other relevant organisations to find out the records of the traffic incidents.</p> <p>d. The proposed Child Care Premises and Associated Parking will significantly impact the traffic and hence increase the safety risk for the school students and the residents.</p> <p>e. It is important to note that there is another more than 4,000m² to be developed on the two lots, in addition to the proposed development plan. If such high density commercial child care premises and parking are approved, the another 4,000m² development of the lots with such a density will put a heavy burden on the existing infrastructure, increase potential government's management cost, jeopardise the environment, damage the existing life style of the local community and limit other normal residential property development in this area. It's unfair and unsustainable.</p> <p>f. Obviously, the proposed development plan neglected the above facts and misled the readers through the study reports which are lack of substantial evidence.</p> <p>2) The Proposed Development Plan does not comply with the requirements of Transport Impact Assessment Guidelines by Department of Planning and Western Australian Planning Commission (Aug 2016) (the TIA Guidelines).</p> <p>a. Clause 2.1 of Volume 1: The Proposed Development Plan does not comply with, even totally departed from the objectives of the TIA process, based on the facts in our point 1).</p> <ul style="list-style-type: none"> • It will increase the transport task and the potential infrastructure required. • It will increase the potential adverse impacts; • It will not be sustainable; • Due to the increased safety risk, it will reduce the levels of accessibility for those without ready access to the private car, those who choose not drive and those who are unable to due to a disability; and • It will lower the current quality of transport. <p>b. The Proposed Development Plan did not address how it complies with TIA guidelines with SUBSTANTIAL EVIDENCE, RELIABLE DATA AND RIGOROUS ANALYSIS.</p> <p>3) The Proposed Development Plan does not comply with the requirements of City of Stirling Local Planning Policy 6.7 Parking and Access, including, but not limited to the objectives, parking ratios and traffic assessment etc.</p> <p>4) The Proposed Development Plan does not comply with the requirements of City of Stirling Local Planning Policy 6.4 Child Day Care Centres, including, but not limited to the objectives, traffic impact, parking, set-back to North Beach Road and in particular the operations hours with adverse impact to the existing Lake Gwelup Primary School and YMCA Outside School Hours Care etc. It is important to note that the Proposed Development Plan neglected YMCA Outside School Hours Care in their documents.</p> <p>5) Commercial development of Child Care Premises on Porter Street does not fit the life style of the surrounding residential area.</p> <p>6) In addition, the Proposed Development Plan will devalue our property due to the adverse transport and traffic impacts, noises, safety risk and the inappropriate commercial use of the land.</p> <p>In a summary, it is our belief that the Proposed Development Plan does not comply with the relevant Local Planning Policies and Transport Impact Assessment Guidelines and will have significant adverse impacts on the community. We strongly object to this proposed development plan.</p>
6	Object	I believe there is not enough parking. With the school across the road and local traffic it will have a significant impact at both end of the day 7.30am–9.00am and 3.30-5.30pm. Public transport is irrelevant as the target families for this centre are not the public transport types.
7	Object	There is not enough parking bays for the size of this centre and the number of staff. There is a school opposite and the road already has people double parked. It is dangerous and with small children attending the primary school this is not ideal or safe. The main times 7.30-9.00am and 3.00-5.30pm will be very bad and majorly impact local traffic and the safety of the community. The people who use this centre will not be public transport types therefore access to this is irrelevant.
8	Object	<p>The large size and commercial nature of the proposed development that is in no way suitable for a small residential street. The elevations shown in the application are suited to commercial/industrial precinct such as Balcatta and do not maintain sympathies to the surrounding residential environment as claimed;</p> <p>Design commentary stating the <i>roof structure and bulk providing not only visual interest but a greater suitability to the surrounding locality</i> is incorrect. In our opinion, the proposed design is bulky and of commercial appearance and is unsuitable for a residential street;</p> <p>The application under item 3.2.2 addresses compliance with the R25 Residential code however is proposing non-residential use. The site should be maintained for residential</p>

		<p>purposes as per the zoning and we expect the City would not use discretionary powers to approve a building that absolutely fails to consider its surroundings;</p> <p>The onsite parking supply does not meet the requirements of the policy. Whilst the application states an argument that their "modelling" shows compliance is not required, the numbers provided are purely speculative. Speaking from my own recent experience using childcare facilities, peak periods are much more condensed than modelled and proposed parking capacity is insufficient;</p> <ul style="list-style-type: none"> ○ The report details that 36% of staff should arrive by alternate transport. This number is unsupported and the likely utilization of drop off bays by staff will result in vehicles attempting to park in Porter Street or on neighbours verges; ○ The report notes 26 street bays are also available. These bays are already inadequate for vehicle requirements at school start and finish and do not support the proposal to reduce required car bays; <p>Traffic flow on North Beach Road and Porter Street is severely congested around school start and finish to the point where Porter Street traffic is at a standstill every weekday and the City of Stirling is regularly contacted to assist. The addition of significantly more car movements during this period is not an acceptable outcome knowing traffic movements in this area are a known issue;</p> <p>Provision of service vehicles is suggested to be completed by smaller vehicles and outside peak hours. As a suggestion it carries no weight and would be expected to have low compliance and add to traffic congestion during peak periods;</p> <p>The report does not identify any safety issues and fails to address the additional vehicle movements that will increase the safety risks associated with large numbers of primary school children moving through this area on their way to and from school.</p>
9	Object	Lake Gwelup School (Porter Street) drop off and pickup is already very busy with cars. Adding more traffic to this street will make it even more dangerous for our children.
10	Object	Lake Gwelup School (Porter Street) drop off and pickup is already very busy with traffic and cars. Adding more traffic to this street will make it even more dangerous for our children.
11	Object	I believe that the proposed application for the Lots 76 and 100 on Porter Street, Gwelup will create vehicular and pedestrian congestion around the present traffic roundabout and the primary school access.
12	Object	I feel this is not a good site for the centre to be built on. School traffic is already at a premium and Porter Street won't be able to cope with any more cars. The amount of cars in the area already creates many hazards for the children. My child has come close to being hit before. Find a different site close by that doesn't already have school traffic.
13	Object	There is already a big problem with parking at Lake Gwelup school for the parents picking up their kids. This will aggravate the situation.
14	Object	The school already struggles with traffic on Porter Street during peak hours; there is insufficient parking around the school grounds and a kiss and ride directly opposite. It is too dangerous for the kids already without adding hundreds more cars every day.
15	Object	The corner is congested during school hours and has resulted in a few close calls. To bring a mass of more traffic to the area as well as school kids cycling and walking to school seems drastic. Plus a 2 storey building overlooking busy roads doesn't seem logical. Not agreeable to this proposed design development.
16	Other	Survey concerns regarding the boundary alignment, and location of retaining and fencing, at the NE corner of HN 50 Porter Street, Gwelup.
17	Object	<p>The largest concern I would have would be traffic management and pedestrian safety. North Beach Road is already considered a 'rat run' for morning and afternoon commuters to avoid freeway congestion. Traffic flows during peak hours are dangerously high for a residential area and with drivers often in complete disregard for local residents exiting/entering side streets. The additional traffic and congestion caused would need to be extensively considered. At the current state, parking is already difficult for school drop-off, and in particular afternoon pickup. Soon to be implemented parking restrictions adjacent to the school will only worsen this situation. Currently the roundabout at Porter Street and North Beach Road is dangerous, when travelling by vehicle eastbound on Porter Street and approaching the RAB, visibility to the Right Of Way traffic heading Northbound on North Beach Road is restricted, and given the current 'short cut' mentality of drivers using the 'rat run' it is inevitable that a collision is highly likely. The same situation exists at Lyndale/North Beach Road, with most southbound vehicles not expecting to yield to vehicles entering the RAB from Lyndale.</p> <p>During peak traffic times, it is dangerous to use the pedestrian crossing at the corner of Porter and North Beach Road in an East to West or West to East direction due to traffic volumes and vehicles failing to indicate their intent. Whilst I am not opposed to the provision of this service in the local area, and even at this location, I would strongly oppose the proposal unless a comprehensive traffic management plan was undertaken that has a strong emphasis on pedestrian safety, and capital works are undertaken to deter drivers from using North Beach Road as a 'Rat Run', calm additional traffic expected, and provide safer pedestrian/traffic separation including controlled intersections, and handrail barriers.</p> <p>Many of the local residents enjoy the opportunity to walk their children to school, and any proposal that compromises this capacity to do so safely would be a significant and detrimental impact to lifestyle, and dramatically decrease the current level of social amenity enjoyed by residents.</p>
18	Object	<p>I wish to express my concern at the plan to build a Child Care on Lots 76 and 100, 50 and 52 Porter Street, Gwelup.</p> <p>Currently there is already a lot of traffic around the school and I am very concerned that the large Child Care centre is going to cause more traffic and more potential for accidents. I'm not against a Child Care being set up but definitely object to the location of this one. I believe that parking is also going to be an issue in an area where school parking is already a challenge.</p>

19	Other	<p>I don't have any problems with the new Chid Care or Early Learning Premises being located where it is but I think that serious measures should be taken for the volume of traffic that now uses this road to Karrinyup Road and Karrinyup Road to North Beach Road and Erindale Road.</p> <p>I feel that this part of North Beach Road has not been designed for this volume of traffic which has further increased with the opening of Farmer Jacks, considering the proximity of the Lake Gwelup School, Retirement Villages, Shopping centre and Service Stations. Living on North Beach Rd has now become very challenging so please take into account the residents who live here.</p>
20	Object	<p>Traffic flow and parking implications due to large capacity of the development and single parking access point so close to roundabout on North Beach Road/Porter Street. Lake Gwelup Primary School entry point will be severely impacted by increased traffic from all directions causing safety and accessibility concerns. Traffic flow report section 3.3/6.1/12.0 Estimated Actual Parking Demand Based on Trip Generation is unrealistic and doesn't account for 500 primary school students drop off/pick up at coinciding peak times.</p> <p>Current parking allocation is already strained and insufficient for primary school needs. Facility design and scale is more suited to an industrial area, maximum 50 child capacity or at least requires multiple entry exit points from Erindale Road/North Beach Road not solely Porter Street.</p>
21	Other	Having read through all the documents relating to the proposal, there doesn't appear to be any reference to the primary school located across from the location. I believe that the traffic flow peaks will coincide with the vehicle and pedestrian traffic movements of the school at the same times. How has this been addressed?
22	Object	We are primarily concerned that the proposed development (in its current form) will place significant strain on the traffic flow, management and parking on Porter Street and North Beach Road. Consequently this will jeopardise the safety of the school community (particularly the young students). Whilst our community would benefit from an Early Education Centre, the proposed site access off Porter Street and the limited number of parking bays is not suitable or sustainable and will be problematic and potentially dangerous. The proposal would need to be accompanied with a significant road / parking design changes to cater for the increased volume of traffic to the area. The school has had ongoing issues with road related problems especially on Porter Street. The addition of more vehicles on North Beach Road and Porter Street can only add to an already difficult situation.
23	Support	Given the limited childcare facilities in the suburb of Gwelup, I am very supportive of this application and would be a user of the centre if it was to open in 2020.
24	Object	I feel it will cause more traffic issue for school mornings & afternoons. There is already traffic flow issues from the school as it is. Many cars use North Beach Road drive as a thoroughfare to miss Mitchell Freeway traffic. With Porter Street at the bottom of the hill many cars diver over the speed limit even during school limited speed hours. I feel it will cause accidents to school children & other cars.
25	Object	I object mainly due to traffic that this will bring to the area. It is already currently very busy on the roads due to school traffic. I enjoy walking my children to school and currently worry about safety on the roads, an increase in traffic in the area would be more dangerous. This will impact us for years as we own our house and intend on staying here for 10 Years.
26	Object	My children attend Lake Gwelup Primary school opposite the proposed site. I believe the area around the Porter Street and North Beach Road roundabout, as well and the surrounding streets are already very busy and the proposed development will make this even more so. It's difficult to find parking near the school as it is, and even more difficult to safety cross the roads during busy times. The proposed development will increase the traffic in the area, make parking more difficult, and make it even less safe for kids walking or riding bikes and scooters to school.
27	Object	<p>We do NOT support the development application for these reasons:</p> <ul style="list-style-type: none"> - Increased traffic on Porter Street and adjacent to the Lake Gwelup Primary School leading to increased safety concerns for parents and children during school drop off and pick up. - Increased traffic on Porter Street in general during operational hours of the proposed child care premises. - Porter Street already sees a large volume of traffic during the day, the proposal would only increase the traffic traversing this street, inhibiting street parking and reducing access for City of Stirling Council workers, such as on bin days. - Significant concerns for the safety of young children walking along the footpath adjacent to the proposed development area and the increased risk of severe injury or possibly death with inattentive road users entering / exiting the proposed child care premises car park. <p>Gwelup already has Child Care facilities within close proximity to the proposed development site (Jelly Beans on Balcatta Road), as well as Child Care facilities in surrounding suburbs (Balcatta, Karrinyup, Carine and beyond). These additional Child Care premises are not required.</p> <p>We have two young children who either walk / ride or scoot to school each morning and whilst we are vigilant to traffic in and around Porter Street, it is easy to lose sight with the high numbers of parents / children and vehicles in the area during school drop off and pick up. We have some significant concerns about our children's safety should the development application for the above be approved.</p> <p>The draw-card to living in Gwelup is the opportunity for our children to walk / ride / scoot to school with minimal road crossings and minimal traffic. This application puts our children and all the children who attend Lake Gwelup Primary School at significant risk and increases the likelihood of injury / death. We would not be comfortable with our children walking / riding / scooting unsupervised in later years with this development near the school.</p> <p>Statistics collected by the Australian Government's Department of Infrastructure and Transport indicates that as many as 150 Australian children are killed each year in "driveway" deaths or "slow deaths or low speed vehicle run-overs". More than 14% of these deaths occurred in areas with low posted speed limits and around school zones. Children between the age of 0 and 4 are at the most risk and the most susceptible to severe injury including death in this case. Children aged 5-14 are more susceptible to severe injury. The study also indicated that as a result, parents were more likely to drive their children to and from school to reduce and mitigate the risk of injury / death. This alone would increase the</p>

		<p>traffic in and around the proposed development area adding to our concerns about child safety. It would be extremely sad if our children in Gwelup were part of this growing statistic as a result of this development approval.</p> <p>Our children are our future. They are our future leaders and should be nurtured in a safe environment. This application removes that safe environment.</p>
28	Object	<p>There is already significant traffic flow causing congestion in the Porter Street and surrounding streets and I am extremely concerned that it's only a matter of time before there is a near miss or worse, a fatality. There are also 2 Aged Care facilities on North Beach Road and families are out often walking their elderly family members in wheelchairs whom will also be impacted by the additional traffic congestion. The fact is that the busiest times for the school would be the same as that for a childcare facility, further exacerbating a known problem affecting residents, parents and increasing the risk of a potentially irreversible situation. Finally, a quick google search shows me at least 14 childcare centres in the immediate 5 km radius-more than enough options.</p>
29	Support	<p>Whilst the proposed 24 bays does not seem sufficient for 112 children to be dropped off and picked up, and 112 children seems an insane number of children to have at a day care (the day care our children went to has 30 per day), the long opening hours at least mean a lot of the traffic would be outside of school hours. I'm sure it will increase problems for traffic flow at peak times; however, of all the commercial options for the site I think a day care is an excellent one.</p> <p>I am concerned that if this over-sized day care is knocked back something worse might be put in its place. My preference for the area would be a small community hub with a library, café, playground, community garden, or similar facilities, to give Gwelup residents a wonderful place to congregate; but, if it has to be a commercial enterprise, then we could do much, much worse than a Child Care Centre.</p>
30	Object	<p>This proposed Child Care Centre is close to the Lake Gwelup Primary School. Traffic around the school particularly around mornings and afternoon is heavily congested. The addition of a new Child Care Centre would bring extra traffic which the current road infrastructure cannot handle.</p>
31	Other	<p>Supportive of community facilities located within proximity of public schools however careful consideration needs to be given to the potential amenity impact that these facilities may have on schools and surrounding properties.</p> <p>It is noted that the vehicle access point to the child care premises is via Porter Street opposite the Lake Gwelup Primary School (Primary School). Currently, the on-street embayment parking bays along the Primary School side of Porter Street is generally utilised for student drop-off/pick-up bays during peak operating times.</p> <p>The proposal constitutes several on-site parking shortfall (albeit the application of the parking concession rate) and that the proponent contends that the parking shortfall, in part, can be compensated by the existing on-street embayment parking along the southern verge of Porter Street.</p> <p>It should be highlighted that the length of stay for drop-off/pick-up activity for the child care is generally longer than a primary school and thus, this may limit the drop-off/pick up parking availability for parents of the students attending the Primary School.</p> <p>In addition, it is deemed that the subject embayment parking may not be a suitable location for drop-off/pick-up of the children as it would compromise the safety of the parents and children crossing Porter Road. This is further exacerbated by the potential increase in traffic volume during peak periods.</p> <p>To avoid any conflict in traffic movement and enhance the safety of the children, students and road users alike, it would be expected that the operation of the proposed child care facility would have sufficient number of on-site drop-off/pick up bays in addition to the required number for staff and visitor parking bays.</p>
32	Other	<p>My main concern is the traffic in the mornings and afternoons during school pick-up which is already terrible. 24 parking bays for a child care centre with 22 staff... common sense says that is not nearly enough. I know not all 22 are likely to be there first thing in the morning but there will be lots of parents coming in and dropping off. I would think at least 40 bays and entry from North Beach Road instead of Porter street might help. I am not against the Child Care Centre. Just the traffic and safety surrounding the traffic issues.</p>
33	Other	<p>Not against the proposal however have concerns regarding traffic generated by proposal in conjunction with the operation of the adjacent school.</p>
34	Object	<p>Traffic along Porter Street during school drop off and pickup times is already congested. The addition of this development will add to this congestion and cause an increase to the risk of potential near misses and fatalities with students of Lake Gwelup primary school; particularly with the car park placed on Porter Street and opposite the student entrance to the school. A significant re-think of traffic management should performed and should consider the options along North Beach Road and improvements of the intersection at North Beach Road and Erindale Road which is a common site for car accidents.</p>
35	Object	<p>I express my concern over the proposed Child Care facility in Gwelup. I have 2 young children, one of which attends lake Gwelup primary School. My biggest concern is traffic & safety. The traffic surrounding the school has been a problem for some time. I realised this even before I had children of my own. North Beach Road has slowly gotten busier and busier over the years I have lived here. With more estates going up & commuters using North Beach Road to access the freeway via North Beach Road.</p> <p>Porter Street during peak pick up and drop off times has always been a problem, with a huge Child Care facility on the street this will only get worse. Another concern I have is with the current lack of parking surrounding the school. The Council are about to implement 15 minute parking restrictions as well as no parking signs on Eyrean Way. This will further push traffic flow through Porter Street where I already see a lot of problems daily. On top of traffic congestion it is extremely unsafe for children & families to cross as well getting in and out of the car. We have a lovely little suburb with an amazing school. There for because of the ongoing traffic hazards, lack of parking and destroying the amenity of our suburb I object to this proposal.</p>
36	Object	<p>I am very concerned with this proposal as there are already major congestion and safety concerns at the school drop off and pick up times.</p>

		<p>The traffic lights as North Beach Road & Erindale Road are very busy often taking two changes to drive through at peak time and there has been many an accident at this intersection.</p> <p>The proposed Childcare Centre in this area with 122 placings plus staff and only 24 car bays would make for an incredible increase in foot and vehicle traffic.</p> <p>Already the parking at the school is at a premium.</p> <p>Please consider our children's wellbeing first when working on this proposal.</p>
37	Object	My children attend Lake Gwelup Primary School. I have just been informed that there will be parking restrictions of only 15 minutes on Eyrean Way. Not enough time to settle in a year one as well as a Kindergarten aged child in the mornings. I believe this project would further increase the traffic in the street and reduce the amount of already limited parking for school pick up and drop off.
38	Other	<p>I have following concerns:</p> <p>1) During demolition and construction of the facilities, there will be a lot of dust and noise generated and the traffic of construction vehicles and trucks will impact on the residents and school children and playground. How will these be addressed?</p> <p>2) The entrance to the Child Care Centre is quite close to the roundabout. During the early peak hours between 7.30am to 8.30am when the parents are dropping off the kids to the Child Care Centre and to the primary school, traffic congestion is expected. Suggest the Child Care Centre has a bigger car park and more drop-off bays for parent to drop off the kids so as not to create congestion on the Porter Street for residents and parents of school kids.</p>
39	Object	Only thing that concerns me is the increased traffic congestion around an already busy area. I feel like it is already a high risk area for kids crossing the road all over the place on Porter Street - it worries me to think what an extra load of cars entering that area would be like!
40	Object	I have concerns about traffic management and parking. Lake Gwelup Primary School already has lack of parking, and this large capacity centre will place added pressure and chaos on Porter Street and surrounding areas. It is also a safety issue, not only for Lake Gwelup Primary School children but also students riding home from Carine High School.
41	Object	I am against the proposed Childcare Centre in its current form. I have 3 children who attend Lake Gwelup Primary school and we are already very concerned with the traffic flow around Porter Street and North Beach Road. I have seen people parking on our verge numerous times during school pick up time as there are not enough parking spaces currently. My children have had to walk on North Beach Road to get around cars parked the pavements. Many of the people driving along North Beach Road do not obey the restricted speed limit during the early school drop-off and the afternoon school pick-up. There are already big problems with the traffic and if this proposal goes ahead in its current form, the likelihood of accidents involving our young students will markedly increase. Whilst I agree that a Child Care Centre in our suburb is a good idea in theory, the current proposal has not been well thought out with regards to the impact on residents and the young students attending Lake Gwelup Primary School.
42	Object	As the City of Stirling Council Rangers are aware the Lake Gwelup Primary School community has significant concerns regarding student and community safety with the current volume of traffic on Porter Street and inadequate infrastructure to support this (for example a roundabout). Adding to the volume of traffic and limited parking (24 spaces for 22 staff and 110+ children) would substantially increase safety concerns (for both pedestrians and drivers). Given the location of the proposed centre the flow of traffic from parents leaving the centre would confront the flow of traffic of parents attempting to drop off or pick up their children from school adding another point of conflict for drivers. For this proposal to be supported I would need to see changes made to both the number of car parks the Child Care Centre has and infrastructure added to the current road to support the volume of traffic with the end result increasing pedestrian and driver safety.
43	Object	OPPOSE proposal - We are concerned that the proposed development will place significant strain on the traffic flow, management and parking on Porter Street and North Beach Road. Consequently this will jeopardise the safety of the school community (particularly on young students). Whilst our community would benefit from an Early Education Centre, the proposed site access off Porter Street and the limited number of parking bays is not suitable or sustainable and will be problematic and potentially dangerous. The proposal would need to be accompanied with a significant road / parking design changes to cater for the increased volume of traffic to the area. Our school has had ongoing issues with road related problems especially on Porter Street. The addition of more vehicles on North Beach Road and Porter Street can only add to an already difficult situation.
44	Object	I am concerned that the proposed development will place extra significant strain on the traffic flow, management and parking on Porter Street and North Beach Road. This will consequently jeopardise the safety of our school community at Lake Gwelup PS. Although the community would benefit from a Child Care Centre, access to the proposed site on Porter Street and the limited number of parking bays is not suitable or sustainable and will be problematic and potentially dangerous. The proposal should carefully consider road/parking design changes to cater for the increased volume of traffic to the area. There are already ongoing issues with road related problems around the school, especially on Porter Street and adding more vehicles to this area will only negatively impact to an already busy and difficult situation.
45	Object	The impact near the school will be negative. Porter Street is already hectic, and there are several day cares in the area - this is not required.
46	Object	Proposed day care will cause traffic congestion on Porter Street and North Beach Road. Will also inhibit flow of traffic at school drop off and pickup times. Will cause traffic congestion outside school while being built. There are already limited parking spaces for the school.
47	Other	<p>I am worried that the heavy construction work may cause structure damages to my house. For example, cracked wall on the side adjacent to the developing area. Is there any protection against this type of damage provide by the builder/land owner?</p> <p>I was informed that the old house at number 52 (Lot 100) Porter Street has asbestos panels and the fences around the house no. 50 (Lot 76) are made of asbestos as well. If they are then are there any steps in place to protect the residents in the vicinity from the poisonous asbestos dusts while they are being demolished?</p>
48	Object	<p>I object to this proposal. There are a number of grounds I wish to raise.</p> <p>Firstly, the traffic study submitted by the proponent is based on a number of flawed assumptions. Firstly, it assumes that half the staff will bike or walk or use public transport. This is ridiculous. It does not reflect typical work commute patterns of any suburban business in our area. The vast majority of workers drive to work. Public transport availability is poor</p>

		<p>and there is no train station within walking distance. I suggest you check with the school and see if half their staff walk to work or use the bus. My understanding is that over 90% drive to work. If 90% of the Child Care staff drive to work, our street and Porter Street will be inundated. The Child Care centre will instruct their staff to park in surrounding streets so as to keep the centre parking bays free for drop offs by parents. Staff parking will block up verges and residential streets with their cars and cause congestion and potential for accidents.</p> <p>I also object to the assumption in the traffic study that staff and parents using the Child Care Centre can use the existing bays on Porter Street, and this will be outside school hours. These bays are already heavily used by the school community, including from early morning and well into the afternoon. YMCA operates pre and post school hours' child minding at the school, but this is not mentioned in the proponent's study. The traffic bays on Porter Street are already well utilised from 7am onwards until late afternoon. If further traffic is using these bays there will be congestion and potential for accidents.</p> <p>I am extremely concerned about the extra traffic this Child Care Centre will bring. The roads in the immediate vicinity are heavily used by commuters, many of whom speed and ignore the speed limit. We see near misses regularly. The intersection of North Beach Road and Erindale Road sees regular accidents, including at least one maybe two fatalities. We don't need more traffic in the immediate area. In particular, more traffic at school times will endanger kids' lives. We see near misses regularly. Parents in a hurry trying to drop kids off at the Child Care Centre will regularly park on verges, across pavements, double park, etc. Kids trying to navigate their way to LGPS school already have to walk on the road and dodge cars. More traffic and drop offs at the proposed child care centre will make the problem much worse. Drivers also routinely ignore the speed restrictions as they race past the school. Please interview the cross walk man who tries to stop traffic on North Beach Road to help kids across in the morning on the way to school. He will tell you how bad it is. Parents dropping off kids to the Child Care Centre who park on Porter Street west will have to cross North Beach Road at the roundabout. We see near misses and accidents there regularly. More foot traffic in busy periods at the roundabout will have to dodge speeding cars. I expect a tragedy to occur. There have been many near misses at the roundabout already.</p> <p>Also, there is no statement in the proposal that the proponent does not intend to operate the Child Care Centre on Saturdays. This should definitely not be allowed. The extra noise and traffic would be an unreasonable burden on residents.</p> <p>There is also no statement in the proposal about what is planned for the balance of the large block that the proponent has bought. There is an indication that a residence would be built to the north of the Child Care Centre, but this is nothing more than an assumption. It seems to me that there is nothing stopping the proponent from putting in additional applications for building commercial premises on the rest of the large block to the north of the Child Care Centre. I would object to that, as it would completely change the character of this part of Gwelup. If the Child Care was approved there should be a condition that the rest of the block be reserved for residential use only. No further commercial development should be allowed on the balance of the block. Further commercial development would bring more traffic, compounding all the problems raised above.</p> <p>Finally, I think that the raised outdoor play area at the Child Care Centre will cause unreasonable noise levels and nuisances for residents. Screaming and shouting voices travel far, particularly when emanating from a raised location, and are much louder than typical neighbourhood noise. Up to 110 screaming, playing children will create significant sound levels. Gwelup is a reasonably quiet suburb and the added noise levels coming from an elevated height will unreasonably intrude on our lives. Having staff and children arrive from 6.30am onwards will lead to unreasonably early morning noise which will continue into the day. Please do not approve this proposal.</p>
49	Other	<p>My major concern is around the additional traffic and parking. I have two young children at Lake Gwelup Primary and there is already traffic and parking issues around the school. I believe there is also now going to be parking restrictions on Eryean Way which may also impact school parking. There are around 500 students at Lake Gwelup which creates a large volume of traffic already. Additionally North Beach Road in the morning is very busy with general "work" traffic. The 24 parking bays at the centre will not be anywhere enough with 22 staff and the vast majority of the children at that age being driven to and dropped at the centre. I am not against the centre per se but feel the traffic management side of it needs further consideration.</p>

Enquiries: Chris Fudge
chris.fudge@stirling.wa.gov.au

Application No: DA18/2010

4 April 2019

Ms Emma Dunning / Mr Peter Breckenridge
MSP Gwelup Pty Ltd
70 Belmont Avenue
Belmont WA 6104

Dear Sir/Madam

DEVELOPMENT ASSESSMENT PANEL APPLICATION: CHILD CARE PREMISES
ADDRESS: LOTS 76 & 100, HN'S 50 & 52 PORTER STREET, GWELUP 6018

I refer to your Form 1 Development Assessment Panel application received by the City on 20 November 2018 (DA18/2010 refers).

Following a preliminary assessment in accordance with the City's Local Planning Scheme No.3 (LPS3), relevant Local Planning Policies and the Residential Design Codes, the following further information is required:

Proposed Staged Development

The development plans indicate a 'proposed staging boundary' to the north of the Child Care Premises proposal. Please provide the City with an indicative concept plan for the future land use of the remaining portion of Lots 76 and 100, HN's 50 & 52 Porter Street, Gwelup, specifically demonstrating that suitable vehicle access can be achieved and how the subject proposal fits in with the future staging.

Local Planning Policy 2.6 – Residential Building Heights

The provisions of LPP 2.6 apply to all development within a Residential Zone. The proposed Lower Skillion height of 6.9m is in lieu of the permitted 6m maximum. The proposed High Skillion height of 8.3m is in lieu of the permitted 8m maximum.

The Objectives of LPP 2.6 are as follows:

- *To ensure that the height of buildings are consistent with the desired scale in a given locality; and*
- *To ensure that the height of a building does not overly impact on the streetscape or on neighbouring properties.*

Amended plans and/or written justification are required to address the above.

Local Planning Policy 6.1 – Advertising Signs

Wall Signs if located within a Residential Zone and attached to a building used predominantly for a commercial use are not to exceed 1.2m² in area per lot, and not exceed one (1) wall sign per lot.

The development proposes two (2) Wall Signs in lieu of the permitted one. The total area of the signage exceeds the 1.2m² maximum with a proposed area of approximately 9.6m².

Local Planning Policy 6.2 – Bicycle Parking

The provisions of LPP 6.2 apply to all non-residential development in excess of 400m² gross floor area (GFA) (new or existing).

The proposal requires the provision of three (3) bicycle spaces. The submitted Planning Report identifies that a total of eight (8) bicycle racks will be provided on-site however the development plans do not annotate this 8 rack provision.

Notwithstanding this, the bicycle racks illustrated on the Site Plan are located within an area of high pedestrian activity – adjacent the main entrance to the facility. LPP 6.2 requires bicycle spaces to be located away from areas of high pedestrian activity in order to minimise inconvenience or danger to pedestrians.

Local Planning Policy 6.3 – Bin Storage Areas

The provisions of LPP 6.3 apply to all non-residential development. The bin storage area size for a bin store in a Residential Zone is a width of 3.5m per bulk bin, and a depth of 2.5m. Furthermore bin storage areas are required to be located behind the building setback line and provide adequate space to allow a bulk refuse truck access to the bin area and manoeuvre.

The proposed bin storage area is located forward of the building setback line – setback approximately 2m from the Porter Street front boundary. Moreover access to the bin store conflicts with vehicle access to the main car parking area on-site. The bin store area would appear to be sufficiently screened from view however side elevation plans of the structure have not been provided in the development submission (refer to Miscellaneous section below).

Local Planning Policy 6.4 – Child Day Care Centres

The provisions of LPP 6.4 apply to the development proposal.

Location - To minimise the impact on residential areas, locations adjacent to non-residential uses, particularly shopping centres, medical centres, schools and other educational facilities and civic uses is preferred. The proposal is adjacent residential land uses to the East and West.

Road Hierarchy – Preferred locations and configurations are those which do not propose direct access onto Primary Regional roads, or Local Roads. The development proposes vehicle access via Porter Street – a Local Road.

Amenity – Activity room windows facing residential properties are to be double glazed and not be able to be opened. Furthermore, with due regard to the impact on residential amenity, the hours of operation of Centres is to be restricted at 7:00am to 6:30pm on weekdays, and 8:00am to 6:00pm on weekends.

Amended plans and/or written justification are required to address the above.

Local Planning Policy 6.6 – Landscaping

The provisions of LPP 6.6 apply to all non-residential development.

Landscaping Provisions for Commercial Developments – A minimum of 10% landscaping of the total site is required. This is to include a 'soft' landscaping buffer to adjacent properties with a minimum width of 1.5m.

Amended plans and/or written justification are required to address the above.

Local Planning Policy 6.7 – Parking & Access

The provisions of LPP 6.7 specify a Child Care Premises a car parking ratio of 1 bay per staff member, and 1 bay per 7 children.

The development proposal, following applicable concessions, requires the provision of 33 car parking bays on site (including one dedicated service bay). The development provides a total of 24 car parking bays on site, which proposes a nine (9) bay shortfall.

Amended plans and/or written justification are required to address the above.

Local Planning Policy 6.11 – Trees & Development

The provisions of LPP 6.11 apply to all development valued at over \$100,000 on land zoned under the City's LPS3. The development requires the planting of five (5) 'Advanced Trees'.

An Advanced Tree is defined by LPP 6.11 as follows:

'means a tree which requires planting in at least a 90 litre container or greater size and which is at least 2 metres in height and at least 2 years of age.'

Furthermore, the provisions of LPP 6.11 require that each Advanced Tree is afforded a minimum of 9m² soil space at ground level, free of intrusions.

Accordingly, please demonstrate that the trees depicted on the Site Plan and associated Landscaping plan meet the definition of an Advanced Tree and that the required planting areas are required.

Residential Design Codes

The provisions of LPP 6.4 require building setbacks, and other design requirements, to be in accordance with the provisions of the Residential Design Codes if a development is located within a Residential Zone. The two subject land parcels are zoned Residential R25.

Primary Street Setback – The proposed 'Bin Storage Area' and 'Store 1' are setback 2.0m from the front lot boundary in lieu of the permitted 3m minimum, as considered via primary street averaging.

Secondary Street Setback – R25 requires a 1.5m minimum Secondary Street setback. A 1m Secondary Street setback is proposed to North Beach Road.

Lot Boundary Setbacks – An accurate lot boundary setback assessment of the development cannot be undertaken as side elevations of the external stores are not provided.

Buildings on Boundary – It is noted that the Average Height of the walls to the 'Proposed Staging Boundary' are 3.5m in lieu of the permitted 3m maximum.

Fencing – Side elevations of the proposed fencing detail are not provided (refer to Miscellaneous, Policy DC 1.7 and Town Planning General By-Law sections below). The proposed fencing is to have regard to the Residential Design Codes and the aforementioned legislation.

Site Works – Please clarify the proposed Relative Levels (RL's) to the external areas directly abutting the building.

External Fixtures – Please confirm the location of the buildings services, having regard to Clause 5.4.4 – *External Fixtures, Utilities and Facilities Deemed-to-Comply* provisions.

Policy Development Control 1.7 – General Road Planning

The proposal straddles Lot 76 and 100, HN's 50 and 52 Porter Street, Gwelup. The associated Planning Report acknowledges that a boundary realignment will be required to facilitate the development proposal, and this will be undertaken prior to the development occurring.

Provision 3.7.2 of Policy DC 1.7 – *Truncations may be required in the following circumstances:*

- a. *Where land is proposed to be subdivided in developing areas;*
- b. *Where existing traffic movements in established areas will be significantly affected and/or where there is a need to improve intersection sight lines as a result of:*
 - *Subdivision/amalgamation of land;* or
 - *A development which requires determination by the Commission under the provisions of the MRS.*

District Distributor – An 8.48m truncation (6m x 6m) will be required for this category of road.

Town Planning (Height of Obstructions at Corners) General By-Laws 1975

Subject to these by-laws, a person shall not have, erect or permit to be erected on land owned by him and referred to in sub-by-law (2) a wall, fence, hedge, tree, shrub or other obstruction of a greater height than 0.75 metres measured from the level of the footpath, street, road or right-of-way adjoining the obstruction.

(2) Sub-bylaw (1) —

(a) shall apply within an area enclosed by the edges of intersecting streets, roads or rights-of-way and a line joining points located at a distance of 6 metres from the point of intersection along the edge of each intersecting street, road or right-of-way or from the point of intersection of a prolongation of the said boundaries;

Amended plans and/or written justification are required to address the above.

Miscellaneous

The City raises the following miscellaneous items with the development:

- The development plans are not to scale;
- Side elevations of the proposed fencing are not provided;
- Side elevations of the bin store and all the external structures are not provided; and
- The dedicated landscaping plan is not consistent with the Site Plan, specifically in depicting an embayment on the Porter Street road reserve.

Referrals

Internal Referrals

Please be advised the development application was forwarded to the following City Business Units who provide comment accordingly:

Engineering Design Business Unit

- A 2.1m wide footpath located at the back of the kerb is to be provided along the developments Porter Street frontage from the proposed site crossover to link with the existing roundabout footpath;
- The applicant's Waste Management Plan (WMP) shows that the development proposes waste pickup using 660 and 1100 litre bulk bins collected from the verge in Porter Street (3x660ltr and 2x1100ltr collected daily). This is not approved, the City does not permit bulk bins to be wheeled out and collected from the verge. Only 360 and 240 litre MGB's can be collected from the verge. A revised WMP is required detailing how waste will be collected from the site. The proposed waste truck hardstand within the verge is not supported and needs to be removed from the plans;
- This locality has high groundwater. The applicant is to demonstrate how the site will be drained; and
- The proposed crossover will be located over an existing fire hydrant within the verge. FESA and Water Corporation comment / approval are required for relocation.

Amended plans and further information is required to address the above.

Traffic Engineer – Engineering Design Business Unit

Engineering Design have reviewed the Traffic Impact Assessment report prepared in support of the development application and are satisfied that the report has demonstrated that the proposal will not have an unacceptable impact on the surrounding road network.

Please note the City does not consider this location to be inherently unsafe and would not consider implementing measures to alleviate perceived traffic risks. The location may be appropriate for certain land uses and the applicant should assess the risks in light of the proposed land use.

In particular it should be brought to the attention of the applicant that the City will not consider, either now or in the future, installing any kind of barriers or other devices to prevent vehicles from impacting with the property fence and encroaching into the children's play area. The applicant should be strongly advised to consider incorporating safety measures into the design of the property as the City will not consider retrofitting any remedial measures in the future.

Senior Engineer – Development Services

In regard to the internal parking area, the following comments are provided:

- Site Plan scale of 1:250 is incorrect. It actually scales 1:359;
- Bin store gates should not open out into the driveway;
- The bay dimensions are acceptable;
- It is suggested that the turning bay is to be located opposite the ACROD bay so that vehicles do not have to drive to the end to turn around; and
- Finished paving levels need to be indicated to comply with AS2890.1.

Waste Business Unit

Based on previous Child Care Premises applications received and advice from the City's Rates Department, this development will remain under the existing Residential Dwelling status. Therefore the WMP will need to be amended to accommodate residential collections. Based on the estimated waste generation rate of 1,980Ltr per week the City has determined the following 2 Options of bin allocations and collections:

- **Option 1:**
 - 1 x 660Ltr general waste bin collected 3 times/week
 - 1 x 660Ltr comingled recycling (including cardboard) collected weekly
 - Bulk bin to be left in bin compound for collection
 - Waste staff to handle bins for collection and will return bins to compound once completed
- The City is now able to provide larger bins to Mixed Use Development properties and properties such as the proposed day care facility.
- **Option 2:**
 - 3 x 240Ltr general waste bin collected 3 times/week
 - 3 x 360Ltr comingled recycling (incl cardboard) collected weekly
 - Collection for MGB's will be undertaken from the verge
 - Centre management will be responsible for bringing the bins to the verge for collection and returning them as soon as possible after collection.

The WMP will need to be amended accordingly and re-submitted.

Environmental Health Business Unit

It is noted that the Herring Storer Acoustic Report, 'Section 4 – Proposal' states that their assessment is based on proposed business operations between 7:00am and 7:00pm Monday to Friday (closed on Public Holidays). This is not specifically clarified in the Development Application, and should be confirmed by the applicant.

Parks & Sustainability Business Unit

In regards to the landscaping the following comments are provided:

- It does not appear the required 10% landscaping has been provided for commercial site (LPP 6.6). Parks & Sustainability does not include artificial turf as landscaping;
- There is no landscape buffer between the car park and the adjacent property (in accordance with LPP 6.6);

- One tree appears to comply with LPP 6.11 – this is the 'Euc victrix' in the car park that has a soil area of 10m². The 'Euc torquata' within the outdoor play areas could be made to comply, if the soil areas (without artificial turf) were increased;
- The dedicated Landscape Plan does not align with the Site Plan. The Site Plan indicates a substantial area of hardstand on the verge; and
- Plant species, spacing's and pot sizes are acceptable.

Community Safety Business Unit

Within the last 12 months there has been a minimum of 30 visits by the City's Rangers to the area surrounding the proposed development. These attendances have stemmed from complaints regarding illegally parked vehicles attending the Primary School directly across the road.

During the attendance eight (8) cautions and two (2) infringements were issued, with many of the other vehicle owners being verbally cautioned.

Based on the above history, time restrictive signage within the area and the proposed shortfall of nine (9) on site car parking bays, Community Safety have significant concerns with the proposal as there is no option for overflow parking without having an effect on the surrounding properties.

Externals Referrals

Please be advised the development application was referred by the City to DFES for comment. At time of writing DFES have not provided formal comment on the proposal however any comment will be forwarded to the Applicant on receipt by the City.

Public Consultation

A Child Care Premises use class is listed as an 'A' land use within a Residential Zone in accordance with the City's LPS3. Accordingly the development proposal is currently being advertised by the City for a period of 21 days, in accordance with the City's Planning Consultation Procedure, with advertising scheduled to expire close of business Wednesday 10 April 2019.

On expiry of the consultation period the City shall provide a summary of the submissions received and allow the applicant to respond to each submission accordingly.

Design Review Panel

As you are aware the development application was considered by the City's Design Review Panel (DRP) on Thursday 21 March 2019. The DRP's formal comments on the proposal were forwarded to Urbis on Monday 1 April 2019, however they are also attached to this correspondence for your perusal.

Please be advised at this stage the City anticipates a second DRP meeting to discuss the proposal will be scheduled for Thursday 2 May 2019. Noting that the City's RAR is currently due on Friday 26 April 2019, should you wish for the application to be presented at this DRP meeting an extension of time to the RAR due date is required.

Should you wish to provide further written justification only in response to the abovementioned matters, and not to refer this application to a further DRP meeting, please ensure that the additional information is submitted within 7 days from the date of this

correspondence, being **15 April 2019**, in order to enable the streamlining of your application and for the City to meet the current statutory timeframe.

Alternatively, should you wish to provide amended plans and additional information to address the abovementioned matters, please contact the City (via return email as soon as earliest possible) to confirm the date by which you can provide the documentation, so that the City can submit an extension of time request to the Development Assessment Panel. The City recommends that an extension of time to the Responsible Authority Report (RAR) due date is obtained and that the amended plans and additional information is submitted for the City's consideration, in order to address the items detailed in the above correspondence. An extension of time to the City's RAR due date will also enable time for a meeting to be arranged to go through any items you wish with the relevant technical officers, if needed.

Further information requested above is to be provided via email to development@stirling.wa.gov.au quoting the relevant development application number. Please note submissions to individual officer email addresses will not be accepted, but please feel free to 'cc' the officer into the email. Please note the City does not accept DropBox links or other large file transfer links.

Should you have any queries regarding this matter, please contact me on 9205 8790 or via email.

Kind regards



Chris Fudge
A/COORDINATOR PLANNING APPROVALS
Development Services - Planning



Form 1 – Responsible Authority Report (Regulation 12)

Property Location:	Lot 60 (71) Kinross Drive, Kinross
Development Description:	Residential Aged Care Facility (dementia care)
DAP Name:	Metro North-West JDAP
Applicant:	Planning Solutions
Owner:	Amana Living Inc
Value of Development:	\$23 million
LG Reference:	DA19/0075
Responsible Authority:	City of Joondalup
Authorising Officer:	Chris Leigh Manager Planning Services
DAP File No:	DAP/19/01578
Report Due Date:	30 April 2019
Application Received Date:	12 February 2019
Application Process Days:	77 Days
Attachment(s):	1. Location plan 2. Development plans 3. Building perspective 4. Landscaping concept plans 5. Environmentally sustainable design checklist 6. Transport impact statement 7. Waste management plan 8. Arborist report

Officer Recommendation:

That the Metro North-West JDAP resolves to:

1. **Approve** DAP Application reference DAP/19/01578 and accompanying plans (Attachment 2) in accordance with the Metropolitan Region Scheme, Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of the City of Joondalup *Local Planning Scheme No. 3*, subject to the following conditions:

Conditions

1. Pursuant to clause 26 of the Metropolitan Region Scheme, this approval is deemed to be an approval under clause 24(1) of the Metropolitan Region Scheme.
2. This approval relates to the 'Residential Aged Care Facility' and associated works only, and development shall be undertaken in accordance with the approved plan(s), any other supporting information and the conditions of approval. It does not relate to any other development on the lot.

3. A Construction Management Plan being submitted to and approved by the City prior to the commencement of development. The management plan shall detail how it is proposed to manage:
 - all forward works for the site;
 - the delivery of materials and equipment to the site;
 - the storage of materials and equipment on the site;
 - the parking arrangements for the contractors and subcontractors;
 - the management of sand and dust during the construction process;
 - any natural vegetation to be retained and the proposed manner in which this will be managed through construction;
 - other matters likely to impact on the surrounding properties;
 - management of the shared accessway during construction.

Development shall be undertaken in accordance with this approved plan.

4. The car parking bays, driveways and access points shown on the approved plans are to be designed, constructed, drained and marked in accordance with the Australian Standard for Off-street Car Parking (AS/NZS2890.1 2004), Off-street Parking for People with Disabilities (AS/NZS2890.6 2009) and Off-street Commercial Vehicle Facilities (AS2890.2:2002), prior to the occupation of the development. These bays are to be thereafter maintained to the satisfaction of the City.
5. A detailed design of the loading embayment to Falkland Way shall be submitted to the City for approval prior to commencing development. The embayment shall be constructed in accordance with the approved design, to the satisfaction of the City.
6. Bicycle parking facilities shall be in accordance with the Australian Standard for Off-street Carparking – Bicycles (AS2890.3-1993 as amended) prior to the development first being occupied. Details of bicycle parking areas shall be provided to the City for approval prior to the commencement of development.
7. Any proposed building plant and equipment, including air conditioning units, piping, ducting and water tanks shall be located so as to minimise any visual and noise impact on surrounding landowners, and screened from view from street and adjoining properties. Details shall be submitted to and approved by the City prior to the commencement of development. Development shall be in accordance with these approved details.
8. A full schedule of colours and materials for all exterior parts of the building (including retaining walls) shall be submitted to and approved by the City prior to the commencement of development. Development shall be in accordance with the approved schedule and all external materials and finishes shall be maintained to a high standard, including being free of vandalism, to the satisfaction of the City.
9. Retention of existing vegetation is to be undertaken in accordance with the recommendations of the arborist report dated 24 January 2019. This shall include the retention or salvaging of any verge trees, trees of high and medium value, where feasible, all *Xanthorrhoea preissii* (Grasstrees) over 1m in height and the *Nuytsia floribunda* (WA Christmas Tree). A Vegetation Retention Plan

clearly outlining the trees marked for retention on-site or to be salvaged for relocation shall be submitted to, and approved by the City prior to commencement of the development, including clearing.

10. Detailed landscaping plans shall be submitted to and approved by the City prior to the commencement of development. These landscaping plans are to indicate the proposed landscaping treatment(s) of the subject site and the adjoining road verge(s), and shall:
 - provide plant species, mature height and spread, plant spacing, pot size and quantities and an irrigation design by a Certified Irrigation Designer;
 - provide all details relating to paving, treatment of verges and tree planting;
 - be based on water sensitive urban design and designing out crime principles to the satisfaction of the City;
 - indicate any natural vegetation to be retained and the proposed manner in which this will be managed;
 - indicate the reinstatement of the area occupied by the temporary administration building;
 - include details of the deep soil zone/s;
 - provide one shade tree for every four uncovered parking bays;
 - landscaping of the terraced areas between retaining walls;
 - show spot levels and/or contours of the site; and
 - be drawn at an appropriate scale of either 1:100, 1:200 or 1:500.

Landscaping and reticulation within the site and adjacent verges shall be established in accordance with the approved landscaping plans, Australian Standards and best trade practice prior to the development first being occupied and thereafter maintained to the satisfaction of the City.

11. A Waste Management Plan indicating the method of rubbish collection shall be submitted to the City prior to the commencement of development and approved by the City prior to the development first being occupied. All rubbish collection shall be in accordance with the approved Waste Management Plan.
12. All stormwater shall be collected on-site and disposed of in a manner acceptable to the City.
13. Development shall be contained within the property boundaries.
14. The temporary administration building shall be removed and the area reinstated in accordance with the approved landscaping plans within three months of the new residential care facility being occupied, to the satisfaction of the City.

Advice Notes

1. In relation to the approved land use, the City of Joondalup *Local Planning Scheme No. 3* defines 'Residential Aged Care Facility' as *"a residential facility providing personal and/or nursing care primarily to people who are frail and aged and which, as well as accommodation, includes appropriate staffing to meet nursing and personal care of residents; meals and cleaning services;*

furnishings, furniture and equipment. May also include residential respite (short term) care but does not include a hospital or psychiatric facility”.

2. Premises to comply with the requirements of the *Food Act 2008*.
3. Hairdressing salons to comply with the requirements of the *Hairdressing Establishment Regulations 1972*.
4. Bin Storage Area shall be provided with a concrete floor graded to a 100mm industrial floor waste gully connected to sewer. Provide hose cock to bin store area.
5. Any mechanical ventilation for the development shall comply with Australian Standard 1668.2, particularly in regard to air flow and the location of exhaust air discharges.
6. The Applicant/Owner is advised that, there is an obligation to design and construct the premises in compliance with the requirements of the *Environmental Protection Act 1986* and the *Environmental Protection (Noise) Regulations 1997*.
7. This approval does not include the dividing fence(s). You are advised that in accordance with the *Dividing Fences Act 1961* you are required to reach agreement with the adjoining owners as to the height, appearance and location of the dividing fence. Further information is available at www.buildingcommission.wa.gov.au.

Details: outline of development application

Zoning	MRS:	Urban.
	LPS3:	Residential, R40.
Use Class:		Residential Aged Care Facility – Discretionary (“D”) use.
Strategy Policy:		N/A.
Development Scheme:		<i>City of Joondalup Local Planning Scheme No. 3 (LPS3).</i>
Lot Size:		12,942m ² .
Existing Land Use:		Nursing Home (Residential Aged Care Facility).

The proposed development consists of:

- A three storey building.
- Vehicle access point via Kinross Drive, functioning as the main access point for visitor and bus parking.
- Second vehicle access point via the ROW to the south of the site, accommodating additional car parking and deliveries.
- Third vehicle access point located on Falkland Way, providing parking for the existing facility.
- Reception, offices, day club, kitchen, internal courtyards, dining and alfresco areas at the lower ground floor.
- An additional 96 beds (136 in total), physiotherapy/pain clinic, nurse/medical services, as well as various living and dining areas across each of the upper two levels.

- Proposed open spaces consisting of interconnected landscaped areas between the proposed/existing development, including shaded seating/barbeque areas, outdoor exercise equipment and a children's play area.
- Temporary administration building adjacent Falkland Way and permanent loading bay within the Falkland Way road reserve.

The subject site is zoned 'Residential' under LPS3 in which 'Residential Aged Care Facility' is a discretionary use. The development is subject to the provisions of the City's *Non-residential Development in the Residential Zone Local Planning Policy*.

Background:

The subject site is currently occupied by the existing Kinross Care Centre on the northern portion, with the southern portion of the site currently vacant with scattered native vegetation. The site is bound by Kinross Shopping Centre to the south, Kinross Drive to the east, Falkland Way to the north and existing residential properties to the west (Attachment 1 refers).

Vehicle access to the site is proposed via the Right of Way shared with the shopping centre to the south of the site, with a second access point from Kinross Drive for visitor and bus parking. The shared access between the subject site and the shopping centre site is formalised through an existing reciprocal access arrangement (easement). Specifically, the agreement relates to a 'Service Lane Easement' that grants the owners of adjoining Lots 1255 and 1256 (to the south) authority to go, pass and repass with or without vehicles, through, over and along the easement.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005.*
- *Metropolitan Region Scheme (MRS).*
- *Planning and Development (Local Planning Schemes) Regulations 2015 (Regulations).*
- *City of Joondalup Local Planning Scheme No. 3 (LPS3).*

State Government Policies

- *State Planning Policy 3.1: Residential Design Codes (R-Codes).*

Local Policies

- *Non-Residential Development in the Residential Zone Local Planning Policy (NDRZLPP).*
- *Environmentally Sustainable Design Policy.*

Consultation:

Public Consultation

The property owner undertook its own consultation with adjoining landowners in December 2018, initially by way of a letter drop to immediate neighbours of the facility, with an invitation to attend an information session and discuss the proposed

development in person. A subsequent information session was held at the Kinross Care Centre site, where a selection of preliminary development drawings were presented and attendees were invited to view the proposed redevelopment.

The information session was attended by five neighbours, including three residential property owners and two representatives of the neighbouring commercial properties to the south. The City is advised that none of the attendees raised any concerns with respect to the proposed redevelopment of the Kinross Care Centre, however, various matters were discussed at the information session in relation to fencing, access and parking.

The City has also sought comments on the proposal, advertising the application by way of letter to 28 surrounding landowners/occupiers, and information placed on the City's website for a period of 14 days. A total of five submissions were received, being one letter of support and four objections.

A summary of the comments raised during advertising of the amended proposal is included below:

Issue Raised	Applicant Response	Officer's comments
The development will result in a loss of light to the adjoining residential properties.	<p>It is not considered the proposed development will result in a significant loss of light or have a significant impact on the amenity of adjoining property owners along the western boundary (the only boundary which adjoins residential property).</p> <p>The amenity of the adjoining residential properties along the western boundary was specifically considered in the design process, with the proposed new building to be setback a minimum of 8.7m from the western boundary, and two storeys in height along this portion of the boundary. The proposed setback, building height and fence height along the western boundary will ensure there are no adverse impacts on adjoining residential property owners in terms of overlooking, loss of privacy or light.</p> <p>Being to the west of the site, the residential properties are not impacted by overshadowing. The western boundary setback area is to be fully landscaped which will provide for an additional</p>	<p>The development is set back from the western boundary in accordance with the setback requirements of the City's Policy.</p> <p>Additionally, the development is located to the east of the adjoining residential properties and therefore overshadowing to the south will generally be contained within the subject site, or fall upon the adjoining shopping centre.</p>

	buffer along this boundary. As such, it is not considered there will be any undue impact on the properties to the west of the site.	
Loss of privacy due to overlooking adjoining residential properties. Includes a 2 storey terrace, 10 bedroom windows and a grieving room overlooking adjoining properties, including a swimming pool.	<p>The submission is not accurate in its description of the proposed development. There are in fact 5 windows at ground level, which will have no line of sight to adjoining properties, taking into account the boundary fence. On the first floor, there are 5 rooms in total, with windows a minimum of 8.7m from the common boundary. The terrace areas are setback a minimum of 10m at their northern end, and 21m at the southern end. The grieving rooms, which are likely to be occupied infrequently, are more than 15m setback at their nearest point.</p> <p>Taking the R-Codes as an indication of what may be reasonably expected, a bedroom is 'deemed to comply' with a setback of 4.5m, and a terrace with a setback of 7.5m. As such, the rooms and terraces achieve setbacks approximately double the 'deemed to comply' standard of the R-Codes. As such, we submit the proposed development will not have an undue impact on visual privacy for adjoining properties.</p> <p>It is considered the proposed development will not create any privacy issues for the adjoining property owners.</p>	<p>It is noted there are nine windows on the first floor facing the western boundary. These windows relate to grieving, dining, sitting rooms and sliding doors providing access to balconies/terraces. These windows are set back a minimum of nine metres from the adjoining residential properties.</p> <p>The building setback of 9.1 metres exceeds the 8.7 metres required under the City's Policy. Whilst there are no specific visual privacy requirements, this building setback is considered appropriate in mitigating the impacts of overlooking.</p> <p>If the visual privacy setback requirements of the R-Codes were to be applied, the development would exceed the following minimum setbacks required:</p> <ul style="list-style-type: none"> • 4.5 metres to bedrooms. • 6 metres to habitable rooms other than bedrooms or studies. • 7.5 metres to unenclosed outdoor active habitable spaces such as balconies.
<p>Proposed building is out of character with the surrounding suburb which is single storey.</p> <p>Overall building height is above the local average and the required height envelope of 8.5 metres required in accordance with</p>	<p>The proposed development has been specifically designed to reflect a residential aesthetic and the surrounding context through the use of building materials and siting of built form. The residential aesthetic is reflected through the use of timber, masonry and glazing</p>	<p>The planning framework permits non-residential development within areas coded R40 to three storeys.</p> <p>The proposed building height does not meet the City's Policy. Refer to Planning Assessment comments below.</p>

<p>the local planning policy. Particular concern is that the development is located on the crest of a hill, which will make the development appear higher still, in relation to the surrounding area.</p> <p>Adjoining residences are at a lower ground elevation than the proposed building, making its height more imposing.</p>	<p>materials. The proposed new building will present as two storeys in height along the western boundary, where the development adjoins residential properties. With two storeys permitted in the Residential zone, and a proposed setback of 8.7m along the western boundary, this is an appropriate transition to the residential properties to the west.</p> <p>Based on the above, it is considered the proposal is entirely consistent with the surrounding context and character of the area.</p> <p>It is not considered the proposed building height will have a significant impact on the adjoining property owners. Refer to the response provided above under Item 3 of Table 1 for detailed justification of the proposed building height.</p>	
<p>Will result in heavier traffic which will compound with school traffic from the two surrounding schools.</p>	<p>The traffic assessment concludes that the traffic generation of the proposed development will be minimal and as such will have a minimal impact on the surrounding road network.</p>	<p>A transport impact statement (TIS) was undertaken by the Applicant which has taken into account the peak traffic periods of the nearby schools. The TIS demonstrates that the impact of the proposed development on the existing road network during peak period (between 2:30pm and 3:30pm) to be minor.</p>
<p>Concern regarding proximity of basement car park to adjoining residential properties.</p> <p>64 parking bays proposed for a total of 66 staff (the application does not include cleaners). Concern that lack of car parking will result in overflow to the adjoining commercial property and road verges.</p>	<p>The proposed development includes a secure internal car park appropriately located at the rear of the building, away from street frontage and setback approximately 7m from the western boundary at the northern end, and 21m at the southern end (beyond the minimum 8.3m boundary setback requirement under the R-Codes).</p> <p>The proposed 'basement' car park will be fully enclosed and secure, and provide for predominantly staff parking. It is not considered this car</p>	<p>Refer to Planning Assessment comments below. The staff numbers include cleaners.</p>

	<p>park will have any adverse impact on the amenity of the adjoining residential properties in terms of noise, odour or security. The proposed landscaping within the setback area along the western boundary will provide for an additional buffer to the adjoining residential properties.</p> <p>The estimated maximum number of ACF staff to be on site at any one time is 51, including cleaning staff. Peak staff period will occur at handover times on weekdays between 7am and 3pm. Cleaning staff for the proposed facility are to be rostered as follows:</p> <ul style="list-style-type: none"> • Weekdays: three cleaning staff to be rostered from 8:00am to 2:00pm, Monday – Friday. • Weekends: one cleaning staff to be rostered from 8:00am to 2:00pm, Saturday – Sunday. <p>The proposed car parking is adequate to accommodate the Kinross Care Centre facility requirements.</p>	
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Consultation with other Agencies or Consultants

Not applicable.

Joondalup Design Reference Panel

The proposal was presented to the City's Joondalup Design Reference Panel (JDRP) at its meeting held on 20 March 2019. The key issues raised by the JDRP, and the summary of applicant's responses and modifications are provided below:

JDRP comment	Applicant response	City response
<u>Landscaping</u> Additional landscaping requested fronting the shared accessway to the south.	Refer to the amended Landscape Plan depicting additional landscaping along the shared accessway to the south, as requested by the JDRP. Refer to the amended Landscape Concept Plan	The proposed landscaping is considered to improve the amenity of the existing ROW, which includes various sections of turfing and a shade tree adjacent to the four uncovered car parking bays in accordance with landscaping (shade tree) requirements.
Additional shade trees		

<p>were requested within the open grassed areas on the building's northern side to provide shade to these areas in summer months.</p>	<p>which depicts additional shade trees within the open grassed areas on the building's northern side. Specifically, six additional shade trees are provided within the open grass area adjacent to the existing building in the northern portion of the site.</p>	
<p><u>Information on plans</u></p> <p>Amendment to the spot levels indicated along the western boundary (38.8 shown). This appears to be a result of the top of the dividing fence being quoted on the site/landscaping plans rather than the retaining wall. This will assist the City in finalising its assessment of the retaining heights along this boundary.</p>	<p>Refer to the amended Landscape Concept Plan which details the western boundary spot levels and top of fence levels, as requested by the JDRP.</p>	<p>Natural ground levels indicated along the western lot boundary have been corrected.</p>
<p><u>PV panels</u></p> <p>Requested the addition of the PV panels proposed on the rooftop to be illustrated on the building perspectives/elevation plans.</p>	<p>Refer to the amended Development Plans including a revised set of elevations depicting the proposed rooftop PV panels, as requested by the JDRP.</p> <p>The proposed PV panels will be installed on the roof of the proposed new building at a 5-10 degree pitch and will not be visible from the street, as shown on the revised site sections.</p>	<p>Section details on plan number DA.601 demonstrate that the PV panels will not be visible from street or adjoining properties.</p>
<p><u>Street interface</u></p> <p>Review of the workshop/office facing Kinross Drive to improve the outlook to, and appearance as viewed from the street. Noted that the workshop includes a roller door facing the street. It was queried whether there is opportunity to switch this with a different use so that the roller door is not facing the street. It was suggested that the office could include north facing glazing.</p>	<p>Refer to the amended development plans which depict modifications to the proposed workshop fronting Kinross Drive, as requested by the JDRP.</p> <p>The proposed modification comprises replacing the roller door with transparent doors facing the street.</p> <p>The amended development plans include further modifications to the eastern portion of the building to improve the outlook to the street and increase light</p>	<p>Changes made to the workshop door and the eastern elevation are considered to address the comments made by the JDRP.</p>

	<p>access to within the building. Modifications include additional glazing to the day club reception (northern elevation), kitchen and corridor adjoining the laundry (southern elevation).</p> <p>The proposed additional glazing to the workshop, day club reception and kitchen will provide for improved passive surveillance to Kinross Drive and improve the appearance of the building when viewed from the street.</p>	
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It is considered that the applicant has adequately responded to the comments made by the JDRP and provided amended plans to adequately address the panel's comments.

Planning Assessment:

The City has completed an assessment of the proposal against the relevant provisions of the Regulations, LPS3, the R-Codes and the City's *Non-residential Development in the Residential Zone Local Planning Policy*. The proposal complies with the majority of these requirements, with the exception of those listed below:

Item	Requirement	Proposal	Compliance
4.1 – Building setbacks	<p>Minimum primary street setback distance: - 4 metres</p> <p>Minimum secondary street setback distance: - 1.5 metres</p> <p>All other setbacks in accordance with Part 5 of the R-Codes.</p>	<p>Street setback to Kinross Drive – 3.1 metres to the first floor balconies and ground floor office.</p> <p>Building setback of 4.1 metres to the southern boundary in lieu of 9 metres.</p>	<p>Setback 0.9 metres closer to Kinross Drive than Policy requirement.</p> <p>Setback 4.9 metres closer to the southern boundary than Policy requirement.</p> <p>Refer to officer comments.</p>
4.2 – Building height	Maximum building height of 10 metres to the top of an external wall with a concealed roof.	13.3m to top of roof plant and 11.27m to the top of the third floor on the south eastern side of the building (as measured from natural ground level).	<p>The building height exceeds the maximum by 1.27 metres (3.3 metres to the building plant).</p> <p>Refer to officer comments.</p>
4.4 – Parking and access	Car parking to be provided at a rate of 1 per 5 beds plus 1 per staff member on duty.	<p>Required: 78.2 (79) bays</p> <p>Provided: 63 bays</p> <p>96 new beds + 40</p>	The car parking for the development is 16 bays less than the number of bays required by the

		<p>existing beds = 136 beds = 27.2 bays</p> <p>New (96 bed) component = 34 staff Existing (40 bed) component = 17 staff = 51 bays</p> <p>Car parking – shortfall of 16 bays overall (63 provided in lieu of 79 bays).</p>	<p>Policy.</p> <p>Refer to officer comments.</p>
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Officer Comments

Land use

The proposed land use 'Residential Aged Care Facility' is a discretionary ("D") use under LPS3. In considering the appropriateness of the land use, the proposal is required to meet the objectives of the Residential zone:

- *To provide for a range of housing and a choice of residential densities to meet the needs of the community.*
- *To facilitate and encourage high quality design, built form and streetscapes throughout residential areas.*
- *To provide for a range of non-residential uses, which are compatible with and complementary to residential development.*

The proposal seeks to redevelop, upgrade and expand the existing Kinross Care Centre, which includes the partial demolition of the existing buildings and construction of new building. The proposed development utilises a mix of timber, masonry and glazing materials to reflect a residential aesthetic in its design.

The proposed additional aged care and dementia specific care services complement the existing nursing home facility, and the development is considered to be compatible with the surrounding land uses, being residential properties, shopping centre and schools, which is consistent with the objectives of the Residential zone.

The proposed land use is therefore considered appropriate.

Street setbacks

In accordance with the City's Policy, development is required to maintain a minimum setback of 4 metres to the primary street, being Kinross Drive. The policy requires buildings to be set back from side and rear boundaries in accordance with the R-Codes. The proposal includes a minimum setback of 3.1 metres from the ground floor office and first floor balconies to Kinross Drive and minimum setback of 4.1 metres to the southern boundary adjoining the right of way shared with the shopping centre.

In considering the appropriateness of the street setbacks, the proposal is required to meet the objectives of the Policy:

- *To provide development standards for non-residential development in the Residential Zone.*
- *To ensure that non-residential development is compatible with and complements the character of the surrounding residential area.*
- *To ensure that non-residential development does not have a negative impact on the surrounding residential amenity.*

In addressing the reduced street setback, the development incorporates active uses at ground floor level including sitting areas and activity/dining rooms, as well as balconies at the upper floor levels. Accordingly the development is considered to interface well with the street, incorporating a high level of surveillance and glazing facing Kinross Drive. The setback of the development is considered to be appropriate given the orientation of the building to face the street as well as the building's location adjacent to other non-residential uses facing Kinross Drive.

In considering the reduced building setback to the southern lot boundary, it is noted that the development is adjacent to the service and deliveries area for the shopping centre, with separation between the shopping centre and the proposed development maintained via the existing six metre wide right of way. The setbacks required under the policy are primarily intended to protect residential amenity. Given the non-residential land use adjacent the southern boundary, the building setback of 4.1 metres is considered to maintain an appropriate level of amenity for the shopping centre and subject site.

It is noted that the setbacks to the adjoining residential properties to the west exceed the requirements of the City's Policy.

Building height

In accordance with the Policy, development is permitted to a height of 10 metres to the top of an external wall with a concealed roof. The proposal includes a three storey building to a maximum height of 11.27 metres to the top of the upper floor and 13.3 metres to the top of the services and plant screening at roof level.

In considering the appropriateness of the building height, the proposal is required to meet the objectives of the policy set out above.

The applicant provided justification for the increased building height, citing that the height exceedance is largely a result of the development needing to comply with the minimum floor-to-ceiling heights for aged care developments. It was highlighted that distinct from standard residential dwellings contemplated by the R-Codes, aged care facilities typically require a floor-to-floor height of approximately 3.7 metres and floor-to-ceiling height of 2.7 metres. Furthermore, it was pointed out that the additional height is required to accommodate essential infrastructure within the ceiling cavity, which is needed to ensure the delivery of high quality care to the residents.

It is noted that the maximum building height of 10 metres permitted under the Policy would generally allow a development to a height of three storeys. The objective of the Policy is to ensure that new non-residential development in the residential zone does not have a negative impact on the surrounding residential amenity. The subject site is

generally surrounded by non-residential uses (i.e. a high school, shopping centre and the existing aged care facility), however is bound by existing residential properties to the west.

In considering the impact of the building height on the adjoining residential properties, the development has responded to the topography of the site. Accordingly, the building presents as a two storey development as viewed from the adjoining residential properties, and a three storey building from the south and the west. The maximum building height proposed will therefore be largely visible from the shopping centre and Kinross Drive. It is noted that the services and plant have been centrally located on the roof of the development, and as such will generally be obscured from view at the pedestrian scale by the remainder of the development (Attachment 3 refers).

Given the above, the proposed building heights are considered appropriate.

Car parking

In accordance with the Policy, car parking is required at a rate of 1 bay per 5 beds plus 1 bay per staff member. Including the existing aged care facility a total of 136 beds and 51 staff on duty at any time are proposed, requiring a total of 78.2 (79) car parking bays.

A total of 63 car parking bays are proposed resulting in an overall car parking shortfall of 16 bays.

The proposed car parking shortfall is considered acceptable in this instance for the following reasons:

- The facility caters for aged persons with dementia (or similar diseases), meaning that the residents of the facility would not be driving vehicles. Car parking would therefore only be required for visitors and staff.
- The applicant has provided justification for the car parking shortfall, suggesting a rate of 1 visitor bay per 10 beds to be more appropriate for the proposal, as the 1 in 5 rate is suited for aged care facilities where residents may still use vehicles.

It is noted that if car parking were to be required at a rate of 1 per 10 beds plus 1 bay per staff, a total of 65 bays would be required; resulting in a shortfall of 2 bays.

- The proposed number of 51 staff refers to the maximum number of staff on duty at any one time, occurring during the morning period. It is noted that the expected visitor peak times will occur weekday evenings and at weekends, meaning that peak visitor attendance is occurring when less staff are working on-site.

It is considered that the car parking provided on-site is appropriate to service the development, therefore not resulting in any detrimental impact on the surrounding area.

Traffic

The applicant has provided a Transport Impact Statement (TIS) to support the proposal (Attachment 6 refers). The TIS has been reviewed by the City and it is considered that the assumptions and content included in this document are acceptable.

In respect to vehicular access, the application includes reciprocal vehicle access to the development site from the proposed right of way via Kinross Drive, which is also associated with the adjacent shopping centre to the south. The development is considered to generate a total of 286 additional vehicles per day, with 54 of these occurring during the afternoon peak period for the development and surrounding road network between 2:30pm and 3:30pm. The number of additional vehicles generated by the development, as well as the shopping centre and nearby schools was taken into account in the overall traffic analysis undertaken.

The TIS demonstrates that the impact of the proposed development on the existing road network, including during the peak afternoon period between 2:30pm and 3:30pm to be minor and able to be accommodated in the road network.

Retaining walls

There are no specific requirements under the City's policy relating to retaining walls and site works, however it is noted that retaining of up to 0.5 metres is permitted abutting an adjoining residential property under the R-Codes. To facilitate the stepped floor levels of the development, retaining walls are proposed along the site's western boundary (adjacent residential properties). The majority of the retaining wall has a height of approximately one metre and reaches a maximum height of 1.55 metres adjacent to 7 Dalkeith Cove. It is considered that the height of the proposed retaining walls is appropriate and has been stepped to reduce the overall impact on the residential properties. As noted above, the setback of the main building is a minimum of between eight and 9.1 metres to the western boundary, exceeding the setback requirements under the City's policy, reducing the overall impact of the development on the adjoining residential properties.

Retaining and fill is also proposed internally to the development site, which allows the development to transition between three storeys on its south eastern side, to two storeys on the northern western side. The majority of this retaining, which at its maximum reaches a height of 4.1 metres, is between the basement car park and the landscaped area on the building's northern side. The visual impact of these site works is situated next to the facility's entry/lobby point and is located in excess of 40 metres from Kinross Drive.

The retaining and site works for the development is considered to be appropriate in ensuring the development does not impact the amenity of the surrounding residential properties.

Landscaping

The landscape design proposed includes areas directly adjacent to the subject site (including the verge) and between the proposed development and the existing aged care facility (Attachment 4 refers). The following landscaping features are proposed as a part of the development:

- Deciduous shade trees to provide summer shade and winter sun.
- Raised planter beds along the western side of the development to provide gardening opportunities for fruits, vegetables and herbs.
- Open turfed areas, gardens, BBQ areas and boardwalks providing connectivity and opportunities for outdoor recreation between the proposed building and the existing aged care facility.
- Internal garden courtyards located beneath void areas along the centre of the building.
- Relocation of, and additional street trees on Kinross Drive.
- Shade trees within the visitor car parking areas adjacent to Kinross Drive and the right of way.

The development proposes the retention and relocation of a number of trees on-site, including grass trees and WA Christmas trees. Should the application be approved, a condition is recommended requiring a tree retention plan to be submitted to the City for approval and for works to be undertaken in accordance with this plan.

Options/Alternatives:

Not applicable.

Council Recommendation:

Not applicable.

Conclusion:

The proposed Residential Aged Care Facility is considered to have been designed to reflect the residential character of the locality through the use of a range of materials, colours, high level of glazing, siting of balconies and active uses facing Kinross Drive, coupled with significant soft landscaping treatments within the site and adjoining verges. These features are considered to successfully balance the surrounding residential properties and non-residential land uses, and positively contribute towards the amenity of the locality.

The areas of discretion sought are considered to satisfy the relevant requirements of LPS3, including the objectives of the Residential zone and the City's *Non-residential Development in the Residential Zone Local Planning Policy*. It is therefore recommended that the application be approved, subject to conditions.



Subject site: Lot 60 (71)
Kinross Drive, Kinross

Overall site area:
12 942m² (redeveloped
portion highlighted yellow)



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Scale(A4):1:1800

Date: 11/03/2019

DISCLAIMER: While every care is taken to ensure the accuracy of this data, the City of Joondalup makes no representations or warranties about its accuracy, completeness or suitability for any particular purpose and disclaims all liability for all expenses, losses, damages and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason.

IT SHOULD BE NOTED THAT ALL UNDERGROUND SERVICES NEED TO BE VERIFIED BY THE RELEVANT AUTHORITY PRIOR TO ANY DEMOLITION, EXCAVATION, DESIGN AND/OR CONSTRUCTION. THEREFORE, NO RESPONSIBILITY IS TAKEN FOR SERVICE LOCATIONS. THE CERTIFICATE OF TITLE SHOULD BE CHECKED FOR EASEMENTS AND ENCUMBRANCES.

NOTE: REVISION 3 PLAN IS A COMBINATION OF SURVEY DATA FROM 2015 AND 3rd PARTY DATA. HORIZON SURVEYS CANNOT TAKE RESPONSIBILITY FOR THE ACCURACY OF THE OUTDATED INFORMATION AND 3rd PARTY DATA (IE PREVIOUS SURVEY SUPPLIED AND UNDERGROUND SERVICE INFORMATION)



SCALE – 1:750 @ A3

LOCAL AUTHORITY:

City of Joondalup

Grid North



ALL CADASTRAL INFORMATION SHOWN IS THE RESULT OF THE LOCATION OF LIMITED SURVEY MARKS AND AS SUCH BOUNDARY LOCATIONS COULD VARY UPON FINAL SURVEY
AREA AND DIMENSIONS ARE SUBJECT TO SURVEY. DIMENSIONS DERIVED FROM CERTIFICATE OF TITLE OR SURVEY PLAN

HORIZON SURVEYS
UNIT 2/14 JERSEY STREET, JOLIMONT 6014
PH 9387 8226 Mob 0407 080 073
Email admin@horizonsurveys.com.au

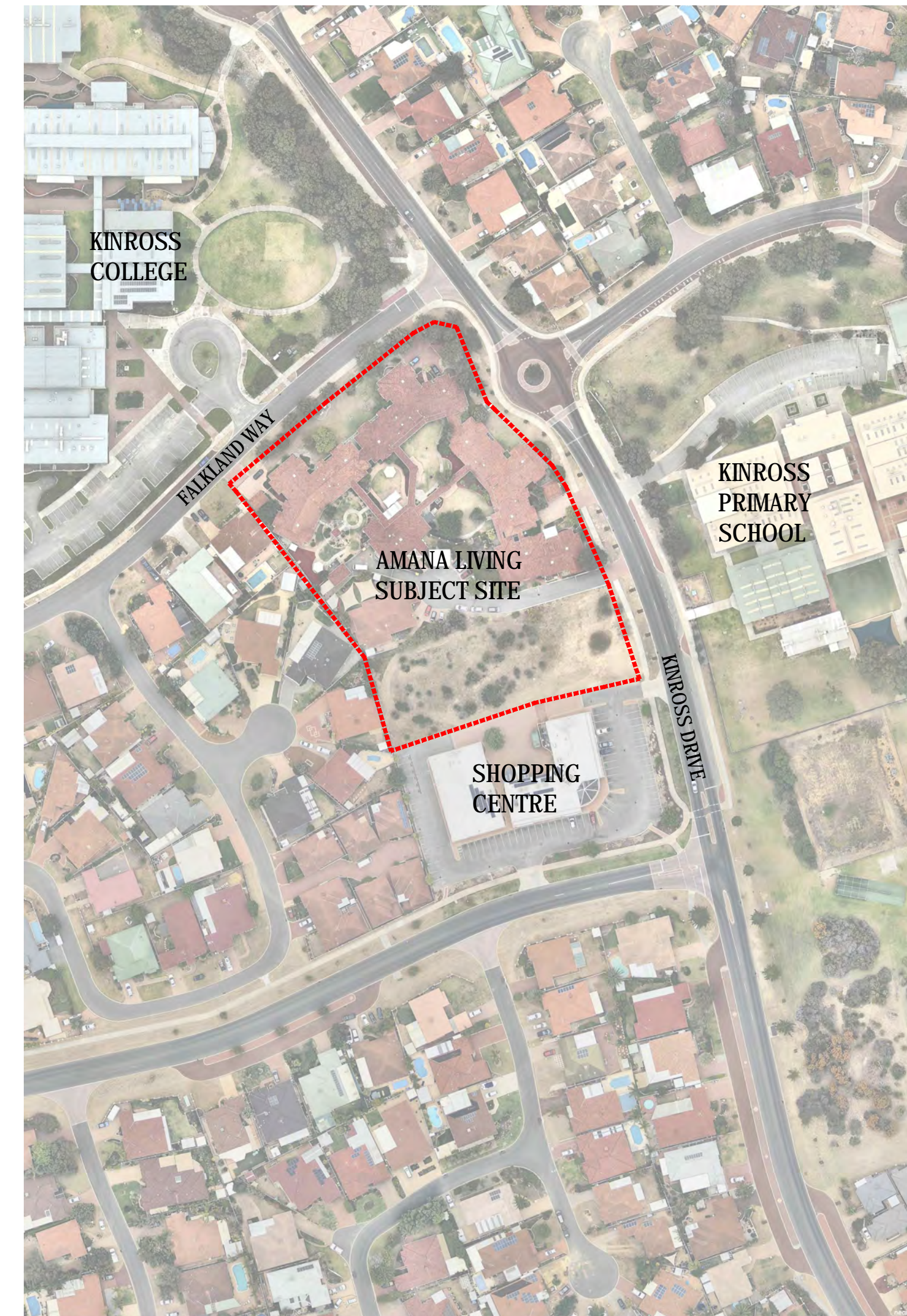
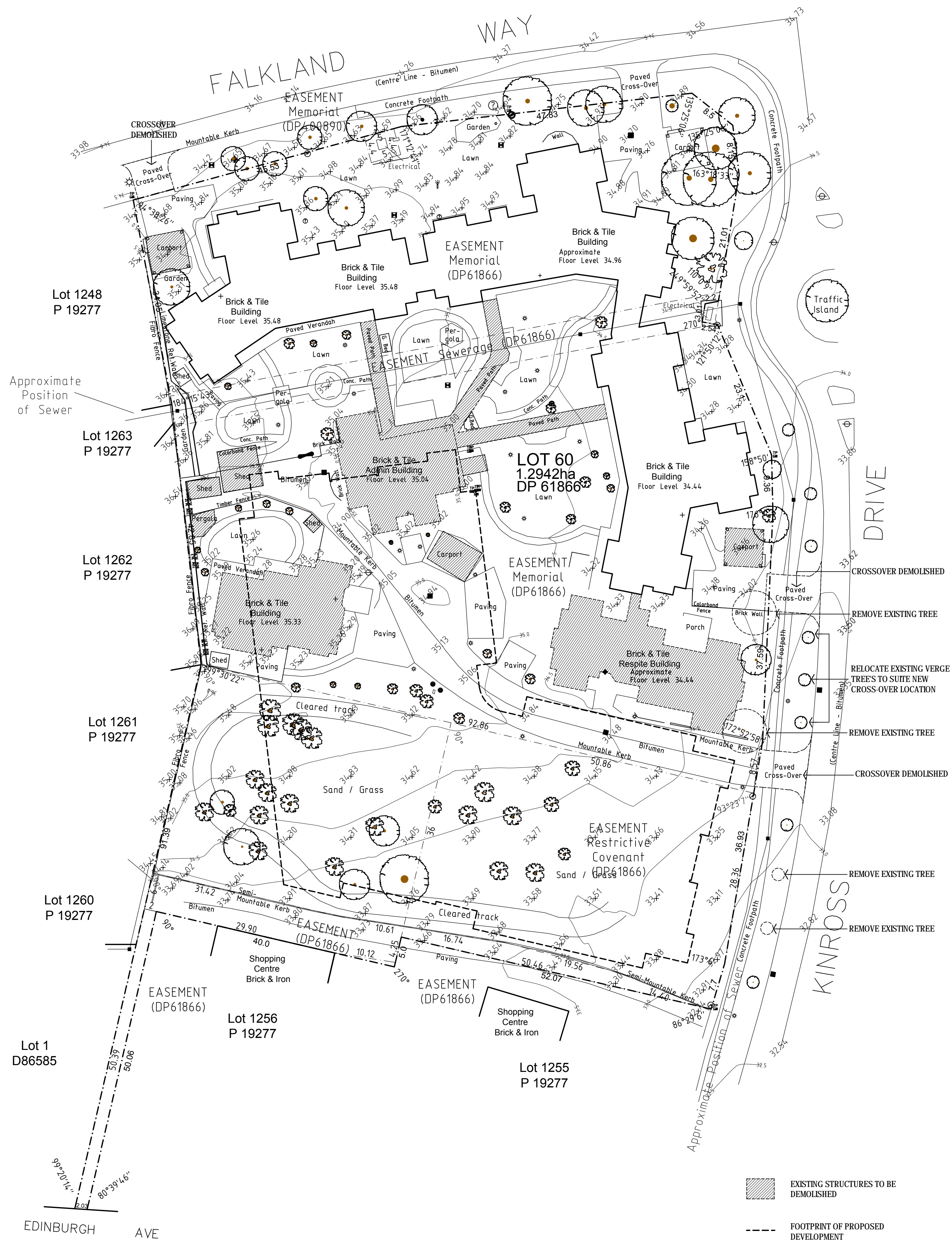
NS PROJECTS
FEATURE SURVEY
71 KINROSS DRIVE, KINROSS
(LOT 60 on DEPOSITED PLAN 61866)

SURVEYED	DATE	SCALE
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COMPUTED	DATE	HORIZONTAL DATUM
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DRAWN	DATE	VERTICAL DATUM
EG	20/10/15	AHD SSM BURNS 38
ADJUSTED	JOB No.	FIELD BOOK LEVEL BOOK
EG	150106	See File -

Legend

- Telecom Underground
- Irrigation Underground
- Power Underground
- Water Underground
- Gas Underground
- Water Meter
- Gully Trap
- Water Hydrant
- Telecom Pit
- Sewer Vent
- Sewer Manhole
- Power Dome
- Misc Pit/Valve
- Light Pole
- Bollard
- Tree

DRAWING No. 150106_V5



LOCATION PLAN - NTS

REV	DESCRIPTION	DATE	APP
D	ISSUE FOR DA	23/01/18	MK

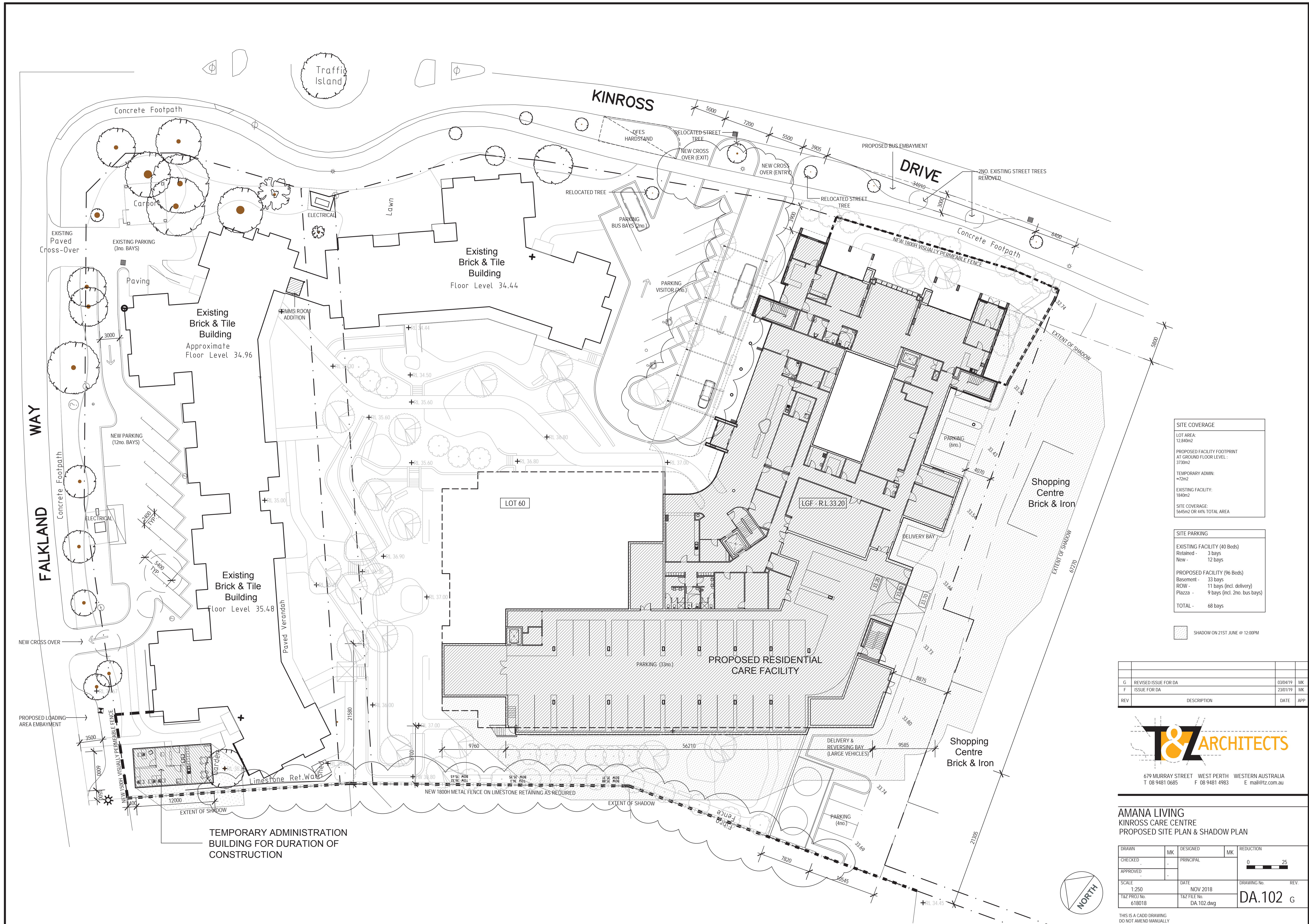


679 MURRAY STREET WEST PERTH WESTERN AUSTRALIA
T 08 9481 0685 F 08 9481 4983 E mail@tz.com.au

AMANA LIVING
KINROSS CARE CENTRE
EXISTING/ DEMOLITION SITE PLAN

DRAWN	MK	DESIGNED	MK	REDUCTION
CHECKED	-	PRINCIPAL		0 25
APPROVED	-			
SCALE	1:400	DATE	NOV 2018	DRAWING No.
TAZ PROJ No.	618018	TAZ FILE No.	DA.101.dwg	DA1.01 D

THIS IS A CADD DRAWING
DO NOT AMEND MANUALLY



SITE COVERAGE	
LOT AREA:	12,840m2
PROPOSED FACILITY FOOTPRINT AT GROUND FLOOR LEVEL:	3,730m2
TEMPORARY ADMIN:	~72m2
EXISTING FACILITY:	1840m2
SITE COVERAGE:	5645m2 OR 44% TOTAL AREA

SITE PARKING	
EXISTING FACILITY (40 Beds)	
Retained -	3 bays
New -	12 bays
PROPOSED FACILITY (96 Beds)	
Basement -	33 bays
ROW -	11 bays (incl. delivery)
Piazza -	9 bays (incl. 2no. bus bays)
TOTAL -	68 bays


SHADOW ON 21ST JUNE @ 12:00PM

REV	DESCRIPTION	DATE	APP
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F	ISSUE FOR DA	23/01/19	MK

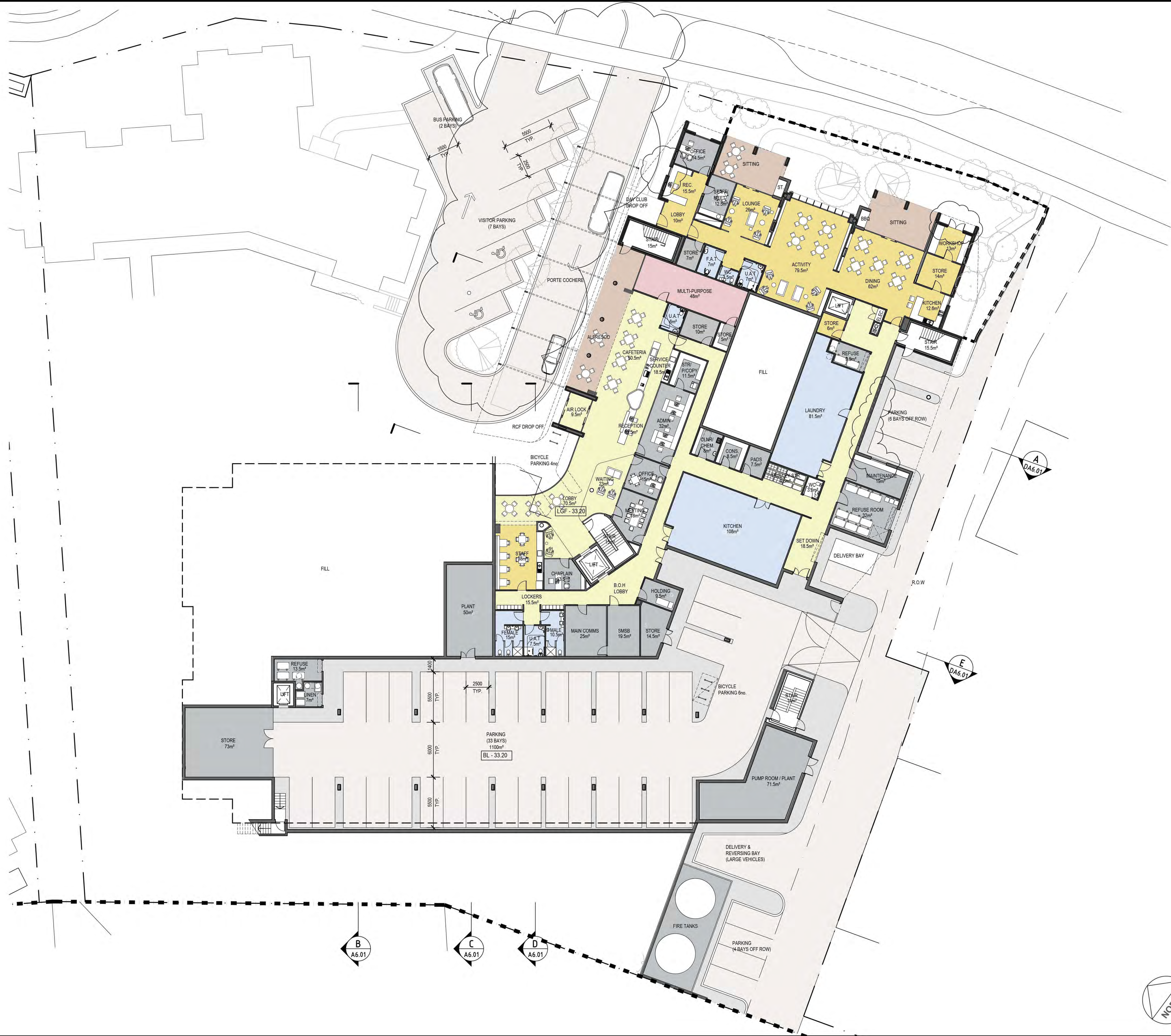


679 MURRAY STREET WEST PERTH WESTERN AUSTRALIA
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AMANA LIVING KINROSS CARE CENTRE PROPOSED SITE PLAN & SHADOW PLAN

DRAWN	MK	DESIGNED	MK	REDUCTION	
CHECKED	-	PRINCIPAL		0  25	
APPROVED	-				
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REV	DESCRIPTION	DATE	APP
H	REVISED ISSUE FOR DA	03/04/19	MK
G	ISSUE FOR DA	23/01/19	MK



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T 08 9481 0685 F 08 9481 4983 E mail@tz.com.au

AMANA LIVING
KINROSS CARE CENTRE
LOWER GROUND FLOOR PLAN

DRAWN	MK	DESIGNED	MK	REDUCTION
CHECKED	-	PRINCIPAL	-	0 25
APPROVED	-	-	-	-
SCALE	1:200	DATE	NOV 2018	DRAWING No.
T&Z PROJ No.	618018	T&Z FILE No.	DA.201.dwg	REV.
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GROUND FLOOR PLAN**

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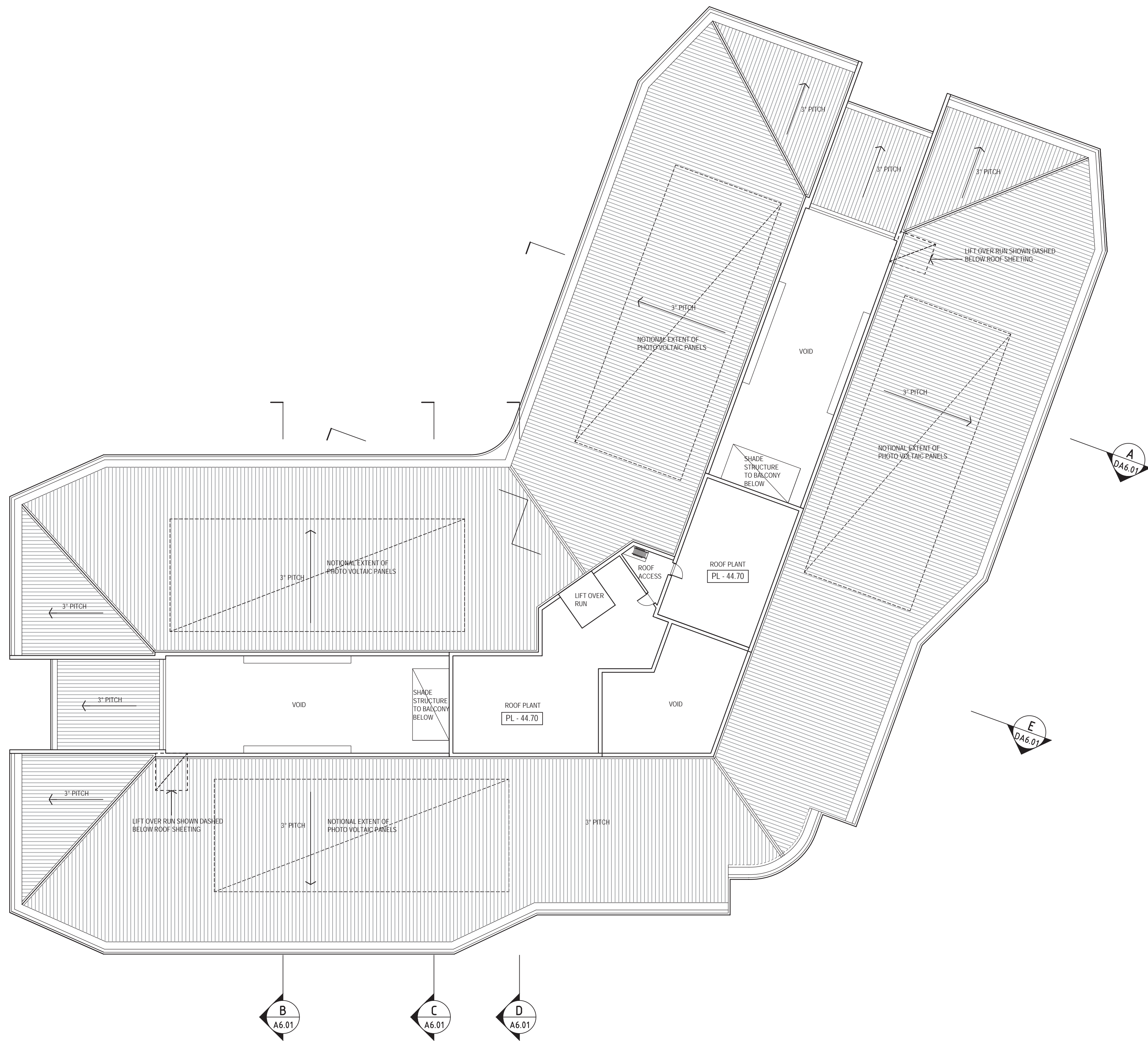


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ROOF PLAN

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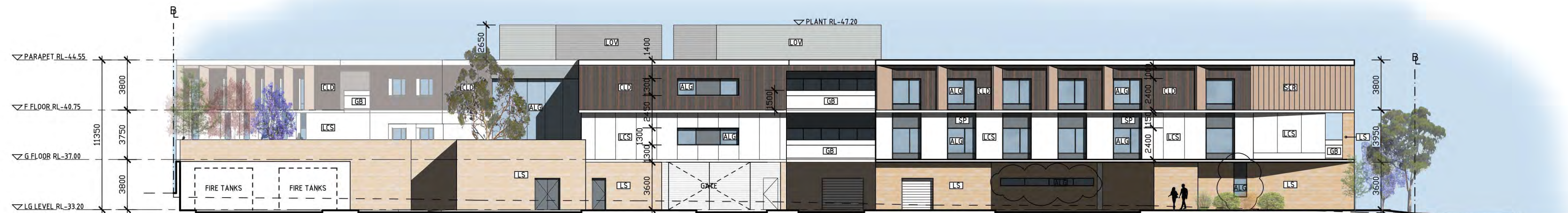
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NORTH ELEVATION
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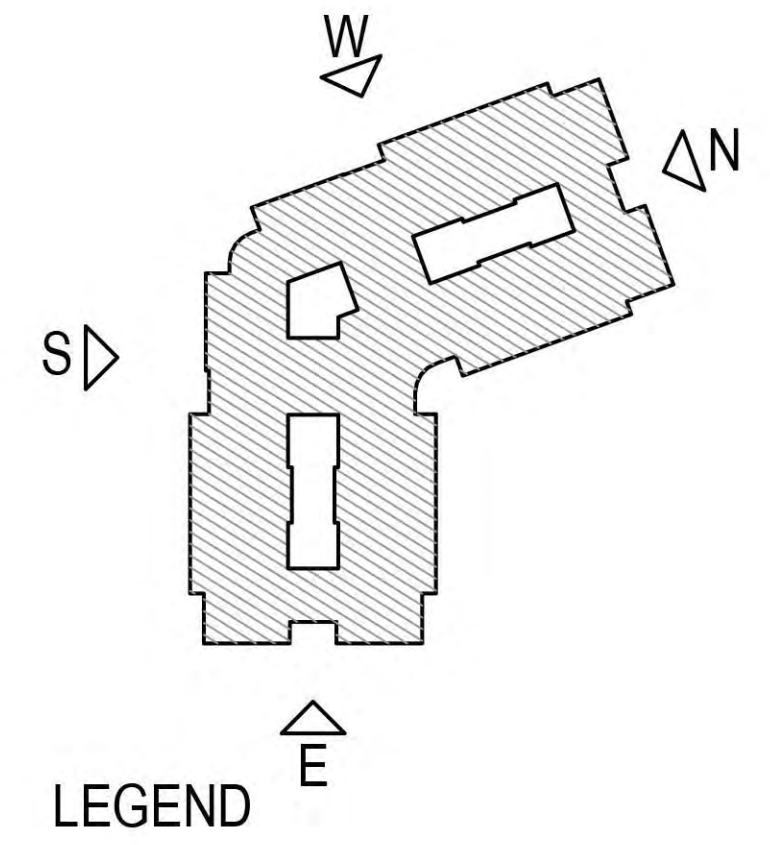
EAST ELEVATION
SCALE 1:200



SOUTH ELEVATION
SCALE 1:200



WEST ELEVATION
SCALE 1:200



MATERIALS LEGEND:

- LS SMOOTH CUT LIMESTONE
- ALG ALUMINIUM FRAMED GLAZING
- LCS LINEAR CLADDING SYSTEM
- GB GLASS BALUSTADING
- CLD TIMBER LOOK CLADDING
- GLV ALUMINIUM FRAMED GLASS LOUVRES
- SP GLAZED SPANDREL
- SCR FEATURE SCREENING
- LOV ALUMINIUM LOUVRES

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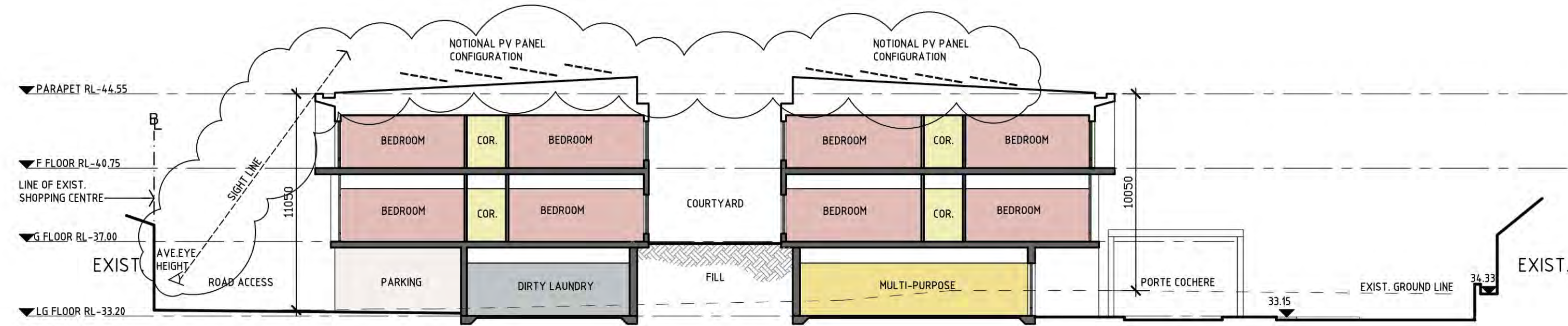


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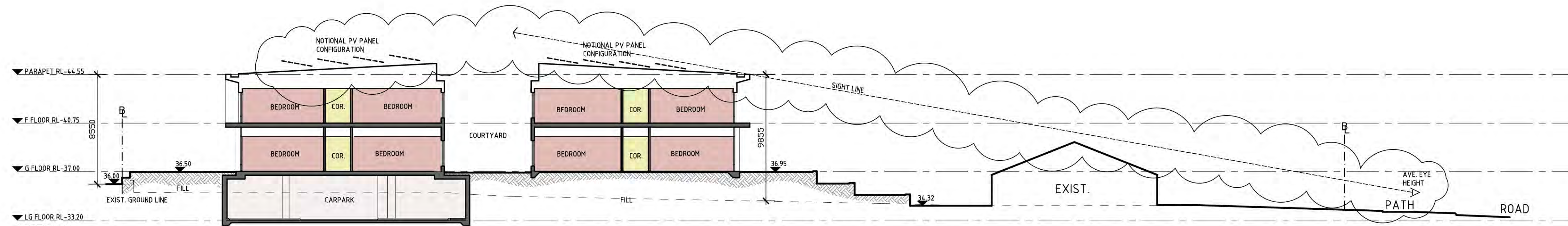
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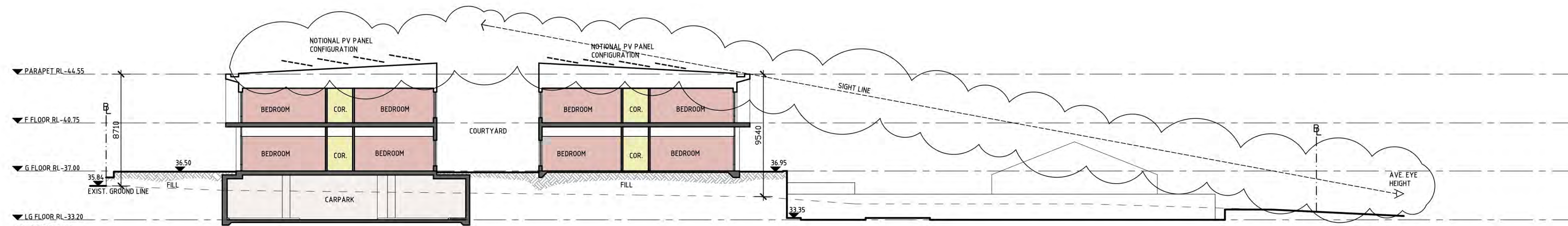
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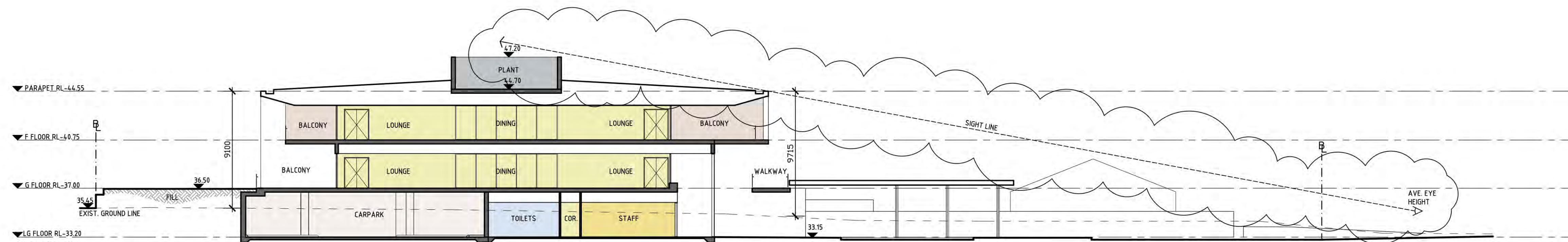
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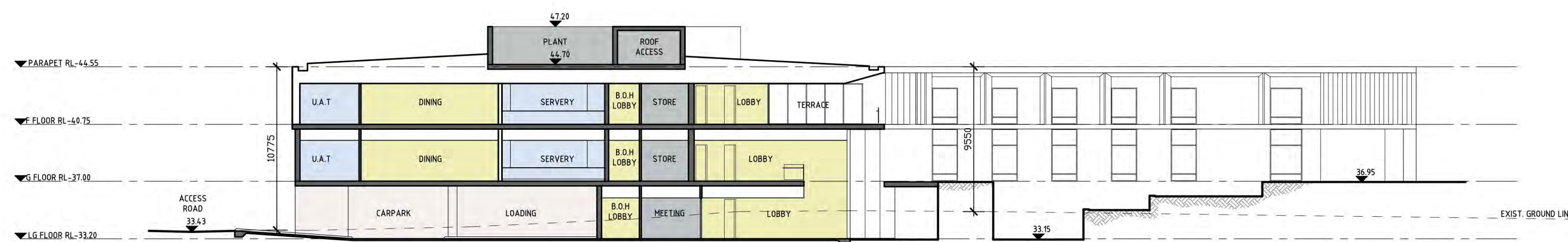
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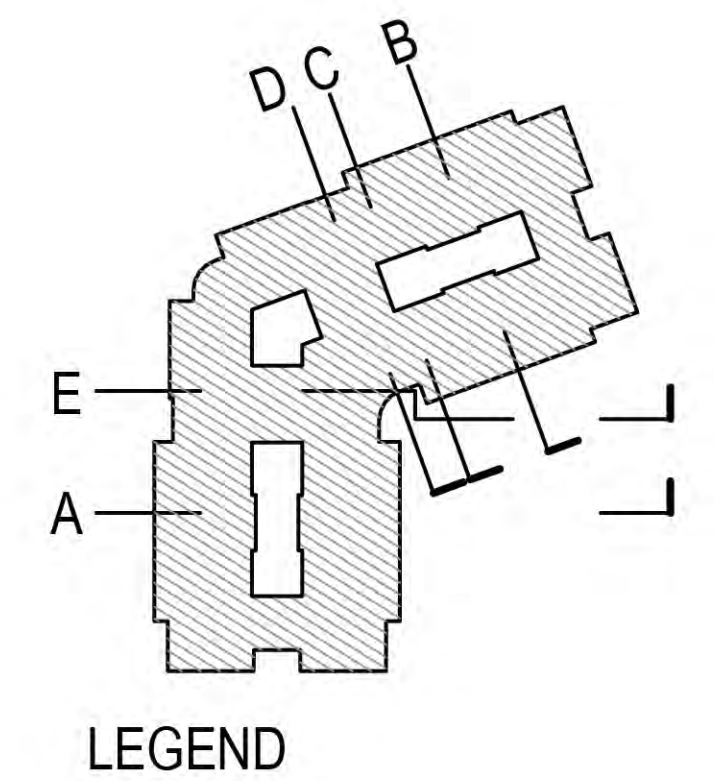
SECTION C
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SECTION D
SCALE 1:200



SECTION E
SCALE 1:200



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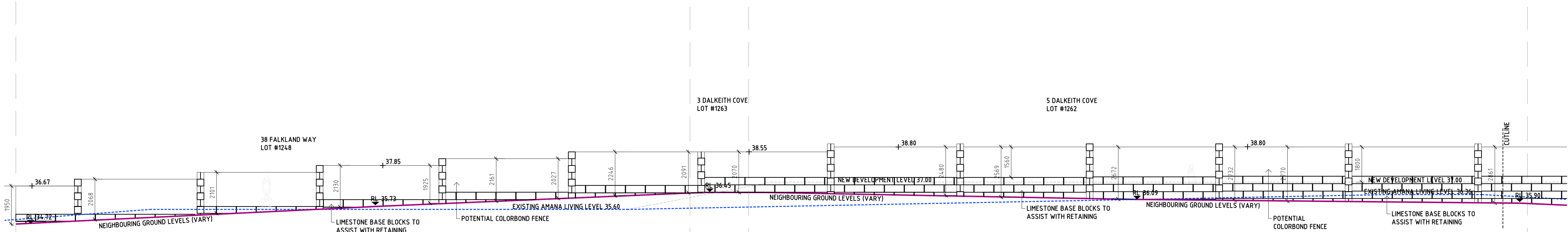
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AMANA LIVING KINROSS CARE CENTRE SITE SECTIONS

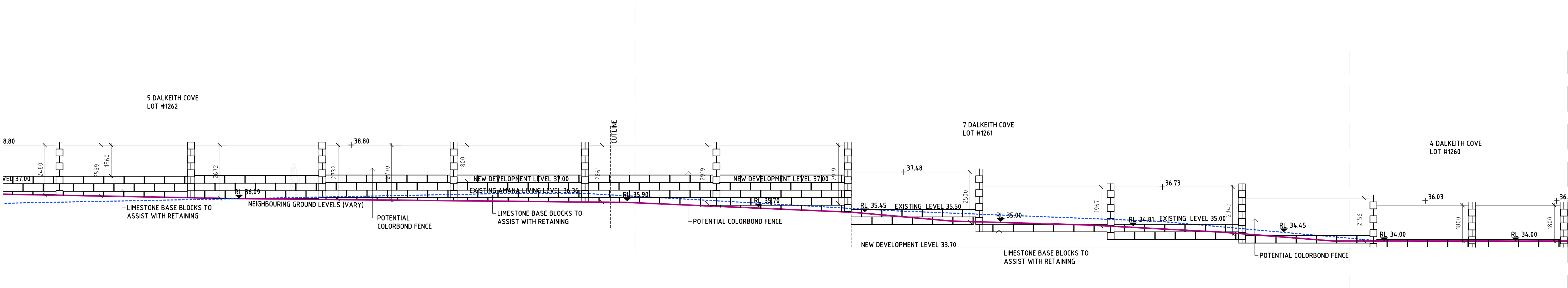
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DETAIL
WESTERN BOUNDARY INTERFACE
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DRAFT AND CONCEPTUAL ONLY



AMANA LIVING - KINROSS
MANA LIVING

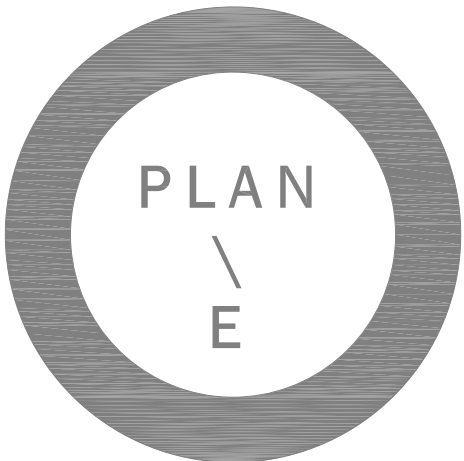
LANDSCAPE CONCEPT
WESTERN BOUNDARY INTERFACE ELEVATION

JOB NO. 1802301 C1.103 REV E APRIL 2019
1:100 @ A1

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LANDSPACE PTY LTD ACN 056 538 679

PLOTTED BY: KDAWSON

PLOT DATE: 15/04/2019 4:11:33 PM





KINROSS DRIVE - VIEW LOOKING INTO ENTRANCE COURT



KINROSS DRIVE - VIEW LOOKING FROM EXISTING R.O.W

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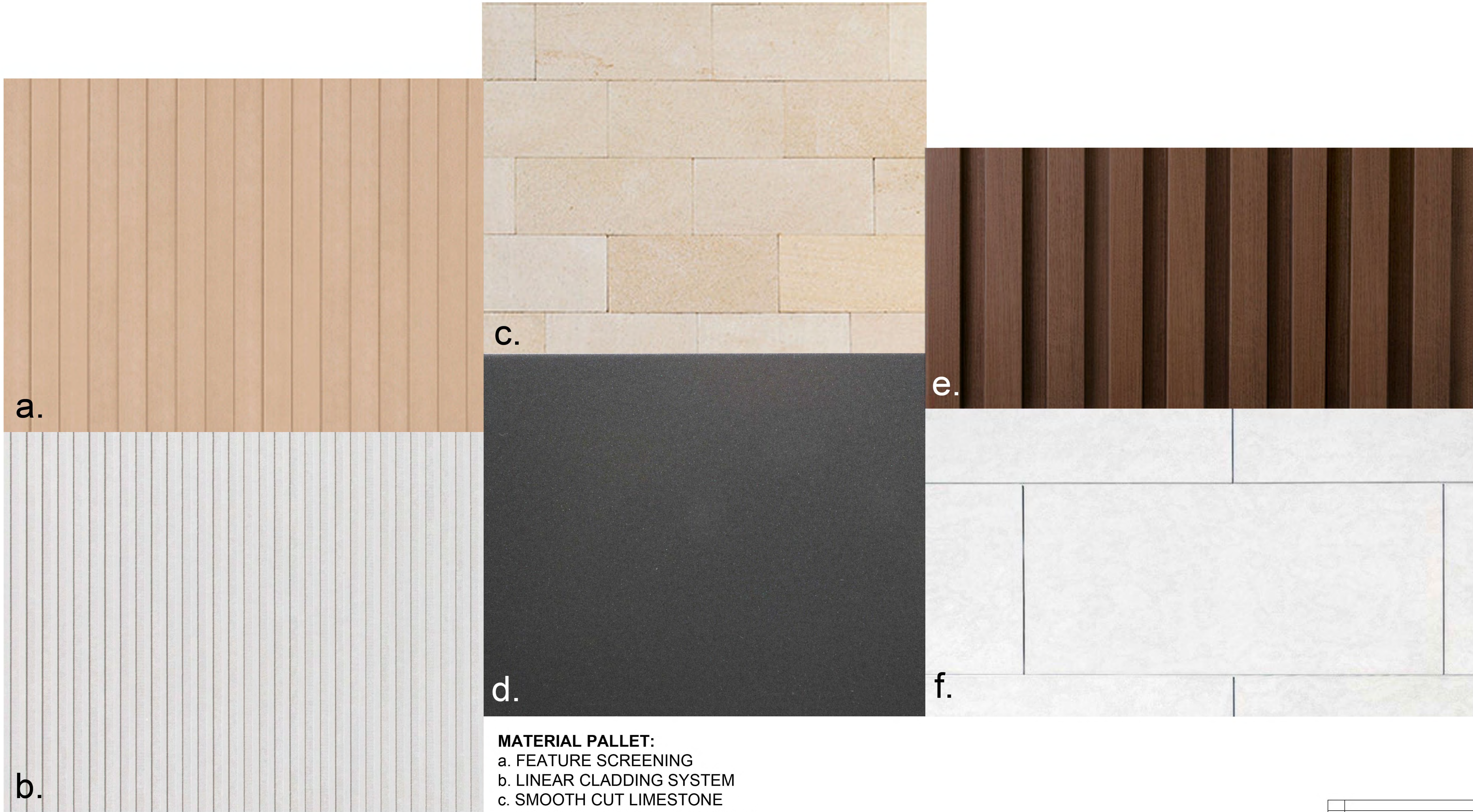


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AMANA LIVING
KINROSS CARE CENTRE
PERSPECTIVES

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- MATERIAL PALLET:**
- a. FEATURE SCREENING
 - b. LINEAR CLADDING SYSTEM
 - c. SMOOTH CUT LIMESTONE
 - d. ALUMINIUM GLAZING FRAMES
 - e. TIMBER LOOK CLADDING
 - f. EXPRESSED JOINT FIBRE CEMENT SOFFIT

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AMANA LIVING
KINROSS CARE CENTRE
MATERIALITY

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Attachment 4 - Landscaping concept plans



- LEGEND
- 1 EXISTING RESIDENCE TO HAVE NEW CONNECTING PATHWAYS AND SOFT LANDSCAPE UPGRADES TO PROVIDE CONTINUITY OF LANDSCAPE THEMING
 - 2 NEW DECIDUOUS SHADE TREES PROVIDE SUMMER SHADE AND WINTER SUN
 - 3 RAISED PLANTER BEDS PROVIDE GARDENING OPPORTUNITIES FOR FRUIT, VEGES OR HERBS
 - 4 STEPS ENABLE STAFF TO GAIN DIRECT ACCESS BETWEEN BUILDINGS
 - 5 COVERED WALKWAY PROVIDES KEY ACCESS WITH UNIVERSAL GRADIENTS
 - 6 RETAINING WALLS ASSIST WITH LEVEL CHANGE AND PROVIDE INTEREST WITH DIFFERING OPEN SPACE LEVELS CREATING INTIMATE SPACES
 - 7 PAVILIONS OR SHADE STRUCTURES WITH SEATING AND BBQ AMENITIES PROMOTE OUTDOOR GATHERING SPACES FOR PROGRAMMED ACTIVITIES
 - 8 OPEN AREAS OF TURF CAN PROVIDE FOR OUTDOOR RECREATION INCLUDING GENTLE STRETCHING, YOGA, OR REHABILITATION EXERCISE SPACES
 - 9 LOCATION OF SMALL KIDS PLAY AREA
 - 10 LOCATION OF OUTDOOR EXERCISE EQUIPMENT AND / OR MUSICAL EQUIPMENT
 - 11 PATHWAYS PROVIDE WALKING LOOPS WITH DESIGNATED SEATED RESTING AREAS
 - 12 LOCATION OF SENSORY GARDEN FOCUSED ON PLANTS WITH SCENT
 - 13 INTERNAL GARDENS HAVE SEATING OPPORTUNITIES AND SMALLER SHADE TREES. SHRUB PLANTING IS MORE EXOTIC AND SHADE TOLERANT
 - 14 USE OF GRASS TREES FROM SITE IN TIERED NATIVE GARDEN NEAR MAIN ENTRANCE
 - 15 PERIPHERY GARDENS WITH SHADING TO PROVIDE SCREENING AND PRIVACY TO RESIDENTS
 - 16 NEW CAR PARK AND PORTE COCHERE DROP OFF
 - 17 RETAIN EXISTING TREES FRONTING FALKLAND WAY WITH NEW CAR PARK
 - 18 RELOCATE STREET TREES ALONG KINROSS DRIVE
- 1.8m HIGH SOLID FENCE ON LIMESTONE RETAINING WALL BASE. TOTAL HEIGHT OF WALL & FENCE VARIES.
- 1.8m HIGH VISUALLY PERMEABLE FENCE
- ... 1.5m HIGH VISUALLY PERMEABLE FENCE
- TEMPORARY ADMINISTRATION

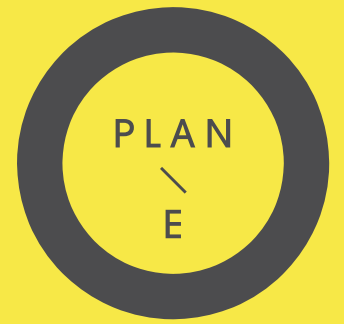
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ASPIRATIONAL IDEAS



PLANTER BOXES WITH EDIBLE PLANTS



OUTDOOR RUGS WITH SEATED AREAS



INTIMATE SEATING AREAS



SENSORY GARDENS



INVITING SPACES FOR VISITATION



COMMUNAL SPACES FOR ORGANISED ACTIVITIES



OPEN LAWN FOR RECREATION



CIRCULAR PATHWAYS FOR WALKING ROUTES



'MENS SHED' STORAGE AND FACILITIES



INFORMAL SHADED AREAS FOR RESPITE

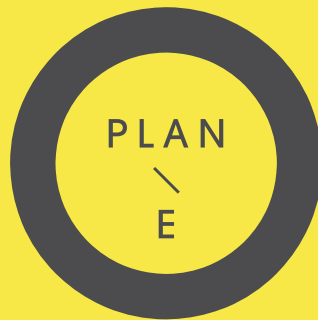
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ARBORS



SHADED PATHWAYS



PAVILIONS

RETAINING WALLS



ECO OUTDOOR 'ALPINE' CLADDING



STONERIDGE RECYCLED LIMESTONE BLOCKS



RECON LIMESTONE WALLS



LARGE POT PLANTS

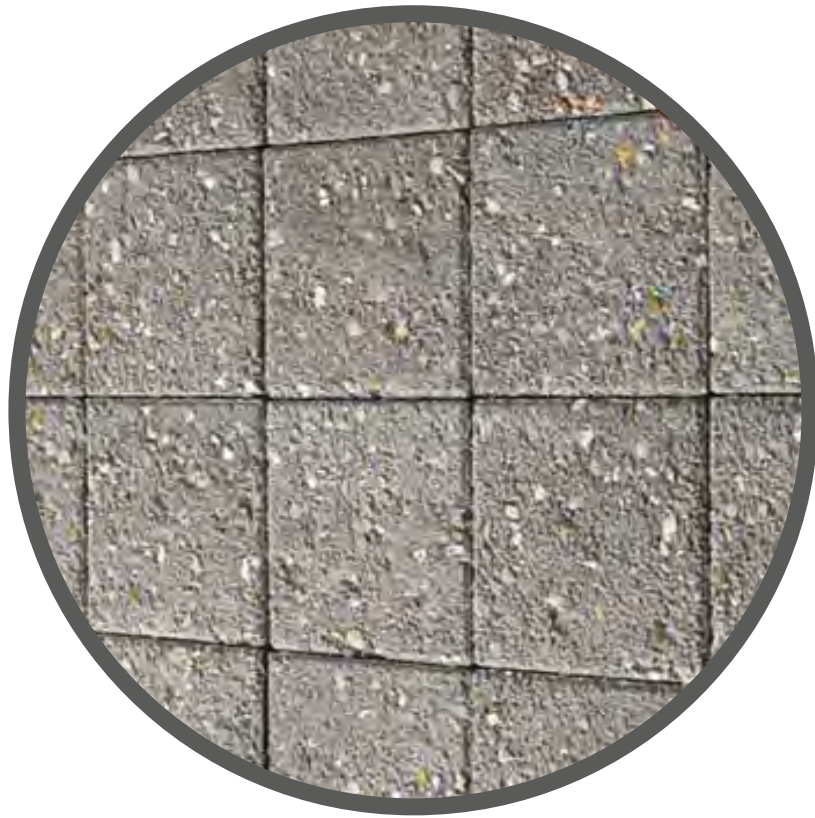


SMALL PLANTER BOXES



POTTED TREES

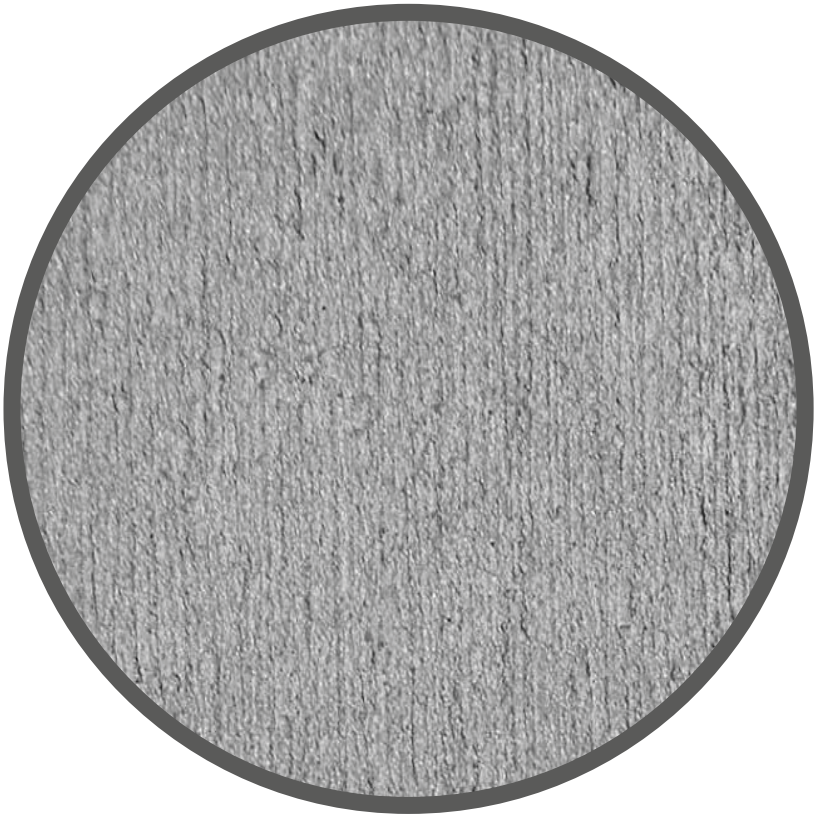
POTS / PLANTERS



UNIT PAVING



'JARRAH' EXPOSED AGGREGATE

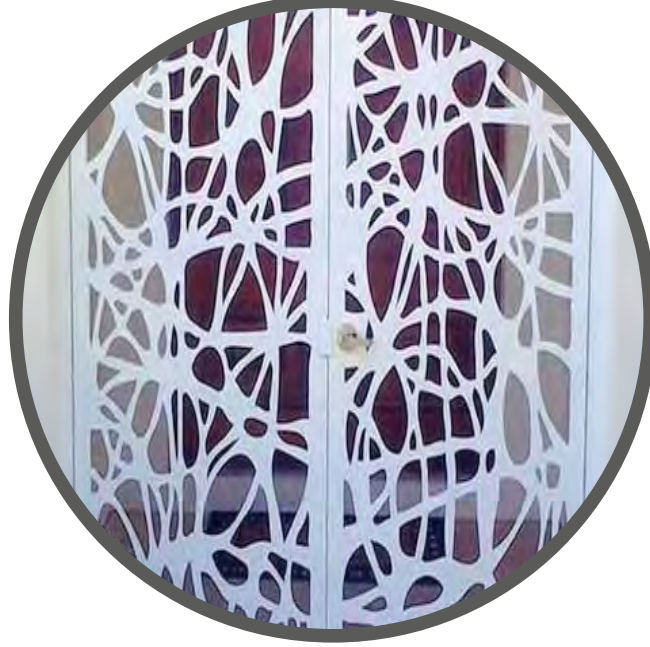


INSITU CONCRETE WITH ROUGH BROOM FINISH AND GREY OXIDE

FENCING



OPEN STYLE FENCING



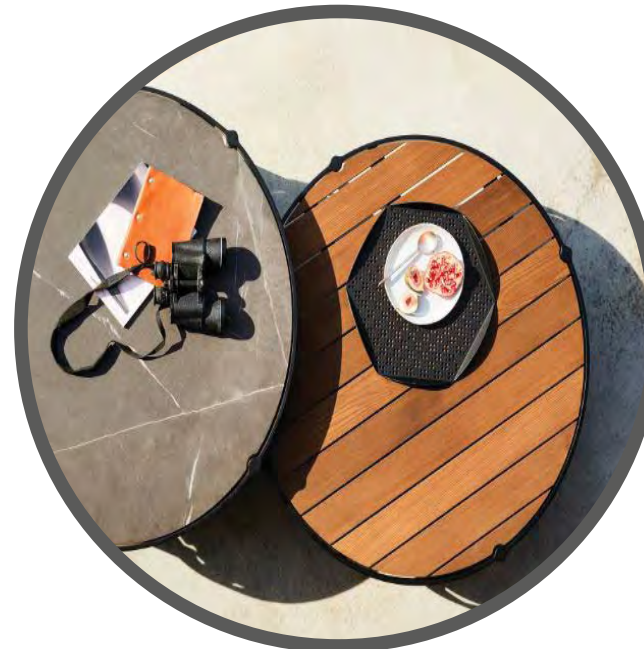
DECORATIVE SCREENS



DECORATIVE SOLID FENCING



COLOURFUL LOUNGES HELP WITH WAYFINDING

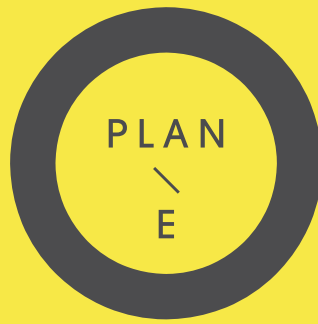


VARIETY OF TABLE HEIGHTS



COMFORTABLE RESTING AREAS

FURNISHINGS



OPEN SPACE AREAS: SOFT LANDSCAPE PROPOSED SPECIES



LEMON



JASMINE



CHORIZEMA CHORDATUM



STRELITZIA



ORANGE



LAVENDULA



CLIVEA



THRYPTOMENE BAECKEACEA
'FLAT'



OLIVE



ROSMARINUS



CONOSTYLIS CANDICANS



SCAEVOLA NITIDA

FEATURE POTTED TREES

SCENT

FLORAL GROUNDCOVERS & LOW SHRUBS

SHADE TREE PLANTING



AGONIS FLEXUOSA



CALLISTEMON KINGS PARK SPECIAL



JACARANDA



EUCALYPTUS CAESIA



GLEDITSIA



XANTHORRHOEA TRANSPLANTS

AMANA LIVING - KINROSS

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Environmentally Sustainable Design – Checklist

Under the City's planning policy, *Environmentally Sustainable Design in the City of Joondalup*, the City encourages the integration of environmentally sustainable design principles into the construction of all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

Environmentally sustainable design is an approach that considers each building project from a 'whole-of-life' perspective, from the initial planning to eventual decommissioning. There are five fundamental principles of environmentally sustainable design, including: siting and structure design efficiency; energy efficiency; water efficiency; materials efficiency; and indoor air quality enhancement.

For detailed information on each of the items below, please refer to the *Your Home Technical Manual* at: www.yourhome.gov.au, and *Energy Smart Homes* at: www.clean.energy.wa.gov.au.

This checklist must be submitted with the planning application for all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

The City will seek to prioritise the assessment of your planning application and the associated building application if you can demonstrate that the development has been designed and assessed against a national recognised rating tool.

Please tick the boxes below that are applicable to your development.

Siting and structure design efficiency

Environmentally sustainable design seeks to affect siting and structure design efficiency through site selection, and passive solar design.

Does your development retain:

- ☒ existing vegetation; and/or
- ☒ natural landforms and topography

Does your development include:

- ☒ northerly orientation of daytime living/working areas with large windows, and minimal windows to the east and west
- ☒ passive shading of glass
- ☒ sufficient thermal mass in building materials for storing heat
- ☒ insulation and draught sealing
- ☒ floor plan zoning based on water and heating needs and the supply of hot water; and/or
- ☐ advanced glazing solutions

Energy efficiency

Environmentally sustainable design aims to reduce energy use through energy efficiency measures that can include the use of renewable energy and low energy technologies.

Do you intend to incorporate into your development:

- ☒ renewable energy technologies (e.g. photo-voltaic cells, wind generator system, etc); and/or
- ☒ low energy technologies (e.g. energy efficient lighting, energy efficient heating and cooling, etc); and/or
- ☒ natural and/or fan forced ventilation

Water efficiency

Environmentally sustainable design aims to reduce water use through effective water conservation measures and water recycling. This can include stormwater management, water reuse, rainwater tanks, and water efficient technologies.

Does your development include:

- ☐ water reuse system(s) (e.g. greywater reuse system); and/or
- ☐ rainwater tank(s)

Do you intend to incorporate into your development:

- ☒ water efficient technologies (e.g. dual-flush toilets, water efficient showerheads, etc)

Materials efficiency

Environmentally sustainable design aims to use materials efficiently in the construction of a building. Consideration is given to the lifecycle of materials and the processes adopted to extract, process and transport them to the site. Wherever possible, materials should be locally sourced and reused on-site.

Does your development make use of:

- ☐ recycled materials (e.g. recycled timber, recycled metal, etc)
- ☐ rapidly renewable materials (e.g. bamboo, cork, linoleum, etc); and/or
- ☒ recyclable materials (e.g. timber, glass, cork, etc)
- ☐ natural/living materials such as roof gardens and "green" or planted walls

Indoor air quality enhancement

Environmentally sustainable design aims to enhance the quality of air in buildings, by reducing volatile organic compounds (VOCs) and other air impurities such as microbial contaminants.

Do you intend to incorporate into your development:

- ☒ low-VOC products (e.g. paints, adhesives, carpet, etc)

'Green' Rating

Has your proposed development been designed and assessed against a nationally recognised "green" rating tool?

- ☐ Yes
- ☒ No

If yes, please indicate which tool was used and what rating your building will achieve:

If yes, please attach appropriate documentation to demonstrate this assessment.

If you have not incorporated or do not intend to incorporate any of the principles of environmentally sustainable design into your development, can you tell us why:

Is there anything else you wish to tell us about how you will be incorporating the principles of environmentally sustainable design into your development:

BCA Section J energy efficiency requirements will be met or exceeded to ensure that the building operates efficiently.

When you have checked off your checklist, sign below to verify you have included all the information necessary to determine your application.

Thank you for completing this checklist to ensure your application is processed as quickly as possible.

Applicant's Full Name: JACOB HOUEMBERG Contact Number: 0459 889 831

Applicant's Signature:  Date Submitted: 25/01/2019

Accepting Officer's Signature: _____

Checklist Issued: March 2011



urbii

Sustainable Transport. Safe Solutions

Lot 60 (71) Kinross Dr, Kinross

Kinross Care Centre Redevelopment

TRANSPORT IMPACT STATEMENT



Prepared for:
Amana Living

April 2019

Lot 60 (71) Kinross Dr, Kinross

Prepared for: Amana Living
Prepared by: Paul Ghanous
Date: 4 April 2019
Project number: U18.002

Version control

Version No.	Date	Prepared by	Revision description	Issued to
U18.002.r01	25/11/18	Paul Ghanous	DRAFT	Johnstaff
U18.002.r01a	23/01/19	Paul Ghanous	FINAL	Johnstaff
U18.002.r01b	24/01/19	Paul Ghanous	FINAL – Rev 1	Johnstaff
U18.002.r01c	04/04/19	Paul Ghanous	FINAL – Rev 2	Johnstaff



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1. Introduction

This Transport Impact Statement has been prepared and updated by Urbii on behalf of Amana Living with regards to the proposed Kinross Care Centre (KCC) redevelopment, located at Lot 60 (71) Kinross Dr, Kinross, in the City of Joondalup.

The subject site is located at the southern corner of the intersection of Falkland Way and Kinross Drive, as shown in Figure 1.

As shown in Figure 2, the existing KCC is bound by Falkland Way to the north, residential properties to the west, Kinross Drive to the east and commercial development to the south. The site currently accommodates the existing KCC facility and partially vacant land. Kinross Primary School and Kinross College are located near the site to the east and north respectively.

The existing care centre provides 48 aged care beds. Forty beds are proposed to be retained and an additional 96 beds are proposed to be provided on site, for a total of 136 beds post development.

The proposed development entails construction of a new three-level building with parking and amenities on the ground level and 96 care beds on the upper levels.

The key issues that will be addressed in this report include the traffic generation and distribution of the proposed development, access and egress movement patterns, car parking and access to the site for alternative modes of transport.



Figure 1: Subject site





Figure 2: Site context

The City of Joondalup reviewed the Development Application (DA) package, including the site layout and Rev 1 of this report. Comments provided by the City relevant to traffic and parking are addressed in this report update (Rev 2) and include:

- The entry driveway to the Porte cochere to be widened to 5.5m;
- Kerb ramps to be provided for the ACROD parking travel path to the building;
- Modification of the curved driveway to the secured car park; and,
- Parking calculations to be revised to only consider car parking (excluding bus and service bays).

Commentary addressing the above items is provided in Section 11 of this report: *Site Specific Issues*.

2. Proposed development

The proposal for the subject site is for extension of the KCC through construction of a new building, comprising:

- Staff and resident amenities on the lower ground level including foyer, administration, laundry, kitchen, day club, cafeteria, multi-purpose room and ancillary areas;
- Total of 70 parking spaces including:
 - on-site parking providing a total of 64 car bays, two delivery bays and two coach bays;
 - one bus embayment on Kinross Drive and one delivery truck embayment on Falkland Way;
- net addition of 96 care beds in the new building (total of 136 beds post development); and
- end of trip facilities including bicycle parking, separate male/female showers, change rooms and lockers.

The existing KCC building is proposed to be retained with some demolition works expected. The new building will be constructed on the vacant land and integrated with the existing facility. Vehicle access to the site will be reconfigured with access maintained from both Falkland Way and Kinross Drive.

Waste collection, delivery and other service vehicle activity for the new KCC building will be accommodated within the site in the new loading area accessed from the existing Right of Way (ROW), which is shared with the shopping centre to the south. Delivery vehicles will also be accommodated in the proposed truck embayment on Falkland Way. Waste collection for the existing facilities will be undertaken as per the existing situation.

Pedestrians and cyclists will access the development from the external path network abutting the site.

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



3. Vehicle access and parking

Vehicle access

The proposed vehicular access arrangements have been reviewed for efficient and safe traffic circulation.

Vehicular access to the existing KCC is detailed in Figure 3. There are two direct vehicle crossovers on Kinross Drive and two on Falkland Way. There is also one shared ROW intersection on the southern boundary of the site.



Figure 3: Existing vehicle access

As detailed in the proposed development plans and in Figure 4, the two existing crossovers on Kinross Drive are proposed to be moved closer together. The northern crossover will be configured as exit only and the southern crossover as entry only. A one-way circulation porte-cochere road is proposed within the development connecting with these crossovers. The one-way circulation road will be used by vehicles for pick up and drop off, by visitors accessing seven visitor car parking bays (including two ACROD bays) and by small coaches. Two coach parking bays are also provided in this area.

The shared ROW intersection with Kinross Drive will provide vehicle access to ten, 90-degree parking bays directly off the ROW (including one small delivery bay), and entry into the proposed 33-bay internal car park. A large vehicle delivery / turn-around bay is also provided off the ROW.

The ROW will continue to accommodate access to the existing shopping centre to the south, as per the existing situation. The shopping centre also has alternative vehicle access to Edinburgh Avenue.

The existing eastern site crossover on Falkland Way will be configured as a two-way crossover. The western crossover on Falkland Way will be configured as exit only.

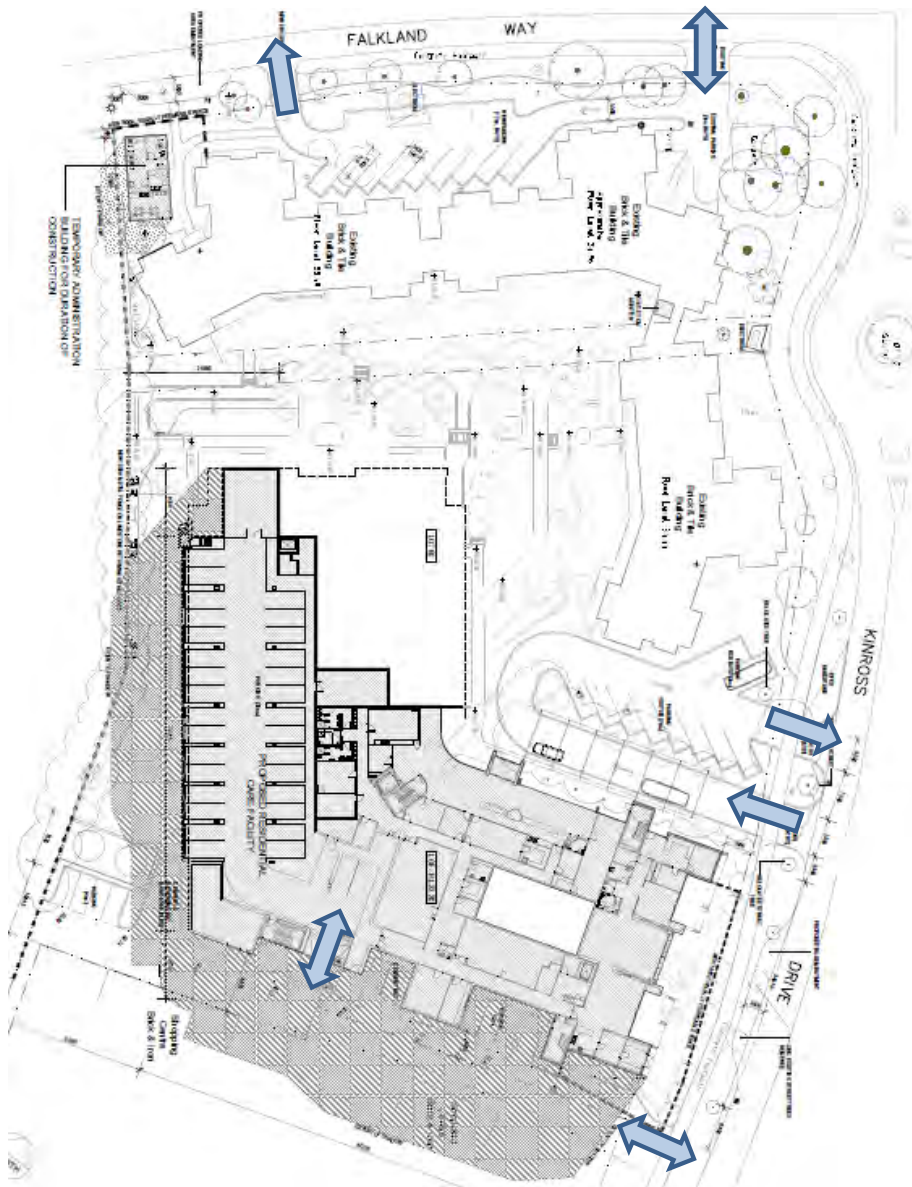


Figure 4: Proposed vehicle access

Parking supply and demand

A total of 64 car parking spaces are proposed to be provided on site for the development as following:

- 7 visitor car bays (including two ACROD bays) in the porte-cochere area;
- 9 car bays off the ROW;
- internal secure car parking providing 33 bays accessed from the ROW; and
- 15 car bays accessed from Falkland Way.

Additionally, parking for coaches, delivery, waste and service vehicles is proposed as following:

- 2 coach bays in the porte-cochere area;
- 1 small delivery bay (90-degree) off the ROW
- 1 large delivery / turn-around bay for trucks accessed off the ROW;
- 1 coach embayment on Kinross Drive; and
- 1 delivery truck embayment on Falkland Way.

The information in Table 1 has been provided by the project planners regarding the on-site parking requirements as set out in the Local Planning Scheme.

Table 1: LPS on-site parking assessment

Parking Rate	Calculations	Number of Bays
1 per 5 beds	96 new beds + 40 existing beds = 136 beds	27.2 bays
1 per staff member at any one time	New (96 bed) component = 34 staff Existing (40 bed) component = 17 staff = 51 staff	51 bays
Total parking required =		79.2 bays (rounded to 79 bays)
Total car parking provided =		64 bays (excluding service bays and bus bays)
Parking shortfall =		15 bays

Data source: Planning Solutions, January 2019

The existing KCC and post development additions will result in a total calculated parking requirement of 79 bays. This results in a theoretical shortfall of 15 bays.

Actual car parking demand modelling

A parking demand modelling exercise has been undertaken to estimate the anticipated actual required car parking for the proposed development. The modelling assumptions and calculations are detailed in Table 2. It is conservatively estimated that the maximum demand for car parking in the post development situation will be 60 bays.

Table 2: Estimated actual maximum car parking demand

Parking Type	Adopted Parking Generation Rate	Units	Bays required
Staff Car Parking	Assume 0.9 bays required per staff member. This is conservative and makes only a small allowance for staff leave, sick days and alternative transport mode choices including kiss and drive, carpooling, public transport or cycling	51	46
Visitor Car Parking	The <i>RTA NSW Guide to Traffic Generating Developments</i> recommends visitor parking for subsidised nursing homes be provided at a rate of 1 per 10 beds	136	14
Estimated maximum car parking demand			60

Based on the car parking demand modelling, the proposed total on-site parking supply of 64 car parking bays is enough to accommodate the needs of the development.

Planning justification for car parking shortfall

Planning Solutions have provided a comprehensive assessment and justification of the car parking shortfall in Section 6.3.3 of the Development Application report. The main points justifying the parking shortfall are summarised as following:

1. Reciprocity between staff and visitor parking – the peak demand time for visitor parking occurs on weekends and in the late afternoon. During this time the staff roster is lower and parking demand for staff is lower. The peak parking demand times for staff and visitors do not overlap and therefore the parking shortfall is acceptable.
2. Visitor parking – evidence from comparable facilities – Amana Living operate 22 facilities in the Perth and Peel area and find that facilities that have 1 visitor bay available per 10 beds have been sufficient for accommodating peak visitor demand. Additionally, Amana Living commissioned a survey of visitors to their facilities in 2014. Using the higher surveyed rates results in an expected visitor demand of 46 visitors per day. Noting that this demand is spread throughout the day, the proposed car parking supply is acceptable.
3. Alternate transport options – The parking requirement assumes all staff will need to park on site. However, staff have access to alternative transport options such as cycling, walking, public transport, kiss and ride or carpooling. The TIS report conservatively estimates 0.9 bays required per staff member.
4. On-street parking – Although not essential for the proposed development, visitors have access to on-street parking near the subject site (outside of school peak times).



4. Provision for service vehicles

The proposed development site plan has been reviewed for service vehicle access, egress and circulation.

Waste collection for the KCC will be undertaken by a private contractor as per the existing situation. A Waste Management Plan (WMP) has been prepared by others which provides additional detail on waste collection arrangements.

A bin store is provided on the lower ground level with the large vehicle delivery / turn-around bay located nearby. Waste collection will take place off-street from this large delivery bay via the ROW. The large delivery bay will also accommodate deliveries to the development. One smaller delivery bay is also provided off the ROW.

Service vehicles may enter the ROW in forward gear and then exit the ROW in forward gear to and from Kinross Drive.

A delivery truck embayment is proposed on Falkland Way to service the northern end of the site.

Swept path analysis has been undertaken to confirm satisfactory service vehicle movements and is presented in Appendix B.

5. Hours of operation

For most aged care facilities, the afternoon staff changeover typically occurs at around 3:00pm, with the morning care staff departing the site and evening care staff arriving.

The morning staff changeover typically occurs early in the day (7am start), outside the road network peak hour. The evening changeover occurs late in the evening when road network traffic is also comparatively low.

Review of the preliminary shift work rosters indicates that there is a staggered staff changeover period between 2:30pm and 3:30pm. There are several schools and other community facilities in the locality. The peak traffic period is anticipated to occur when school traffic and the KCC afternoon staff changeover overlaps.

Urbii undertook manual traffic count surveys on Wednesday 21 November 2018 during the afternoon peak hour between 2:30pm and 3:30pm. Manual traffic count surveys were undertaken to establish the existing turning volumes at the ROW intersection with Kinross Drive, and at the intersection of Kinross Drive / Falkland Way.



6. Daily traffic volumes and vehicle types

Existing traffic flows

Existing traffic was estimated through analysis of data from the following sources:

- Daily traffic volumes for Kinross Drive provided by City of Joondalup (assumed 10% peak hour traffic flows); and
- Manual traffic count surveys undertaken by Urbii on Wednesday 21 November 2018 between 2:30pm and 3:30pm.

The estimated existing traffic flows are presented in Figure 5. For conservative analysis, it was assumed that traffic on Kinross Drive is consistent north and south of Callander Avenue.

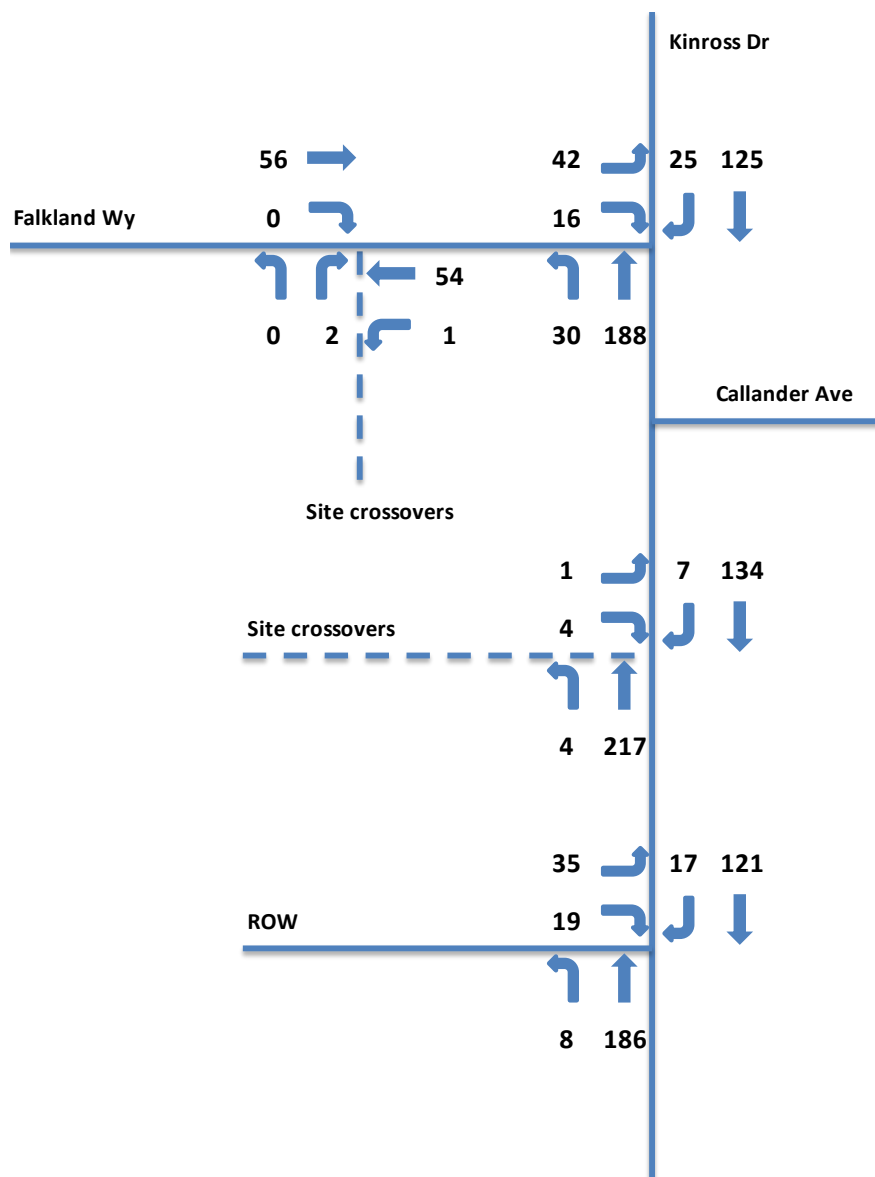


Figure 5: Estimated existing traffic flows – 2:30pm to 3:30pm

Traffic generation

The traffic volume that will be generated by the proposed development has been estimated using trip generation rates derived with reference to the following sources:

- Roads and Traffic Authority of New South Wales *Guide to Traffic Generating Developments* (2002); and
- RTA TDT 2013/ 04a.

The trip generation rates adopted are detailed in Table 3. It was found that the trip rate for 'housing for seniors' resulted in a good match with surveyed existing site traffic.

Table 3: Adopted trip rates for traffic generation

Land use	Trip rate source	Daily rate	PM peak hour rate	In	Out
Aged care bed	TDT 2013/04a - Housing for seniors	2.1 per unit	0.4 per unit	60%	40%

The estimated traffic generation of the proposed development is detailed in Table 4. The proposed development is estimated to generate a total of 286 vehicles per day (vpd) and 54 vehicles per hour (vph) during the PM peak hour. The net increase in site traffic is estimated to be **+202vpd** and **+38vph**.

These trips include both inbound and outbound vehicle movements. It is anticipated that most of the vehicle types would be passenger cars and SUVs. The porte cochere has been designed to accommodate small coaches, such as Toyota Coaster buses, for pick-up / drop-off, with two small coach parking bays provided on site in this area. A coach embayment is also proposed on Kinross Drive to accommodate larger, Optare 9.8m coaches, which may service the site from time to time.

Swept path analysis was undertaken to confirm satisfactory circulation of these vehicles and is included in Appendix B.

Table 4: Traffic generation

Land use	Quantity	Daily rate	PM peak rate	Daily trips	PM trips	PM peak trips	
						In	Out
Existing KCC beds	40	2.1	0.4	84	16	10	6
Proposed KCC beds	96	2.1	0.4	202	38	23	15
Total beds	136	2.1	0.4	286	54	33	21
Net change in traffic				202	38	23	15



Trip distribution and assignment

The distribution of development traffic has been modelled based on the existing surveyed PM peak hour traffic flows. Development traffic was assigned to the site crossovers based on the proportion of car parking bays accessible from each respective crossover.

The post development site traffic during the PM peak hour (2:30pm to 3:30pm) is detailed in Figure 6.

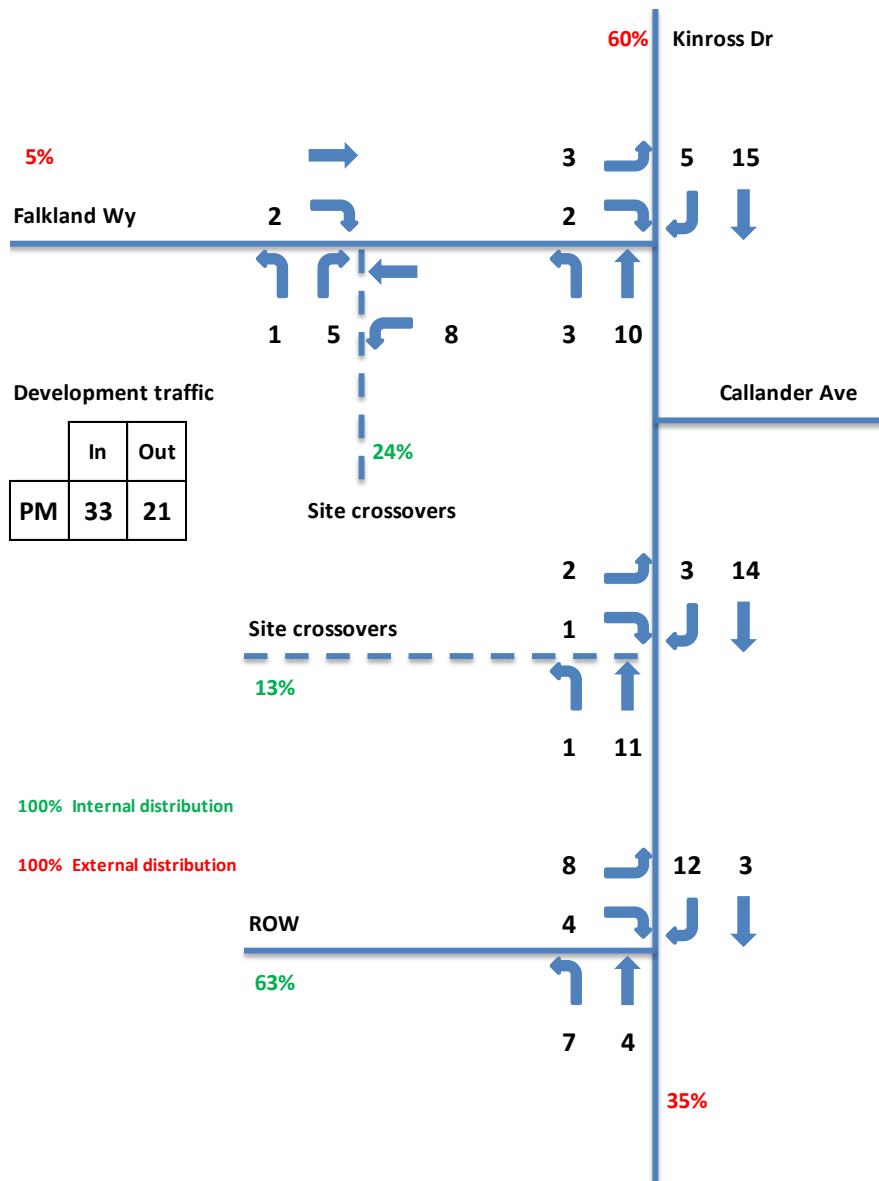


Figure 6: Post development site traffic distribution and assignment – 2:30pm to 3:30pm

Impact on surrounding roads

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

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The proposed KCC redevelopment will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph to warrant further analysis. Therefore, the impact on the surrounding road network is minor.



7. Traffic management on the frontage roads

Information from online mapping services, Main Roads WA, Local Government, and/or site visits was collected to assess the existing traffic management on frontage roads.

Kinross Drive

Kinross Drive near the subject site is an approximately 9m wide, two-lane undivided road. Shared paths are provided along both sides of the road. A parking embayment is provided on the eastern side of the road adjacent to Kinross Primary School.

Kinross Drive is classified as a Local Distributor road in the Main Roads WA road hierarchy (Figure 7) and operates under a default built up area speed limit of 50km/h (Figure 8). Local Distributor roads are the responsibility of Local Government and support movement of traffic within local areas and connect access roads to higher order distributors (Figure 9). A 40km/h school zone is in place between the hours of 7:30 am to 9:00 am and 2:30 pm to 4:00 pm on school days. This assists with reducing vehicle speeds during the peak traffic hour of the proposed development.

Traffic count data obtained from the City of Joondalup indicates that Kinross Drive carries average weekday traffic flows of around 3,813 vehicles per day (vpd), with a recorded 85th percentile speed of 52km/h.

A pedestrian crossing with kerb ramps and a refuge island is provided on Kinross Drive at the roundabout intersection with Callander Avenue. This roundabout with red asphalt treatment also promotes Local Area Traffic Management (LATM). A children's crossing is manned during school hours on Kinross Drive north of Edinburgh Avenue. These road features help with slowing down traffic travelling past the site.

Falkland Way

Falkland Way near the subject site is an approximately 8m wide, two-lane undivided road. Footpaths are provided along both sides of the road near the subject site. A parking embayment is provided on the northern side of the road adjacent to Kinross College.

Falkland Way is classified as an Access road in the Main Roads WA road hierarchy (Figure 7) and operates under a default built up area speed limit of 50km/h (Figure 8). Access roads are the responsibility of Local Government and are for provision of vehicle access to abutting properties (Figure 9). A 40km/h school zone is in place between the hours of 7:30 am to 9:00 am and 2:30 pm to 4:00 pm on school days. This assists with reducing vehicle speeds during the peak traffic hour of the proposed development.

No traffic count data was available from the City of Joondalup. Based on peak hour surveys, it is estimated that Falkland Way currently carries less than 1,500vpd.

A children's crossing is manned during school hours west of Kinross Drive.

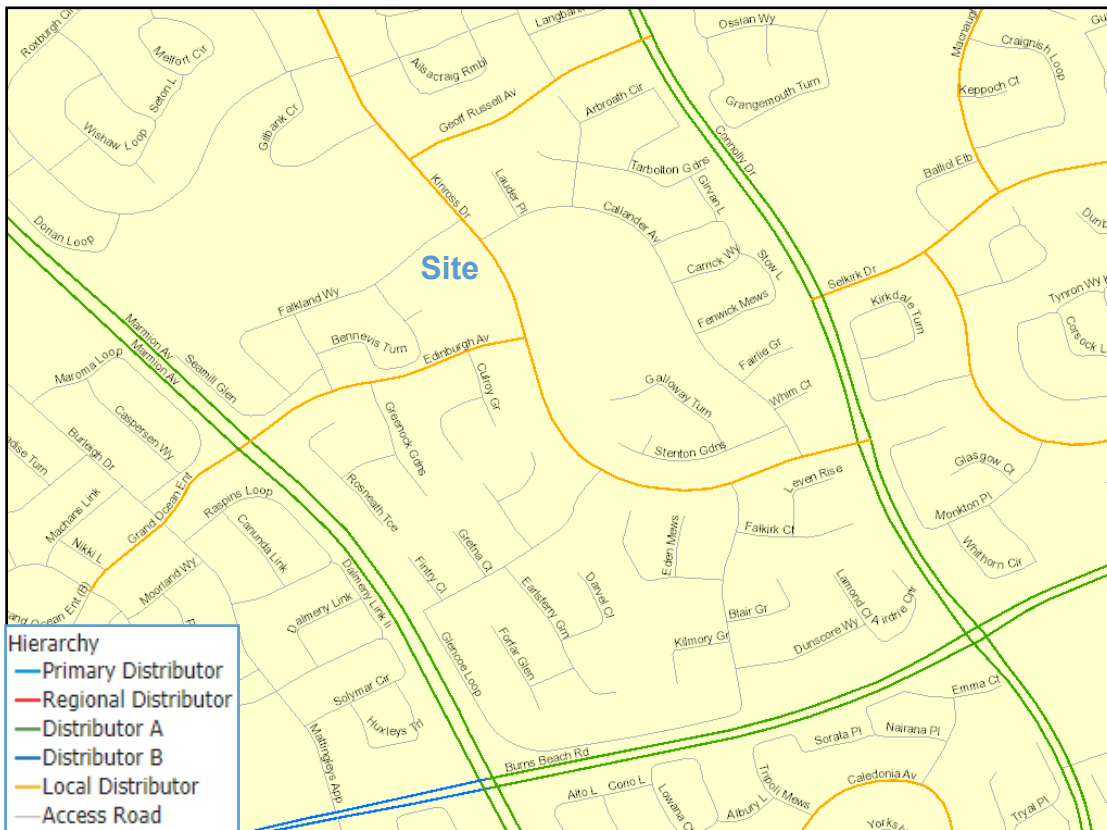


Figure 7: Main Roads WA road hierarchy plan

Source: Main Roads WA Road Information Mapping System (RIM)

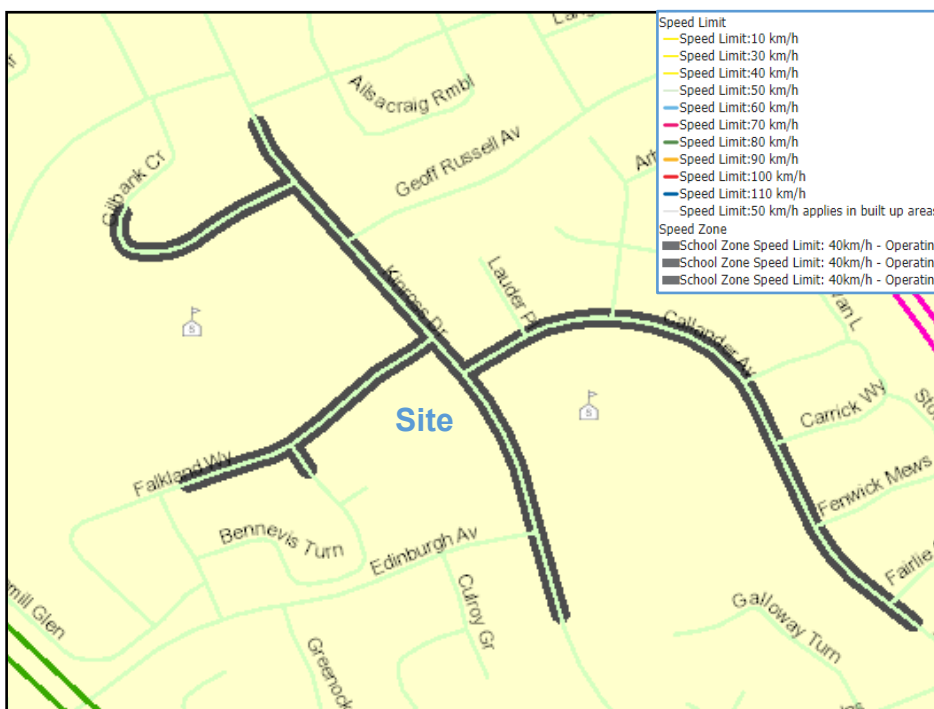


Figure 8: Main Roads WA road speed zoning plan

Source: Main Roads WA Road Information Mapping System (RIM)



ROAD HIERARCHY FOR WESTERN AUSTRALIA
ROAD TYPES AND CRITERIA (see Note 1)

CRITERIA	PRIMARY DISTRIBUTOR (PD) (see Note 2)	DISTRICT DISTRIBUTOR A (DA)	DISTRICT DISTRIBUTOR B (DB)	REGIONAL DISTRIBUTOR (RD)	LOCAL DISTRIBUTOR (LD)	ACCESS ROAD (A)
<i>Primary Criteria</i>						
1. Location (see Note 3)	All of WA incl. BUA	Only Built Up Area.	Only Built Up Area.	Only Non Built Up Area. (see Note 4)	All of WA incl. BUA	All of WA incl. BUA
2. Responsibility	Main Roads Western Australia.	Local Government.	Local Government.	Local Government.	Local Government.	Local Government.
3. Degree of Connectivity	High. Connects to other Primary and Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	Medium. Minor Network Role Connects to Distributors and Access Roads.	Low. Provides mainly for property access.
4. Predominant Purpose	Movement of inter regional and/or cross town/city traffic, e.g. freeways, highways and main roads.	High capacity traffic movements between industrial, commercial and residential areas.	Reduced capacity but high traffic volumes travelling between industrial, commercial and residential areas.	Roads linking significant destinations and designed for efficient movement of people and goods between and within regions.	Movement of traffic within local areas and connect access roads to higher order Distributors.	Provision of vehicle access to abutting properties
<i>Secondary Criteria</i>						
5. Indicative Traffic Volume (AADT)	In accordance with Classification Assessment Guidelines.	Above 8 000 vpd	Above 6 000 vpd.	Greater than 100 vpd	Built Up Area - Maximum desirable volume 6 000 vpd. Non Built Up Area – up to 100 vpd.	Built Up Area - Maximum desirable volume 3 000 vpd. Non Built Up Area – up to 75 vpd.
6. Recommended Operating Speed	60 – 110 km/h (depending on design characteristics).	60 – 80 km/h.	60 – 70 km/h.	50 – 110 km/h (depending on design characteristics).	Built Up Area 50 - 60 km/h (desired speed) Non Built Up Area 60 – 110 km/h (depending on design characteristics).	Built Up Area 50 km/h (desired speed). Non Built Up Area 50 – 110 km/h (depending on design characteristics).
7. Heavy Vehicles permitted	Yes.	Yes.	Yes.	Yes.	Yes, but preferably only to service properties.	Only to service properties.
8. Intersection treatments	Controlled with appropriate measures e.g. high speed traffic management, signing, line marking, grade separation.	Controlled with appropriate measures e.g. traffic signals.	Controlled with appropriate Local Area Traffic Management.	Controlled with measures such as signing and line marking of intersections.	Controlled with minor Local Area Traffic Management or measures such as signing.	Self controlling with minor measures.
9. Frontage Access	None on Controlled Access Roads. On other routes, preferably none, but limited access is acceptable to service individual properties.	Prefer not to have residential access. Limited commercial access, generally via service roads.	Residential and commercial access due to its historic status. Prefer to limit when and where possible.	Prefer not to have property access. Limited commercial access, generally via lesser roads.	Yes, for property and commercial access due to its historic status. Prefer to limit whenever possible. Side entry is preferred.	Yes.
10. Pedestrians	Preferably none. Crossing should be controlled where possible.	With positive measures for control and safety e.g. pedestrian signals.	With appropriate measures for control and safety e.g. median/islands refuges.	Measures for control and safety such as careful siting of school bus stops and rest areas.	Yes, with minor safety measures where necessary.	Yes.
11. Buses	Yes.	Yes.	Yes.	Yes.	Yes.	If necessary (see Note 5)
12. On-Road Parking	No (emergency parking on shoulders only).	Generally no. Clearways where necessary.	Not preferred. Clearways where necessary.	No – emergency parking on shoulders – encourage parking in off road rest areas where possible.	Built Up Area – yes, where sufficient width and sight distance allow safe passing. Non Built Up Area – no. Emergency parking on shoulders.	Yes, where sufficient width and sight distance allow safe passing.
13. Signs & Linemarking	Centrelines, speed signs, guide and service signs to highway standard.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs and guide signs.	Speed and guide signs.	Urban areas – generally not applicable. Rural areas - Guide signs.
14. Rest Areas/Parking Bays	In accordance with Main Roads' Roadside Stopping Places Policy.	Not Applicable.	Not Applicable.	Parking Bays/Rest Areas. Desired at 60km spacing.	Not Applicable.	Not Applicable.

Figure 9: Road types and criteria for Western Australia

Source: Main Roads Western Australia D10#10992

Midblock road capacity

The post development midblock capacity of the frontage roads was assessed against the thresholds in Table 5.

Level of Service (LOS) (A) represents a free flow condition where drivers can choose their preferred speed and are not affected by other vehicles. LOS (F), on the other hand, represents a congested traffic situation where drivers have no choice of speed and are frequently forced to stop. Anything above the LOS (E) is LOS (F) which is the point of forced traffic flows where congestion occurs.

All frontage roads are expected to operate under conditions below their maximum midblock operating capacity at a good level of service A in the post development situation.

Table 5: Upper limits of daily traffic volumes per lane for each level of service

Road type	Upper limits of daily traffic volumes per lane for level of service				
	A	B	C	D	E
2-lane undivided road	5 100	5 950	6 800	7 650	8 500
2-lane divided road	5 700	6 650	7 600	8 550	9 500
4-lane undivided road	5 250	6 125	7 000	7 875	8 750
4-lane divided road	6 600	7 700	8 800	9 900	11 000
6-lane divided road	6 600	7 700	8 800	9 900	11 000
4-lane expressway	7 800	9 100	10 400	11 700	13 000
4-lane freeway	6 000	10 000	14 000	18 000	20 000
6-lane freeway	6 000	10 000	14 000	18 000	20 000
8-lane freeway ¹	6 000	10 000	14 000	18 000	20 000

Source: Review of Major Roads in the South West Metropolitan Corridor: Traffic congestion Technical Paper, Local Impacts Committee, December 2004



8. Public transport access

Information was collected from Transperth and the Public Transport Authority to assess the existing public transport access to and from the site.

The subject site has access to the following bus services within walking distance:

- Bus Route 473: Joondalup – Kinross via Blue Mountain Dr; and
- Bus Route 474: Joondalup – Clarkson via Kinross.

Bus services provide a viable alternative mode of transport for staff and visitors of the proposed development. The nearest bus stops are located on Kinross Drive less than 400m walk or 5 minutes from the site. Bus services also connect to the rail network at Clarkson and Joondalup train stations for longer trips.

The public transport network plan is shown in Figure 10.

Route 470, 471, 473, 474 Map



Figure 10: Transperth public transport plan

Source: Transperth bus timetable 67 – Effective: 28/01/2018



9. Pedestrian access

Information from online mapping services, Main Roads WA, Local Government, and site visits was collected to assess the pedestrian access for the proposed development.

Walk score

The Walk Score online service was checked to measure the walkability of the site based on the distance to nearby places and pedestrian friendliness. The site achieved a walk score of 49 which means it is car dependent, with most errands requiring a car. The score by category for different activities is detailed in Figure 11. It is noted that the site scores favourably for categories relevant to the proposed development, such as nearby access to parks.

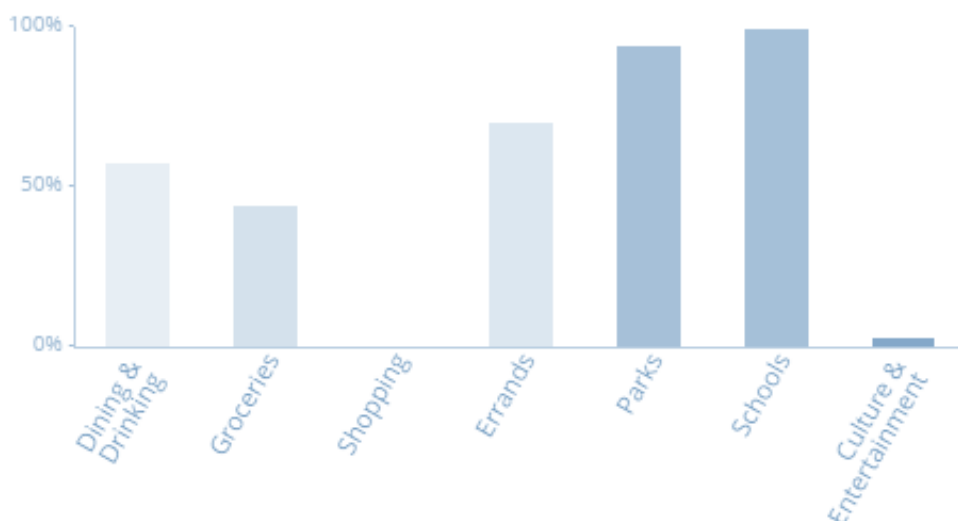


Figure 11: Subject site walk score by category

Source: www.walkscore.com – accessed 25 November 2018

Pedestrian facilities and level of service

Footpaths are provided along both road frontages adjacent to the site. Pedestrian crossing facilities including kerb ramps are provided on Kinross Drive and Falkland Way adjacent to the site, which promotes improved access for bicycles, wheelchairs and prams. There are manned children's crossings on both road frontages which operate during school peak periods and improve safety on walking routes to the nearby schools.

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provide warrants for installing pedestrian priority crossing facilities. This is based on the volume of traffic as the key factor determining if pedestrians can safely cross a road. The guidelines recommend pedestrian priority crossing facilities be considered once the peak hour traffic exceeds the volumes detailed in Table 6.

The traffic volumes in this table are based on a maximum delay of 45 seconds for pedestrians, equivalent to Level of Service E. Traffic volumes on the road network adjacent to the site are

below the threshold for safe pedestrian crossing. Therefore, pedestrian crossing level of service is satisfactory on the adjacent road network.

Table 6: Traffic volume thresholds for pedestrian crossings

Road cross-section	Maximum traffic volumes providing safe pedestrian gap
2-lane undivided	1,100 vehicles per hour
2-lane divided (with refuge)	2,800 vehicles per hour
4-lane undivided*	700 vehicles per hour
4-lane divided (with refuge)*	1,600 vehicles per hour



10. Bicycle access

Information from online mapping services, Department of Transport, Local Government, and/or site visits was collected to assess bicycle access for the proposed development.

Bicycle network

The Department of Transport Perth Bicycle Network Map (see Figure 12) shows the existing cyclist connectivity to the subject site. A shared path is designated on both sides of Kinross Drive adjacent to the site. Connectivity is provided to the wider bicycle network including shared paths and on-street cycle lanes on Marmion Avenue and Burns Beach Road.

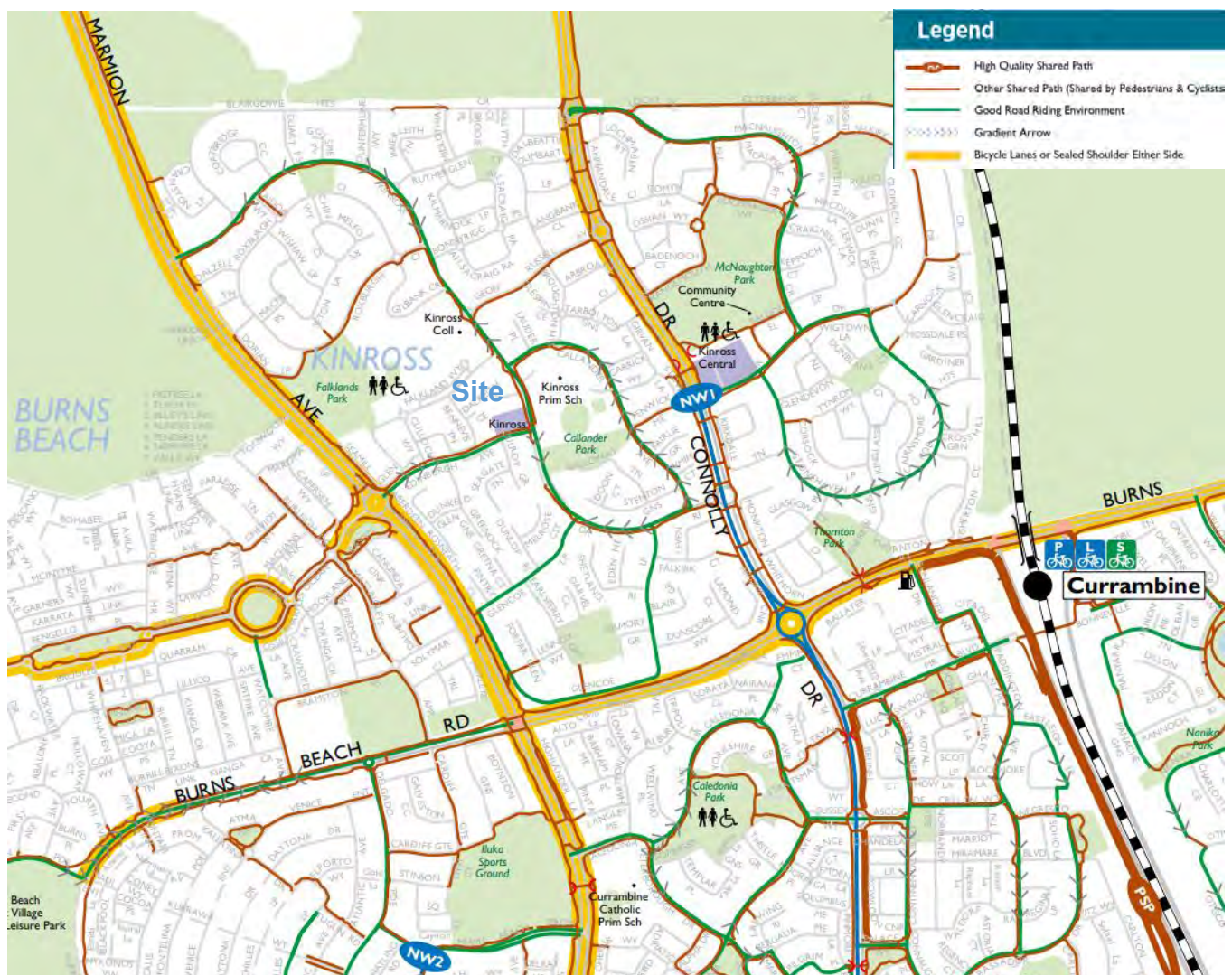


Figure 12: Perth bicycle network plan

Source: Department of Transport Joondalup and Stirling comprehensive bike map (accessed: 25/11/2018)

Warrants for separation of cyclists and motorists

The Cycling Aspects of Austroads Guides 2017 provides guidance on the separation of cyclists and motorists. Traffic volumes on the adjacent road network are consistent with the provided cycling infrastructure based on the thresholds in Figure 13.

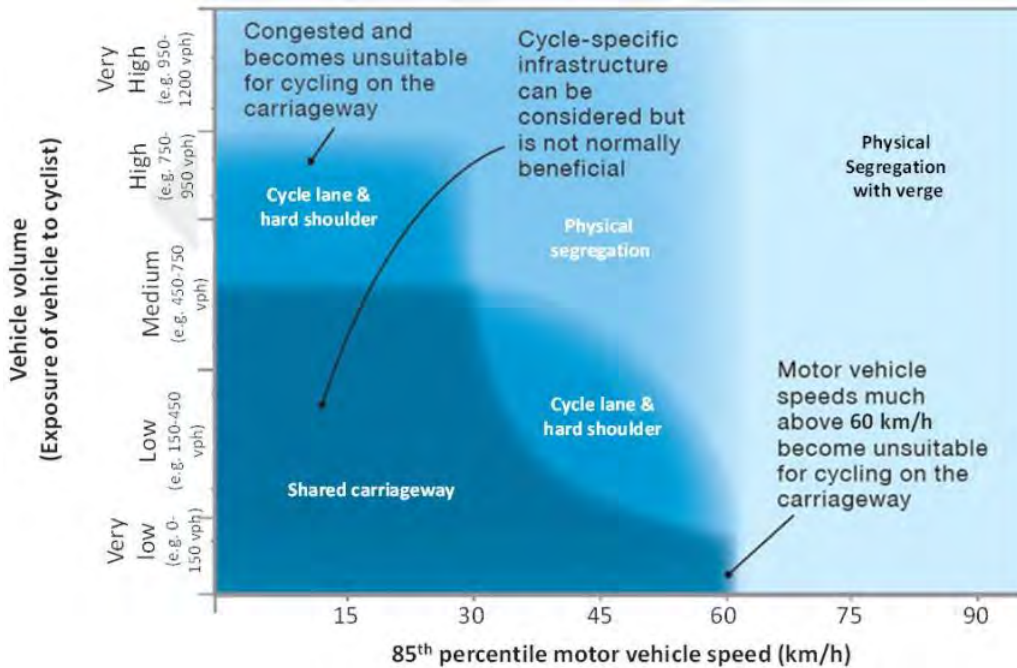


Figure 13: Guidance on the separation of cyclists and motor vehicles

Source: Cycling Aspects of Austroads Guides, June 2017

Bicycle parking and end of trip facilities

10 bicycle parking spaces are provided on site, with four spaces proposed to be located adjacent to the main entrance and six spaces to be located within the internal secure car park on the lower ground floor.

The proposed development provides end of trip facilities including separate male and female showers, lockers and change rooms. This promotes alternative transport modes particularly for staff travelling to the proposed development.



11. Site specific issues

The City of Joondalup reviewed the Development Application (DA) package, including site layout and Rev 1 of this report. Site specific comments provided by the City relevant to traffic and parking include:

- The entry driveway to the Porte cochere to be widened to 5.5m;
- Kerb ramps to be provided for the ACROD parking travel path to the building;
- Modification of the curved driveway to the secured car park; and,
- Parking calculations to be revised to only consider car parking (excluding bus and service bays).

These comments are addressed as following:

Porte cochere driveway width

The proposed development plans have been amended to increase the entry driveway width to 5.5m as requested by the City.

Kerb ramps for ACROD bays

Urbii agrees in principle that a satisfactory travel path must be provided for users of ACROD car parking. Liaison with the project architect indicates that there will be flush kerbing and different paving materials to distinguish circulation, parking and pedestrian areas. The appropriate use of suitable paving materials should be considered at detailed design stage to maintain a wheelchair friendly travel path from the ACROD bays to the building entry.

Modification of the secure car park driveway

The secure car park entry driveway has been designed to reinforce the appropriate safe and low travel speed for car park entry and exit. The car park is for Class 1A parking, with 33 parking spaces accessed from a local ROW. This is best designated as a *Category 1* access facility. AS2890.1 suggests as a general guide, 30 or more movements in the peak hour would require two vehicles to pass on a driveway. As the driveway provides access to only half of all site parking, traffic volumes on the driveway would be below 30vph during the peak hour. Due to the low traffic volume and low speed nature of the car park, the car park driveway design is acceptable. There is a concern that creating a more generous turning radius which can be negotiated at higher speed would increase vehicle speeds in the car park which is not desirable. Another consideration in this assessment is that users of the car park will be largely familiar drivers in a secured car park setting (staff) and will adjust their driving behavior to suit the local conditions.

Parking calculations

Parking calculations are revised in Section 3 of this report.

12. Safety issues

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



13. Conclusion

This Transport Impact Statement has been prepared and updated by Urbii on behalf of Amana Living with regards to the proposed Kinross Care Centre redevelopment, located at Lot 60 (71) Kinross Dr, Kinross, in the City of Joondalup.

The site features good connectivity with the existing road and pedestrian network. There is good public transport coverage through nearby bus services.

The traffic analysis undertaken in this report shows that the traffic generation of the proposed development is minimal (less than 100vph on any lane) and as such would have insignificant impact on the surrounding road network.

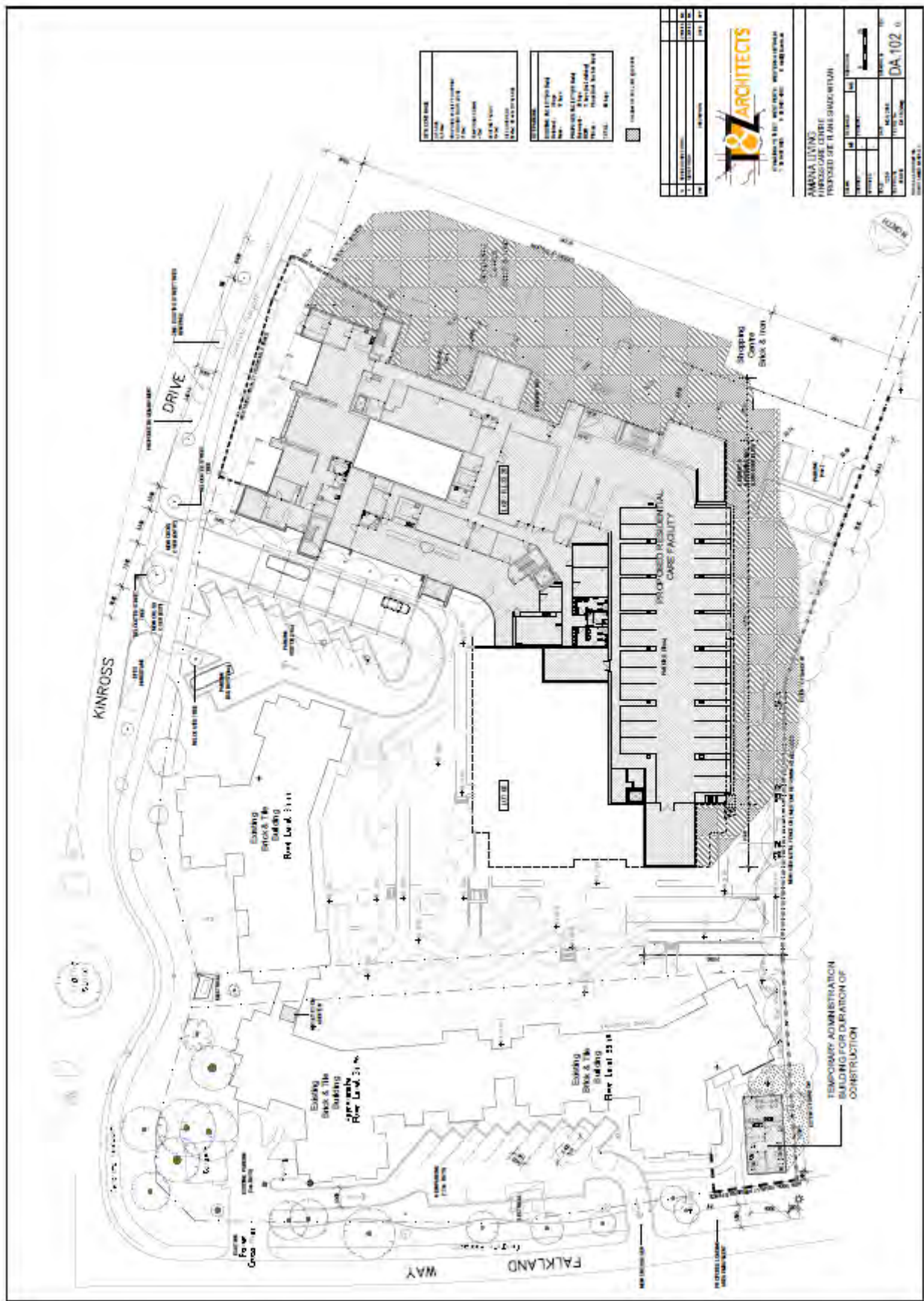
The car parking supply is satisfactory and can accommodate the car parking demand of the proposed development.

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

Appendices

Appendix A: Proposed development plans





NO.	DESCRIPTION	DATE
1	PRELIMINARY	2011.01.10
2	REVISED	2011.01.10
3	REVISED	2011.01.10
4	REVISED	2011.01.10
5	REVISED	2011.01.10
6	REVISED	2011.01.10
7	REVISED	2011.01.10
8	REVISED	2011.01.10
9	REVISED	2011.01.10
10	REVISED	2011.01.10

NO.	DESCRIPTION	DATE
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NO.	DESCRIPTION	DATE
1	PRELIMINARY	2011.01.10
2	REVISED	2011.01.10
3	REVISED	2011.01.10
4	REVISED	2011.01.10
5	REVISED	2011.01.10
6	REVISED	2011.01.10
7	REVISED	2011.01.10
8	REVISED	2011.01.10
9	REVISED	2011.01.10
10	REVISED	2011.01.10

Appendix B: Swept path diagrams

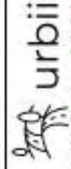
Swept path diagrams are included in this section of the report. Different coloured lines are employed to represent the various envelopes of the vehicle swept path, as described below:

Cyan represents the wheel path of the vehicle

Green represents the vehicle body envelope

Blue represents a 500mm safety buffer line, offset from the vehicle swept path

The swept path diagrams are also provided separately in high-quality, A3 PDF format.



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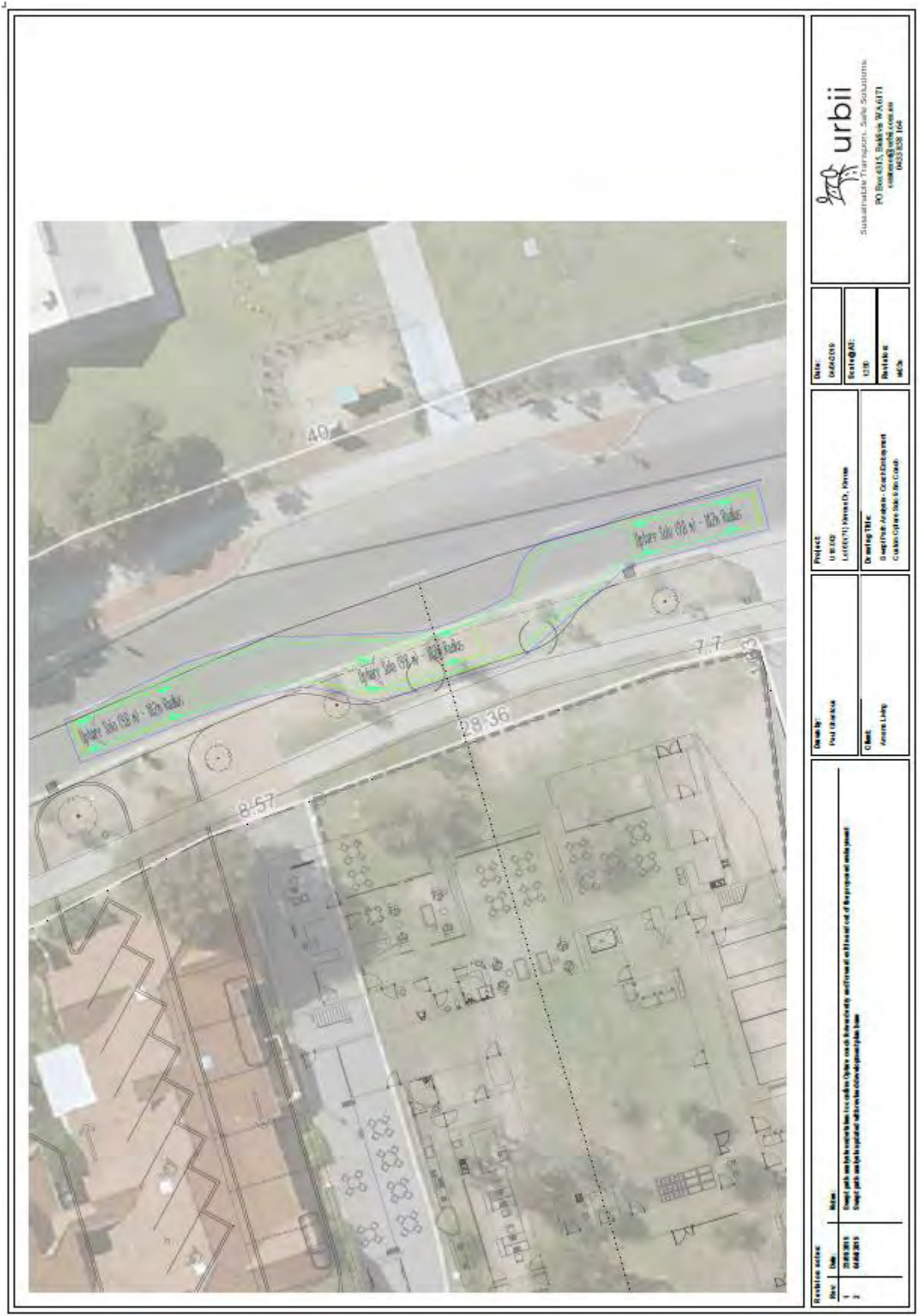
Date:	06/26/2019
Scale:	1"=20'
North:	North

Project:	URBII LUGGAGE LUGGAGE
Drawing Title:	Conceptual Design - LUGGAGE Access/Driveway/Entrance

Owner:	Paul G. G. G.
Client:	Amara Lugg

Rev	Date	Notes
1	2019-06-26	Final design and construction details for the LUGGAGE and access/entrance.
2	2019-06-26	Final design and construction details for the LUGGAGE and access/entrance.





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 www.urbiiconsulting.com

Date:	08/05/2019
Drawn by:	URBII
Client:	URBII

Project:	URBII Lot 60 (71) Kinross Dr, Kinross
Design Title:	Design Title Design Title - Conceptual Design Design Title - Conceptual Design

Drawn by:	URBII
Client:	URBII

Revision:	1	08/05/2019	Design Title - Conceptual Design
Revision:	2	08/05/2019	Design Title - Conceptual Design



Revision notes

No.	Date	Notes
1	20/08/2015	Design path and layout for the site, including the proposed road layout and the proposed site layout.
2	04/08/2015	Design path and layout for the site, including the proposed road layout and the proposed site layout.

Drawn by:
Paul O'Connell

Checked by:
James Long

Project:
118-02
Lecture 11: Transport, Urban
Design 101

Design Path:
Design Path Analysis: Urban
Design 101

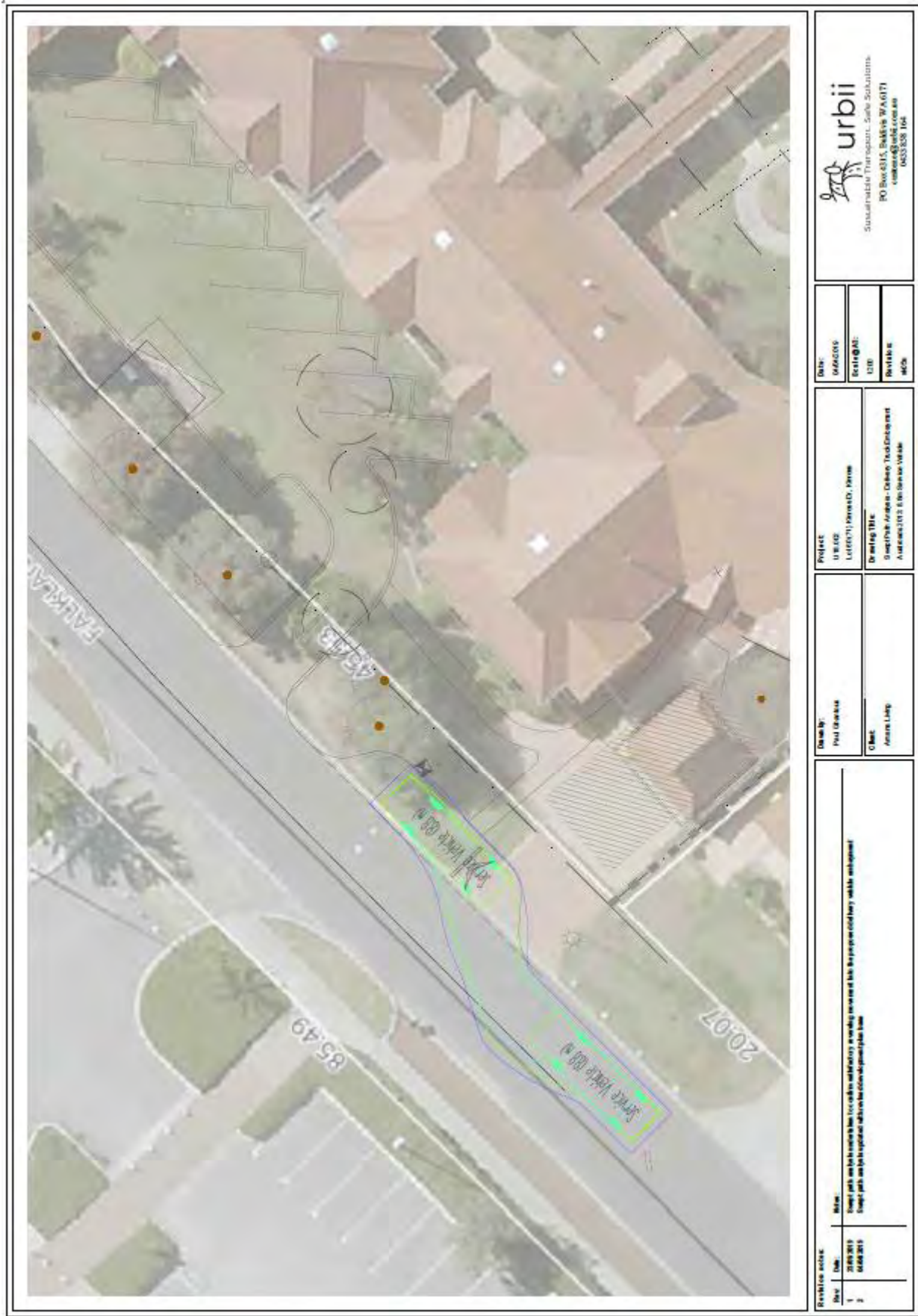
Date:
04/08/15

Scale:
1:10

Revision:
mcm

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WASTE MANAGEMENT PLAN

AMANA LIVING – KINROSS CARE CENTRE

Prepared By: Cleartech Waste Management
Unit 2/390 Victoria Road
Malaga WA 6090

April 2019 – V4

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Table 1: Waste Categories

1. Introduction

This Waste Management Plan has been prepared in support of the Application for Development Approval lodged with the City of Joondalup by Amana Living, for the construction the Kinross Care Centre. The proposed facility is a ninety-six (96) bedroom residential care facility located on the corner of Kinross Drive and Falkland Way, Kinross. Amana Living has achieved better practice by consulting with Local Government and waste service providers during the concept development stage.

The development application for subject land proposes the construction of the care facility with the following configuration:

- Ninety-six (96) bedroom residential care facility
- Associated back of house, administrative and ancillary spaces
- Cafeteria and Creche
- Day Club facility
- Car parking on site to account for both the new and existing aged care facility

It is also to be noted that there will be no proposed changes to the waste services, to the retained sections, of the existing facility, as part of this development.

2. Purpose of Plan

The Waste Management Plan has been submitted in support of the application currently being considered by the City of Joondalup for the construction of the ninety-six (96) bedroom residential care facility on the subject land.

The aim of this Plan is to comply with the City of Joondalup 'Draft guidelines for Waste Management Plan in new developments' by addressing the following:

1. Utilise the WALGA guidelines to estimate waste generation rates and thus the indicative volume of waste.
2. Identify the nominated collection point on site.
3. Demonstrate that the proposed allocated storage space is sufficient for the expected volume of waste and also highlighted on the site plans.
4. Provide for adequate access for both users and collections vehicles while not compromising traffic safety along Kinross Drive.
5. Develop the framework of operational procedures required from Amana Living to ensure that the management of waste is to best practice.

3. Key Reference Material

The key references are:

- City of Joondalup – Draft Guidelines for Waste Management Plan in new developments
- WALGA Multiple Dwelling Waste Management Plan Guidelines.
- Waste Avoidance and Resource Recovery Regulations 2008
- Draft Waste Strategy 2030

4. Estimated Volumes, Waste types and MGB Type

4.1.1 Volume

The proposed development on the subject land consists of the following:

1. Ninety-six (96) bedroom residential care facility
2. Associated back of house, administrative and ancillary spaces
3. Cafeteria and Creche

The *WALGA Multiple Dwelling Waste Management Plan Guidelines* indicate that on average, each bed will generate the following waste:

- 80L of general rubbish per unit per week
- 40L of recycling per unit per week
- 40L of organic / food waste per fortnight

Considering the controlled environment that the residents of the Kinross Care Facility live in, it is estimated that each bed will generate the following waste:

- 60L of general rubbish per unit per week
- 30L of recycling per unit per week
- 30L of organic / food waste per fortnight

In light of the above requirements, it is estimated that the proposed development on the subject land will generate the following demand per week:

- General refuse – 5,760Lt
- Recycle refuse – 2,880Lt

4.1.2 General Waste

General refuse is waste that has been directly produced by each resident and collected in bin liners provided. The facility staff will then collect the bin liners and either deposit them down the refuse chutes or place them on their trolley and transport to the bin storage room for storage in the 660L Mobile Garbage Bins (MGB's) provided. The staff will be appropriately trained and fitted with adequate personal protective equipment to handle the waste.

4.1.3 Recycling

Recyclable material includes items such as cardboard, paper, plastic and aluminium cans, these items will be collected and stored in the 660L MGB's. The staff will follow the same collection and transfer procedures as per the other waste streams.

4.1.4 Organic / food waste

Organic / food waste services have not been contracted at this stage as the facility will not be preparing food on site, Food preparation is a service that will be investigated in the future of the facility operations. Relevant bins and services will be offered when Amana Living require this service to be provided. The bin storage area has been designed to accommodate growth and the additional bins that will be required. Through innovation and communication with the hospitality managers, being

Hospitality Total Services, the diversion, of the organic material, away from landfill will be achieved by utilising options such as composting recovery processes.

4.1.5 Bulky Waste

Green waste will be removed as required and immediately after being generated. The type of service provided to remove the material will depend on its current state, for example tree stumps will not compact and therefore a hook lift bin may be more appropriate than a compactor truck.

4.1.6 Grease Trap Waste

Although the Care Facility will not be conducting food preparation activities on site, this activity may be introduced in the future. Therefore, the concept design has included the construction of a grease trap in preparation for future activity. The proposed management of the grease trap will be through a DWER appropriately licenced and registered service provider. Through innovation and communication with the hospitality managers, being Hospitality Total Services, the diversion, of the organic material, away from treatment facilities and potential landfill, will be achieved by utilising options such as composting recovery processes.

4.1.7 Mattresses

Other bulky waste such as mattresses will be removed on a pre-determined schedule, usually as required by the Amana Living mattress exchange program. Large hook lift bins are the preferred bin type as they have doors that can be opened to allow the mattresses to be stacked safely inside the bin, maximising space and transport efficiencies. Convenient placement of the bin can be achieved as the bins can fit into two parking bays, being a temporary service, this will not impact the parking compliance requirements on site.

4.1.8 Hazardous Wastes

Cleartech Waste Management is appropriately licensed to offer packaged liquid and solid waste removal, recovery and disposal services. Any hazardous waste produced on site will be manifested, packaged and transported to a relevant and appropriately DWER licenced facility for recovery or disposal. Controlled Waste Tracking Forms will be utilised as required in compliance with the relevant regulations.

Examples of this type of waste include;

- Batteries
- Fluorescent tubes and lamps
- Aerosols
- Cleaning products
- Expired fire extinguishers
- Automotive wastes such as coolants and glycols

As part of the waste management service, employee education includes on demand advice on how to handle, package and store the hazardous waste prior to collection. Timely and relevant advice will mitigate the risks associated with the specific types of hazardous waste and therefore create a safer working environment. Hazardous waste collection would be an 'as required' service and would be executed within an agreed, acceptable timeframe that will reduce any associated risks further.

5. Waste Categories (Table 1.)

Waste Type	Waste Form	CW Code	Waste Stream	Waste Destination
General Waste	S/L	Class II	Landfill	Licensed facility – Class
Comingled	S	Class II	Recycling	MRF – Material Recovery Facility
Organic / Food Waste	S/L	Class II	Recovery	Compost Facility
Grease Trap Waste	L	K210	Recovery	Compost Facility
Bulky Waste – Green Waste	S	Class I	Recovery	Compost Facility
Bulky Waste - Mattresses	S	Class I	Recycling	EMRC – Hazelmere Recovery Centre
Hazardous Waste – Batteries	S/L	B / D	Recycling	Metal Recycler
Hazardous Waste – Paint / Flammables	S/L	F	Recovery	Wren oil - Energy Recovery
Hazardous Waste – Aerosols	S/G	F	Recycling	Metal Recyclers (after container purging has been completed)
Hazardous Waste – Fluorescent tubes and lamps	S/G		Recycling	CMA Recycling

Legend: Solid (S); Liquid (L); Gas (G); Flammable (F); B (Acids); D (Inorganic Chemicals); F (Paints; Resins; Inks; Organic Sludges); Eastern Metropolitan Regional Council (EMRC)

6. Bin Type

Following the City of Joondalup guidelines, it is concluded that Amana Living is advised to adopt the use of 660 litre mobile bins for the proposed development, that will be collected on-site by Amana Living's preferred waste management provider (i.e. rear loading truck).

Given the volume of waste being generated per bed, it is proposed as part of this application that the development be supplied with ten (10) 660 litre mobile bins for general refuse and five (5) 660 litre mobile bins for recycling.

This will provide for the total weekly capacity of 5,760L for general refuse and 2,880L for recycling (weekly), which is sufficient to accommodate the total weekly volume of rubbish/recycling generated by the ninety-six (96) beds.

In light of the above, it is contended that the provision of ten (10) general waste mobile bins and five (5) recycle mobile bins, including associated storage facilities, is sufficient to accommodate the needs of the future occupants of the development.

7. Standard MGB dimensions

Bin Capacity	660L
Height (mm)	1250
Depth (mm)	850
Width (mm)	1370
Approximate footprint (m2)	1.16

8. Collection Frequency and Provider

Cleartech Waste Management is the rubbish collection service provider of choice for Amana Living. Cleartech currently provide waste management services across all of the Amana Living sites.

Cleartech Waste Management advises that all bins will be collected on-site, with the rubbish truck accessing the site with a rear loading vehicle that would drive onto the property, via Kinross Drive and park close to the bin storage area to service the bins. The collection service will be undertaken three times a week on Monday, Wednesday and Friday.

9. Location, size and features of bin storage area

Bin storage area will be located at the rear of the facility. The bin store will also be located within the common rear driveway area to facilitate Cleartech's rubbish truck that will access the site by driving in. The site design has incorporated enough space for the vehicle to conduct a three-point turn utilising the allocated area for the loading bay. This location will allow for a buffer between the bin store area, the residents and the adjoining properties. It is significant to note that the truck driver will be given a key to access the bin storage area in the common driveway to gain access to the bins.

The proposed location of the bin storage area will:

- Minimise odour levels impacting on the adjoining properties and the occupants of the new development;
- Provide easy access to all future occupants of the development; and
- Accommodate Cleartech's rubbish truck access.

Key design points of the common bin storage area are as follows:

- The bin storage area will comprise a tap for wash-down purposes, this will be coordinated with the hydraulics service provider.
- The bin store area will be closed by a roller door to hide its view from the street, common property area and provide security, this will be coordinated with the architects; and
- The bin storage area will be secure and screened from the future occupants of the development.

10. Chutes

Chutes have been included in the concept design to enable the facility staff to transport the waste around the multi-level facility with efficiency and ease. To minimise the potential for the bin liners to tear open, the chutes have been designed as a straight

tube without elbows and they are only installed from the resident floors to the lower ground level waste rooms.

These chutes will only be used to transfer general waste. The chute design will be confirmed by the architect's, it is proposed that a cylindrical section with a diameter of 500mm or greater could be used. The chutes will cease on the lower ground floor refuse rooms and discharge directly into 660L bins with additional room to accommodate second, exchange, 660L bins.

11. Noise, odour and minimizing landfill

It is anticipated that the location of the bin storage area within the development will provide easy access by the facility staff to minimize disruption to residents.

12. Noise

The bin storage area will be secured, by a roller door, and located at the rear of the facility. The bin storage area will be constructed under slab part of the main facility.

It is expected that the storage area will generate minimal vertical and horizontal noise transfer during use. As such, it is contended that the noise generated from the bin storage area will not result in any undue noise that would not be consistent with that generated by the adjoining properties. The bin storage is in a location that enables the rubbish collection vehicle to drive in, thus reducing the requirement for extended reversing.

In consultation with the architect's it is proposed that the chutes will be insulated to prevent excessive noise generation. Pathways will be predominately concrete and vehicle access will be an asphalted surface. The MGB's will be fitted with appropriate wheels to minimise any potential noise while in transit. To further minimise noise smaller trolleys will also be used by the facility staff to transfer the full bin liners to the storage room to be placed in the bin.

In light of the above, it is contended that there will be no notable impacts on the adjoining properties from the development on the subject land in terms of waste management.

13. Odour

Strategies to minimize odour are:

- Locating the bin storage area under slab as accessed by the rear driveway of the new development and located away from the adjoining residential properties;
- In consultation with the architect's, the proposal is to allow for natural ventilation, the air flow is directed away from the residents, through the roller door and vents.
- Regular washing of the bins and storage area.

14. Minimising landfill

Given that the City of Joondalup preference is source separation (i.e. general waste & recycling), it allows the staff of the care facility to sort rubbish accordingly. The

provision of recycling bins will enable occupants of the development to place the following items for recycle collection:

- Glass bottles and jars (excluding broken glass, plates, pottery).
- All plastic bottles.
- Newspapers and glossy magazines, paper, envelopes
- Cardboard boxes, cereal boxes, pizza boxes, egg cartons
- Cans - steel and aluminium, including aerosols cans
- Milk and juice cartons

15. Hygiene and Vermin

All waste will be stored in bin liners and placed in the available bins prior to collection. Housekeeping within the storage room will be maintained to ensure there is no build-up of waste. Bins will be configured to have bin lids that are opened with a foot pedal mechanism, this will ensure that the bin lids remain closed. Bin and storage area cleaning will be scheduled with the frequency increased to reflect seasonal conditions (i.e. summer). The bins will be cleaned, by the staff, in an area where the liquid is captured appropriately. In consultation with the hydraulic service providers, it is proposed that the bin storage facility has been designed to have a specialised cleaning area with water and drainage available.

16. Health, Safety and Environment Risks

The bin storage area, refuse (chute) collection rooms, pathways and roadways have been designed to minimise any potential risk of injury or illness that could be associated with the storage and transfer of the Mobile Garbage Bins (MGB's) around the site.

17. Screening and blending of storage area

The bin storage area will be a purpose-built compound specifically designed and screened from the public realm. The materials and finishes of the bin storage compound will harmonise with those materials to be used for the proposed development (i.e. masonry).

18. Impact on adjacent properties

Furthermore, the bin store will be located at the rear of the facility on the subject land, therefore providing adequate screening and buffer with the adjoining lots. It is contended that the bin storage area is consistent with a bin storage area akin to a conventional residential care facility development. Notwithstanding this fact, it is significant to note that the bin store for the proposed development on the subject land is located well within the property boundaries (along the common driveway), therefore it does not impact the dwellings on the adjoining properties. As such, it is contended that the proposed bin storage area will not have an adverse impact on the amenity of the adjoining properties.

In light of the above, it is contended that any potential impacts on the adjoining properties from the proposed bin storage are expected to be minimal and would be consistent with the waste disposal activities of a typical care facility development within the immediate locality.

19. Signage and Education

All bins will be provided with appropriate stickers that will designate the type of waste to be contained within the MGB. The storage facility will have signage on the outside of door and wall that will identify the room as the bin storage area. A waste management procedure will be developed to assist with the training of the facility staff on how to contain the waste in the bin liners, how to exchange the bins under the chutes, how to transport the bins from the refuse (chute) rooms, how to position the bins in the storage room and also the process for the correct positioning of the rubbish truck. Other items that will be addressed will be the identified hazards, such as handling waste and moving the MGB's around the site safely.

20. Contingency Planning

Amana Living have mitigated the risks associated with equipment or service failure by engaging Cleartech Waste Management as their preferred service provider. Cleartech's business model is a brokerage with multiple service providers pre-qualified to provide all of the required equipment and services. Therefore, ensuring the continuity of the Care Facilities operations.

21. Auditing / Monitoring

Cleartech perform service suitability and innovation audits on all contracts to ensure that all of the current needs of the business are being fulfilled, these audits will be scheduled annually for the Kinross Care Facility.

22. Amana Living – Facility Requirements - Waste Management

Amana Living will be responsible to:

1. Appoint a site manager to be responsible for coordinating the housekeeping of the facility and to arrange cleaning of the bins and bin storage areas every two (2) to three (3) weeks;
2. Ensure litter is cleaned up through regular landscape maintenance; and
3. Deal promptly with any issues or complaints relating to hygiene, noise, odour or other inconvenience.

The Waste Management Plan will also be incorporated or referred to in any other Management Plan prepared for the development.



January 24, 2019 (Rev4)

Amana Living
PO BOX 933
Subiaco WA 6904

ATTENTION: Simon Kershaw
Cc: George Georgiu, Chris Fagri (John Staff)
RE: Assessment of Trees; Kinross Care Centre, Lot 60 (71) Kinross Drive, Kinross

Dear Simon,

Further to your request, the following is a summary of my assessment of the trees on, and directly adjacent to, the identified area of Lot 60 (71) Kinross Drive, Kinross.

Should you have any queries regarding the findings of this report, or if I can be of any further assistance in the management of the identified trees, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read "JRM", with a stylized flourish at the end.

JASON ROYAL

Dip. Arboriculture (UK)
Tech. Arbor A

Assessment of Trees;

Kinross Care Centre, Lot 60 (71) Kinross Drive, Kinross

Prepared For

Amana Living

Prepared By



November 30, 2018	Rev0	Draft for Comment
December 6, 2018	Rev1	Revisions and amendments
December 6, 2018	Rev2	Revisions and amendments
December 14, 2018	Rev3	Revisions and amendments
January 24, 2019	Rev4	Revisions and amendments

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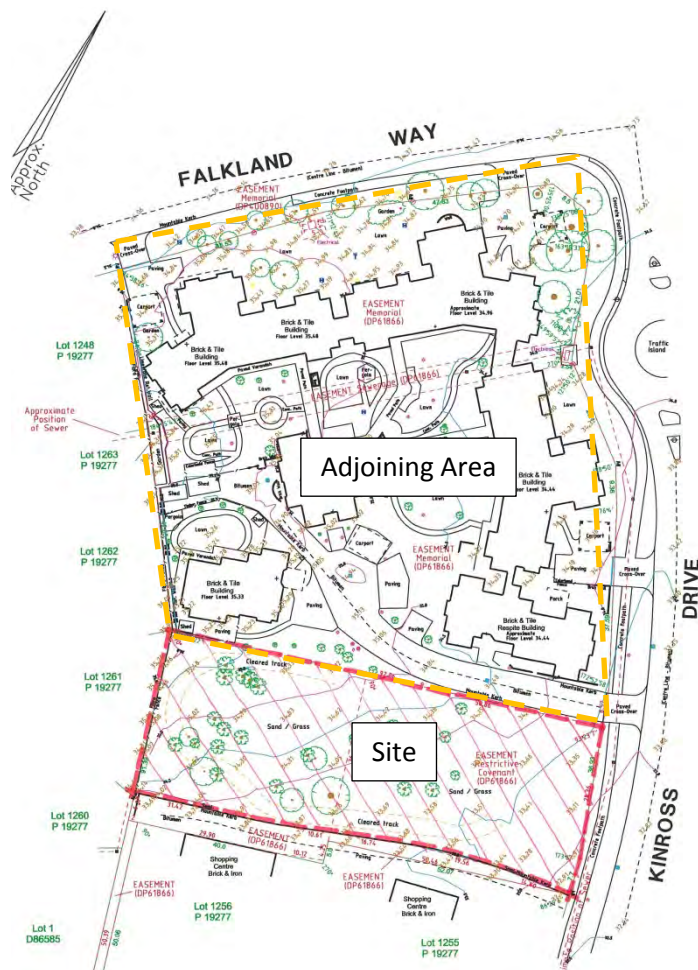
1.	Particulars to this Assessment_____	Pages	1 - 2
2.	Scope of Works_____	Page	2
3.	Assessment Methodology Applied_____	Pages	3 - 4
4.	Summary of the Key Findings of the Assessment_____	Pages	5 - 9
5.	Table of the Findings of the Assessment_____	Pages	10 - 21
6.	Recommendations_____	Pages	22 - 23
7.	Attachments to the Report		
	Attachment 1; Tree Location Guide with Retention Value Overlaid		
	Attachment 2; Location of Grass Trees with approximate heights overlaid		
	Attachment 3; Glossary of Arboricultural Terms		
	Attachment 4; Company Information & Disclaimer		

1. Particulars to the Assessment

1.1 Terms Used

The following terms have been used in this report:

- ‘Property’ meaning Lot 60 (71) Kinross Drive, Kinross
- ‘Site’ meaning the identified area of Lot 60 (71) Kinross Drive, Kinross that was included in the assessment
- ‘Adjoining Area’ meaning the area of the Property adjoining the Site that has already been previously developed



- ‘Tree’ meaning any tree identified and included as part of this assessment
- ‘AS 4970’ meaning Australian Standards guideline 4970 (2009); Protection of trees on development sites
- ‘TPZ’ meaning Tree Protection Zone; the area where the majority of the given Tree’s root mass is considered likely to be found, and the area that is recommended to be protected during any development or landscape activity

1. Particulars to the Assessment

1.2 Limitations and Particulars of this Assessment

The information and opinions provided in this document are based on the findings from the visual observations of the Trees on and directly adjacent to the Site undertaken November 26, 2018.

All observations of all of the Trees were undertaken from ground level.

No exploratory excavations were undertaken as part of this particular assessment to verify the actual root spread of any given Tree. As such the allocation of TPZ for each Tree has at this stage been based on AS 4970 guidelines, with some amendments being made for the physical size and canopy dimensions of the Tree, its condition, the known root zone morphology of its given species in the sort of soil profile considered to be typical to this area of Western Australia.

2. Scope of Works

1. Undertake an inspection of all Trees on, or directly adjacent to, the Site that may be impacted by its development.
2. Provide information in regards to the species of each Tree identified; its current physical attributes (height, main stem calliper, canopy width, health condition, and structural condition), recommended zone of protection, and any comments deemed pertinent to the identified tree (i.e. any hazards, defects, issues etc.).
3. Provide an opinion on the suitability of retention of each of the identified trees on the site in the context of an urban development.
4. Identify any Trees which may be suitable for relocation (transplanting), and provide indicative time frame for preparation as well as any aftercare considerations that may be considered applicable.
5. Provide any broad-brush purposeful and practical recommendations for any design and construction implications that may apply for any trees identified as being suitable for retention within the proposed development so to ensure their preservation if undertaken remains successful.

3. Methodology of the Assessment

All Trees identified and included in the assessment were visually inspected from ground level in accordance with visual tree assessment (“VTA”) methods and principles.

The VTA method is based on the sciences of tree biology, physiology, tree structure, and tree bio-mechanics. It is a method widely used by arborists worldwide to identify visible signs on trees that indicate any health or potential structural issues that in turn could increase the risks associated with the given tree.

The overall health of each Tree was adjudged from an inspection of its leaf, overall percentage of leaf mass present in the canopy of the Tree, and the presence (or absence) of any pest or disease factor that could have an effect on the overall health of the Tree.

The structural integrity of each Tree was determined from a visual inspection of its main stem, primary (and secondary) branch unions to determine the presence of any areas considered to be a structural ‘defect’ or ‘imperfection’ such as unions with included bark, swelling, or noticeable splitting at them.

Symptoms of decay, growth patterns and defects are identified and assessed as to their potential to cause whole tree, part tree or branch failure, and where considered necessary further investigation by way of the use of sounding techniques was utilised to determine the presence and general extent of any areas of cavity or associated decay within a tree’s main stem structure.

Each Tree’s root plate area was also inspected to identify any visible signs of root plate, movement, cracking or heave from which a determination of the in-ground stability of the Tree can be ascertained. It is however important to note that there are limitations in verifying the in-ground stability of a tree based on a ‘one-off’ cursory visual observation; particularly if the inspection is undertaken during a period of ‘fine’ weather with little to no wind; as was the case over the period of this assessment.

With regards to any future development the known natural species traits of the given tree and its suitability for use in an urban area and if the identified specimen is of a species that can be subject to the sudden branch failure phenomenon or is known to be potentially problematic in terms of self-sowing (weed) issues, was also considered as part of the assessment process.

The Tree’s species and its ability to cope with disturbances to its root zone that typically occur as part of a development process, as well as its ability to cope with the new parameters that are commonly created by an urban development (i.e. decreased soil oxygen due to compaction, increased un-seasonal watering from irrigation, increased pollution, increased radiated heat/light from urban infrastructure (roads, walls, buildings etc.) are all also taken into consideration.

The known root zone morphology of the species was taken into consideration when allocating the recommended TPZ for each of the identified trees. Note: Whilst some reference and acknowledgment is given to the guidelines set down in AS 4970, the TPZ for each Tree has been based on the known typical root zone morphology for specimens of their species, the condition of the given Tree, and the known tolerance to root zone disturbance of the given species.

3. Methodology of the Assessment

The Trees were also assessed using the principles of SULE; “Safe-Useful-Life-Expectancy”¹.

SULE is a system that can be used to provide an indication of the length of time an individual tree can be retained with an acceptable level of risk based on the information available at the time of inspection.

It is a snapshot in time of the potential an individual tree has for survival in the eyes of the assessor based on the tree’s current health and structural condition, and the known typical life span of specimens of its given species for the given area/situation.

There are many factors that can affect SULE of a tree such as:

- Obvious past influences.
- Health and vitality and presence of any pest or disease pathogen.
- Estimated age in relation to expected life expectancy for the species.
- Structural defects which may influence the potential life expectancy for the species.
- Remedial work which may be necessary to allow retention in the existing situation.
- ‘Rootable’ soil volume for the area in which it is situated.
- Environment and climate factors.

As such, at best the SULE for any given tree can only be estimated within a ‘range’ of years, with the following ranges typically used; Long Term (>40 years), Medium Term (15-40 years), Short Term (5-15 years), and Limited (<5yrs)

¹

SULE: Its use and status into the new millennium; J Barrell; 2001

4. Summary of the Key Findings of the Assessment

4.1 No of Trees Identified

A total of 29 Trees were identified, assessed and included as part of this assessment.

However 4 of these Trees are located on the Council verge area of Kinross Drive, and a further 8 look to be located on the Adjoining Area, but close to the boundary of the Site and therefore have some potential to be impacted by the development of the Site itself. The remaining 16 Trees identified during this assessment are on the Site itself.

Attachment 1 of this report provides a guide to their location.

In addition to the Trees, a further 35 Grass Tree (*Xanthorrhoea preissii*) of notable size were also identified on the Site itself.

Note: All of the Trees on the Site itself were tagged with a metal identification plate (starting at the number '21') to aid in their future identification. Trees not on the Site itself (i.e. those on the Adjoining Area and Council verge area) and the Grass Trees were not tagged during the assessment.

4.2 Species Identified

Seven different species of tree were identified.

Five of the species identified are native to Western Australia, with the other two being native to other areas of Australia.

Table 1: List of Species Identified during the Assessment

Species	No of on Site	Origin
Bottlebrush Kings Park Special (<i>Callistemon</i> 'Kings Park Special')	7	Aus native
Candle Banksia (<i>Banksia attenuata</i>)	2	WA native
Common Sheoak (<i>Allocasuarina fraseriana</i>)	11	WA native
Coojong (<i>Acacia saligna</i>)	3	WA native
Firewood Banksia (<i>Banksia menziesii</i>)	1	WA native
Spotted Gum (<i>Corymbia maculata</i>)	4	Aus native
West Australian Christmas Tree (<i>Nuytsia floribunda</i>)	1	WA native

The Banksia, Common Sheoak, Coojong and WA Christmas Tree (as well as all of the Grass Trees) are native (endemic) to this area of Western Australia and all of them look to be naturally occurring (i.e. have not been planted).

The Bottlebrush look to have been planted as part of the development of the Adjoining Area.

The Spotted Gum look to have been (recently) planted on the verge (assumedly by Council).

All of the species identified are considered to be very common species for the Perth metropolitan area.

None of the tree species identified are considered to be (or are known to be classed as) an endangered species, or found on the Environment Protection and Biodiversity Conservation Act 1999.

None of the tree species identified are known to have been declared a weed species².

²

Reference; Declared Plant Species in Western Australia (Department of Agriculture and Food, Western Australia 2008)

4. Summary of the Key Findings of the Assessment

4.3 Health Condition

The majority of the Trees showed to be in good health or better at this time. Whilst a few of the Trees showed to have varying amounts of varying diameter sized deadwood in their canopy, it looks to have occurred as part of the natural growth processes of trees or due to impact from past bushfire activity rather than being caused by any pest or disease pathogen. I could see no visible evidence of any pest or disease pathogen that could have a major impact to the health of the Trees on this Site at the time of my inspection.

Two dead trees were noted on the Site; One Banksia and one Coojong. Cause of death looks to have been due to natural causes; i.e. age/environment. Some of the Bottlebrush, Banksia and Coojong looked to be in poor health and look to have limited life span remaining; looks to an age related cause for the Coojong (as they are generally a short lived species), and possibly a (poor) soil condition related issue for the Bottlebrush.

4.4 Structural Condition

The majority of the Trees showed to have (what is considered to be) typical structural forms for specimens of their given species. Whilst a number of the Trees showed to have what are considered to be 'structural defects' such as bi-furcated unions with signs of swelling and included bark (which are considered to potentially have an increased likelihood for failure than other forms of branch unions) for the most part any structural defect or imperfections were not considered to be of any major concern at this time. Areas of decay and cavity were noted in a small number of the Trees; mostly the larger more mature Common Sheoak due to impact from past bushfire activity. In all instances the extent of the decay visible was not considered to be of any major concern to the structural integrity of the affected Trees at this time.

4.5 SULE

With the exception of the dead and declining Trees, the majority of the Trees on the Site itself were considered to have either a medium or a long SULE remaining; given the majority are species that are generally considered to be long-lived species when remaining in good health.

Their SULE could however change depending on the extent of changes to their surrounds that occur as a result of development and/or their treatment (protection) during any development works that occur around them.

4.6 Potential Transplants

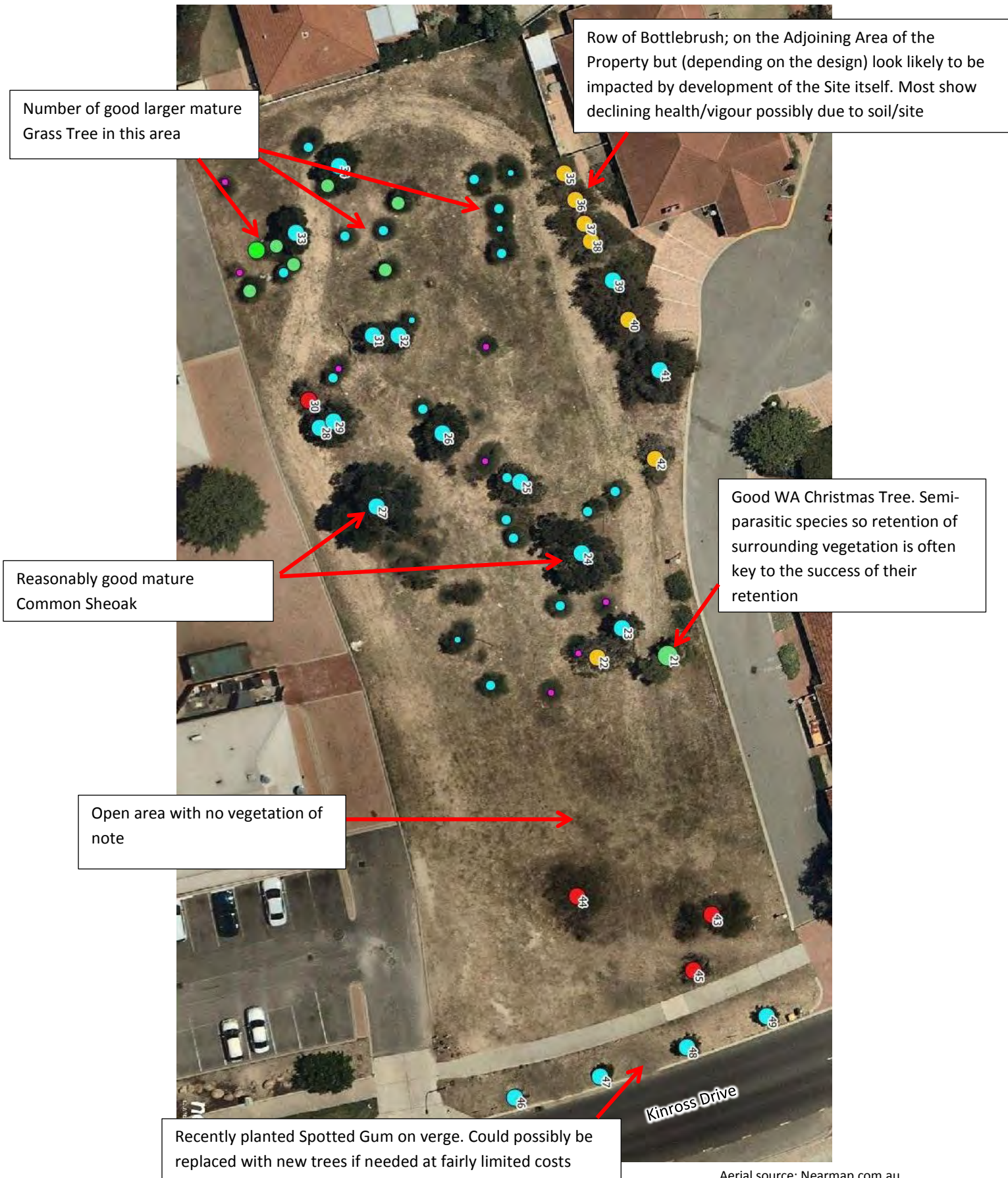
There are significant limitations in the success of transplanting specimens of the identified species of tree on this Site; particularly the *Banksia* and *Acacia* species where (to the best of my knowledge) no success has been had with mature specimens. Some attempts have been made at transplanting mature *Nuytsia* but (again to the best of my knowledge) success rates are very low due to the nature of the species.

The Grass Trees on the Site are however transplantable, and some of them look to be particularly large, old specimens in excess of 100 years old; some possibly over 200 years old³. Grass Tree do not typically require any specific root zone preparation and could be relocated/salvaged as part of any site clearing process. Attachment 2 of this report provide a guide to their location with their (approximate) height of clear stem overlaid.

³ Information in the Grass Tree industry suggests that this species of Grass Tree typically grow 10mm (1cm) per year. i.e. a Grass Tree with 1 metre of clear main stem before its 'head' forms may be in the order of 100 years old.

4. Summary of the Key Findings of the Assessment

4.7 Visual Summary of Key Findings



Aerial source; Nearmap.com.au

4. Summary of the Key Findings of the Assessment



Eastern end of the Site; relatively open area with no vegetation of note



Middle section of the Site; number of Common Sheoak, Banksia and Grass Trees



Tree #24



Tree #27

Reasonably good mature Common Sheoak (*Allocasuarina fraseriana*)



Examples of the larger Grass Tree on the Site. Considered worthwhile transplanting/salvaging given their size/age

4. Summary of the Key Findings of the Assessment

4.8 Suitability for inclusion into an area of Development

Retention value of the various tree species and even individual tree specimens will always be open to some personal opinion.

In general trees displaying good health and deemed to have a good aesthetic quality will be generally considered to have a high retention value.

Conversely, dead or declining trees, or tree species known (or considered) to be problematic in terms of having a propensity for branch failures, or ones that could self-seed freely, or ones that display low aesthetic traits would typically be considered to have a low retention value.

Whilst all of these trees may have high environmental benefits as part of ascertaining the suitability for inclusion into a development, other aspects of the tree must be considered; primarily its structural form and suitability for inclusion into an urbanised area with high volumes of potential targets (such as people, structures etc.), and its potential to cope with changes to its soil and surrounding environment that typically occur as part of a development process; even if it is only to be landscape works.

Based on the findings of the assessment:

- **None of the Trees on this Site are considered to be 'significant' in terms of their age, physical size, or stature for specimens of their given species.**
- That said 1 Tree is however considered to have a 'High' retention value; namely Tree #21; the West Australian Christmas Tree.
- Many of the larger Grass Tree specimens are also considered to have a high value and either their retention or relocation as part of the development is encouraged; particularly some of the larger older specimens.
- 11 Trees on the Site itself were considered to have a 'Medium' retention value. These Trees are generally considered to be reasonably good (i.e. typical) specimens of their given species and would be suitable for retention in the context of a development process.

The 4 Trees on the verge are also considered to have a 'Medium' retention value; although equally they could possibly be replaced with new trees of the same species at the same size with limited costs if necessary.

- 1 Tree on the Site and 6 of the Trees on the Adjoining Area of the Property are considered to have a 'Low' retention value in the context of a development; mainly due to their relatively poor health condition.
- 4 Trees on the Site are considered to have a 'Very Low' retention value and would not be considered suitable for retention into an urban development area. This includes the dead Trees and Trees that look to have limited life span remaining.

Attachment 1 of this report provides an overview of the Site with the retention value of each Tree overlaid and colour coded for ease of reference.

5. Table of the Key Findings of the Assessment

The following pages provide further information on the Trees identified during this assessment.

Explanation of Fields of Information in the Table

Tree No.	Provides an identification number for the identified Tree corresponding to its tree tag number on Site
Species	Provides the botanical and most commonly used species name of the Tree.
Height	Provides the height of the Tree (in metres) to the nearest metre.
DBH (Trunk Calliper)	Provides the diameter of the Tree's main stem (trunk) in centimetres, and generally measured at 1.4 metres above ground level as per the industry standard. Should lower canopy formation start below 1.4 metres above ground level, the DBH is estimated at the point below the furcation of its main stem. In instances where the tree has multiple main stem structures, the DBH of all has been provided.
Approx. Canopy Spread	Provides an approximation of the spread of the Tree's canopy; provided in metres diameter. Both north-south and east-west canopy dimensions have been provided.
Health Condition	Provides a view of the Tree's health/vigour condition at the time of inspection based on a number of predetermined criteria.

Health Rating	Explanation
Excellent	Shows to have typical foliage condition and amount of foliage mass for a specimen of the species. May have a minor amount of deadwood, but no signs of any pest or disease factor that may affect its health.
Good	Shows to have typical foliage condition. Canopy foliage may be slightly chlorotic, or it may have a slightly higher percentage of deadwood than usual, or exhibit signs of being affected by environmental conditions. May have a minor pest or disease present that could start to affect its health.
Fair	Shows to have a relatively high percentage of deadwood than considered typical for a specimen of the given species and/or a low volume of live canopy leaf mass for a specimen of the given species. Apical sections of the canopy (may also be) dead. Signs of a pest or disease factor evident.
Poor	Canopy mass and foliage condition shows to be in a poor state for a specimen of the species. Has a high percentage of deadwood material in its canopy and a low volume of live canopy mass (typically <20%).
Dead	Shows to have either no live tissue within its structure, or at best has <5% live foliage mass remaining in its canopy.

5. Table of Information on the individual Trees identified during the Assessment

Structural Form Provides a view of the Tree's structural form at the time of inspection based on a number of predetermined criteria.

Structure Rating	Explanation
Good	Shows typical structural form for a specimen of the species. Branch unions show typical form at the point of attachment. May have a small number of minor structural defects; but are within the scope of tree surgery management to rectify. Shows to be root-stable.
Acceptable	Shows an acceptable form, but may have a number of structural defects present i.e. bi-furcation (but with no major swelling or movement), or areas of stem cavities, but structure remains within the scope of management at this stage; albeit with a higher risk/management requirement. Can include previously lopped trees that are known to have good points of attachment of any regrowth that occurs.
Questionable/Undesirable	Shows an undesirable structure for a specimen of the species. Structural condition likely to cause future issues in regards to the potential for branch or even complete tree failure to occur. Generally includes previously lopped trees, trees with large areas of cavity and/or associated decay that may be starting to affect its structural integrity, trees with bi-furcated unions with notable included bark and swelling that are considered to have an increased potential to fail.
Poor	Major structural defects evident. May have very large stem cavities, extensive termite damage, or noticeable movement in main stem, branch unions or root plate area.

Age Class Provides the age class of the given Tree.

SULE Provides an opinion of the 'safe-useful-life-expectancy' of the given Tree (range in years)

Nominal TPZ Meaning the Tree's protection zone; the area where the majority of the given Tree's root mass is considered likely to be found.

Any works required in this zone are considered likely to have some potential to impact the Tree.

Comments Provides any additional information (seen as relevant in the context of this report) to the Tree. Comments are (generally) self-explanatory.

An explanation of arboricultural terms has been provided as an attachment to this document.

Retention Value Provides an overall 'opinion' on the quality of the Tree and its suitability for retention as part of the development.




This opinion rating has been colour-coded for ease of reference.




High




Medium




Low




Very Low (Not Recommended)

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)	Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S E-W										
21	West Australian Christmas Tree (<i>Nuytsia floribunda</i>)	5	39, 22	4--5 3--4	Excellent	Good	Mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Multi-stemmed from ground level possibly more than one tree		HIGH	4.7	Semi parasitic species so retention of surrounding vegetation is often key to the success of their retention. Due to this factor successful transplanting of specimens of this species has a low probability of success.	None required
22	Firewood Banksia (<i>Banksia menziesii</i>)	5	25	4--5 3--4	Poor	Good	Mature	Limited (<5 yrs)	Ok tree. Canopy condition suggests possibly limited life remaining. Canopy is sparse		Low	3.0	Species generally don't tolerate much in the way of root zone disturbance	Remove larger deadwood only. No canopy thinning required
23	Common Sheoak (<i>Allocasuarina fraseriana</i>)	5	23	2--3 2--3	Excellent	Good	Semi-mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time		Medium	2.8		None required




Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)		Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S	E-W										
24	Common Sheoak (<i>Allocasuarina fraseriana</i>)	7.5	34, 32, 30, 28	6--7	6--7	Excellent	Acceptable	Mature	Medium term (15-40 yrs)	Good specimen. No issues or concerns visible at this time. Multi-stemmed from near ground level. Minor amount of large (>10cm diameter) sized deadwood. Area of decay in lower main stem (from old fire damage) but not of a major concern at this time		Medium	4.1		Remove larger deadwood only. No canopy thinning required
25	Common Sheoak (<i>Allocasuarina fraseriana</i>)	4	18, 18, 16	2--3	2--3	Excellent	Acceptable	Semi-mature	Long term (>40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Canopy slightly sparse. Remaining leaf still good condition. Multi-stemmed from near ground level		Medium	2.2	On edge of an embankment; level changes could be an issue	None required
26	Common Sheoak (<i>Allocasuarina fraseriana</i>)	6	18, 18	4--5	4--5	Excellent	Good	Early-mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Main stem bi-furcates. Union looks to be Ok at this stage		Medium	2.2	On edge of embankment; level changes could be an issue	None required




Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)	Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S E-W										
27	Common Sheoak (<i>Allocasuarina fraseriana</i>)	9	72, 65	6--7 6--7	Excellent	Acceptable	Mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Main stem bi-furcates. Union looks to be Ok at this stage. Area of decay in lower main stem (due to old fore damage) but not of a concern at this time. Minor amount of large (>10cm diameter) sized deadwood		Medium	8.6	Looks to be excess soil placed around base of its main stem so survey levels could be misleading and need to be verified	Remove larger deadwood only. No canopy thinning required, Raise canopy
28	Common Sheoak (<i>Allocasuarina fraseriana</i>)	6	29, 20	4--5 3--4	Excellent	Good	Early-mature	Long term (>40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Multi-stemmed from near ground level. Effectively forms the one canopy with the adjacent Tree.		Medium	3.5	Treat as one tree with the adjacent Tree	None required
29	Common Sheoak (<i>Allocasuarina fraseriana</i>)	6	20	1--2 1--2	Excellent	Good	Early-mature	Long term (>40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Effectively forms the one canopy with the adjacent Tree.		Medium	2.4	Treat as one tree with the adjacent Tree	None required




Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)		Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S	E-W										
30	Candle Banksia (<i>Banksia attenuata</i>)	4	20	2--3	3--4	Dead	Poor	Mature	n/a. Dead tree	Dead tree		Very Low	2.4		Remove to ground level
31	Common Sheoak (<i>Allocasuarina fraseriana</i>)	6	17, 15, 10	2--3	3--4	Excellent	Good	Semi-mature	Long term (>40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Multi-stemmed from near ground level. Effectively forms the one canopy with the adjacent Tree.		Medium	2.0		None required
32	Common Sheoak (<i>Allocasuarina fraseriana</i>)	4.5	18x2	2--3	2--3	Excellent	Good	Semi-mature	Long term (>40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Multi-stemmed from near ground level. Effectively forms the one canopy with the adjacent Tree.		Medium	2.2		None required



Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)		Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S	E-W										
33	Common Sheoak (<i>Allocasuarina fraseriana</i>)	6	32	3--4	3--4	Excellent	Good	Early-mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time		Medium	3.8		None required
34	Common Sheoak (<i>Allocasuarina fraseriana</i>)	5	37	3--4	3--4	Excellent	Good	Early-mature	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Main stem bi-furcates. Union looks to be Ok at this stage		Medium	4.4	On edge of a slope so levels could be an issue	None required
35	Bottlebrush Kings Park Special (<i>Callistemon</i> 'Kings Park Special')	3.5	12x2	2--3	4--5	Poor	Good	Semi-mature	Short-term (5-15 yrs)	Ok tree but clearly struggling; possibly due to soil conditions		Low	2.0	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for purposes of clearance, OR it may need to be removed

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)	Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S E-W										
36	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	4	12, 10	2--3 2--3	Poor	Good	Semi-mature	Short-term (5-15 yrs)	Ok tree but clearly struggling; possibly due to soil conditions		Low	2.0	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed
37	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	4	15, 12, 10	3--4 3--4	Poor	Acceptable	Early-mature	Limited (<5 yrs)	Ok tree but clearly struggling; possibly due to soil conditions		Low	1.8	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed
38	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	3.5	18	2--3 3--4	Fair	Acceptable	Early-mature	Short-term (5-15 yrs)	Ok specimen. No issues or concerns visible at this time. Grown on a lean but not considered an issue at this time		Low	2.2	On the Adjoining Area of the Property but its canopy and main stem extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)	Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S E-W										
39	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	4.5	29, 18	3--4 3--4	Good	Acceptable	Early-mature	Medium term (15-40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Multi-stemmed from near ground level		Medium	3.5	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed
40	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	4.5	12 (multiple)	2--3 3--4	Poor	Acceptable	Early-mature	Limited (<5 yrs)	Multi-stemmed from near ground level. Apical sections of its canopy are dead/declining. Canopy condition suggests possibly limited life remaining. Effectively forms the one canopy with the adjacent Tree		Low	1.5	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed
41	Bottlebrush Kings Park Special (Callistemon 'Kings Park Special')	4	20, 15, 12, 10	4--5 4--5	Excellent	Acceptable	Early-mature	Medium term (15-40 yrs)	Reasonably good specimen. No issues or concerns visible at this time. Multi-stemmed from ground level. Widespread canopy form		Medium	2.4	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)	Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S E-W										
42	Candle Banksia (<i>Banksia attenuata</i>)	3	25	2--3 2--3	Poor	Acceptable	Mature	Limited (<5 yrs)	Apical sections of its canopy are dead/declining. Canopy condition suggests possibly limited life remaining		Low	3.0	On the Adjoining Area of the Property but canopy extends over boundary of the Site	Pending design details for the Site, either its canopy may need to be raised/reduced for the purposes of clearance, OR it may need to be removed
43	Coojong (<i>Acacia saligna</i>)	3	20 x2	3--4 3--4	Poor	Acceptable	Mature	Limited (<5 yrs)	Two near dead trees in close proximity that effectively form the one canopy. Canopy condition suggests possibly limited life remaining. Typically a short lived species		Very Low	2.4		Remove to ground level
44	Coojong (<i>Acacia saligna</i>)	3	20	3--4 3--4	Fair	Acceptable	Mature	Limited (<5 yrs)	Multi-stemmed from ground level possibly more than one tree. Typically a short lived species and canopy condition suggests decline		Very Low	2.4		None required

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)		Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S	E-W										
45	Coojong (<i>Acacia saligna</i>)	4	15, 12	3--4	3--4	Dead	Poor	Mature	n/a. Dead tree	Dead tree. Multi-stemmed from ground level		Very Low	1.8		Remove to ground level
46	Spotted Gum (<i>Corymbia maculata</i>)	4	6	1--2	1--2	Good	Poor	Juvenile	Limited (<5 yrs)	Looks to have been recently planted. Canopy is slightly sparse. Root zone movement noted when pushed (excessive)		Medium	1.5	On verge (Council tree). May have limited life remaining due to root zone issues	None required
47	Spotted Gum (<i>Corymbia maculata</i>)	3	8	1--2	1--2	Excellent	Acceptable	Juvenile	Long term (>40 yrs)	Ok tree. Root zone movement noted when pushed (minor). Looks to have been recently planted. On verge (Council tree)		Medium	1.5	On verge (Council tree)	None required

Tree No	Species	Approx. Height (metres)	Approx. DBH (cm)	Canopy Spread (metres diameter)		Health	Structure	Age Class	SULE	Comments	Image	Retention Value	Nominal TPZ (metres radius)	Development Considerations	Canopy Works (if retained)
				N-S	E-W										
48	Spotted Gum (<i>Corymbia maculata</i>)	4.5	10	1--2	1--2	Excellent	Good	Juvenile	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Looks to have been recently planted. On verge (Council tree)		Medium	1.5	On verge (Council tree)	None required
49	Spotted Gum (<i>Corymbia maculata</i>)	4.5	10	1--2	1--2	Excellent	Good	Juvenile	Long term (>40 yrs)	Good specimen. No issues or concerns visible at this time. Looks to have been recently planted. On verge (Council tree)		Medium	1.5	On verge (Council tree)	None required

6. Further Considerations; Development Design and Construction

6.1 Protection of Trees as part of Development

It is difficult to provide any further specific comments for each Tree as to the potential of the impact from the development of this Site at this stage, as much of the impact caused will be very much dependent on the detailed design aspects of any proposed development.

The retention of the existing current ground level and soil profile and limiting excavations within a Tree's designated TPZ will however be of paramount and key importance in the success of the retention of any Tree.

Effective tree protection must also begin with good design and specifications, so that protection during the construction/landscape stages of a development will be achievable and practicably possible.

As an initial recommendation:

1. Efforts are recommended to be spent on the inclusion and retention of the Trees with high and medium retention value.
2. The Trees with a very low retention value would be recommended to be removed as part of the development process.
3. Retention of some of the individual Trees identified during this survey will need to be subject to details of the proposed design and what targets (people, structures etc.) may be introduced into their fall zone as a result of the development; **particularly some of the physically larger Tuart specimens and/or the Trees with areas of cavity and decay within their structure.**
4. The nominal TPZ of each Tree is recommended to be overlaid onto all development plans used during the design process.

Where encroachments into a designated TPZ are found to be required, further discussion with an experienced independent arboricultural consultant will be required if the Tree is desired to be retained as part of the development.

This is not to say that some encroachment and development activity would not be permitted to be undertaken within a TPZ area as part of a development process.

However any encroachment required/proposed will require further input and discussion with the arboricultural consultant as part of any detailed design process to determine what the potential impact on the given Tree will be, and what design modifications or measures may need to be implemented to mitigate any potential negative impact on the given Tree.

If considered necessary, some exploratory excavation works may also be required to verify actual root spread and determine what impact could occur.

Aspects such as resulting levels, delineation of any underground service pipework, drainage, sewerage etc. can all have (potentially) a major impact on a tree's root zone, and in turn its future health and potential lifespan.

6. Further Considerations; Development Design and Construction

During the design process further arboricultural input will likely be required to discuss:

- Current existing ground levels and proposed resulting levels of the various areas of the Site. Note: As previously mentioned, retaining and maintaining current existing ground levels within the designated TPZ of any tree is of paramount importance to the success of tree retention.
- Delineation of any underground services pipework including drainage, sewerage, water, gas, electricity, telecommunications and the like; specifically should they pass through any designated TPZ.
- Location of any drainage near to the Trees and their TPZ.
- Any site remediation requirements within TPZ areas as part of the Site clearing process.

6.2 Physical Protection of Trees during Development

Physical protection measures in accordance with AS 4970 will also be required for any Tree selected for retention; details of any measures to be implemented will be very much dependent on the final detailed design.

It will be of critical importance that the appropriate protection measures are set up and maintained from the outset; i.e. before any Site clearing/demolition works commence.

Implementing tree protection measures after damage has occurred from works is often of little to no value other than affording some protection from further damages occurring.

However effective protection of any Trees on this Site must begin at the design stages of any development that is to occur.

6.3 Canopy Works

Canopy works are considered likely to be required on any Tree retained as part of the development process.

The full extent of canopy works on each Tree will be somewhat dependent on the eventual landscape around the Tree and what potential targets (people, structures etc.) may eventually be within the given Tree's projected fall zone.

At this stage canopy works are likely to include the removal of any larger diameter deadwood (i.e. any dead branches 50mm or greater in diameter) and/or the raising of canopy's where necessary to provide clearances for any new future footpaths, structures and/or roads.

All canopy works are recommended to be undertaken by suitably qualified and experienced tree surgeons, who possess a minimum qualification of AQF certificate 3 arboriculture, or recognised equivalent qualification.

All canopy pruning works must also comply with Australian Standards 4373; Pruning of Amenity Trees.

7. Attachments to the Report

- Attachment 1; Tree Location Guide with Retention Value Overlaid
- Attachment 2; Location Guide for Grass Trees (with approximate trunk height marked for reference)
- Attachment 3; Glossary of arboricultural terms
- Attachment 4; Company Information & Disclaimer

Attachment 1; Tree Location Guide with Retention Value Overlaid

- High Retention Value
- Medium Retention Value
- Low Retention Value
- Very Low Retention Value (Not recommended to be retained)
- Grass Tree



Aerial source; Nearmap.com

Attachment 2; Location of Grass Trees with approximate heights overlaid



Aerial source; Nearmap.com

Attachment 3; Glossary of Commonly Used Arboricultural Terms

Absorbing Root	Smaller root structures that are utilised in the uptake of water and essential elements and soil minerals from the surrounding soil profile.
Bark	All tissue outside the vascular cambium. Bark can be divided into 'inner bark' (active phloem) and 'outer bark' (aging and dead phloem).
Basal	Lower trunk area of the tree.
Branch	Part of the tree which supports its leaves flowers and fruit organs. Can be further classified into: Primary Branch Structures; meaning the larger first order branches that arise off the main stem or trunk of the tree. Secondary Branch Structures; meaning smaller diameter sized branches that arise off the Primary Branch Structures.
Branch Collar	Bark tissue that forms around the base of a branch where it meets its 'parent source' be it the main stem/trunk of the tree or primary branch structure. Formed as the bark layers of both sections of the plant meet and by their expansion as part of their natural growth processes and radial expansion.
Branch Bark Ridge	Bark tissue that forms at the union of a branch where it meets its 'parent source' be it the main stem/trunk of the tree or another branch structure. Formed as the bark layers of both sections of the plant meet and by their expansion as part of their natural growth processes.
Canopy	The part of the crown of a tree composed of the branch and leaf mass.
Cavity	An open wound, characterized by the presence of decay and resulting in a hollow. (Matheny & Clarke, 1994).
Co-dominant stem	A primary branch structure of about the same size as the trunk, arising from the trunk and competing to become the main dominant leading stem/trunk.
Compaction	Compaction of soils causes roots to die due to lack of oxygen and water.
Compartmentalization	Dynamic tree defence process involving protection features that resist the spread of pathogens.
Decay	Degeneration and delignification of plant tissue, including wood, by pathogens and/or micro organisms.
Decline	Decline is a general loss of vitality over the entire tree either caused by a systemic disease or by a series of events that disrupt the essential plant processes.
Epicormic shoots	Shoots produced by dormant buds within the bark or stems of a tree as a result of stress, lopping or increased light factors. Epicormic shoots usually have a weaker form of branch attachment.
Furcation	A point where two (or more) trunk or branch structures arise from the same point of union and subsequently compete for the same physical space at the point of attachment.

Glossary of Commonly Used Arboricultural Terms

Hollows	Hollows form when wood-digesting microorganisms digest wood within the boundaries set by the reaction zone or the barrier zone.
Included bark	Inwardly formed bark or bark found in between the union of a co-dominant or 'furcated' branch/trunk. Typically (although not always) this leads to an area of decay forming at the point of union leading to an increased risk of failure.
Kino	A dark red to brown resin-like substance produced by the trees in the genera <i>Eucalyptus</i> and <i>Corymbia</i> . Kino forms when living cells are injured and infected.
Live Crown Ratio	The volume of canopy of the tree relative to its overall height.
Lopping	Random cutting of branches or a tree's trunk between a union or not at a proper pruning point or in accordance with Australian Standards Guidelines.
Main Stem Structure	The main stem section of the tree. Also commonly referred to as the trunk of a tree.
Mycorrhiza	A symbiotic non-pathogenic (or weakly pathogenic) relationship between fungi and the non-woody absorbing roots of plants. Note: Research has shown that certain mycorrhiza can aid a tree with mineral absorption, especially phosphorus.
Micro-organisms	An organism of microscopic size.
Pathogen	Any agent that causes disease or adversely affects the health of the plant. Can include insect, fungal, viral and bacterial agents.
Photosynthesis	A process where a combination of water, sunlight and carbon dioxide are utilised by the plant for the production of simple sugars.
Scaffolding Limbs/Branch Structures	The parts of the tree that provide support to the smaller secondary branch structures. Can also be sometimes referred to as the primary branch structures, or stems.
Supportive Root Structures	An organ of a tree that serves to maintain the mechanical support and in-ground stability of the plant.
Stem	The parts of the tree that provide support to the smaller secondary branch structures. Can also be sometimes referred to as the primary branch structures, or 'scaffolding' limbs/branch structures.
Tree	Long lived woody perennial plant greater than (or potentially greater than) 3m in height with one or relatively few stems.
Trunk	The main stem section of the tree. Also commonly referred to as a stem or main stem.
Wound	An opening that is created when the bark is cut, removed or injured.

Attachment 4; Company Information

Company Name:



A.C.N.: 107 194 061

A.B.N.: 66 566 369 687

Insurance Details:

General Liability;	QBE	\$20 million
Professional Indemnity;	Vero	\$10 million
Personal Protection;	Zurich	

Office/Contact Details

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Ph: (08) 9240 7555

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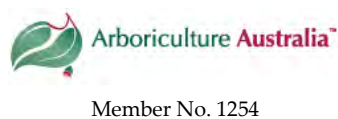
Consultant Details

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Lisc. No. 1743

Disclaimer

This Report has been provided in good faith and based upon the material information provided by the Client to Arbor logic, and/or based on the visual inspection of the tree(s) at the time this advice was prepared.

The contents of this Report should be read in full, and at no time shall any part of the Report be referred to unless taken in full context with the remainder of the document.

The contents of this Report may not be reissued to another party or published in part or full without Arbor logic's written permission.

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- Material information not being provided by the Client to Arbor logic at the time this advice was prepared.
- The provision of misleading or incorrect information by the Client or any other party to Arbor logic upon which this advice was prepared.
- This advice being used by the Client or any other party in circumstances or situations other than the specific subject of this advice.
- Failure by the Client to follow this advice.
- The action(s) or inaction(s) of the Client or any other party that gives rise to the loss of, or damage to, the tree(s) that are the subject of this advice.

It is also important to take into consideration that all trees are living organisms and as such there are many variables that can affect their health and structural properties that remain beyond the scope of reasonable management practices or the advice provided in this Report based on the visual inspection of the tree(s).

As such a degree of risk will still remain with any given tree(s) despite the adoption of any best management practices or recommendations made in this Report.