

Application for

Office Use Only Application No.:

# **Planning Permit**

Planning Enquiries	If you need help to complete this form, read <u>How to complete the Application for Planning Permit form</u> .
Phone: 03 9205 2200 Web: http://www.hume.vic.gov.au	Any material submitted with this application, including plans and personal information, will be made available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the <i>Planning and Environment Act 1987</i> . If you have any concerns, please contact Council's planning department.  A Questions marked with an asterisk (*) are mandatory and must be completed.
	A If the space provided on the form is insufficient, attach a separate sheet.
The Land 1 Addres	ss of the land. Complete the Street Address and one of the Formal Land Descriptions.
Street Address *	Unit No.: St. No.: St. Name:
	Suburb/Locality: Postcode:
Formal Land Description * Complete either A or B.  This information can be	A Lot No.: Occided Plan Title Plan Plan of Subdivision No.:  OR & Lot 1 on TP 183558H
found on the certificate of title.	B Crown Allotment No.: Section No.:
	Parish/Township Name:
	to more than one address, please click this button and enter relevant details.
Ine Proposal A You mu	st give full details of your proposal and attach the information required to assess the application. ent or unclear information will delay your application.
For what use, development or other matter do you require a permit? *	Select the focus of this application and describe below:
If you need help about the proposal, read:	
	This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.  The copy must not be used for any other purpose.
	Provide additional information on the proposal, including; plans and elevations; any information required by the plans of the proposal of the proposal of the proposal.
3 Estimated cost of development for which the permit is required *	Cost \$ 1, 500, 000.00  You may be required to verify this estimate. Insert `0' if no development is proposed.
,	If the application is for land within <b>metropolitan Melbourne</b> (as defined in section 3 of the <i>Planning and Environment Act 1987</i> ) and the estimated cost of the development exceeds \$1 million (adjusted annually by CPI) the Metropolitan Planning Levy <b>must</b> be paid to the State Revenue Office and a current levy certificate <b>must</b> be submitted with the application. Visit <a href="www.sro.vic.gov.au">www.sro.vic.gov.au</a> for information.

Date Lodged:

#### Existing Conditions II Describe how the land is used and developed now \* Currently has a building on site. eg. vacant, three dwellings, medical centre with two practitioners, licensed restaurant with 80 seats, Provide a plan of the existing conditions. Photos are also helpful. grazing.

#### Title Information

5 Encumbrances on title \*

If you need help about the title, read: How to complete the **Application for Planning Permit** <u>form</u>

Does the proposal breach, in any way, an encumbrance on title such as a restrictrive covenant, section 173 agreement or other obligation such as an easement or building envelope?

- Yes. (If 'yes' contact Council for advice on how to proceed before continuing with this application.)

Name:

Not applicable (no such encumbrance applies).

Provide a full, current copy of the title for each individual parcel of land forming the subject site. (The title includes: the covering 'register search statement', the title diagram and the associated title documents, known as 'instruments', eg. restrictive covenants.)

#### Applicant and Owner Details II

Provide details of the applicant and the owner of the land. Applicant \*

Where the preferred contact person for the application is different from the applicant, provide the details of that person.

The person who wants

the permit.

Please	provide at least one
contact	phone number *

Title:	First Name:	Surname:			
Organisation (if applicable): Selimiye Foundation c/- KLM Spatial					
Postal Address:		If it is a P.O. Box, enter the details h	nere:		
Unit No.: S1	St. No.: B2,3	St. Name: Ordish Road			
Suburb/Locality:	Dandenong South	State: VIC	Postcode: 3175		
Contact person's de	tails*	Same as applicant (if so, go t	to 'contact information'\		
Name:		Same as applicant (il so, go	io contact il ilorination)		
Title:					
Organis					
Postal Address:		If it is a P.O. Box, enter the details h	nere:		
Unit No.: S1	St. No.: B2,3	St. Name: Ordish Road			
	•	achanavanikable for the so			
		on and review as part of			
Contact in	ess under the Planning	g and Environment Act	1987.		
The copy must not be used for any other purpose. Business Phone: 03 9704 1600 Email: Manager@klms.com.au Please note that the plan may not be to scale.					
Mobile Phone:		Fax:			

#### Owner \*

The person or organisation who owns the land

Where the owner is different from the applicant, provide the details of that person or organisation.

Name:					Same as applic	ant
Title:	First Name:		Surname:			
Caparon-ocanty	. Sanco	Otato.	VIC		ostoodo. oo n	
Owner's Signat	ure (Optional):			Date:		
				day	/ month / year	

Date:

14.08.2024

day / month / year

#### Declaration I

(7) This form must be signed by the applicant \*

Remember it is against the law to provide false or misleading information, which could result in a heavy fine and cancellation of the permit.

I declare that I am the applicant; and that all the information in this application is true and correct; and the owner (if not myself) has been notified of the permit application.

Signature Kaan Ozyra

#### Need help with the Application?

If you need help to complete this form, read <u>How to complete the Application for Planning Permit form</u> General information about the planning process is available at <u>www.delwp.vic.gov.au/planning</u>

(x)

Contact Council's planning department to discuss the specific requirements for this application and obtain a planning permit checklist. Insufficient or unclear information may delay your application.

(8) Has there been a pre-application meeting with a Council planning officer?

No	Yes	If 'yes', with whom?:	
		Date:	day / month / year

#### Checklist

9 Have you:

Filled in the form completely?
Paid or included the application fee?  Most applications require a fee to be paid. Contact Council to determine the appropriate fee.
Provided all necessary supporting information and documents?
A full, current copy of title information for each individual parcel of land forming the subject site
A plan of existing conditions.
Plans showing the layout and details of the proposal
Any information required by the planning scheme, requested by council or outlined in a council planning permit checklist.
If required, a description of the likely effect of the proposal (eg traffic, noise, environmental impacts).
If applicable, a current Metropolitan Planning Levy certificate (a levy certificate expires 90 days after the day on which it is issued by the State Revenue Office and then cannot be used). Failure to comply means the application is void.
Completed the relevant Council planning permit checklist?
Signed the declaration (section 7)?

#### Lodgement

Lodge the completed and signed form, the fee payment and all documents with:

Hume City Council
PO Box 119 Dallas VIC 3047
Pascoe Vale Road Broadmeadows VIC 3047

Deliver application in person, by fax, or by post:

Make sure you deliver any required supporting information and necessary payment when you deliver this form to the above mentioned address. This is usually your local council but can sometimes be the Minister for Planning or another body.

Save Form:

You can save this application form to your computer to complete or review later or email it to others to complete relevant sections.



# PLANNING DRAWINGS

SHEET LIST					
SHEET NO.	SHEET NAME		REVIS	ION	
		REV	DATE	DESCRIPTION	
TP01	COVER SHEET				
TP02	PROPOSED SITE PLAN	A	14/10/24	TOWN PLANNING RFI - BIN ENCLOSURE AMENDED	
TP03	PROPOSED FIRST FLOOR				
TP04	ROOF PLAN & ELEVATIONS	A	14/10/24	TOWN PLANNING RFI - BIN ENCLOSURE AMENDED	
TP05	SHADOW DIAGRAMS				



# PROPOSED CHILDCARE **CENTER**

22-24 LISMORE ST, DALLAS VIC 3047

PROJECT No: 12318

ISSUE:

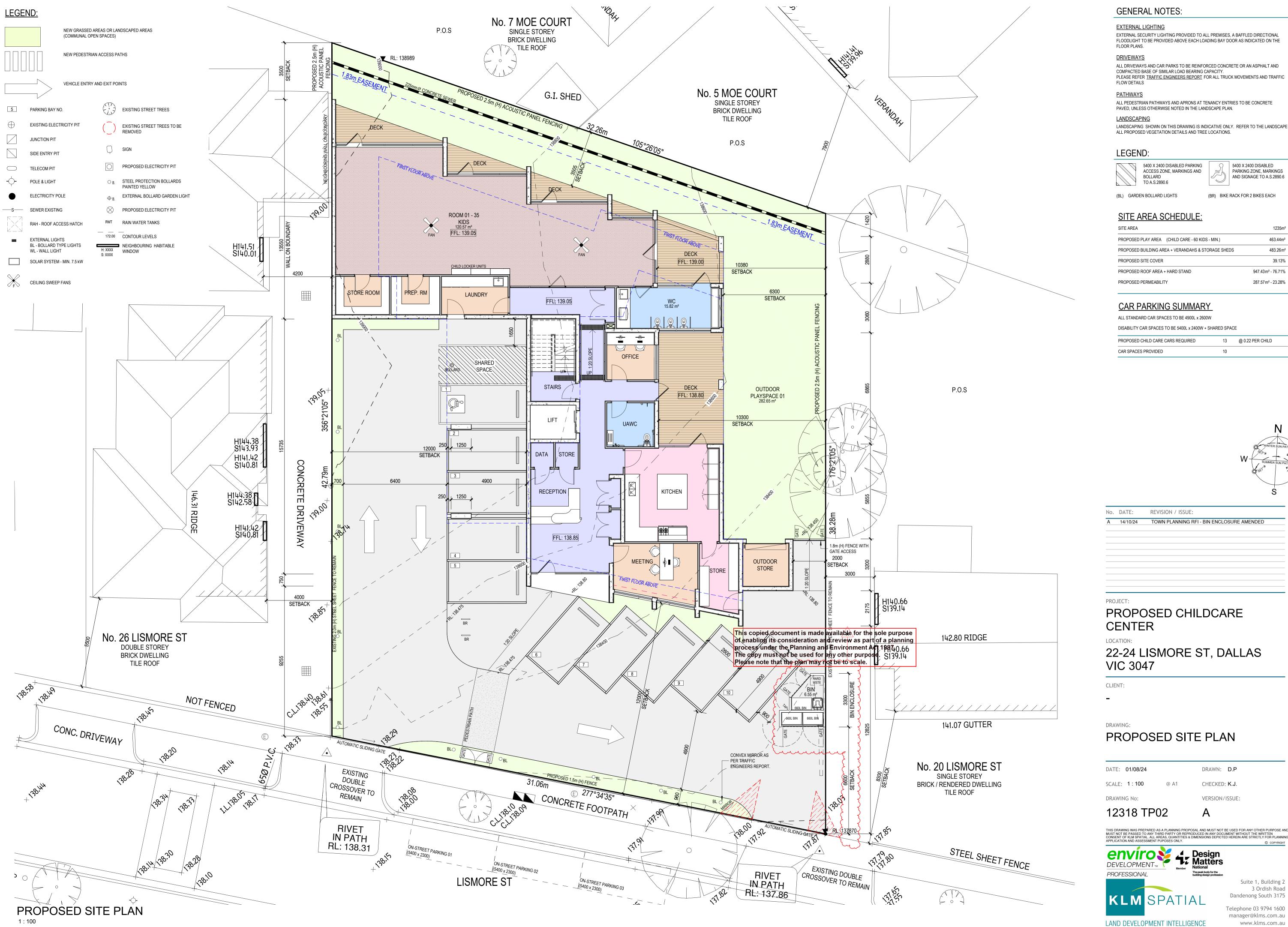
DATE: 01/08/24





Suite 1, Building 2 3 Ordish Road Dandenong South 3175

www.klms.com.au



ALL DRIVEWAYS AND CAR PARKS TO BE REINFORCED CONCRETE OR AN ASPHALT AND

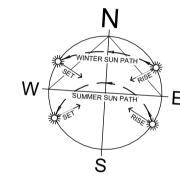
ALL PEDESTRIAN PATHWAYS AND APRONS AT TENANCY ENTRIES TO BE CONCRETE

LANDSCAPING SHOWN ON THIS DRAWING IS INDICATIVE ONLY. REFER TO THE LANDSCAPE PLAN FOR

AND SIGNAGE TO A.S.2890.6

SITE AREA	1235m²
PROPOSED PLAY AREA (CHILD CARE - 60 KIDS - MIN.)	463.44m²
PROPOSED BUILDING AREA + VERANDAHS & STORAGE SHEDS	483.26 m²
PROPOSED SITE COVER	39.13%
PROPOSED ROOF AREA + HARD STAND	947.43m² - 76.71%
PROPOSED PERMEABILITY	287 57 m² - 23 28%

OPOSED CHILD CARE CARS REQUIRED	13	@ 0.22 PER CHILD
R SPACES PROVIDED	10	



A 14/10/24 TOWN PLANNING RFI - BIN ENCLOSURE AMENDED

ANNIN( Suite 1, Building 2 3 Ordish Road Dandenong South 3175 Telephone 03 9794 1600

LAND DEVELOPMENT INTELLIGENCE

www.klms.com.au

AUTOMATIC SLIDING GATE

1:100

Copyright State of Victoria. No part of this publication may be reproduced except as permitted by the Copyright Act 1968 (Cth), to comply with a statutory requirement or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. None of the State of Victoria, its agents or contractors, accepts responsibility for any subsequent publication or reproduction of the information.

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11616 FOLIO 706

Security no : 124117183864N Produced 05/08/2024 02:30 PM

#### LAND DESCRIPTION

Lot 1 on Title Plan 183558H. PARENT TITLE Volume 09112 Folio 653 Created by instrument AM363688D 30/11/2015

REGISTERED PROPRIETOR -----

Estate Fee Simple

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP183558H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT

This copied document is made available for the sole purpose Additional information: (not personabling eits constitutional information: (not personabling) process under the Planning and Environment Act 1987.

Street Address: 24 LISMORE STREET DALLAS VIC 3047

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

DOCUMENT END

Delivered from the LANDATA System by Dye & Durham Terrain Pty Ltd

Derived From:

Depth Limitation:

NIL

**EDITION 1** TP 183558H TITLE PLAN Notations Location of Land WILL-WILL-ROOK Parish: Section Crown Allotment: Crown Portion: Last Plan Reference: LP58860 VOL 9112 FOL 653

THIS TITLE PLAN

Description of Land / Easement Information

#### ENCUMBRANCES REFERRED TO

As to the land coloured blue -THE EASEMENTS (if any) existing over the same by virtue of Section 98 ofthe Transfer of Land Act -

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT COMPILED: 11/10/1999

GB

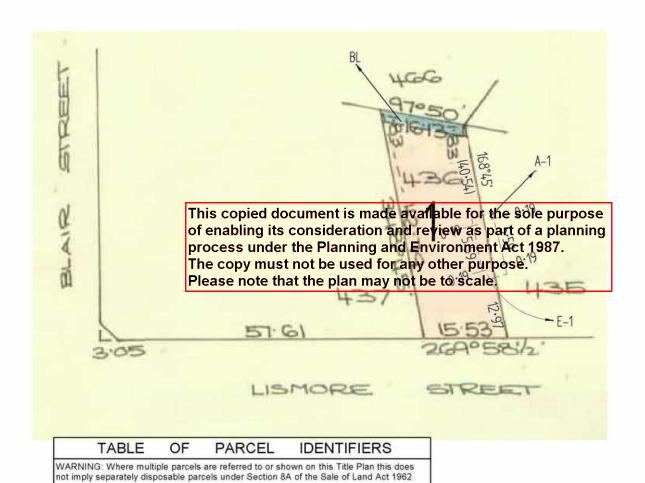
ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON

VERIFIED:

E-1 = EASEMENT CREATED BY C/E G218841

A-1 = EASEMENT APPURTENANT TO THE WITHIN LAND CREATED BY TRANSFER G218841

COLOUR CODE BL = BLUE



LENGTHS ARE IN METRES

Metres = 0.3048 x Feet Metres = 0.201168 x Links

PARCEL 1 = LOT 436 ON LP58860

Sheet 1 of 1 sheets

Copyright State of Victoria. No part of this publication may be reproduced except as permitted by the Copyright Act 1968 (Cth), to comply with a statutory requirement or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. None of the State of Victoria, its agents or contractors, accepts responsibility for any subsequent publication or reproduction of the information.

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11616 FOLIO 710

Security no : 124117183936K Produced 05/08/2024 02:31 PM

#### LAND DESCRIPTION

Lot 1 on Title Plan 201943K. PARENT TITLE Volume 10422 Folio 033 Created by instrument AM363688D 30/11/2015

REGISTERED PROPRIETOR

\_\_\_\_\_\_ Estate Fee Simple

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP201943K FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

-----

NIL

-----END OF REGISTER SEARCH STATEMENT

This copied document is made available for the sole purpose Additional information: (not personabling eits constitutional information: (not personabling)

process under the Planning and Environment Act 1987.

Street Address: 22 LISMORE STREET DALLAS VIC 3047

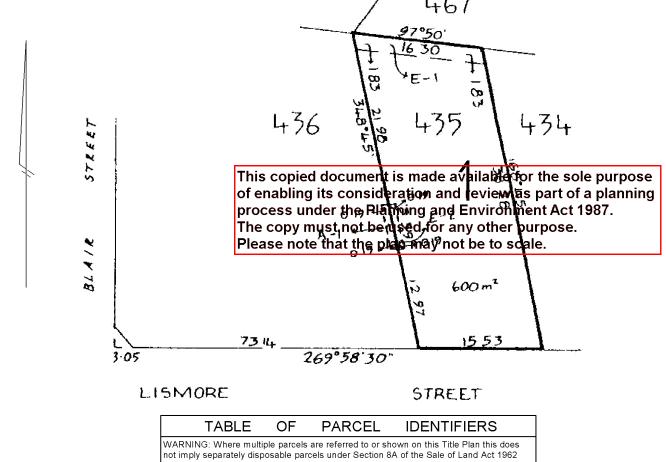
The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

DOCUMENT END

Delivered from the LANDATA System by Dye & Durham Terrain Pty Ltd

TITLE PLAN	EDITION 1	TP 201943K
ocation of Land		Notations
arish: WILL-WILL-ROOK ownship: ection: rown Allotment: rown Portion:		
ast Plan Reference: LP 58860 erived From: VOL 10422 FOL 033 epth Limitation: NIL	ANY REFERENCE TO MAP II THIS TITLE PLAN	N THE TEXT MEANS THE DIAGRAM SHOWN ON
Description of Land / Easeme	nt Information e of land in the Parish of Will Will Rook b	THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND
TOCCTUED WITH a wake to use the land the commended A. I am the agent		TITLES AUTOMATION PROJECT
ENCUMBRANCES REFERRED TO As to the land shown marked E-1  THE EASEMENTS (if any) existing over the same by virtue of Section 98 of the Transfer of Land Act	ne	COMPILED: 28/10/1999 VERIFIED: EWA
ENCUMBRANCES REFERRED TO As to the land shown marked E-1  THE EASEMENTS (if any) existing over the same	ne t	



Sheet 1 of 1 sheets

PARCEL 1 = LOT 435 ON LP 58860

Metres = 0.3048 x Feet

Metres = 0.201168 x Links

LENGTHS ARE IN

METRES

#### Owner \*

The person or organisation who owns the land

Where the owner is different from the applicant, provide the details of that person or organisation.

Name:					Same as applicant
Title: Ms	First Name: Harpreet		Surname	Kaur-Singh	
Organisation (if ap	oplicable):				
Postal Address:		If it is a	P.O. Box, ent	ter the details he	ere:
Unit No.:	St. No.: 9	St. N	ame: Rossd	ale Street	
Suburb/Locality: (	Cragieburn	State	:		Postcode: 3064
Owner's Signature	e (Optional):			Date:	
				day	/ / month / year

#### Declaration ii

This form must be signed by the applicant \*

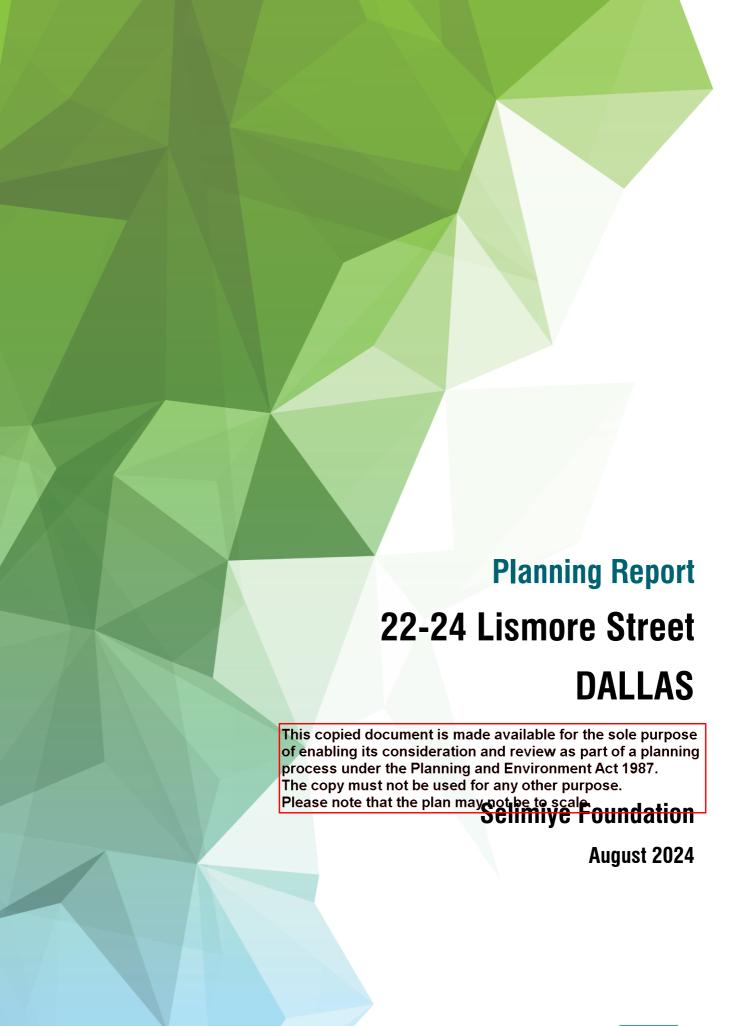
Remember it is against the law to provide false or misleading information, which could result in a heavy fine and cancellation of the permit.

I declare that I am the applicant; and that all the information in this application is true and correct; and the owner (if not myself) has been notified of the permit application.

Signature: Date: 28/08/2024

> This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

day / month / year







### 22-24 Lismore Street

#### **Contents**

Execu	utive Summary	1
1.0	Background Information	3
	1.1. Previous Planning Permits	3
2.0	Proposal	4
3.0	Subject Site and Surrounds	
	3.1. Subject Site	6
	3.2. Site Context	7
4.0	Planning Assessment	8
	4.1. Permit Triggers	8
	4.2. Zoning	8
	4.3. Overlays	g
5.0	Strategic Planning Policy Assessment	11
	5.1. Municipal Planning Strategy	11
	5.2. Planning Policy Framework ("PPF")	11
	5.3. Provisions That Require, Enable or Exempt a Permit	12
	5.4. Other – Built Form Considerations	14
	5.5. Clause 65 - Decision Guidelines	15
6.0	Conclusion	16
Figur	e 1. Construction materials and finishes (as attached on the plans prepared by KLMS)	4
	e 2. Aerial image of site, as at 16 March 2024, accessed from Nearmap 10 May 2024	
	e 3. Zone map of site (blue outlined rectangle) and surround, accessed from VicPlan on 13 May 2024	
Table	e 1. Table of site surrounds	7

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

#### Document Control

Date Prepared	Version Number	Author	Reviewer	Distributed
August 2024	1	T Emmanaual	V Oznart	Internal
	I	T. Emmanouel	K. Ozyurt	Council

#### **Executive Summary**

KLM Spatial acts on behalf of Selimiye Foundation in preparing and submitting this application for a planning permit.

#### **Subject Site**

The subject site is commonly known as 22 and 24 Lismore Street Dallas 3047 and can be formally identified as Lot 1 on Title Plan 20194K (22) and Lot 1 on Title Plan 183558H (24).

#### **Proposal**

Broadly, the proposal is for the use and development of a childcare centre, and a carparking variation, generally in accordance with the submitted plans and documents.

#### **Planning Controls**

Pursuant to the Planning Scheme, the following planning controls apply to the subject sites:

<b>Zone</b> General Residential Zone – Schedule 1 (GRZ1)	
Overlay	Melbourne Airport Environs Overlay – Schedule 2 (MAEO2)
Particular Provisions	Clause 52.05 – Signs
	Clause 52.06 – Car Parking
	Clause 52.34 – Bicycle Facilities

#### **Permit Triggers**

Clause 32.08-2 To Use the land as a childcare.

Clause 32.08-10 Buildings and works associated with a Section 2 use.

Clause 45.08-1 Schedule 2 - Clause 1 To Use the land as a childcare (nesting under Education Centre)

Clause 45.08-2-2 Schedule 2 - Clause 2 Buildings and Works associated with a childcare (nesting under Education Centre)

Clause 52.05 – business identification signage – Category 3 (High amenity areas)

Clause 52.06-3 To reduce the number of car parking spaces required under Clause 52.06-5

#### Other

Management Plan has not

This copied document is made available for the sole purpose
The land is not within an organization and review for participating planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose. be read in conjunction with the following documents: Please note that the plan may not be to scale. This planning report should

- Acoustic Report
- Sustainable Development Assessment Report
- Traffic Impact Assessment
- Waste Management Report

This report and the subsequent documentation seek to provide a response to the following provisions:

- Acoustic protection to surrounding amenities.
- Adequacy of car parking with variation proposed.
- Design and treatment of the proposed development, with regard to existing neighbourhood.

We provide the below planning statement to assist in supporting this application. This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

#### 1.0 Background Information

#### 1.1. Previous Planning Permits

No planning permits previously identified for the subject site.

#### On lots nearby:

No permits of significant relevance have been granted in the surrounding areas, however we have listed some for reference of the type of works being permitted within the Melbourne Airport Environs Overlay (MAEO).

P25661 – 2 lot subdivision (13 Lismore St Dallas)

P17381 – 2 lot subdivision (12 Lismore St Dallas)

P25909 – 2 lot subdivision (26 Lismore St Dallas)

P12869 – 2 lot subdivision in accordance with PS 623752B (10 Lismore St Dallas)

P23957 – The development of land for one dwelling on a lot affected by the Melbourne Airport Environs Overlay (20 Lismore St Dallas)

#### 2.0 Proposal

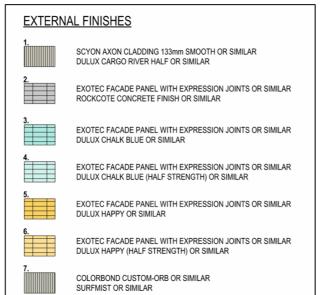
The proposal is for the use and development of a childcare centre, display of business identification signage, and a reduction to the statutory carparking space required onsite by spaces 3, generally in accordance with the submitted plans and documents.

#### **Use & Development**

The childcare centre proposed is two-storey, containing 2 classrooms, with a proposed capacity for 60 children. Key features of the development include:

- Two (2) classrooms:
  - Indoor room 1 32 children
  - o Indoor room 2 28 children
    - Total indoor classroom space of 120.57 sqm (ground floor) and 85.20 sqm (first floor) for the children
- Two (2) outdoor play areas
  - o Ground outdoor 282.65 sqm.
  - o Upper outdoor 180.81 sqm.
- Additional facilities
  - o Kitchen
  - Outdoor storerooms x2
  - Reception/Waiting area.
  - Meeting room
  - Laundry
  - o Indoor storerooms x4
  - Associated Office
  - Accessible toilet x3 and Standard bathrooms x3
  - Staffroom
- General building dimensions:
  - o Maximum Height 7.71 m
  - o Length north to south at approx. 24m
  - Width east to west at approx. 18.8m

Figure 1. Construction materials and finishes (as per the plans prepared by KLMS).



- Carparking/bicycle facilities
  - o 10 x carparking spaces
    - 1 of which is accessible carparking.
  - Bicycle parking facilities.
    - WC that has a shower
  - o 1 x Shared space
- Access
  - Stairs and lift
  - o Vehicle entry and exit from Lismore Street
    - Entry (western side of the frontage)
    - Exist (eastern side of the frontage)
  - Delivery area to east of building
- Waste facilities to the east side of the entrance

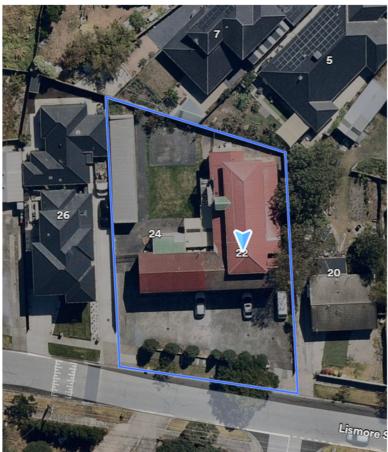
#### 3.0 Subject Site and Surrounds

#### 3.1. Subject Site

The subject site is commonly identified as 22 and 24 Lismore Street Dallas and can be formally described as Lot 1 on Title Plan 20194K (22 Lismore Street) and Lot 1 on Title Plan 183558H (24 Lismore Street).

- There is an easement that runs along the northern boundary of the two sites.
- Site area together = 1235 sqm
- Site configuration
  - o Currently has a building on the site used as a charity and is run by community members.
- No significant vegetation present on site. Planted trees/shrubs within a garden bed on the southern boundary.
- Vehicle access
  - o Along the southern boundary on Lismore Street via the two existing vehicle crossovers.

Figure 2. Aerial image of site, as at 16 March 2024, accessed from Nearmap 10 May 2024.



#### 3.2. Site Context

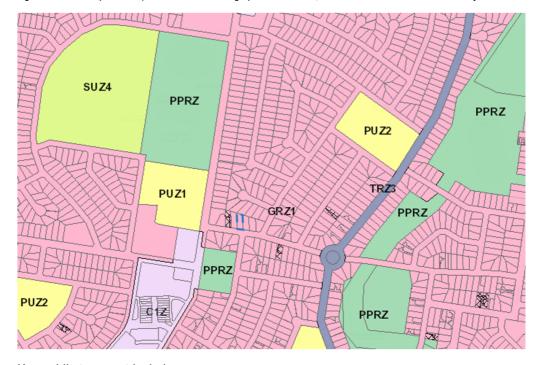
The following land uses and development surround the subject site:

Table 1. Table of site surrounds.

North	Residential area Gibb reserve Upfield Soccer Club Catholic Church
East	Sirius College – primary school Tennis hall Football club Dallas Brook Community primary school
South	Reserves & playground Group of grocery shops
West	Reserve Residential area

The broader area can be described as predominantly residential. The surrounding area is generally part of the General Residential Zone (GRZ), with other surrounding areas being zoned Public Park and Recreation Zone (PPRZ), Public Use Zone (PUZ) and Commercial Zone (CZ) (as seen in figure 2 below).

Figure 3. Zone map of site (blue outlined rectangle) and surround, accessed from VicPlan on 13 May 2024.



Key public transport includes:

- Bus route to the west of site on Blair Street (routes 532 and 540)
- The 540 bus runs to Broadmeadows Station which is south-west of the site approximately 2km away.
  - The Craigieburn line runs from this station.

#### 4.0 Planning Assessment

#### 4.1. Permit Triggers

A planning permit is required under the following provisions of the Hume Planning Scheme.

Clause 32.08-2 To Use the land as a childcare.

Clause 32.08-10 Buildings and works associated with a Section 2 use.

Clause 45.08-1 Schedule 2 - Clause 1 To Use the land as a childcare (nesting under Education Centre)

Clause 45.08-2-2 Schedule 2 – Clause 2 Buildings and Works associated with a childcare (nesting under Education Centre)

Clause 52.05 – business identification signage – Category 3 (High amenity areas)

Clause 52.06-3 To reduce the number of car parking spaces required under Clause 52.06-5

#### 4.2. Zoning

The subject land is located within the General Residential Zone – Schedule 1 (GRZ1) of the Hume Planning Scheme.

The purpose of this zone is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To encourage development that respects the neighbourhood character of the area.
- To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

Pursuant to Clause 32.08-2, the use of a childcare centre (nested under Education Centre) requires a permit (a section 2 use).

Pursuant to clause 32.08-10, a permit is required to construct a building or construct or carry out works for a use in Section 2 of 32.08-2.

#### Response

The proposal is considered consistent with the purpose of the zone as the use of a childcare centre is not uncharacteristic within a residential area and is highly compatible with residential uses. The hours of operation are mostly within the standard working hours, therefore not causing unreasonable noise to the surrounding area. Having childcare centres nestled within residential zones provides a desirable outcome as it improves access to local residents to a essential service and its location encourages active transport to and from the site.

In responding to one key purpose of the zone which is to *allow educational uses to serve local community needs in appropriate locations*, we provide the following justification:

- The site is within an established residential area that is easily accessible to various residents surrounding, via car but also walking/cycling.
- The site can be accessed via Barry Road or Pascoe Vale Road which can both accommodate traffic generation.

- There are other existing educational facilities in the surrounding area including ICMG Saturday Language School, Ilim College Dallas, Dallas Brooks Community Primary School, and Broadmeadows Primary School.
- The building is consistent with the area, being that it is no more than two-storey, therefore fitting in with the dwellings within the area. Whilst the colours make the building identifiable as an education facility with the intent to create differentiation from the site and the rest of the street. Furthermore, the site is within close proximity to the street corner (approximately 100m) therefore the visual difference between it and the houses along the street is not sudden when travelling along it.
- The childcare centre operation has low noise levels which can be managed from appropriate construction materials, hours of operation, and screening to ensure noise emissions are appropriately managed.
- The proposed childcare will provide for future needs to the immediate and surrounding community. The childcare will service the community of an essential service.
- The scale and intensity of the use and development is of a modest scale with the use consisting of a maximum of 60 children. Typical hours of operation will ensure the use is compatible with the surrounding residential area and will have minimal impact

#### 4.3. Overlays

The subject land is covered by the Melbourne Airport Environs Overlay – Schedule 2 (MAEO2).

The purpose of this overlay is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure that land use and development are compatible with the operation of Melbourne Airport in accordance with the relevant airport strategy or master plan and with safe air navigation for aircraft approaching and departing the airfield.
- To assist in shielding people from the impact of aircraft noise by requiring appropriate noise attenuation measures in dwellings and other noise sensitive buildings.
- To provide for appropriate levels of noise attenuation depending on the level of forecasted noise exposure.

Pursuant to Clause 1.0 and 2.0 of Schedule 2 of the Overlay (MAEO2), a permit is required for use of an education centre (childcare centre) and for the buildings and works.

As stated further under Clause 45.08-2 of the MAEO, any building for which a permit is required under this overlay must be constructed so as to comply with any noise attenuation measures required by Section 3 of Australian Standard AS2021-2015, Acoustics – Aircraft Noise Intrusion – Building Siting and Construction, issued by Standards Australia Limited.

Schedule 2 states that its purpose is to identify areas that are or will be subject to moderate levels of aircraft noise based on the 20-25 Australian Noise Exposure Forecast (ANEF) contours and to limit use and development to that which is appropriate to that level of exposure.

#### Response

This proposal is consistent with the permit requirements under the overlay and schedule as we engaged with council previously regarding the use and building requirements to which they provided that the MAEO2 should not be inhibiting on the proposal.

The acoustic report provided with this application, stated that aircraft noise can be mitigated through constructions of building envelopes. The external consultants provided construction requirements that can be followed more in detail during the building construction phase. However, we note that the plans have been reviewed by the acoustic consultant and we have implemented their advice in ensuring that the fencing around the site is to the height of 2.5m to achieve minimum Rw30.

#### 5.0 Strategic Planning Policy Assessment

5.1. Municipal Planning Strategy

Clause 02.03-1 - Settlement

Clause 02.03-9 - Infrastructure

Clause 02.04-2 – Strategic Framework Plan

#### Response

The subject site is located within the Hume Corridor. Areas within are predominantly residential development surrounding activity centres and employment land located along major transport corridors. The Strategic direction here includes developing the Hume Corridor to be a sustainable urban area with high quality development in new growth areas.

Dallas is within a Neighbourhood and Local Activity Centre which aims at including a mix of uses which meet local community needs. The aim is for these to be accessible by walking and cycling and provide public transport links to other, higher order activity centres. We provide that the subject site is highly accessible via local public transport routes, easily accessible via walking by nearby residents, and can be safely cycled to. Furthermore, the site is close to the Broadmeadows Activity Centre therefore adding to its ability to provide access to higher order activity centres.

Furthermore, the proposal provides an outcome that adds to the liveability of people in the area. Factors that shape the quality of life include access to education, which this proposal provides through its location in proximity to surrounding residents, and other community facilities.

#### 5.2. Planning Policy Framework ("PPF")

The Planning Policy Framework (PPF) is in place to ensure that the objectives of Section 4 of the Planning and Environment Act 1987 are implemented through appropriate land use and development planning policies. These policies incorporate environmental, social and economic factors that contribute towards the achievement of net community benefit and sustainable development.

The following policies are of relevance to the current proposal:

#### Clause 11 - Settlement

11.01-1S Settlement

#### Clause 13 – Environmental Risks & Amenity

- 13.05-1S Noise Management
- 13.07-1S Land Use Compatibility

#### Clause 15 – Built Environment and Heritage

- 15.01-1L-05 Signs
- 15.01-2L-01 Building Design Hume
- 15.01-2L-03 Environmentally Sustainable Development Hume
- 15.01-4S Healthy Neighbourhoods

#### Clause 19 – Infrastructure

- 19.02-2S Education Facilities

#### Response

The proposal responds to the relevant planning policies as it allows for the convenient access to community facilities and infrastructure and encourages the direct growth into existing settlements.

Noise management has been addressed through by following advice from the acoustic consultant. Upon reviewing of the plans, it was recommended that the fence along the boundary be 2.5m in height to achieve a minimum Rw30, which the proposal has implemented. Further advice from the acoustic consultant has provided that outdoor play time does not exceed a total of 4 hours throughout the day so that a criteria of 51 dB(A) is applicable.

Furthermore, the land use and development are compatible with the surrounding area as stipulated within the zones purpose. The proposal does not detrimentally interfere with the surrounding area, rather it enhances it, noting that it allows for convenience of an important amenity as such to those living in the surrounding area, is highly accessible by many forms of transport, and provides an additional use not currently within the surrounding neighbourhood. Being nested within a residential zone also furthers the environmentally sustainable design and healthy neighbourhood policies and guidelines that Hume wants to achieve through the location encouraging engagement in walking/cycling where possible.

Whilst the proposed development is differentiating in its built form to the surrounding dwellings, we note that the proposal will not be of detriment to the neighbourhood character. The development is well setback from the street, with the parking to the front of the site, which ensures an ease in visual impact when looking directly from the street. Further, the site is 100m from the street corner and so the built form varying from the dwellings along the street is less impactful as it isn't nested within the centre, therefore will not look out of place. Furthermore, the signage proposed complies with the planning policy, noting that it is all located on the land to which they relate, they are modest in size, and proportionate to the development relative to their purpose.

Overall, the proposal provides advantages to the surrounding neighbourhood, being that it allows for a highly and easily accessible childcare centre, further enhancing the economic opportunities for Dallas, and facilitating community.

#### 5.3. Provisions That Require, Enable or Exempt a Permit

#### Clause 52.05 — Signs

Pursuant to clause 32.08-15 of the GRZ, sign requirements are at clause 52.05, and the zone is within Category 3. Category 3 states (clause 52.05-13) refer to high amenity areas with a medium limitation.

We are proposing 'business identification signage' which falls under section 2, meaning that a permit is required for this.

We therefore request that the permit includes business identification signage and note our proposal as follows:

- Western elevation signage approximately 3500 mm x 1200 mm
- Southern elevation signage approximately 1800 mm x 1800 mm
- Signage lettering above doorway approximately a maximum height of 400 mm

Please see attached town planning plans, which provides these in relation to the built form. We consider that the signage proposed is modest, and relative to its purpose and the scale of the built form.

#### Clause 52.06 - Car Parking

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

The purpose of this provision is:

- To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- To support sustainable transport alternatives to the motor car.
- To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
- To ensure that car parking does not adversely affect the amenity of the locality.
- To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

Clause 52.06 applies to a new use.

The scope for this use is 0.22 spaces per student that is part of the maximum number of students on the site at any time (pursuant to clause 52.06-5).

A permit is required to reduce the number of car parking spaces required under Clause 52.06-5 (stated in clause 52.06-3).

#### Response

The carparking space rate under clause 52.06-5 is  $0.22 \times 60$  students = 13.2 = 13 spaces.

This proposal is for 10 spaces within the boundary, therefore a reduction of 3 car parking spaces on site. However, our proposal includes the potential of having an additional 3 spaces allocated along Lismore Street outside the southern boundary of the site. This can be allocated via a condition of permit and can be 15-minute parking to allow for an efficient drop off facility. This proposal has been recommended by the engaged traffic consultant to help achieve the requirement without subsequently altering the site.

Furthermore, we have provided a response to the Car Parking Demand Assessment pursuant to clause 52.06-7 to satisfy the application requirements and decision guidelines to reduce the car parking requirement.

#### Guidelines:

This copied document is made available for the sole purpose

The likelihood of multi-purpose trips within the localitative has particled with a trip

to the land in connection with the land in conne

The copy must not be used for any other purpose. It is very likely that multi-prose in the three three

- The variation of car parking demand likely to be generated by the proposed use over time.

The car parking demand generated is not proposed to change over time due to the maximum number of children remaining at 60.

- The short-stay and long-stay car parking demand likely to be generated by the proposed use.

We do not propose to have short-stay and long-stay car parking as it is generally understood that children will be dropped off and picked up which should not take any longer than 10-15 minutes.

The only drivers that will remain at the site for long periods of time will be staff members.

- The availability of public transport in the locality of the land.

The closest bus stop is a 100m walk west of the site (along Blair Stret). This bus stop has a route that connects to Broadmeadows Station which is approximately 2km away from the site, making it highly accessible to get around via public transportation.

- The convenience of pedestrian and cyclist access to the land.

Pedestrian access is highly accessible, with well maintained paths connecting to and around the site.

Blair street which is 100m west of the site has dedicated bike lanes making it a highly accessible site for cyclists.

- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.

The proposal has bicycle parking at the east end of the entrance to the proposed building.

End of trip facilities are provided as one of the bathrooms on the proposed development has showering facilities.

- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.

It can be anticipated that many children will be walked to and from the site, being that the childcare will be nested within a residential area. Furthermore, children that are dropped off/picked up will be done so in a quick manner, making the movement through the carpark at those peak times frequent.

Due to the proximity of the site to public transport, it can also be assumed that some parents and children or staff will use this form of transportation.

#### Clause 52.34 – Bicycle Facilities

The purpose of this provision is:

- To encourage cycling as a mode of transport.
- To provide secure, acc change facilities.

  This consideration and review as part of a planning process under the Planning and Environment Act 1987.

  The copy must not be used for any other purpose.

Pursuant to clause 52.34-1 President and the prantage that the prantage in the prantage is a sociated signage has been provided on the land.

#### Response

Clause 52.34-5 states that bicycle facilities are not required for a childcare centre, however this proposal still includes bicycle facilities to encourage its use. This further coincides with the policy set out within the Hume Planning Scheme, additionally encouraging community and healthy neighbourhood strategies.

#### 5.4. Other – Built Form Considerations

**ESD** 

The report provided has helped formulate the town planning plans submitted with the application. We have incorporated ESD requirements into the design where applicable at this stage of the proposal.

#### Traffic and waste considerations

Traffic and waste have been deliberated with the respective traffic consultant engaged. We have provided a report as well as swept path movements and have incorporated their recommendations into our planning design.

#### Acoustic considerations

The acoustic considerations ensured the proposal is well incorporated into the area, with regard to the MAEO2. Furthermore, the height of the fencing around the site has been decided based on advice received from the acoustic engineer and complies with the standards set out within the report attached.

#### 5.5. Clause 65 - Decision Guidelines

In determining whether a permit should be granted, the responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines set out in Clause 65.

The following outlines how the proposal appropriately responds to each of the decision guidelines:

- The proposal is consistent with the purpose and intent of the Policy Framework as outlined in this Statement.
- The proposal is consistent with the objectives of the General Residential Zone Schedule 1 (GRZ1) and Melbourne Airport Environs Overlay Schedule 2 (MAEO2) because the use and development is not prohibited and instead encouraged within this area, given it helps achieve the strategies of set out for the area.
- Consideration of environmental impacts have been undertaken through the consultation of an Environmentally Sustainable Design (ESD) report, a traffic and waste management report, and an acoustic report. Each of these consultants have provided feedback and had input on the design to ensure all considerations necessary are met.
- Flooding, bushfire and biodiversity matters are not relevant with regard to the site specifically; however, we have considered input received from the ESD report, and aim to achieve as best of an environmentally conscious standard as practical.
- Consideration of abutting properties have been undertaken with our review of neighbourhood design standards against the proposed built form in such a way that we aim to achieve these despite the planning policy not mandating it on such proposals.

#### 6.0 Conclusion

This Planning Statement has demonstrated the proposal which involves the use and development of a childcare centre, display of business identification signage, and a car parking variation, is consistent with the requirements of the Hume Planning Scheme. The proposal will enable the use and development of a childcare centre in an area of great access, providing additional amenity to residents nested within the area, additionally fostering healthy neighbourhood objectives, and a sense of community.

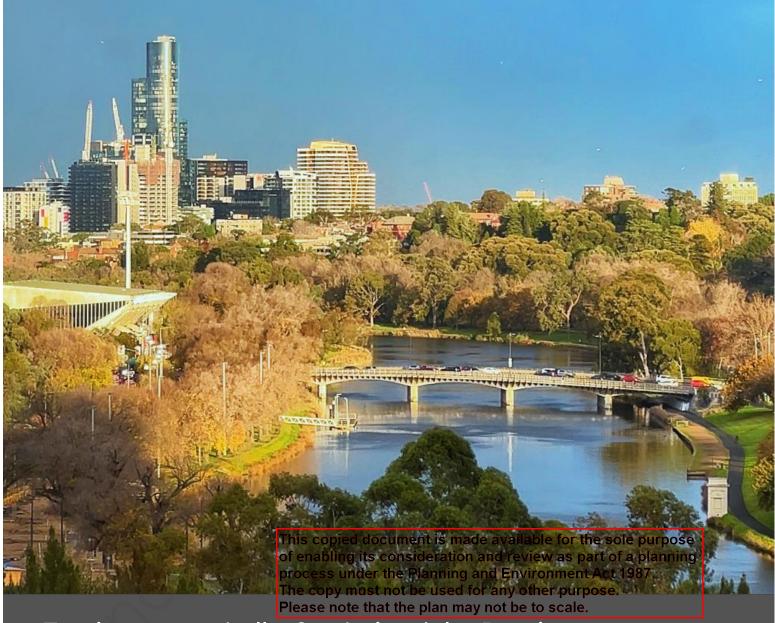
It is therefore considered that based on the above assessment the proposal should be supported by Council for the following reasons:

- The proposal is consistent with the purpose and intent of the Planning Policy Framework including the Municipal Strategic Statement.
- Meets the requirements of the GRZ1 and MAEO2 as demonstrated within this Statement and the submitted plans/documents.
- Although varying the requirements of car parking (clause 52.06) this is appropriately justified
  having regard to the site characteristics, design of the proposal, advice received from the respective
  traffic consultant, and access to the site by other various modes of transport.
- The built form, although standing out from the surrounding dwellings, is of respect to the character, given the setbacks, height, and location of the site from the connecting street. The proposal is not prohibited within the zone, rather is encouraged, and thus the design has been carefully considered, both to ensure it is well designed to fit the area yet differentiated, given its difference in purpose as opposed to a dwelling.

Overall, the proposal is considered to present an appropriate planning outcome and is consistent with the purpose and intent of the relevant planning controls and policies and assessed within this report.

#### **END OF ASSESSMENT**

# Low Impact Development Consulting



## Environmentally Sustainable Design

Sustainable Design Assessment for:

22 & 24 Lismore St, Dallas

Prepared for: Selimiye Foundation

Prepared by: AV - Low Impact Development Consulting

#### 06/08/2024

- e: info@lidconsulting.com.au
- p: 03 9016 9486
- a: Level 6, 114 Flinders St, Melbourne 3000
- w: www.lidconsulting.com.au



Version	Date	Description	Drawings	Prepared	Checked
1.0	06/08/2024	TP Issue	Rev. P1	AV	МН

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

#### **Disclaimer**

This report is copyright and has been written exclusively for the subject project discussed throughout. No part of this document may be reproduced or transcribed without the express agreement of LID Consulting Pty Ltd. The content of this report remains the intellectual property of LID Consulting.

The content of this document represents the entirety of work output or recommendations offered by LID Consulting for this particular project. This content supersedes all other verbal discussions undertaken by LID Consulting representatives in relation to this project.



### Contents

Executive summary		i
Energy	1	l
Electrification	1	l
Building sealing	1	l
Building fabric, heatin	g and cooling, and hot water supply2	2
Lighting	2	2
Lighting controls	3	3
Indoor Environment Quality		4
Mechanical ventilation	on2	4
Daylight		5
Low VOC products		5
Low formaldehyde pr	oducts	5
Integrated Water Manageme	ent	7
Stormwater quality		7
Fixtures, fittings and a	ppliances	3
Rainwater harvesting	and reuse	3
Permeable paving/co	oncrete9	)
Landscaping	9	)
Material Selection	10	)
Concrete	10	)
Steel	11	l
Light coloured roofing	g11	l
Light coloured paving	This copied document is made available for the sole purpos	2
Timber	of enabling its consideration and review as part of a plannin	fg
Insulation	process under the Planning and Environment Act 1987.	2
Carpet	The copy must not be used for any other purpose. Please note that the plan may not be to scale.	3
Location and Transport	12	4
Public transport		4
Waste Management		5
Demolition and const	ruction waste15	5
Plastering waste	18	5
Urban Ecology	16	5
Communal spaces	16	5
Vegetative cover	17	7



Management, Innovation, Climate Adaptation and Community Benefit	17
Metering	17
Sub-metering	17
Climate adaptation and resilience	18
Appendix 1 - BESS Report	19
Appendix 2 - Preliminary Energy Assessment	33
Non-residential Preliminary Wall-glazing Assessment	33
Appendix 3 - Daylight Assessment	34
Appendix 4 - Integrated Water Management	36
STORM Report	36
Stormwater catchment plan	37
WSUD system maintenance plan	38
Stormwater management during construction	41
Appendix 5 - Vegetated Landscape Areas	44

LID acknowledges and pays respect to the Australian Aboriginal and Torres Strait Islander people, to their ancestors and elders, past, present and emerging, as the traditional custodians of the lands upon which we work and live. We recognise Aboriginal and Torres Strait Islander people's deep cultural and spiritual relationships to the water, land and sea, and their rich contribution to society

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



# **Executive summary**

## **Project summary**

Site type	Non-residential development	
Building type	Education	
Council	Hume City Council	
BESS Score	50%	



Figure 1: Proposed Site Layout

This report addresses the environmentally sustainable development requirements under the specific Council Planning Scheme (relevant clauses listed below), specifically per clause 15 Built environment and heritage:

Planning should promote development that is environmentally sustainable and minimise detrimental impacts on the built and natural environment.

Planning should facilitate development that:

- Is adapted and resilient to climate related hazards
- Supports the transition to net zero greenhouse gas emissions
- Minimises waste generation and supports resource recovery
- Conserves potable water
- Supports the use of, and access to, low emission forms of transport
- Protects and enhances natural values
- Minimises off-site detrimental impacts on people and the environment.



This sustainability report details measures that meet and often exceed mandatory Environmentally Sustainable Design (ESD) requirements for this type of development.

The body of the report contains a full list of ESD initiatives to be included in the development.

Mandatory guidelines and tools addressed in this report as relevant to sustainability include:

- National Construction Code (NCC) Volume One Section J;
- Victorian Planning Policy (VPP) and Local Planning Policy (LPP) clauses including
  - 11 Settlement
  - 12 Environmental and Landscape Values
  - 15 Built Environment and Heritage
  - 15.01-2S Building Design
  - 15.01-2L-03 Environmentally Sustainable Development
  - 19.03-3S Integrated Water Management
  - 53.18 Stormwater Management in Urban Development
- Built Environment Sustainability Scorecard (BESS); and
- The STORM assessment.

The proposed development will address the relevant ESD requirements of the above planning scheme provisions.

## Results summary

Further to the above initiatives and in conjunction with others listed in this report, the development was assessed using the 'Built Environment Sustainability Scorecard' (BESS), obtaining a total score of 50%. A score of 50% or greater (including compliance under water, energy, stormwater and IEQ categories) demonstrates a Best Practice environmentally sustainable development.

# Commitment & documentation on plans

Where possible the "ESD initiatives" in each section should be included on the plans. Examples include (where relevant):

- Water tank retention volume, location, and reuse connections
- Permeable paving/concrete size(s) and location. •
- The openable component of a window
- Mechanical equipment This copied document is made available for the sole purpose

  Hot water system location and types

  The copied document is made available for the sole purpose

  Hot water system location and review as part of a planning
- of enabling its consideration and review as part of a planning
- External materials
- Location for internal and enternal and enternal and external waste bins.

  Other relevant readily.
- Other relevant readily Please note that the plan may not be to scale.

Where items are not usually shown on town planning plans, these can be included on a notes box on the drawings to ensure they flow through to construction drawings, or they can be included in the specification.

As a minimum this ESD report must be referenced in a single note, such as:

"Plans are to be read in conjunction with the endorsed ESD report (which forms part of the town planning permit submission), and all initiatives contained within must be implemented to the satisfaction of the responsible authority"



## How to read this report

Initiatives within this report are catalogued by relevant Best Practice ESD categories. Each individual initiative has reference to the relevant compliance framework (where relevant), as well as description of the commitment, detailed compliance parameters, and sustainability benefits.

The below legend is provided for reference:

Compliance framework reference

Description of commitment (what).

Detail of compliance parameters (how).

Description of sustainability benefits (why).

Abbreviations used in this report include:

- NCC BCA National Construction Code Building Code of Australia
- SDAPP Council Sustainable Design Assessment in the Planning Process
- BESS Built Environment Sustainability Scorecard

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



# Energy

#### Goals

- Minimise greenhouse gas emissions from operational energy consumed Energy source selection
- To improve the efficient use of energy and reduce total operating greenhouse gas emissions
- To reduce energy peak demand through particular design measures (e.g. appropriate building orientation, shading to glazed surfaces, optimise glazing to exposed surfaces, space allocation for solar panels and external heating and cooling equipment
- Improve efficiency in energy use through greater use of renewable energy technologies and other energy efficiency upgrades

## **Key Outcomes**

Energy source	all electric
Heating/cooling system	reverse cycle
Hot water service	Heat pump

#### **Initiatives**

# Electrification

BESS Energy 2.6

The proposed development will be all-electric.

Heating/cooling systems, hot water supply, and cooking facilities will be electric:

- Heating/cooling will be reverse cycle electric systems
- HWS will be from heat pump storage units
- Cooking will be from electric induction

Specification of all-electric services supports decarbonisation goals, and can facilitate net zero operational emissions with the classification and available for the solen purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

# Building sealing

NCC2022 Volume 1 Part J5 Building Sealing

The proposed development will incorporate building sealing measures for improved energy efficiency.

Building sealing will be in accordance with NCC requirements, including:

- Compressible foam or similar seals provided around doorways from conditioned to non-conditioned spaces;
- Draft protection devices along the bottom edge of external swing doors;
- Multi-fit cable and pipe seals/adhesive membrane grommets for sealing around pipes or conduits passing through the building envelope; and
- Self-closing dampers fitted to exhaust fans.



Where power or data points etc. are required installed on external walls, acoustic fire rated wall boxes will be installed behind these power and data points for electrical safety, rather than compromising the external wall envelope.

Building sealing prevents un-intended air movement through the thermal envelope (infiltration and exfiltration). Air gaps in the building fabric result is uncontrolled heating and cooling demands in addition to high risk of structural damage due to condensation internally in well insulated envelope walls.

It is important to ensure air-tight connections between internal lining on exterior walls, ceiling and floor plate, around electrical, mechanical, and hydraulic penetrations going through the air-tight barrier by using a system of grommets, membranes and tapes. Alternatively, a combination of plasterboard and caulking with high level attention to detail can make a large difference to the air leakage rate of the building.

# Building fabric, heating and cooling, and hot water supply

BESS management 2.3, BESS Energy 1.1 & 2.1, NCC2022 Volume 1 Section J

The proposed development will incorporate performant building fabric, efficient heating and cooling, and hot water systems.

Building fabric (walls, glazing, floor and roof systems) will adhere to NCC2022 Volume 1 Section J Part J4 requirements. A preliminary assessment has been completed (refer Appendix 2), demonstrating expected wall-glazing performance requirements (to be verified for building certification).

Heating and cooling systems will be within 85% of the best CoP/EER available (or within one star) for the required capacity.

Water heating systems will be within one star of the best available, or 85% of the performance of the best available for the required capacity.

of energy throughout the operceinablinite its tronside aton and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

# Lighting

NCC2022 Volume 1 Part J7D3 Artificial Lighting, BESS Energy 3.7

High efficiency lighting systems will be specified.

LED lighting will be used, with maximum illumination power density rates in accordance with NCC allowances as follows:



Space Maximum Illumination Power Density	
Storage	1.5
Childcare (school)	4.5
Common areas (eg. corridors)	5

Where recessed lighting is specified, light fittings are to be IC4 rated to allow insulation to be installed as a continuous layer without cutouts.

Specification of efficient lighting systems will facilitate reduced energy consumption and greenhouse gas emissions, and reduce peak energy demand.

# Lighting controls

NCC 2022 Volume 1 Part J7D3 Artificial Lighting

Lighting controls will be implemented to promote efficient operation of artificial lighting.

# Internal lighting will:

- Be dimmable and controlled by daylight sensors to minimise the energy consumption when adequate daylight is present;
- Utilise motion sensors to ensure lights turn off for energy saving behaviour when spaces are not occupied; and
- Have switch zoning to separately control lighting within a natural lighting zone defined as a distance from the window equal to the depth of the floor to window head height.

## External lighting will:

• Have daylight sensors and either a timer or motion sensor installed.

These lighting control measures further promote efficient use of energy, reduce energy consumption and greenhouse gas emissions, and reduce peak energy demand.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



# Indoor Environment Quality

## **Background**

Building design and material choices impact on indoor environment quality.

Access to daylight and sunshine is advantageous to the wellbeing of humans.

Many paints, adhesives, sealants and flooring types contain Volatile Organic Compounds (VOCs) which are released into the indoor air. Joinery has, over the last 30 years, contained high levels of formaldehyde. VOCs and formaldehyde are recognised as potentially harmful to humans as well as contributors to atmospheric pollution.

#### Goals

- To achieve a healthy indoor environment quality for the wellbeing of building occupants, including the provision of fresh air intake, and natural daylight.
- To achieve thermal comfort levels with minimised need for heating and cooling.
- To minimise indoor air pollutants by encouraging use of materials with low toxic chemicals levels.
- To minimise noise levels and noise transfer within and between buildings and associated external areas.

## **Key Outcomes**

Regular use areas with Best Practice daylight (%)	66%
Increase in outdoor air supply for mechanically ventilated spaces:	50%
CO <sub>2</sub> monitoring to maintain a concentration not greater than:	800 ppm

## **Initiatives**

# Mechanical ventilation

BESS IEQ2.3, NCC2022 Part F6D6(b), AS1668.2 (exceeded)

Where mechanical ventilation is required, the mechanical equipment will be sized to facilitate provision of outdoor air beyond minimum requirements of AS1668.2.

quality.

This copied document is made available for the sole purpose CO<sub>2</sub> sensors will be included of recarbling its contistideration and review as partnofinal planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose.

The mechanical ventilation Please mpte that the plan may not be to scale.

- Be sized to deliver outdoor air at a rate (L/s) 50% greater than requirements of AS1668.2: and
- Monitor and maintain a concentration of CO<sub>2</sub> not greater than 800 ppm.
- Be designed to allow easy access for maintenance and cleaning of moisture and debris, and will be cleaned prior to building occupancy.

Mechanical ventilation can ensure appropriate ventilation rates throughout the development regardless of external conditions. Where mechanical ventilation is proposed for a larger proportion of the development, heat/energy recovery is recommended to minimise the ventilation energy losses.



Higher ventilation levels are also shown to reduce the incidence of air-borne disease transmission.

A balanced mechanical ventilation system ensures the supply of fresh air regardless of external atmospheric conditions such as wind speed, wind direction and temperature. It reduces the amount of unfiltered air infiltrating through cracks and holes in the building envelope due to pressure differences and enhances the indoor air quality. It also reduces the flow of conditioned air exfiltrating through cracks and holes in the building envelope, hence reducing the risk of condensation occurring within the external walls.

# Daylight

# BESS IEQ 1.4, NCC 2022 F6D4

Best Practice daylight levels are provided to regular use areas.

The proposed development achieves a Daylight Factor of >2% for 66% of regular use areas, as determined via the Green Star Hand Calculation Method.

Windows to regular use areas will have a total system (glass and frame) Visible Light Transmittance (VLT) of not less than 40%.

Windows must be sized with an aggregate light transmitting area (measured exclusive of framing members, glazing bars, or other obstructions) not less than 10% of the floor area of the room must be provided in accordance with NCC2022 Part F6D4.

High quality daylight provides improved amenity, and may reduce reliance on artificial lighting.

# Low VOC products

### BESS IEQ4.1

The development will provide low VOC paints, adhesives, sealants and carpets.

This copied document is made available for the sole purpose

Star Buildings.

The VOC content of paints, achesives and seglants will not exceed the levels listed in the process under the Planning and Environment Act 1987.

Star Buildings

of enabling its consideration and review as part of a planning achesives and seglants will not exceed the levels listed in the process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose. Please note that the plan may not be to scale.

Product category	Maximum VOC content (g/L)
General purpose adhesives and sealants	50
Interior wall and ceiling paint, all sheen levels	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65
One & two pack performance coatings for floors	140
Acoustic sealants, architectural sealant, waterproofing membrane and sealant, fire retardant sealant and adhesives	250
Structural glazing adhesive, wood flooring and laminate	100



#### adhesive and sealants

The VOC content of carpets will not exceed the levels listed in the table below in accordance with the relevant test protocols.

Test protocol	Limit
ASTM D5116 – Total VOC limit	0.5mg/m² per hour
ASTM D5116 - 4-PC (4-Phenylcyclohexene)	0.05mg/m² per hour
ISO 16000/EN13419 – TVOC at three days	0.5mg/m² per hour
ISO 10580 / ISO/TC 219 (document N238) – TVOC at 24 hours	0.5mg/m² per hour

Volatile Organic Compounds is the term used to describe several hundred petrochemical solvent type compounds found in paints, adhesives, sealants, carpets, reconstituted wood products, and new furniture. Newer buildings generally have higher concentrations of these VOC's that contribute to headache, lethargy etc. in occupants.

Low VOC adhesives and sealants are readily available and can be purchased in bulk to minimise the price premium.

# Low formaldehyde products

### BESS IEQ4.1

The development will provide low formaldehyde timber-based products.

Engineered wood products (including MDF, particleboard and plywood) will be formaldehyde class E1 or better.

Formaldehyde emissions in engineered wood products are classed as below:

Class	Limits (mg/L)
Super E0	This copied document is made available for the sole purpose
	of enabling its consideration and re≨iew as part of a planning
E1	process under the Planning and Environment Act 1987.
E2	The copy must not be used for any other purpose.  Please note that the plan may not be to scale.
E3	Please note that the plan may not be to scale.

Formaldehyde is used in the production of resins that act as glues for engineered wood products and is a colourless gas with a strong odour. Exposure to formaldehyde can cause irritation in the eyes, nose and throat with various authorities recommend E1 as a maximum emissions class.



# Integrated Water Management

### **Background**

As populations increase and global warming contributes to fast climate change, the access to clean potable water will become more of an issue to Australians and the world. Inefficient use of water can lead to the destruction of habitats. Over-use of artesian water supplies can result in rising water tables and salination of soils.

Furthermore, pollutants that build up on impervious surfaces get washed into the stormwater system and end up in local waterways. Water Sensitive Urban Design is now a major goal of urban development to prevent this occurring.

The quality of water leaving a site (and peak and total stormwater run-off volumes) can be improved by collection of water in water tanks, natural infiltration through gardens and lawns into the soils, and minimisation of impervious pavements or the shedding of water from impervious surfaces into garden beds that have particularly good infiltration into the ground – known as infiltration beds.

#### Goals

- To ensure the efficient use of water.
- To reduce total operating potable water use.
- To incorporate the use of water sensitive urban design, including stormwater re-use.
- To encourage the appropriate use of alternative water sources.
- To minimise associated water costs
- To reduce the impact of stormwater run-off
- To improve the quality of stormwater run-off
- To achieve best practice stormwater quality outcomes

## **Key Outcomes**

Fixtures/fittings/appliances:		
Showers		4 Star WELS (≥6.0 but ≤7.5)
Kitchen taps		≥5 Star WELS rating
Bathroom taps		>6 Star WFLS rating
Dishwashers		uฆษาปูเรงทายเปลาผลู้ilable for the sole purpose
WC	of enabling its c	o <u>nsideration</u> എന്ന് eview as part of a planning
Washing machine		he Planming and Emvironment Act 1987.
STORM score achieved		ot∖b∉used for any other purpose.
Rainwater tank retention vo	<b>⊮ி</b> ease note that	the സ്വിമ may not be to scale.
Rainwater catchment area	(m²)	326m <sup>2</sup>
Rainwater tank connected	to	toilets
Permeable paving/concret	e area	448m <sup>2</sup>

## **Initiatives**

## Stormwater quality

BESS Stormwater 1.1, Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) CSIRO 1999

The proposed development demonstrates Best Practice stormwater quality outcomes.



Stormwater leaving the site will be treated to Best Practice standards in accordance with the Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) (CSIRO 1999).

A STORM score of 100% was achieved (scores ≥100% represent Best Practice) with consideration of stormwater quality systems described below.

Note in accordance with the Australian Rainfall and Runoff (ARR2019) guidelines, impervious areas are those which have an immediate rainfall runoff response (i.e. dedicated drainage from a surface or concentrated flows). Only impervious areas meeting this definition have been considered in this stormwater quality assessment.

Refer to Appendix 4 for further detail.

The implementation of Water Sensitive Urban Design (WSUD) and Integrated Water Management (IWM) principles minimises negative environmental impacts of stormwater runoff and leads to reduced potable water demand throughout operation.

# Fixtures, fittings and appliances

BESS Water 1.1

The proposed development will utilise water efficient fixtures, fittings and appliances.

Fixtures, fittings and appliances will conform to the following WELS ratings:

Fixture/fitting/appliance	WELS Rating
Showers	4 Star WELS (≥6.0 but ≤7.5)
Kitchen taps	≥5 Star WELS rating
Bathroom taps	≥6 Star WELS rating
Dishwashers	≥5 Star WELS rating
WC	≥4 Star WELS rating
Washing machine	Occupant to install

Products will be specified be the considered being its considered by the considered

The above specifications confine depty must next be useful for tany other grunnessent development.

Please note that the plan may not be to scale.

## Rainwater harvesting and reuse

BESS Water 1.1, BESS Stormwater 1.1, Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) CSIRO 1999

Rainwater harvesting and reuse systems will be utilised in the proposed development, contributing to a Best Practice stormwater quality outcome and reducing potable water consumption.



Rainwater tanks of 6,000L retention volume will collect rainfall runoff from 326 m<sup>2</sup> of roof areas. Rainwater tanks will be connected to toilets. Refer to Appendix 4 for further details.

Leaf diverting rain heads and/or first flush diverters will be included upstream of the tank to divert the initial flow from entering the tank when a rain event occurs.

Pumps and manual over-ride switches will be readily accessible in the event of malfunction.

The location of tanks, pumps and maintenance access is to be shown on architectural drawings.

The use of rainwater harvesting and reuse systems promotes Integrated Water Management principles, reducing stormwater runoff volume and pollutant concentrations, as well as reducing potable water consumption.

# Permeable paving/concrete

Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) CSIRO 1999

Permeable paving/concrete will be included in the drainage design, contributing to a Best Practice stormwater quality outcome.

Permeable paving/concrete of 448 m<sup>2</sup> as specified in Appendix 4 will be provided for the driveway/carpark.

Inclusion of permeable pavement/concrete reduces hardstand surface runoff, urban stormwater pollution and improves waterway health.

# Landscaping

BESS Water 3.1

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

Proposed planting will be worther purpose.

• not require watering **pites servoit of harding what in an information system is proposed.**Therefore, no irrigation system is proposed.

Specification of landscaping with no potable water demands further enhances objectives of resource efficiency and climate resilience.



# Material Selection

#### **Background**

Careful selection of construction materials can help to limit the environmental impacts of the production, transport, and incorporation of these materials in our buildings. In many cases there are similarly performing, comparable but more environmentally friendly product selection options available.

#### Goals

The goals in environmentally sustainable construction material selection should be to:

- Limit the use of new materials where possible to help minimise the detrimental outcomes of product manufacture or modification.
- Select durable materials and re-use materials where possible increase the lifespan of all products.
- minimise the environmental impacts materials used, by encouraging the use of materials with a favourable lifecycle assessment based on the fate of materials, their recycling / reuse potential, their embodied energy, their biodiversity, human health, and environmental toxicity impacts.

#### **Initiatives**

#### Concrete

SDAPP 5.0 Building Materials

The proposed development will incorporate lower embodied carbon concretes.

Concretes with 20-35% (or greater) Supplementary Cementitious Materials (SCMs) such as slag or flyash, or similar geopolymer mixes will be utilised for on-site on-ground poured concrete mixes, subject to structural requirements.

In addition, recycled aggregate, water and/or sand will be included in the concrete mixes.

concrete product.

Concrete mixes with SCMs have circlind document is made available for the sole purpose components. Waste products such as a planning its consideration and review as part of a planning intensive Portland cement in process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose. Please note that the plan may not be to scale.

Embodied energy levels:

Concrete Product	Embodied carbon (TCO <sub>2</sub> -e/m³)	Embodied carbon as a percentage of 32MPA OPC
Generic 32MPA Ordinary	0.481	100%
Portland Cement (OPC)		
With 20% flyash	0.397	82.5%
With 20% blast furnace slag	0.404	84.0 %
With 50% flyash	0.273	56.8%
With 50% blast furnace slag	0.288	60.0%
With 100% slag or flyash	0.120	25.0%
geopolymer replacement		



(requires structural approval)		
Holcim EcoPact	0.198	41.1%
Holcim EcoPact Zero (ECOPact with carbon offset)	0.028	5.8%

Source - The Green Book

#### Steel

# SDAPP 5.0 Building Materials

Structural steel used in the project will be sourced from a Responsible Steel manufacturer.

Fabricators will be required to confirm their steel is sourced from one of the Responsible Steel member suppliers listed here https://www.responsiblesteel.org/about/members-andassociates/

The Responsible Steel Standard V1.1 was developed to recognise steel sites that are operated in a responsible manner. The 12 Principles of the Standard cover environmental, social and governance issues.

- 1. Corporate Leadership
- 2. Social, Environmental and Governance Management Systems
- 3. Occupational Health and Safety
- 4. Labour Rights
- 5. Human Rights
- 6. Stakeholder Engagement and Communication
- 7. Local Communities
- 8. Climate Change and Greenhouse Gas Emissions
- 9. Noise, Emissions, Effluents and Waste
- 10. Water Stewardship
- 11. Biodiversity
- 12. Decommissioning and Closure

# Light coloured roofing

NCC2022 Volume 1 Part J4D The copy must not be used for any other purpose. The upper surface of roofs will leave notes that the plant max not be to scale.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning

process under the Planning and Environment Act 1987.

The Colorbond colour range in the link below can inform solar absorptance values of different finishes for metal roof construction:

### https://steel.com.au/resources/colours

Where a performance solution is used to demonstrate compliance with Part J4D4 and a higher SA value is nominated, this must ensure equivalent or better thermal performance and comfort outcomes when compared to the reference building.



Light coloured roofing can help mitigate Urban Heat Island (UHI) effects by reflecting more solar radiation when compared with darker colours of the same material. This can also result in lower cooling requirements and peak energy demand from the building in operation.

# Light coloured paving

Green Star Buildings Credit 19

Unshaded paving products will be specified with light colours, providing improved Solar Reflectance Index (SRI) values.

Unshaded paving products will have a three-year SRI of ≥34, or an initial SRI of ≥39.

Paving that is shaded by permanent structures at midday on the summer solstice are exempt from this requirement.

Light coloured paving can help mitigate Urban Heat Island (UHI) effects by reflecting more solar radiation when compared with darker colours of the same material.

#### Timber

SDAPP 5.0 Building Materials

Sustainable timber products will be specified for the proposed development.

Framing timber will be sourced from accredited sustainable plantations (either FSC or PEFC/AFS accreditation).

No rainforest timbers will be incorporated i.e. no Oregon, Western Red Cedar, Meranti, Merbau, Teak or Luan.

Specification of sustainable timber products from accredited certification schemes helps

to mitigate threats to flora a This യാത്രാഭർപ്പാർ വിന്നു of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

## Insulation

SDAPP 5.0 Building Materials

Glasswool insulation (where specified) will incorporate recycled content.

A minimum 80% recycled glass content is to be achieved for all glasswool insulation in the proposed development.

In addition, the product will reduce potential negative health effects by not using formaldehyde as a binder.

Specification of circular economy insulation, containing recycled content, significantly reduces embodied carbon.



# Carpet

SDAPP 5.0 Building Materials

The proposed development will utilise more sustainable carpet products.

## Carpets will:

- Be specified as carpet tiles in lieu of traditional roll product carpet; and
- Utilise underlay with recycled content.

Carpet tiles are to be placed in position or if stuck down, will be a low VOC pressure sensitive contact adhesive, only applied once there is tack in the adhesive. If applied too early these adhesives can become permanent fixings and damage the back of the tile on removal, reducing circular economy benefits.

Carpet underlay may be specified with third party GECA certification.

The proposed carpet products provide circular economy benefits through use of recycled content and consideration of recycling potential at end of product life.

Carpet tiles allow moving of tiles to ensure even wear across the floor, or minimal replacement where required rather than full scale replacement of whole rooms of broadloom carpet. Carpet is generally not recycled often and is a significant component of landfill around the world. Using carpet tiles can minimise the amount of carpet sent to landfill.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



# **Location and Transport**

#### Goals

- To ensure that the built environment is designed to promote the use of walking, cycling and public transport in that order.
- To minimise car dependency
- To promote the use of low emission vehicle technologies and supporting infrastructure

#### Location

Green travel options are dependent on the following factors:

- Location of the site
- Walking distance of facilities
- Cycling facilities paths and parking and End-of-Trip facilities
- Public transport facilities
- Parking facilities for other motorised vehicles

Google Maps and similar apps have a bicycling filter indicating where off road bike trails as well as dedicated bike lanes are located. It is expected that the occupants and visitors will use their preferred app or browser to locate bicycle paths and trails, find public transport options with live updates, and identify preferred walking routs to their destination.

Principal Bicycle Network (PBN) routes for each council area are available via the following link https://www.vicroads.vic.gov.au/traffic-and-road-use/cycling/bicycle-network-planning

### **Key Outcomes**

### **Initiatives**

# Public transport

SDAPP 6.0 Transport

The proposed development is serviced by the following public transport options:

Train – 1.6 kilometres from the sole purpose
 Bus – 130 metres from of hendiling its consideration and review as part of a planning

process under the Planning and Environment Act 1987.

Tram, bus and train timetable Theoropy must seed for rany other purpose ables/Please note that the plan may not be to scale.

A full range of Public Transport Victoria maps can be sourced from <a href="http://ptv.vic.gov.au/getting-around/maps/">http://ptv.vic.gov.au/getting-around/maps/</a>

For more train specific information visit <a href="https://www.metrotrains.com.au">www.metrotrains.com.au</a>

A Travel Smart map showing major local travel interchanges can be obtained for the councils listed on the site:

http://www.transport.vic.gov.au/projects/travelsmart/maps

Public transport offers significant environmental benefits over personal car use, including reduced greenhouse gas emissions and improved air quality.



# Waste Management

### Goals

- To promote waste avoidance, re-use and recycling during the design, construction, and operation stages of development.
- To ensure durability and long-term re-usability of building materials.
- To ensure sufficient space is allocated for future change in waste management needs, including (where possible) composting and green waste facilities.

#### **Initiatives**

## Demolition and construction waste

SDAPP 7.0 Waste Management

Demolition and construction activities will minimise waste.

A minimum of 80% of waste (by mass) from demolition and construction activities will be recycled or reused.

Demolition and construction waste management must:

- Allow sufficient space on site to accommodate skips for different waste and recycling streams;
- Clearly label individual skips and bins, with protections from contamination, rain and wind;
- Organise regular pick-up of skips and bins to avoid overloading or misuse of containers:
- Ensure sub-contractors are fully aware of the site's waste management practices;
- Ensure written contracts with trades include waste minimisation practices; and
- Request suppliers collect/recycle packaging.

Relevant demolition and construction contractors are to provide documentation confirming waste and recycling rates by mass.

Poor waste practices lead to a degradation of water, air and land resources. By setting

minimum recycling requirem จิกโรเออายสานอย่ามาเลยาสาเลยาลงเย่าจางสาเลยายาจาก sole purpose development aims to minim of the first the constal in the second of the constal in the constal i process under the Planning and Environment Act 1987.

The following materials can generally be recycled be used for any other purpose.

- Concrete products (l.e. blocks, roof files, povers etc.)
- Unpainted or untreated timber
- Steel / metal products
- Glass
- Unpainted plasterboard
- **Plastics**
- Carpet underlay
- Carpet tiles
- **Asphalt**
- Cardboard
- Green waste



# Plastering waste

SDAPP 7.0 Waste Management

Plasterboard waste produced during construction will be recycled.

Plastering contractors will be required to supply their own bin and recycle plasterboard offcuts.

Separation of plasterboard from skip bins helps divert this material from landfill and simplifies the recycling process.

# **Urban Ecology**

# **Background**

Urban development has seen the destruction and displacement of plant species and in turn wildlife habitat. With new developments there is an opportunity to redress this that should be taken up.

#### Goals

- To protect and enhance habitat biodiversity of the urban environment
- To encourage the retention of significant trees
- To encourage the planting of indigenous vegetation
- To reduce CO<sub>2</sub> in the atmosphere through increased vegetation
- Reduce the urban heat island effect by greening urban areas, buildings, transport corridors and open spaces with vegetation (cl15.02-1S)
- Encourage retention of existing vegetation and planting of new vegetation as part of development proposals (cl15.02-1S)

## **Key Outcomes**

Communal space provided (m²) 53m²

Vegetation as percentage of total site area (%) 5%.

This copied document is made available for the sole purpose

# Initiatives

of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

## Communal spaces

BESS Urban Ecology 1.1

The proposed development will include a minimum of  $53 \, \text{m}^2$  of communal spaces for building occupants.

Communal open spaces may be indoors or outdoors, and include courtyards with seating, terraces, community rooms etc.

The inclusion of communal spaces promotes social exchange and contributes to a happier and healthier building environment.



# Vegetative cover

BESS Urban Ecology 2.1

The proposed development will include vegetated landscaping.

The landscaping plan will ensure a minimum of 5% of site area is vegetated.

Vegetated areas include garden bends and turf, and exclude hard landscaping elements such as paving and decks, as well as bin areas and storage areas.

Gardens and green areas help to minimise the Urban Head Island (UHI) effect through shading, evapotranspiration and higher solar reflectivity. Vegetation also increases the opportunities for biodiversity on site.

# Management, Innovation, Climate Adaptation and Community Benefit

#### Goals

- To encourage design and innovation in the development, which positively influence the improved life of, and sustainability of, the building.
- To encourage a holistic and integrated design and construction process and ongoing high performance.

#### **Initiatives**

## Meterina

BESS Management 3.2, NCC2022 Volume 1 Part J9D3

The proposed development will include metering of electricity and water.

Utility meters will be installed for all services, allowing identification of electricity and water

consumption.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning

Providing building users with procession derithe Ranning and Environment Act 1987.

facilitates and encourages the convenue to the measures will contribute to deliberate that the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prote be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be it possible in a second of the plane may prove be in a second of

## Sub-metering

Major electrical systems will be sub-metered.

Circuit sub-meters will be provided in the switchboard to allow metering of energy use on individual circuits.

Improved energy efficiency can be achieved by addressing the energy efficiency of major energy uses.





Small, inexpensive sub-meters for key circuits can be fitted to switchboards to allow metering of energy use on individual circuits. The following energy monitor and smart phone App (Powerpal from Reduction Revolution) provide a simple online dashboard for aggregating and reviewing the data.

# Climate adaptation and resilience

SDAPP 9.1 Melbourne's Climate

The proposed development will address climate responsive design principles.

The following risks are to be considered and addressed in design:

- <u>Higher temperature threats</u>
  - o Building fabric of the thermal envelope to be well insulated, with appropriate shading for improved thermal comfort.
  - Location of cooling equipment and air intakes to be considered, aiming to reduce intake of pollutants and limit intake near heat sources. Cooling equipment should be located away from heat sources.
- Extreme wind threats external services are to be installed so as to be protected from windblown vegetation or high wind loads.
- Extreme rainfall events heating/cooling, services, lifts, and energy supply services are to be located to not suffer the effects of heavy rainfall, hail stones or flooding of roof drainage systems or flooding at ground level.
- <u>Weather proofing</u> Windows and doors will be designed to handle water from extreme rainfall events.

Consideration of climate responsive design principles results in more resilient, healthy, efficient and comfortable buildings.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



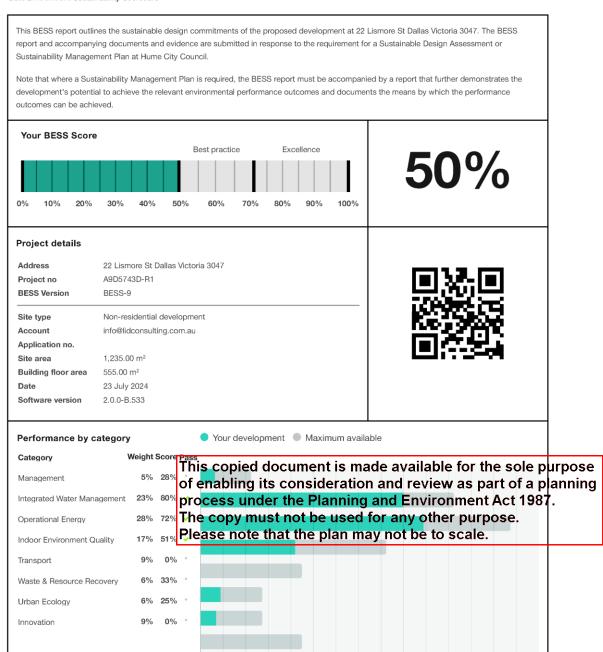
# Appendix 1 - BESS Report

BESS, 22-24 Lismore Street, Dallas VIC, Australia 22 Lismore St, Dallas 3047

# **BESS Report**

Built Environment Sustainability Scorecard





The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 1 of 14



# **Buildings**

Name	Height	Footprint	% of total footprint
Childcare	2	483 m²	100%

# **Dwellings & Non Res Spaces**

## Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Public building				
Childcare	1	555 m²	Childcare	100%
Total	1	555 m²	100%	

# **Supporting information**

#### Floorplans & elevation notes

	conicos	
Management 3.3 Annotation: Sub-meters to be provided to all major common area (list each)	services	-
Integrated Water Location of any stormwater management systems (rainwater tanks Management 2.1 raingardens, buffer strips)	S,	-
Integrated Water Annotation: Water efficient garden details Management 3.1		-
Waste & Resource Location of recycling facilities Recovery 2.2		-
Urban Ecology 1.1 Location and size of communal spaces		-
Urban Ecology 2.1 Location and size of vegetated areas		-

#### Supporting evidence

Credit	Requirement	Response	Status
Management 2.3a	Section J glazing ass	essment	-
Integrated Water Management 2.1	STORM report or MU	This copied document is made availab	ole for the sole purpose
Operational Energy 1.1	Energy Report showing buildings	otienabling its consideration and revie	ew as part of a planning
Operational Energy 3.7	Average lighting pow	relensity and lighting type(s) to be used	or purpose
Indoor Environment Quality 1.4	A short report detailir	Ciensity and lighting type is to be used for any other than the copy must not be used for any other assumptions used and results achieved. Please note that the plan may not be t	o scale.

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 2 of 14



### **Credit summary**

#### Management Overall contribution 4.5% 28% 1.1 Pre-Application Meeting 0% 2.3 Thermal Performance Modelling - Non-Residential 3.2 Metering - Non-Residential N/A Scoped Out Just one tenant 3.3 Metering - Common Areas 100% 4.1 Building Users Guide IWM Overall contribution 22.5% 80% Pass 1.1 Potable Water Use 40% Achieved 2.1 Stormwater Treatment Achieved 100% 3.1 Water Efficient Landscaping 100% 4.1 Building Systems Water Use Scoped Out N/A Energy Overall contribution 27.5% Minimum required 50% 72% Pass 1.1 Thermal Performance Rating - Non-Residential 37% 2.1 Greenhouse Gas Emissions 100% 2.2 Peak Demand 100% 2.6 Electrification 100% 2.7 Energy consumption

3.2 Hot Water

3.7 Internal Lighting - Non-Residential
4.1 Combined Heat and Power (cogeneral Phericopty) must not be used for any other planning and Environment Act 1987.

4.2 Renewable Energy Systems - Solar

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

Please note that the plan may not be to scale ton system in use.

4.4 Renewable Energy Systems - Other

N/A ❖ Scoped Out

No other (non-solar PV) renewable energy is in use.

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 3 of 14

Scoped Out

No solar PV renewable energy is in use.

3.1 Carpark Ventilation



## IEQ Overall contribution 16.5%

1.4 Daylight Access - Non-Residential	66%	✓ Achieved
2.3 Ventilation - Non-Residential	50%	✓ Achieved
3.4 Thermal comfort - Shading - Non-Residential	0%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential	70%	
4.1 Air Quality - Non-Residential	100%	
sport Overall contribution 9.0%	 0%	
	0%	
1.4 Bicycle Parking - Non-Residential	0%	
1.5 Bicycle Parking - Non-Residential Visitor	0%	
1.6 End of Trip Facilities - Non-Residential	0%	Disabled
	Credit 1.4	must be complete first.
2.1 Electric Vehicle Infrastructure	0%	
2.2 Car Share Scheme	0%	
2.3 Motorbikes / Mopeds	0%	
te Overall contribution 5.5%		
	33%	
1.1 Construction Waste - Building Re-Use	0%	

Minimum required 50%

51%

100%

Pass

### Urban Ecology Overall contribution 5.5%

2.2 Operational Waste - Convenience of Recycling

				25%	
	1.1 Communal Spaces			100%	_
	2.1 Vegetation			25%	
	2.2 Green Roofs			t is made available for the sole purp	
	2.3 Green Walls and Facades	or enabling its cor	nsia • Pla	eration and review as part of a plan nning and Environment Act 1987.	ning
	3.2 Food Production - Non-Residential			used for any other purpose.	_
laa	Please note that the plan may not be to scale.				
mm	novation Overall contribution 9.0%				

		0%	
1.1 Innovation		0%	

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 4 of 14



# Credit breakdown

1.1 Pre-Application Meeting		0%	
Score Contribution	This credit contributes 42.9% towards	the category score.	
Criteria	Has an ESD professional been engage	d to provide sustainability advice from sche	matic
	design to construction? AND Has the E	SD professional been involved in a pre-	
	application meeting with Council?		
Question	Criteria Achieved ?		
Project	No		
2.3 Thermal Performance Modellin	ng - Non-Residential	50%	
Score Contribution	This credit contributes 28.6% towards	the category score.	
Criteria	Has a preliminary facade assessment b	peen undertaken in accordance with NCC2	)22
	Section J4D6?		
Question	Criteria Achieved ?		
Public building	Yes		
Criteria	Has preliminary modelling been undert	aken in accordance with either NCC2022	
	Section J (Energy Efficiency), NABERS	or Green Star?	
Question	Criteria Achieved ?		
Public building	No		
3.2 Metering - Non-Residential		N/A ♦ Scope	d Out
This credit was scoped out	Just one tenant		
3.3 Metering - Common Areas		100%	
Score Contribution	This credit contributes 14.3% towards	the category score.	
Criteria	Have all major common area services a	peen separately submetered?	
Question	Criteria Achieved ?		
Public building	Yes		
4.1 Building Users Guide		0%	
Score Contribution	This credit contributes 14.3% towards	5 ,	
Criteria	This copied document is many will be produced to the produced	ade available for the sole	our
	of enabling its consideratio		
Froiect	process under the Planning The copy must not be used		i7.

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 5 of 14



# Integrated Water Management Overall contribution 18% Minimum required 0%

			<u> </u>	
	Project profile			
	Do you have a reticulated third pip recycling system?:	e or an on-site water	No	
	Are you installing a swimming pool?:		No	
	Stormwater profile			
Ī	Which stormwater modelling softw	vare are you using?:	Melbourne Water STORM tool	
	STORM score achieved:		100	
	Flow:		-	
	Total Suspended Solids:		-	
	Total Phosphorus:		-	
	Total Nitrogen:		-	
	Recycled third pipe / on site wat	er recycling system profile		
	Recycled Profile Name:		Third pipe	
	Irrigation area connected to reticul	ated third pipe or an on-site	-	
	water recycling system only (i.e. no	ot also connected to		
-	rainwater system): Water Efficient Garden?:			
-	Other external water demand conr	acatad to ratioulated third		
	pipe or an on-site water recycling			
	connected to rainwater system):			
	Rainwater tank profile			
Ī	What is the total roof area connect Rainwater Tank 1	ted to the rainwater tank?:	326 m <sup>2</sup>	
Ī	Tank Size: Rainwater Tank 1		6,000 Litres	
	Irrigation area connected to tank:	Rainwater Tank 1	-	
	Is connected irrigation area a water Rainwater Tank 1	er efficient garden?:	No	
	Other external water demand conn	nected to tank?: Rainwater	-	
_	Tank 1			
	Fixtures, fittings & connections	orofile		
	Building:		Childcare	
	Showerhead:	This copied docu	เพื่อที่ <sup>พรเร</sup> ็กลิดียาส่งวิลีเลือโย for the sole purpo	se
	Bath:	of enabling its co	onsideration and review as part of a plann	ing
	Kitchen Taps:	process under th	ne Planning and Environment Act 1987.	Ū
	Bathroom Taps:	The copy must n	ot ທີ່ຂີ່ໃນຮັບດີ ໃຕ້ກ່າງany other purpose.	
	Dishwashers:		the plan may not be to scale.	
	WC:		>= 4 Star WELS rating	
	Urinals:		Scope out	
	Washing Machine Water Efficiency	r.	Occupant to Install	
	Which non-potable water source is connected to?:	s the dwelling/space	Rainwater Tank 1	
	Non-potable water source connec	ted to Toilets:	Yes	

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 6 of 14



Non-potable water source connecte	ed to Hot Water System: No		
1.1 Potable Water Use	40% ✓ Achieved		
Score Contribution	This credit contributes 33.3% towards the category score.		
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances,		
	rainwater use and recycled water use? To achieve points in this credit there must be		
	>25% potable water reduction.		
Output	Reference		
Project	2482 kL		
Output	Proposed (excluding rainwater and recycled water use)		
Project	2011 kL		
Output	Proposed (including rainwater and recycled water use)		
Project	1850 kL		
Output	% Reduction in Potable Water Consumption		
Project	25 %		
Output	% of connected demand met by rainwater		
Project	48 %		
Output	How often does the tank overflow?		
Project	Never / Rarely		
Output	Opportunity for additional rainwater connection		
Project	1086 kL		
2.1 Stormwater Treatment	100% ✓ Achieved		
Score Contribution	This credit contributes 60% towards the category score.		
Criteria	Has best practice stormwater management been demonstrated?		
Output	Min STORM Score		
Project	100		
Output	STORM Score		
Project	100		
3.1 Water Efficient Landscaping	100%		
Score Contribution	This credit contributes 6.7% towards the category score		
	This copied document is made available for the sole purp		
	of enabling its consideration and review as part of a plan		
Dunin at	process under the Planning and Environment Act 1987.		
4.1 Building Systems Water Use	The copy must not be used for any other purpose Scoped Out		

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 7 of 14



## Operational Energy Overall contribution 20% Minimum required 50%

	Use the BESS Deem to Satisfy (Dts spaces?:	S) method for Non-residential	Yes	
	Project Energy Profile			
	Are you installing any renewable er solar photovoltaic)?:	nergy system(s) (other than	No	
	Energy Supply:		All-electric	
	Non-residential Deemed-to-Satis	sfy profile		
	Do all exposed floors and ceilings demonstrate meeting the required (total R-value upwards and downwards are	NCC2022 insulation levels	Yes	
	Does all wall and glazing demonstr NCC2022 facade calculator (or bet allowance)?:		Yes	
	Are heating and cooling systems we efficient equivalent capacity unit as Performance (CoP) & Energy Efficienthan 85% of the CoP & EER of the capacity unit available?:	vailable, or Coefficient of ency Ratios (EER) not less	Yes	
	Are water heating systems within or 85% or better than the most effi- unit?:		Yes	
	Non-residential buildings profile			
	Heating, Cooling & Comfort Ventila Reference fabric & services:	tion - Electricity		
	Heating Casling & Comfort Ventile	Non-Electricity, assessed	-	
	Heating, Cooling & Comfort Ventila fabric and reference services:	ition - Electricity - proposed		
ŀ	<u> </u>			
	fabric and reference services:  Heating, Cooling & Comfort Ventila	tion - Electricity	-	
	fabric and reference services: Heating, Cooling & Comfort Ventila Proposed fabric & services:	tion - Electricity	- -	
	fabric and reference services: Heating, Cooling & Comfort Ventila Proposed fabric & services: Heating - Wood - reference fabric a	and services:	-	
	fabric and reference services: Heating, Cooling & Comfort Ventila Proposed fabric & services: Heating - Wood - reference fabric & Heating - Wood - proposed fabric &	and services: and reference services: and services:	-	
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric a Heating - Wood - proposed fabric a Heating - Wood - proposed fabric a	and services: and reference services: and services:		
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric a Heating - Wood - proposed fabric a Heating - Wood - proposed fabric a Hot Water - Electricity - References Hot Water - Electricity - Proposed: Lighting - Reference:	and services: and reference services: and services: This copied docu	- - - - - - ment is made available for the sole purpos	
	fabric and reference services: Heating, Cooling & Comfort Ventila Proposed fabric & services: Heating - Wood - reference fabric a Heating - Wood - proposed fabric a Heating - Wood - proposed fabric a Heating - Wood - proposed fabric a Hot Water - Electricity - Reference: Hot Water - Electricity - Proposed; Lighting - Reference: Lighting - Proposed:	and services: and reference services: and services: This copied docu of enabling its co		
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric & Heating - Wood - proposed fabric & Heating - Wood - proposed fabric & Hot Water - Electricity - Reference:  Hot Water - Electricity - Proposed:  Lighting - Reference:  Lighting - Proposed:  Peak Thermal Cooling Load - Reference	and services: and reference services: and services: This copied docu of enabling its co	ment is made available for the sole purposensideration and review as part of a plannie Planning and Environment Act 1987.	
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric & Heating - Wood - proposed fabric & Heating - Wood - proposed fabric & Hot Water - Electricity - Reference:  Hot Water - Electricity - Proposed:  Lighting - Reference:  Lighting - Proposed:  Peak Thermal Cooling Load - Reference Peak Thermal Cooling Load - Proposed:	and services: and reference services: and services: This copied docu of enabling its co process under th	ment is made available for the sole purposensideration and review as part of a plannie Planning and Environment Act 1987.	
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric & Heating - Wood - proposed fabric & Heating - Wood - proposed fabric & Hot Water - Electricity - Reference:  Hot Water - Electricity - Proposed:  Lighting - Reference:  Lighting - Proposed:  Peak Thermal Cooling Load - Reference Peak Thermal Cooling Load - Proposed:	and services: and reference services: and services: This copied docu of enabling its co process under th	ment is made available for the sole purposensideration and review as part of a plannie Planning and Environment Act 1987.	
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric & Heating - Wood - proposed fabric & Heating - Wood - proposed fabric & Hot Water - Electricity - Reference:  Hot Water - Electricity - Proposed:  Lighting - Reference:  Lighting - Proposed:  Peak Thermal Cooling Load - Reference Peak Thermal Cooling Load - Proposed:	This copied docu of enabling its co process under the The copy must no	ment is made available for the sole purposensideration and review as part of a plannie Planning and Environment Act 1987.	
	fabric and reference services:  Heating, Cooling & Comfort Ventila Proposed fabric & services:  Heating - Wood - reference fabric a Heating - Wood - proposed fabric a Heating - Wood - proposed fabric a Hot Water - Electricity - References Hot Water - Electricity - Proposed: Lighting - Reference: Lighting - Proposed: Peak Thermal Cooling Load - Reference Thermal Cooling Load - Proposed: Thermal Performance Rating	This copied docu of enabling its co process under the This copy must no Please dock This credit contributes	ment is made available for the sole purposensideration and review as part of a plannie Planning and Environment Act 1987. of be used for any other purpose. the plan may not be to scale.	

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 8 of 14



BESS, 22-24 Lismore Street, Dallas VIC, Australia 22 Lismore St, Dallas 3047

2.1 Greenhouse Gas Emissions	100%
Score Contribution	This credit contributes 9.1% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
2.2 Peak Demand	100%
Score Contribution	This credit contributes 4.5% towards the category score.
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?
2.6 Electrification	100%
Score Contribution	This credit contributes 13.6% towards the category score.
Criteria	Is the development all-electric?
Question	Criteria Achieved?
Project	Yes
2.7 Energy consumption	100%
Score Contribution	This credit contributes 18.2% towards the category score.
Criteria	What is the % reduction in annual energy consumption against the benchmark?
3.1 Carpark Ventilation	N/A Scoped Out
This credit was scoped out	No enclosed carpark
3.2 Hot Water	100%
Score Contribution	This credit contributes 4.5% towards the category score.
Score Contribution Criteria	This credit contributes 4.5% towards the category score.  What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?
	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?
Criteria  3.7 Internal Lighting - Non-Resid	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  lential 100%
Criteria  3.7 Internal Lighting - Non-Resid	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  lential 100%  This credit contributes 9.1% towards the category score.
Criteria  3.7 Internal Lighting - Non-Resid	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the
Criteria  3.7 Internal Lighting - Non-Resid Score Contribution Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  In this credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?
Criteria  3.7 Internal Lighting - Non-Resident Score Contribution Criteria  Question	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes
Criteria  3.7 Internal Lighting - Non-Resid Score Contribution Criteria  Question Public building	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes
Criteria  3.7 Internal Lighting - Non-Resid Score Contribution Criteria  Question Public building  4.1 Combined Heat and Power (c	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  lential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes  cogeneration / N/A Scoped Out
3.7 Internal Lighting - Non-Resident Score Contribution Criteria  Question Public building 4.1 Combined Heat and Power (Contrigeneration)	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes  cogeneration / N/A Scoped Out  This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Ace1987 led
Criteria  3.7 Internal Lighting - Non-Resid Score Contribution Criteria  Question Public building 4.1 Combined Heat and Power (or trigeneration) This credit was scoped out	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes  cogeneration / N/A Scoped Out  This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Ace1987 led  The copy must not be used for any other purpose.
Criteria  3.7 Internal Lighting - Non-Resident Score Contribution  Criteria  Question  Public building  4.1 Combined Heat and Power (Contribution)  This credit was scoped out  4.2 Renewable Energy Systems	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?  ential 100%  This credit contributes 9.1% towards the category score.  Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?  Criteria Achieved ?  Yes  cogeneration / N/A Scoped Out  This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Ace1987 led

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 9 of 14



# Indoor Environment Quality Overall contribution 8% Minimum required 50%

1.4 Daylight Access - Non-Re	esidential	66%	✓ Achieved
Score Contribution	This credit contributes 35.3% towards t	he category score.	
Criteria	What % of the nominated floor area has	at least 2% daylight factor?	
Question	Percentage Achieved?		
Public building	66 %		
2.3 Ventilation - Non-Residen	tial	50%	✓ Achieved
Score Contribution	This credit contributes 35.3% towards to	he category score.	
Criteria	What % of the regular use areas are effe	ectively naturally ventilated?	
Question	Percentage Achieved?		
Public building	-		
Criteria	What increase in outdoor air is available required by AS 1668.2:2012?	to regular use areas compared	I to the minimum
Question	Percentage Achieved?		
Public building	50 %		
Criteria	What CO2 concentrations are the ventila	ation systems designed to achi	eve, to monitor
	and to maintain?		
Question	Value		
Public building	800 ppm		
3.4 Thermal comfort - Shadin	g - Non-Residential	0%	
Score Contribution	This credit contributes 17.6% towards t	he category score.	
Criteria	What percentage of east, north and wes	st glazing to regular use areas is	effectively
	shaded?		
Question	Percentage Achieved?		
Public building	-		
3.5 Thermal Comfort - Ceiling	g Fans - Non-Residential	70%	
Score Contribution	This credit contributes 5.9% towards the	e category score.	
Criteria	What percentage of regular use areas in	tenancies have ceiling fans?	
Question	Percentage Achieved?		
Public building	This copied document is ma		
4.1 Air Quality - Non-Residen	<sub>tial</sub> of enabling its consideration		
Score Contribution	process under the Planning The This credit contributes 5.9% towards in The copy must not be used	and Environment	Act 1987.
Criteria	Please note that the planema	ny motabie to scale:	ollutant
Question	Criteria Achieved ?		
Public building	Yes		
Criteria	Does all carpet meet the maximum total	indoor pollutant emission limit	s?
Question	Criteria Achieved ?		
Public building	Yes		

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 10 of 14



Criteria	Does all engineered wood meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Public building	Yes

# Transport Overall contribution 0%

1.4 Bicycle Parking - Non-Resi	dential	0%	
Score Contribution	This credit contributes 22.2% towards the	e category score.	
Criteria	Have the planning scheme requirements for	or employee bicycle parking been exceeded	
	by at least 50% (or a minimum of 2 where	there is no planning scheme requirement)?	
Question	Criteria Achieved ?		
Public building	No		
Question	Bicycle Spaces Provided ?		
Public building	-		
1.5 Bicycle Parking - Non-Residential Visitor 0%			
Score Contribution	This credit contributes 11.1% towards the	e category score.	
Criteria	Have the planning scheme requirements for	or visitor bicycle parking been exceeded by	
	at least 50% (or a minimum of 1 where the	ere is no planning scheme requirement)?	
Question	Criteria Achieved ?		
Public building	No		
Question	Bicycle Spaces Provided ?		
Public building	-		
1.6 End of Trip Facilities - Non-Residential 0%		0% <b>⊘</b> Disabled	
This credit is disabled	Credit 1.4 must be complete first.		
2.1 Electric Vehicle Infrastructo	ure	0%	
Score Contribution	This credit contributes 22.2% towards the	e category score.	
Criteria	Are facilities provided for the charging of e	electric vehicles?	
Question	Criteria Achieved ?		
Project	No		
2.2 Car Share Scheme		0%	
Score Contribution	This <sup>-</sup> copied-document-is-mad	le∗available for the sole purpose	
Criteria	of enabling its consideration	and review as part of a planning	
Question	process under the Planning a	and Environment Act 1987.	
The copy must not be used for any other purpose.		or any other purpose.	
2.3 Motorbikes / Mopeds	Please note that the plan may	y not be to scale.	
Score Contribution	This credit contributes 22.2% towards the	e category score.	
Criteria	Are a minimum of 5% of vehicle parking s	spaces designed and labelled for motorbikes	
	(must be at least 5 motorbike spaces)?	-	
	(made be at least o motorbine opaces).		
Question	Criteria Achieved ?		

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 11 of 14



### Waste & Resource Recovery Overall contribution 2%

1.1 Construction Waste - Bui	Iding Re-Use	0%	
Score Contribution	This credit contributes 33.3% towards the	e category score.	
Criteria	If the development is on a site that has be the existing building been re-used?	een previously developed, has at least 30% of	
Question	Criteria Achieved ?		
Project	No		
2.1 Operational Waste - Food	l & Garden Waste	0%	
Score Contribution	This credit contributes 33.3% towards the	e category score.	
Criteria	Are facilities provided for on-site manager	ment of food and garden waste?	
Question	Criteria Achieved ?		
Project	No		
2.2 Operational Waste - Conv	venience of Recycling	100%	
Score Contribution	This credit contributes 33.3% towards the	e category score.	
Criteria	Are the recycling facilities at least as conv waste?	venient for occupants as facilities for general	
Question	Criteria Achieved ?		
Project	Yes		

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au



# Urban Ecology Overall contribution 1%

1.1 Communal Spaces	100%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Is there at least the following amount of common space measured in square meters: *
	1m² for each of the first 50 occupants * Additional 0.5m² for each occupant between 51
	and 250 * Additional 0.25m² for each occupant above 251?
Question	Common space provided
Public building	53.0 m <sup>2</sup>
Output	Minimum Common Space Required
Public building	52 m²
2.1 Vegetation	25%
Score Contribution	This credit contributes 50% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the
	total site area?
Question	Percentage Achieved ?
Project	6 %
2.2 Green Roofs	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No
2.3 Green Walls and Facades	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No
3.2 Food Production - Non-Re	esidential 0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	This⊧copied document is made available for the sole purpose
Public building	of enabling its consideration and review as part of a planning
Output	process under the Planning and Environment Act 1987.
Public building	The copy must not be used for any other purpose.
	Please note that the plan may not be to scale.

# Innovation Overall contribution 0%

	1.1 Innovation	0%
	Score Contribution	This credit contributes 100% towards the category score.
	Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?

The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 13 of 14



#### Disclaimer

The Built Environment Sustainability Scorecard (BESS) has been provided for the purpose of information and communication. While we make every effort to ensure that material is accurate and up to date (except where denoted as 'archival'), this material does in no way constitute the provision of professional or specific advice. You should seek appropriate, independent, professional advice before acting on any of the areas covered by BESS.

The Municipal Association of Victoria (MAV) and CASBE (Council Alliance for a Sustainable Built Environment) member councils do not guarantee, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of BESS, any material contained on this website or any linked sites

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

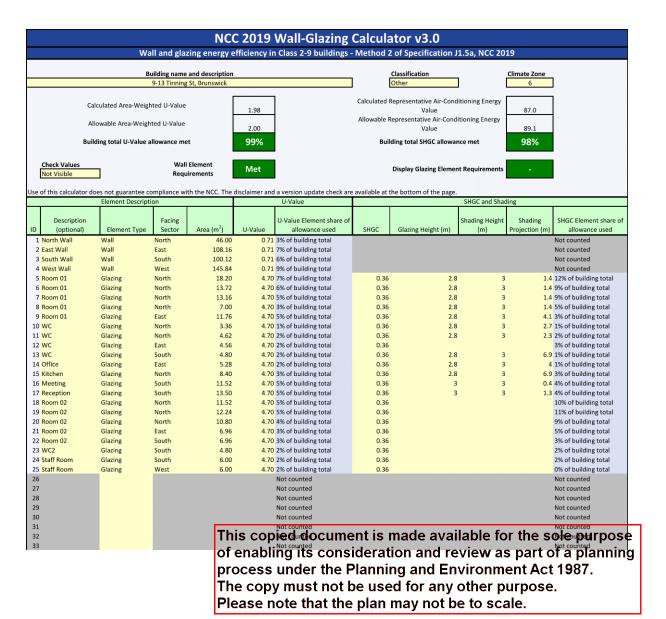
The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE). For more details see www.bess.net.au

Page 14 of 14



# Appendix 2 - Preliminary Energy Assessment

Non-residential Preliminary Wall-glazing Assessment





### Appendix 3 - Daylight Assessment

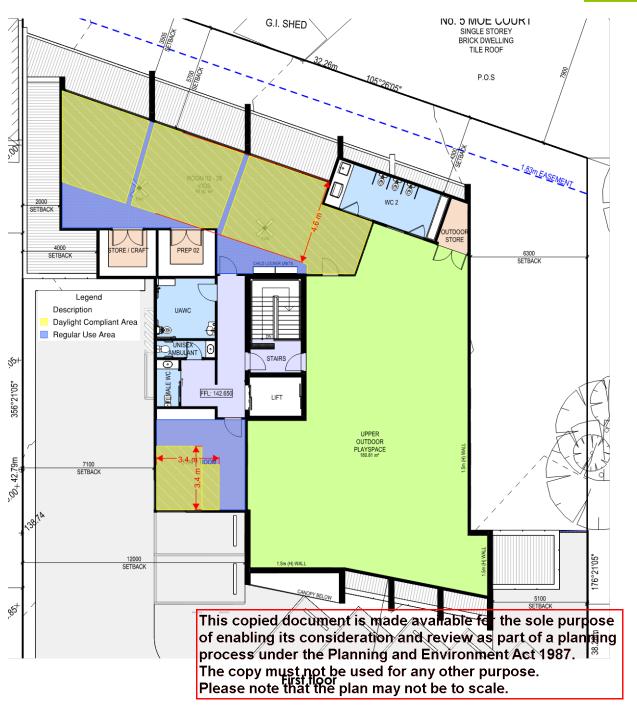
The following details the BESS daylight deemed to satisfy compliance outcomes for the development (Per BESS tool notes IEQ 1.4)

Level	Space	Nominated area (m²)	Compliant area (m²)	Compliant area
OF	Office	8.4	0.0	0.0%
OF	Reception	8.5	2.9	34.1%
OF	Meeting	16.8	15.3	91.1%
OF	Room 01	121.3	78.4	64.6%
1F	Room 02	90.2	72.5	80.4%
1F	Staff	23.2	10.7	46.1%
T	otal	266.4	176.5	67.0%



© Low Impact Development Consulting







### Appendix 4 - Integrated Water Management

STORM Report

### Melbourne STORM Rating Report

TransactionID: 0

Municipality: HUME

Rainfall Station: HUME

Address: 22-24 Lismore St

Dallas

VIC 3047

Assessor: LID Consulting
Development Type: Other
Allotment Site (m2): 1,235.00
STORM Rating %: 100

Description Impervious Area Treatment Type Treatment Occupants / Treatment % Tank Water (m2)Area/Volume Number Of Supply Reliability (%) (m2 or L) Bedrooms Roof to RWT 326.00 Rainwater Tank 6,000.00 30 156.80 77.00 Outdoor play 187.00 None 0.00 0.00 0.00

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

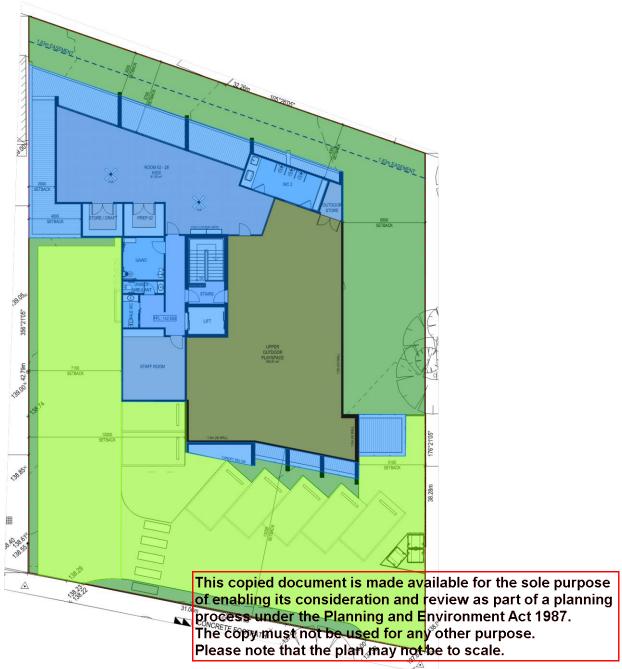
Please note that the plan may not be to scale.

Date Generated: 05-Aug-2024 Program Version: 1.0.0

Note: The number of occupants for non-residential developments or components, occupancy rates are taken from the InSite Water tool which is based on Building Code of Australia section D1.13. Occupancy rates (determined from areas).



#### Stormwater catchment plan



#### Legend

Description	Quantity	Unit
Outdoor play untreated	187.0	sq m
Permeable Paving	448.0	sq m
Pervious	274.0	sq m
Roof to RWT	326.0	sq m
Site area	1,235.0	sa m



#### WSUD system maintenance plan

#### Rainwater Tanks

The following maintenance schedule is to be used as a guide for rainwater tank maintenance. It is based on average maintenance requirements for rainwater tanks in Victoria, and timings may need to be adjusted to suit specific site assets. Regular inspections should be undertaken every three months. Inspection and maintenance of all rainwater tanks will be the responsibility of the building owner/manager.

Refer to the Melbourne Water WSUD Maintenance Guidelines for further details.

Item	What to check for	Action	Frequency
Tank inlet	Tank inlet is not blocked by accumulated debris	Physically remove debris build up	1-3 months
First flush device and filters	First flush device and filters are not blocked, and flow is not limited by litter or sediment accumulation	Physically remove litter and sediment from first flush device, or if it contains a flush-out valve, use water to remove sediment.	1-3 months
Tank outlet	Tank outlet is not restricted by sediment.	Flush tank as required.	1-3 months
Mosquito screens	Mosquito screens are not torn or loose	Replace mosquito screens if necessary. Put screens back carefully, ensuring they are tightly refitted.	1-3 months
Pumps	Water around pump equipment. Water pressure.	Replace seals where leaks are noted. Clean pumps as required to maintain pump pressure. Refer to pump manufacturer's maintenance requirements.	1-3 months
Roof and gutters	Accumulated debris in gutters. Discolouration of tank	Physically remove accumulated debris, including leaf and other plant material. More regular	3-6 months
	of enabling its process under	ocทศตร์สาราหลงตามสมัยสมัยสมัยสมัย consideratioการกษาตัวสมัยสมัยสมัยสมัย the Blanning and Environment A	of a planning ct 1987.
Overhanging trees		t mounte asset drog anny mether purpos a to the lipitation argunot begins trate. build up and chance of blockages in tank network.	e3-6 months
Tank	Tank defects or damage. Sediment and sludge build up in tank, or sulphide/rotten egg odours.	Replace defect or damaged tank as necessary. Remove accumulated sediment and sludge from tank. Clean tank if required.	2-3 years



#### Permeable pavement/concrete

The following maintenance schedule is to be used as a guide for permeable pavement/concrete maintenance. It is based on average maintenance requirements for permeable pavement/concrete in Victoria, and timings may need to be adjusted to suit specific site assets. Regular inspections should be undertaken every three months. Inspection and maintenance of all permeable pavement will be the responsibility of the building owner/manager.

Refer to the Melbourne Water WSUD Maintenance Guidelines for further details1.

Item	What to check for	Action	Frequency
Permeability	Pavement area is free	Sweep or wet vacuum the	Storm
	draining (i.e no clogging	surface of the pavement to	events
	of the pavement	remove clogging material.	3 months
	surface).		
		Modular permeable	
	Clogging is generally	<u>pavements:</u>	
	evident by water	Note: check that infill material	
	ponding on the surface	between pavers is intact	
	of the permeable	following wet vacuuming.	
	paving more than 2	Replace infill material as	
	hours after rainfall.	required.	
		If water ponding persists -	
		remove pavers and check that	
		the sub-layers (base material	
		and bedding material) and	
		underdrain are free draining. If	
		necessary, replace the sub-layer	
		material or flush the underdrain	
		system using low pressure water	
		to remove accumulated	
		sediment.	
		Permanent permeable	
		oc <del>ழ்ஸ்ளோந்</del> ள்ade available for the	
		change and and exists has bar	
		the Planning and Environing and A	
		t notobe insetdiforcemy lotthelingurpos	se.
	Please note th	atritoequiain imay iment obecto scale. replaced.	
Pavement	No uneven paver	The surface of payment may	Annually
surface	surface (i.e. pavement	need to reset.	,
551.466			
	surrace littina ana		
	surface lifting and ruttina).	Modular permeable	
	rutting).	Modular permeable pavements:	
	<u> </u>	Modular permeable pavements: May require removing the	

<sup>&</sup>lt;sup>1</sup> WSUD maintenance guidelines: Inspection and maintenance activities, Melbourne Water Corporation, 2013, <a href="http://www.melbournewater.com.au/Planning-and-building/Forms-guidelines-and-standard-drawings/Documents/WSUD-Maintenance-Inspection-and-maintenance-activity-guidelines.pdf">http://www.melbournewater.com.au/Planning-and-building/Forms-guidelines-and-standard-drawings/Documents/WSUD-Maintenance-Inspection-and-maintenance-activity-guidelines.pdf</a>



Item	What to check for	Action	Frequency
	look for cracks and holes.	layers (base material and bedding material).	
		Permanent permeable pavements: The pavement surface or sub- layers (base material and bedding material) may need to be replaced. Rutting or vehicular damage to pavement surface may require management of vehicles accessing the site.	
Infill material (modular permeable pavements	Infill material is present between pavers. No scour occurring.	Replace infill material. Re-sow turf if required.	3 months
Weeds (modular permeable pavements	Less than 10% of infill surface area (where present) covered by weeds.	Remove weeds from infill surface area.	3 months

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.



#### Stormwater management during construction

Stormwater management Planning Scheme clauses 19.03-3S and 53.18 (specifically 53.18-06) require measures in place to ensure the protection of drainage infrastructure and receiving waterways during construction.

The following is intended to inform the site management plan in matters relating to stormwater management during construction. Relevant principles per the EPA Civil Construction, Building and Demolition Guide<sup>2</sup>, and measures as per Urban Stormwater Best Practice Environmental Management Guidelines Section 6.3 are shown below.

The site management plan should restrict runoff to adjoining properties and ensure minimal earth disturbance occurs during construction. Additionally, building waste, dangerous chemicals and food waste must be managed to prevent damage to flora and fauna, or build up or blockage in drains and nearby creeks.

Item	Potential issues	Control Measure
Fences	Porous fences allow stormwater runoff to carry sediment across the site and discharge into the stormwater network.	Mesh fabric and silt fences to be installed on fences where site includes slopes greater than 1:20. Hay bales may also be suitable for larger sites.
Pit inlets	Without sediment filters, pit inlets allow sediment to enter the stormwater network causing sediment build-up downstream.	Sediment traps or drain filters should be installed on all pit inlets.
Downpipes	Localised flooding due to lack of site drainage.	Temporary downpipes to be installed as soon as roofing is installed to minimise overland flow across the site (see plastic tube roll image below). These should be connected to the rainwater tank where possible, or alternatively the stormwater
	This copied doc	ument is made available for the sole purpose
Vehicle traffic on site	subject to dist <b>Briggress under. t</b> <b>The copy must r</b>	onsiderating and riewiew rash past of a plann in healthanning and kny it one out Aste 1987 erial. 1968 be used for any whether and the classically remove the classically remove mud from tyres of vehicles prior to leaving
		the site.

© Low Impact Development Consulting

<sup>&</sup>lt;sup>2</sup> EPA Civil Construction, Building and Demolition Guide, Publication 1834 (2020) <a href="https://www.epa.vic.gov.au/about-epa/publications/1834">https://www.epa.vic.gov.au/about-epa/publications/1834</a>



Item	Potential issues	Control Measure
Mounded earth	Unsecured mounds create significant issues with sedimentation after rainfall.	Use erosion control blankets for mounded earth. Ensure correct installation, and incorporate secondary measures such as silt fences on steep sites.
Bins	Where suitable bins are not provided, litter can be washed from the site.	Ensure appropriate bins are provided for construction workers and staff. Ensure bins for lightweight food packaging and construction waste have lids to stop waste blowing away.
Waste material	Pollution of stormwater can occur where appropriate disposal methods for waste materials are not established on site.	Provide separate bins for paints and solvents to allow safe removal and disposal at accredited locations.  Ensure all staff are aware of correct disposal methods.
Stockpiles	Incorrect stockpiling can lead to stormwater contamination, and site pollution.	Locate stockpiles away from drainage paths, and construct stockpiles with gentle slopes (max 1:2).

In addition, the contractor will be required to:

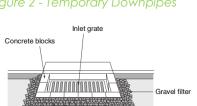
- **Identify and document**, prior to construction commencing, where these measures will be installed, and how erosion and loose waste will be managed.
- Install tarps on site waste bins every night.
- Avoid overfilling vehicles or cover all soil loads being taken offsite.
- **Sweep up the site** every day when works occur on site to ensure loose waste does not blow around the site and into the surrounding streets.
- Ensure erosion and sediment control of the solve purpose maintenance measures renaining the constitue and review as parts of a planning topping up gravel on the copy must not be used for any other purpose.

  Please note that the plan may not be to scale.





Figure 2 - Temporary Downpipes



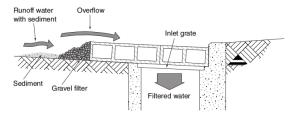


Figure 4 - Block and Gravel Filter (CSIRO)



Figure 3 - Sediment Trap



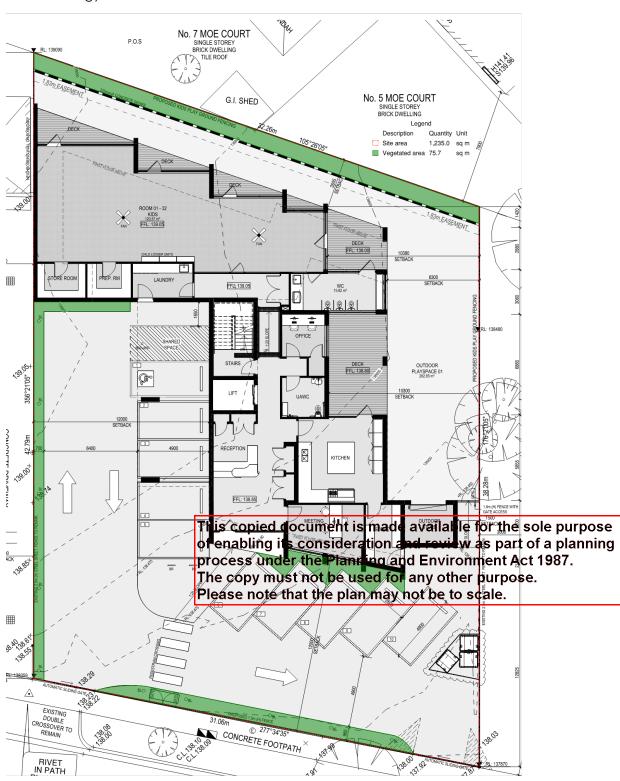
Figure 5 - Sediment Trap

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.



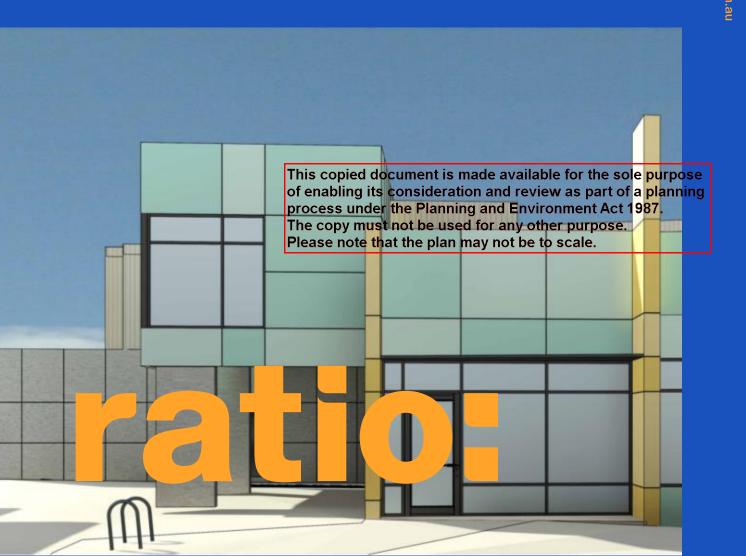
### Appendix 5 - Vegetated Landscape Areas

The following is provided as demonstration of vegetated landscape areas considered in BESS Urban Ecology 2.1.



# Transport Impact Assessment Report

22-24 Lismore Street, Dallas



Project 22-24 Lismore Street, Dallas **Prepared for** Selimiye Foundation

Our reference 21193T-REP01-D01

Directory path

 $https://ratioconsultants1.sharepoint.com/sites/21193T/Shared\ Documents/10\ Letters\ and\ Reports/21193T-REP01-F01.docx$ 

Version	Date	Issue	Prepared by	Approved by
F01	07/08/2024	Final	S. Lewis	C. Greenland

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

#### Ratio Consultants Pty Ltd

This work is copyright. Apart from any use as permitted under Copyright Act 1968, no part may be reproduced without written permission of Ratio Consultants Pty Ltd.

Disclaimer: neither Ratio Consultants Pty Ltd nor any member or employee of Ratio Consultants Pty Ltd takes responsibility in anyway whatsoever to any person or organisation (other than that for which this report is being prepared) in respect of the information set out in this report, including any errors or omissions therein. Ratio Consultants Pty Ltd is not liable for errors in plans, specifications, documentation or other advice not prepared or designed by Ratio Consultants Pty Ltd.

# **Table of Contents**

	Section		Page No.
1.	Introduction		5
1.1.	Introduction		5
1.2.	Purpose & Structure of this F	Report	5
1.3.	References		6
2.	Existing Conditions		7
2.1.	Location and Environment		7
2.2.	Road Network		8
2.3.	Surrounding Intersections		10
2.4.	Existing Traffic Volumes		10
2.5.	Existing On-Street Car Parki	ng Characteristics	10
2.6.	Sustainable Transport		11
2.7.	Crash Analysis		12
3.	The Proposal		13
3.1.	General		13
4.	Car Parking Assessment		15
4.1.	Clause 52.06 Planning Sche	me Assessment	15
4.2.	Car Parking Demand Assess	ment	15
4.3.	Adequacy of the Car Parking	g Provision	17
4.4.	DDA Car Parking		17
5.	Access and Car Parking Layo	out	18
5.1.	Clause 52.06 Design Standa		18
5.2.	Swept Path Assessment	This copied document is made available for the sole purion of enabling its consideration and review as part of a pla	inning <sup>2</sup> 0
5.3.	Summary	process under the Planning and Environment Act 1987. The copy must not be used for any other purpose.	20
6.	Bicycle Parking	Please note that the plan may not be to scale.	21
6.1.	Clause 52.34 – Bicycle Facil	ities	21
6.2.	Bicycle Parking Layout		21
7.	Loading Arrangements		22
7.1.	Statutory Requirement		
7.2.	Loading and Waste Arrange	ments	22
7.3.	Adequacy of Loading and Waste Collection 2		

8. Traffic Assessment		23
8.1. Traffic Generation		23
8.2. Traffic Distribution and Impa	ct	23
9. Conclusion		24
Appendices		
Appendix A - Development Plans		
Appendix B - Traffic Survey Results	3	
Appendix C - Swept Path Assessm	ent	
Table of Figures		
Figure 1.1: Site Plan		5
Figure 2.1: Site Location		7
Figure 2.2: Planning Scheme Zones		8
Figure 2.3: Aerial view of the Site ar	nd Surrounds	8
Figure 2.4: Lismore Street Looking \	West	9
Figure 2.5: Lismore Street Looking I	East	9
Figure 2.6: On-Street Car Parking S	urvey Area	11
Figure 3.1: Proposed Site Layout		14
Figure 6.1: On-Site Bicycle Parking	Spaces	21
Table of Tables  Table 2.1: Automatic Tube Count Su	ımmary – Lismore Street	10
Table 2.2: Aerial Imagery Survey Re	sThis copied document is made available for the sole p	urpose 11
Table 2.3: Summary of Crashes in the	of enabling its consideration and review as part of a p process under the Patrining and Environment Act 198	<del>lanning</del> 7.
Table 3.1: Development Summary	The copy must not be used for any other purpose. Please note that the plan may not be to scale.	13
Table 4.1: Clause 52.06 Planning Sc	. ,	15
Table 4.2: BCA Car Parking Require	ments	17
Table 5.1: Design Standard 1 Assess	ment	18
Table 5.2: Design Standard 2 Asses	sment	19

23

Table 8.1: Childcare Centre Traffic Generation

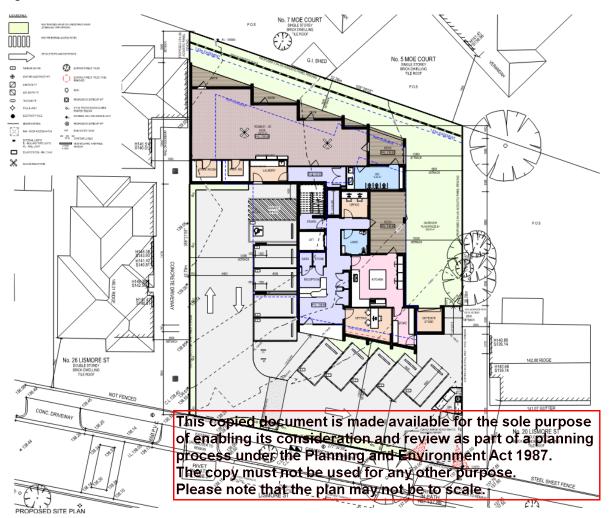
## 1. Introduction

#### 1.1. Background and Introduction

A Planning Permit is currently being sought for a proposed 60-place childcare centre development on land located at 22-24 Lismore Street in Dallas.

For reference, an excerpt of the site plan is provided in Figure 1.1, with a copy of the development plans are provided in Appendix A of this report.

Figure 1.1: Site Plan



(Source: KLM Spatial)

Ratio Consultants has been commissioned by KLM Spatial (the Permit Applicant) to undertake a Transport Impact Assessment of the proposed development at 22-24 Lismore Street in Dallas.

#### 1.2. Purpose & Structure of this Report

This report sets out an assessment of the anticipated parking, traffic and transport implications of the proposed development, including consideration of the:

1. Existing traffic conditions surrounding the site

- 2. Parking demand likely to be generated by the proposed development
- 3. Suitability of the proposed parking in terms of supply and layout
- 4. Traffic generation characteristics of the proposed development
- 5. Proposed access arrangements for the site
- 6. Transport impact of the development proposal on the surrounding road network.

#### 1.3. References

In preparing this report, reference has been made to the following:

- Plans for the proposed development prepared by KLM Spatial (Drawing No. 12318.00 TP02, dated 01/08/2024).
- Hume Planning Scheme.
- Australian/New Zealand Standard, Parking Facilities Part 1: Off-Street Car Parking (AS2890.1:2004).
- Australian Standard, Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities (AS2890.1:2002).
- Australian/New Zealand Standard, Parking Facilities Part 6: Off-Street Parking for People with Disabilities (AS/NZS 2890.6:2009).
- An inspection of the subject site and its surrounds.
- Traffic surveys as referenced within this report.
- Other documents as nominated.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

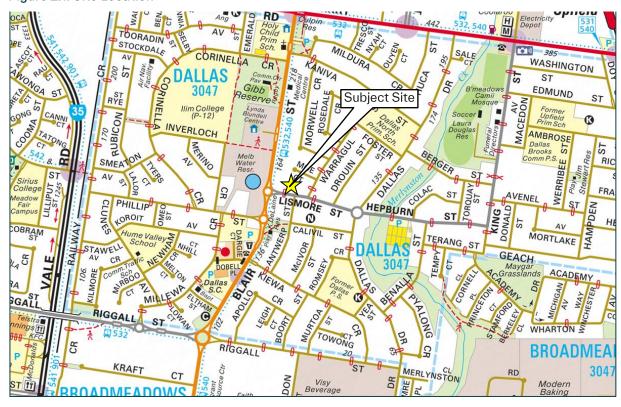


# 2. Existing Conditions

#### 2.1. Location and Environment

The subject site is located on the northern side of Lismore Street in Dallas. The site's location relative to the surrounding road network is shown in Figure 2.1.

Figure 2.1: Site Location



(Source: Melway)

The subject site is broadly rectangular in shape with an approximate frontage of 32m to Lismore Street and a maximum depth of approximately 43m, for an overall site area of approximately 1,235 sqm. The subject site currently has two paisting pingle width cross versade a variable for the sole plury of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning. The subject site is currently of enabling its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its consideration and review as part of a planning its

Figure 2.2 shows the location of the site and the Hume Planning Scheme Zones.

Figure 2.2: Planning Scheme Zones



(Source: Planning Maps Online)

Figure 2.3 shows an aerial view of the site and its immediate surrounds.

Figure 2.3: Aerial view of the Site and Surrounds



(Source: Landchecker.com.au)

#### 2.2. Road Network

**Lismore Street** is classified as a Local Connector Road that runs in an east-west direction along the southern frontage of the site and is under the jurisdiction of Council.

In the vicinity of the subject site, Lismore Street accommodates a single trafficable lane in each direction. The carriageway is sealed at approximately 7m wide (15m road reserve) and operates at a default speed of 50km/hr. Footpaths are provided on both sides of the road.

Speed humps are provided along the length of Lismore Street including 10 metres to the west of the subject site to encourage reduced speeds of 20 km/hr.

A typical view of Lismore Street in the vicinity of the site is shown in Figure 2.4 and Figure 2.5.

Figure 2.4: Lismore Street Looking West



(Source: Google Street View)

Figure 2.5: Lismore Street Looking East



(Source: Google Street View)

#### 2.3. Surrounding Intersections

The intersections in the vicinity of the subject site include:

- Lismore Street / Antwerp Street (Unsignalised T-intersection).
- Lismore Street / Blair Street (Unsignalised Roundabout).
- Lismore Street / Warragul Street (Unsignalised T-intersection).

#### 2.4. Existing Traffic Volumes

In order to determine the current traffic conditions in the vicinity of the subject site, Ratio Consultants commissioned a weeklong automatic tube count survey on Lismore Street adjacent to the subject site between Monday 15 April to Monday April 2024.

The peak hour movements and daily movements are shown in Table 2.1 the most critical days within the 1-week survey period, with detailed results in attached in Appendix B of this report.

Table 2.1: Automatic Tube Count Summary - Lismore Street

Time Period	West Bound	East Bound	Two-Way
AM Peak Hour (8am-9am)	400 vehicles per hour	283 vehicles per hour	683 vehicles per hour
PM Peak Hour (3pm-4pm)	338 vehicles per hour	321 vehicles per hour	659 vehicles per hour
Daily Weekday	2,580 vehicles per day	2,584 vehicles per day	5,164 vehicles per day

A review of Table 2.1 indicates that Lismore Street carries up to 683 and 5,164 vehicle movements over a peak hour and daily periods, respectively.

The above traffic volumes are considered to be standard for a typical local connector road. As such, the local road network has ample traffic capacity.

#### 2.5. Existing On-Street Car Parking Characteristics

In order to determine the availability of on-street parking in the vicinity of the site, a survey of on-street car parking occupancy via aerial imagery has been undertaken. The survey area included Lismore Street between Blair Street and Warragul Street and along Antwerp Street between Lismore Street and Calivil Street.

The area surveyed included a total on-street supply of 48 car parking spaces. The area surveyed is shown in Figure 2.6 overleaf with the results shown in Table 2.2.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

Figure 2.6: On-Street Car Parking Survey Area



(Source: Landchecker.com.au)

Table 2.2: Aerial Imagery Survey Results

Surveyed Day	Total No. of Spaces	No. of Occupied Spaces	Vacant Spaces
29th March 2024		5 spaces	43 spaces
11th January 2024		3 spaces	45 spaces
13th September 2023	48 spaces	5 spaces	43 spaces
15th May 2023		4 spaces	44 spaces
22nd September 2022		4 spaces	44 spaces

**Average** 

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning The surveyed occupancy rate praces runder the Planning and Equipment Act a 1987 imum of at least 43 spaces available at a The copy must be takes used for any other purpose.

Across the five surveyed days, an average of 4 car parking spaces were recorded to be occupied with an average of 44 car parking spaces available.

#### 2.6. Sustainable Transport

#### **Public Transport**

The site has convenient access to public transport facilities with the nearest bus services (No. 532 and No. 540) provided along Blair Street approximately 100 metres north-west of the subject site.

In addition to the above, the subject site is within approximately 1.6 kilometres of Upfield Railway Station and 1.6 kilometres of Coolaroo Railway Station. Upfield Railway Station is serviced by the Upfield Line and Coolaroo Railway Station is serviced by the Craigieburn Line.

#### Pedestrian Network

Pedestrian movements are well facilitated in the wider surrounding area with footpaths provided on both sides of the majority of roads including Lismore Street which forms the southern boundary of the site.

#### Bicycle Network

The subject site has convenient access to the metropolitan bicycle network including on-road bicycle lanes along Blair Street, Dallas Drive and Riggall Street.

#### 2.7. Crash Analysis

A review has been conducted of VicRoads 'CrashStats' database for the five-year period of available data for any reported casualty crashes.

This database records all accidents causing injury that have occurred in Victoria since 1987 (as recorded by Victorian Police) and categorises these accidents as follows:

- Fatal injury: at least one person was killed in the accident or died within 30 days as a result of the accident.
- Serious injury: at least one person as sent to Hospital as a result of the accident.
- Other injury: at least one person required medical treatment as a result of the accident.

A summary of the accidents in the vicinity of the subject site for the last five-year period is presented in Table 2.3.

Table 2.3: Summary of Crashes in the Vicinity of the Subject Site

		Accident No.		
Location	Fatality	Serious Injury	Other Injury	
Site Frontage				
Lismore Street	0	0	0	
Nearby In	tersections			
Lismore Street / Antwerp Street	0	0	0	
Lismore Street / Warragul Street	0	0	0	
Lismore Street / Blair Street	0	0	1	
Total	0	0	1	

Table 2.3 indicates that overoffenlabiling its consideration and review as parts for planning immediate vicinity of the subject sites in the house reported along the site frontage in the copy must not be used for any other purpose.

Given the road classifications**Priedsesnoiteளிள்ளிe முகாள்கர் isotிக**i**dersdate**t the road network is operating in a safe manner.

# 3. The Proposal

#### 3.1. General

It is proposed to develop the land at 22-24 Lismore Street in Dallas for the purpose of a childcare centre to accommodate a maximum of 60 places, along with associated on-site car parking area to cater for car and bicycle parking and waste facilities.

More specifically, the development will incorporate the following land use yield and associated transport infrastructure, as summarised in Table 3.1.

**Table 3.1: Development Summary** 

Land Use			
Land Use Classification	Description	Size (NLA) / Number	
Childcare Centre	Childcare Centre	60 children	
Transport Infrastructure			
Land Use Classification	Description	Size / Number	
Pedestrian Access	Along Southern Boundary (Lismore Street)	-	
Vehicular Acces [1]	Lismore Street (Western Access)	Inbound Only	
Vehicular Access [1]	Lismore Street (Eastern Egress)	Outbound Only	
Doubing	Car Spaces	10 spaces [2]	
Parking ——	Bicycle Spaces	4 spaces	
Loading	Loading	Trucks up to 6.4m long	

[1] Vehicle access is proposed to have in the constant of the

[2] Comprising 9 standard on-site processing modes the Planning land Environmentia ets by the s. It is also important to note that there are the copy must not be used for any other purpose.

It is proposed to provide 10 of Phiase note that the plan Imagnor be to scale and parking space. In addition to the 10 on-site parking spaces, three car parking spaces are available on Lismore Street along the southern boundary of the site frontage. These on-street car parking spaces can also be utilised by users of the site without impact to nearby properties.

Vehicle access to the development will be via the existing vehicle crossover within the south-east corner of the site to Lismore Street (entry only) with vehicles exiting the site via the exiting vehicle crossover in the south-east corner of the site to Lismore Street (exit only).

Pedestrian access to the subject site will be provided from Lismore Street along the southern boundary of the site. A pedestrian path is proposed to be provided from the building to Lismore Street to facilitate safe pedestrian movements to/from the site and the wider pedestrian network.

The proposed development will also include a total of four on-site bicycle parking spaces in the form of two hoops located within the car park, able to be used by visitors and/or staff as needed.

For reference, the proposed site layout is shown in Figure 3.1.

Figure 3.1: Proposed Site Layout



(Source: KLM Spatial)

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

# 4. Car Parking Assessment

#### 4.1. Clause 52.06 Planning Scheme Assessment

Parking requirements for a range of uses are set out under Clause 52.06 of the Hume Planning Scheme. Table 1 of Clause 52.06 sets out the car parking requirement that applies to a use listed in the Table.

Of relevance, Clause 52.06-5 states that:

A car parking requirement in Table 1 is calculated by multiplying the figure in Column A or Column B (which ever applies) by the measure in Column C.

Column A applies unless Column B applies.

Column B applies if:

- Any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network Area Maps (State Government of Victoria, 2018); or
- A schedule to the Parking Overlay or another provision of the Planning Scheme specifies that Column B applies.

Additionally, the car parking requirement specified for a use listed in Table 1 does not apply if:

- A car parking requirement for the use is specified under another provision of the Planning Scheme: or
- A schedule to the Parking Overlay specifies the number of car parking spaces required for the use.

The subject site is not located within the PPTN area. In this regard, the Column A rates outlined in Table 1 of Clause 52.06-5 applies.

Accordingly, the statutory car parking requirements for the proposed development have been assessed against these rates.

Table 4.1: Clause 52.06 Planning Scheme Requirement

Use	Statutory Car Parking Rate	No.	Statutory Car Parking Requirement
Childcare Centre	0.22 spaces to each child	60 children	13 spaces
Total			13 spaces

Table 4.1 indicates that the proposed development has a statutory requirement to provide a total of 13 car parking spaces.

This copied document is made available for the sole purpose parking spaces.

The proposed development spaces available on Lismore S

of enabling its consideration and review as part of a planning ncludes 10 on-site car parking spaces as well as 3 on-street car parking process under the planning and Environment Act 1987 free site frontage along the sold the site. The copy must not be used for any other purpose.

to reduce this requirement.

In this instance, the on-site stappearsean packing requirement is another instance, the on-site stappear is being sought

In order to provide further clarity on the appropriateness of the provision, an assessment of the expected parking demand and the appropriateness of allowing a reduction of on-site parking for the proposed development is discussed below.

#### 4.2. Car Parking Demand Assessment

In accordance with Clause 52.06-6, an assessment of car parking demand likely to be generated by the use must have regard to the following factors, considered relevant to the proposal.

"The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.

- The variation of car parking demand likely to be generated by the proposed use over time.
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study."

An assessment of the projected car parking demand for the proposed development, accounting for these factors is discussed as follows.

#### The Variation of Car Parking Demand Over Time

Car parking demands for childcare centres typically peak for short periods of time for parents dropping off their child/children on weekday mornings and picking up in the afternoon/evening period.

Typically, low car parking levels are experienced during daytime hours, with low-level, long-term staff car parking usage occurring during this time. Furthermore, there is no car parking demand experienced by this land use on weekends.

#### The Availability of Public Transport in the Locality of the Land

The subject site is located within walking distance to a number of bus services, as discussed in Section 2 of this report.

Accordingly, the range of public transport opportunities can be utilised by some parents, carers and staff of the proposed development. Providing less car parking spaces on site can encourage parents, carers and staff to utilise the sustainable transport options that are available to them and minimise the overall congestion on the road network in the vicinity of the site.

#### The Convenience of Pedestrians and Cyclist Access to the Land

Pedestrian footpaths are provided on both sides of the frontage road, facilitating connections to the broader area and land uses in the surrounding area.

Furthermore, on-street bicycle lanes are provided along Blair Street, Dallas Drive and Riggall Street, providing connections in all compass directions to the broader bicycle network.

These facilities allow for convenient access to the subject site for pedestrians and cyclists, thereby providing an option for access to the site without the use of a private motor vehicle.

#### The Provision of Bicycle Parking and End of Trip Facilities for Cyclists

The proposal includes a provision of four (4) bicycle spaces within two horizontal bicycle rails. A generous provision of bicycle parking that exceeds the typical bicycle parking demands are proposed to be provided on the site.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning. These facilities provide an acprocess/inhitenthes Planting tand Environment Actes 987 to reduce future reliance on private mot The copy must not be used for any other purpose.

The Availability of Alternate Please note that the plan may not be to scale.

As outlined in Section 2 of this report, the on-street car parking in the vicinity of the subject site is unrestricted. The surveys undertaken indicate that on-street car parking within short walking distance of the site has a minimum of 44 vacancies on a typical weekday.

#### **Empirical Assessment**

Guidance on the anticipated car parking characteristics of the proposal can be established from various sources.



In this instance, guidance is sought via empirical and case study data of similar childcare centres based on surveys of 19 childcare centres within Victoria undertaken by various traffic consultancies, which has determined an average car parking rate of 0.19 car parking spaces per child. Application of this rate to the proposed 60 places indicates a peak parking demand of 11 spaces could be expected.

In this instance, the proposed on-site provision of 10 car spaces is anticipated to result in an overflow to on-street car parking by a single vehicle during peak times on a weekday morning and evening period. The development allows for the provision of three on-street spaces along Lismore Street. At all other times during the daytime, inter-peak periods and weekends, the car parking demands are likely to be less and contained on-site.

It is considered entirely appropriate for these spaces to be utilised by users of the site on an as-needed basis that are not expected to have any impact on adjoining properties. The maximum overflow of up to one space can adequately be catered for by the three additional car parking spaces proposed along Lismore Street with a surplus of two additional on-street parking spaces available.

#### 4.3. Adequacy of the Car Parking Provision

Based on the assessment undertaken above, it is evident that the on-site provision of 10 parking spaces and on-street provision of three parking spaces along the site frontage would be capable of accommodating the peak parking demand of 11 car parking spaces likely to be generated by the development.

#### 4.4. DDA Car Parking

In addition to the statutory car parking requirements in the Planning Scheme, the Building Code of Australia (BCA) outlines the requirements for the provision of car parking for people with disabilities.

An assessment of the BCA disabled car parking requirements for the development proposal is outlined in Table 4.2.

**Table 4.2: BCA Car Parking Requirements** 

Description	Use	BCA Disabled Parking Requirements
Childcare Centre	Class 4	1 space for every 50 car parking spaces or part thereof

Parking spaces for people with disabilities can be included in the total number of spaces required by the Planning Scheme.

The on-site provision of one space for people with a disability meets the BCA requirement and is considered appropriate.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

# 5. Access and Car Parking Layout

#### 5.1. Clause 52.06 Design Standard Assessment

An assessment against the relevant design standards of Clause 52.06-9 of the Hume Planning Scheme is provided below:

#### Design Standard 1 - Accessways

Design Standard 1 of Clause 52.06-9 relates to the design of accessways. The requirements of Design Standard 1 are assessed against the proposal in Table 5.1.

Table 5.1: Design Standard 1 Assessment

Requirement	Comments
Must be at least 3m wide.	Satisfied: The accessways within the site has been designed to have a minimum width in excess of 3.m wide.
Have an internal radius of at least 4m at changes of direction or intersection or be at least 4.2m wide.	Satisfied: The accessway and internal layout have been designed to be at least 4.2m wide at all changes of direction.
Allow vehicles parked in the last space of a deadend accessway in public car parks to exit in a forward direction with one manoeuvre.	Satisfied: The swept path assessment (refer to Appendix C) confirms that vehicles parked in the end spaces can exit in a forward direction in one manoeuvre.
Provide at least 2.1m headroom beneath overhead obstructions, calculated for a vehicle with a wheelbase of 2.8m.	N/A – The car parking area is open air and not subject to height clearance requirements.
If the accessway serves four or more car spaces or connects to a road in a Road Zone, the accessway must be designed so that cars can exit the site in a forward direction.	Satisfied: All vehicles are able to exit the site in a forward direction.

Provide a passing area at the interpretate of the sold purple of the s ten or more car parking spacessithederothe Blanning and Environment Act 1987 site. than 50m long or connects The copy must not be used for any other purpose. Zone.

Please note that the plan may not be to scale.

the frontage road from the edge of an exit lane and 2.5m along the exit lane from the frontage, to provide a clear view of pedestrians on the Nevertheless, in order to improve the existing footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided.

N/A: The development proposes to utilise the Have a corner splay or area at least 50% clear of existing site access points to Lismore Street in the visual obstructions extending at least 2m along south-western and south-eastern corners of the site, which allow for clockwise movement and flow through the car park and site access points.

> arrangement, it is proposed to provide a convex mirror adjacent the site egress to increase visibility and reduce any potential conflict between pedestrians and vehicles departing the site.

If an accessway to four or more car parking the car spaces must be at least 6m from the road road in a Road Zone. carriageway.

spaces is from land in a Road Zone, the access to N/A: Car spaces are not accessed directly to/from a

of the accessway may include the road.

If entry to the car space is from a road, the width N/A: Entry to the car spaces is not accessed directly from a road.

#### Design Standard 2 - Car Parking Spaces

Design Standard 2 of Clause 52.06-9 relates to the design of car parking spaces. The requirements of Design Standard 2 are assessed against the proposal in Table 5.2.

#### Table 5.2: Design Standard 2 Assessment Requirement Comments Car parking spaces and accessways must have Satisfied - All standard car parking spaces within the the minimum dimensions as outlined in Table 2 of site meet the dimensional requirements set out in Design Standard 2. Table 2 of Design Standard 2. A wall, fence, column, tree, tree guard or any other structure that abuts a car space must not encroach into the area marked 'clearance required' on Diagram 1 of Design Standard 2, other than: Satisfied - The car parking spaces have been A column, tree or tree guard, which may designed to accord with Diagram 1 of Design project into a space if it is within the area Standard 2. marked 'tree or column permitted' on Diagram A structure, which may project into the space if it is at least 2.1m above the space. Car spaces in garages must be at least 6m long and 3.5m wide for a single space and 5.5m wide N/A - No garage car parking spaces are proposed. for a double space measured inside the garage. Where parking spaces are provided in tandem 500mm in length must be provided between each $\frac{N/A}{A}$ – No tandem car parking spaces are proposed. space. Where two or more car parking spaces are provided for a dwelling, at lethis recopiece document is made available for the sofe purposet of enabling its consideration and review as part of a planning be under cover. process under the Planning and Environment Act 1987. Disabled car parking spaces THE copy in the used for any other purpose.

accordance with Australian Standard ASSES 6 of the used for any other purpose.

Standard ASSES 6 of the used for any other purpose.

Standard ASSES 6 of the used for any other purpose.

Standard ASSES 6 of the used for any other purpose. the

dimensional

2890.6:2009.

requirements

Australia. Disabled car parking spaces may

encroach into an accessway width specified in

Table 2 of Design Standard 2 by 500mm.

#### 5.2. Swept Path Assessment

#### Site Access

An assessment of the accessibility to/from the site using the 'Autodesk Vehicle Tracking' software has been conducted. The swept path demonstrates that a B99 design vehicles (99.8th percentile car), could suitably manoeuvre through the site access points to Lismore Street.

Further, all vehicles will be able to enter / exit the site in a forward direction.

#### Car Parking Spaces

An assessment of the accessibility to/from the critical parking bays was also undertaken using the B85 design vehicle (85th percentile car) and it was found that each of the critical parking space could be accessed (ingress and egress) in a satisfactory manner.

Within consideration to the preceding, the layout of the car parking spaces are considered to provide convenient and functional car parking opportunities.

#### 5.3. Summary

The assessment indicates that the access arrangements and car parking layouts have been designed appropriately and generally in accordance with the requirements of the Hume Planning Scheme and/or AS/NZS 2890.1:2004.

The swept path assessments have been provided in Appendix C of this report.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

# 6. Bicycle Parking

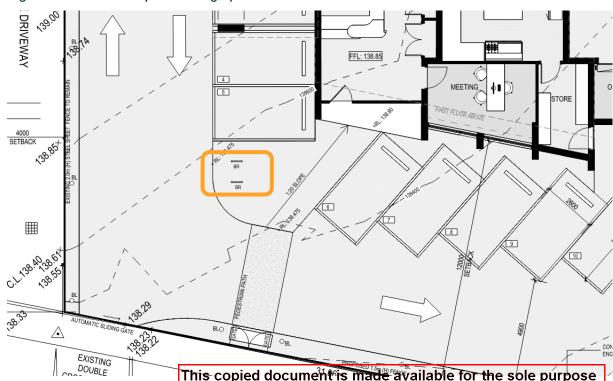
#### 6.1. Clause 52.34 - Bicycle Facilities

Clause 52.34 of the Hume Planning Scheme seeks to encourage cycling as a mode of travel through the provision of appropriate bicycle parking and associated facilities and does not specify statutory bicycle parking requirements for childcare centre land uses.

Notwithstanding, it is proposed to provide a total of four (4) bicycle parking spaces in order to promote sustainable transport initiatives associated with the development.

The bicycle parking spaces are located within the car parking area, as shown below in the excerpt within Figure 6.1.

Figure 6.1: On-Site Bicycle Parking Spaces



Given the nature of the propose has in beits reconstituted at its of the nature of the propose and in beits reconstituted at its control of the propose and attainable transport options for the site in lieu of the motor vehicle any other purpose.

### 6.2. Bicycle Parking Layou Please note that the plan may not be to scale.

The bicycle parking layout has been designed in excess of AS2890.3:2015 - Bicycle Parking, which requires at least 20% of the bicycle parking spaces to be provided in a ground level (horizontal) Bicycle Parking Devices.

The horizontal rails are provided within a parking module that is 1.8m  $\times$  0.5m accessed via a 1.5m aisle, conveniently located within the site.

Accordingly, it is considered that the bicycle parking has been designed appropriately and in accordance with the relevant requirements of AS2890.3:2015.

# 7. Loading Arrangements

#### 7.1. Statutory Requirement

Clause 65.01 'Decision Guidelines' of the Hume Planning Scheme outlines the provision of loading requirements, and states the following:

"Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

 The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.

#### 7.2. Loading and Waste Arrangements

Loading and unloading activities associated with the proposed development will be limited. Loading activities associated with the development can be undertaken by vans / small trucks. It is anticipated that these can occur informally within a car space outside of peak times.

Waste collection is proposed to be collected on-site by a private waste collector.

A swept path assessment (refer to Appendix C) has been conducted and demonstrates that a mini-rear loader waste truck can access the site in a forward direction, manoeuvre to the waste collection area (informally propping within the parking aisle) and depart in a forward direction.

#### 7.3. Adequacy of Loading and Waste Collection

Based on the above, the waste collection and loading arrangements are considered to be acceptable.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

### 8. Traffic Assessment

#### 8.1. Traffic Generation

The RTA *Guide to Traffic Generating Developments* (October 2002) document indicates a peak hour traffic generation of 0.7 to 0.8 vehicle trips per child in the AM and PM peak hours.

Additionally, a cross-check has been undertaken with an empirical data source. In this respect, a survey conducted by Ratio Consultants at the existing 'Ariston' childcare centre in Newtown (Geelong) confirms that childcare centres typically generate in the order of 0.8 vehicle trips per child during the peak hours.

The childcare centre study also indicated that the AM and PM peak hour traffic generation of childcare centres typically occurs between 8:00am to 9:00am and between 4:45pm and 5:45pm.

Applying a rate of 0.8 vehicle trips per child, the proposed 60 place childcare centre is anticipated to generate approximately 48 vehicle movements per weekday peak hour (combined for staff and visitors of the childcare centre). The childcare centre is not anticipated to generate any traffic on the weekend.

The resultant anticipated traffic generation associated with the proposal is summarised in Table 8.1.

Table 8.1: Childcare Centre Traffic Generation

	AM Peak	PM Peak
Arriving Trips	24 vph	24 vph
Departing Trips	24 vph	24 vph
Total Trips	48 vph	48 vph

#### 8.2. Traffic Distribution and Impact

The development is projected to generate up to a total of 48 vehicle movements during the AM and PM peak hours, comprising of both arrivals and departures via the proposed access points to Lismore Street.

At the site access intersections with Lismore Street there is expected to be a fairly even split in the direction of traffic movements to/from the surrounding local catchment area for the childcare centre.

The additional 48 vehicle movement that the childcare centre is expected to generate are expected to be comfortably accommodated in/out of Lismore Street given existing traffic volumes on the network. Following completion of the drifts to supple the action of t

The additional traffic describe process under the Planning and Environment Aut 1987 additional traffic generated by the site of the test process under the Planning and Environment Aut 1987 additional traffic generated by the existing double storey comme pieds in the traffic that the plan imay not be to scale.

Having regard to the above analysis and discussion, against the existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development is not expected to compromise the safety and function of the surrounding road network.

### 9. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- The proposed development generates a statutory parking requirement of 13 car parking spaces.
- The car parking demand assessment undertaken indicates that the site is expected to generate a peak car parking demand of up to 11 car parking spaces.
- The proposed provision of 10 on-site car parking spaces and three (3) on-street spaces is considered satisfactory for the reasons detailed in this report.
- The proposed parking layout is consistent with the dimensional requirements as set out in the Hume Planning Scheme and/or Australian/New Zealand Standards for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009).
- CAD-based swept paths have been completed which confirm the key vehicle movements can be completed with adequate clearance through the access points and relevant areas within the site.
- The proposed development does not trigger a statutory requirement for bicycle parking provision.
   Nevertheless, a total of four (4) bicycle spaces are proposed to be provided, which is considered to be satisfactory.
- The site is expected to generate up to 48 vehicle trips during the AM and PM peak hour period.
- Given the existing traffic volumes along Lismore Street during weekday peak hours, the anticipated traffic generated by the proposed development is not expected to have any issues being accommodated by Lismore Street and the adjacent wider road network.

Overall, the proposed development has been suitably designed and is not expected to create adverse traffic or parking impacts in the vicinity of the subject site.

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The copy must not be used for any other purpose. Please note that the plan may not be to scale.

# Appendix A – Development Plans

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

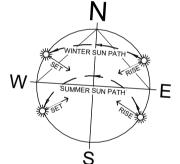


ALL DRIVEWAYS AND CAR PARKS TO BE REINFORCED CONCRETE OR AN ASPHALT AND

ALL PEDESTRIAN PATHWAYS AND APRONS AT TENANCY ENTRIES TO BE CONCRETE

5400 X 2400 DISABLED PARKING ZONE, MARKINGS AND SIGNAGE TO A.S.2890.6

SITE AREA	1235m²
PROPOSED PLAY AREA (CHILD CARE - 60 KIDS - MIN.)	463.44m²
PROPOSED BUILDING AREA + VERANDAHS & STORAGE SHEDS	483.26m²
PROPOSED SITE COVER	39.13%
PROPOSED ROOF AREA + HARD STAND	947.43m² - 76.71%
PROPOSED PERMEABILITY	287.57 m² - 23.28%



22-24 LISMORE ST, DALLAS

THIS DRAWING WAS PREPARED AS A PLANNING PROPOSAL AND MUST NOT BE USED FOR ANY OTHER PURPOSE AND MUST NOT BE PASSED TO ANY THIRD PARTY OR REPRODUCED IN ANY DOCUMENT WITHOUT THE WRITTEN CONSENT OF KLM SPATIAL. ALL AREAS, QUANTITIES & DIMENSIONS DEPICTED HEREIN ARE STRICTLY FOR PLANNING APPLICATION AND ASSESSMENT PUPOSES ONLY.

ANNIN( Suite 1, Building 2 3 Ordish Road Dandenong South 3175 Telephone 03 9794 1600

# Appendix B – Traffic Survey Results

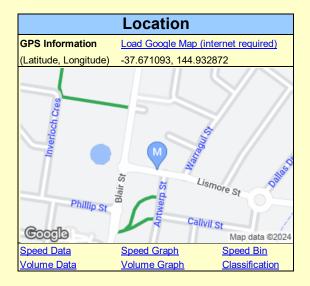
### TRANS TRAFFIC SURVEY

trafficsurvey.com.a

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

AUTOMATIC COUNT SUMMARY						
Street Name :	Lismore St	Location :	Outside Property 22-24			
Suburb :	Dallas	Start Date :	00:00 Mon 15/April/2024			
Machine ID:	HR468C5W	Finish Date :	00:00 Mon 22/April/2024			
Site ID:	19178	Speed Zone :	50 km/h			
Prepared By :	Vo Son Binh	Email:	binh@trafficsurvey.com.au			

GPS information	Lat	37° 40' 15.93 South	Direction of Travel		
	Long	144° 55' 58.34 East	Both directions	Westbound	Eastbound
Traffic Volume :		Weekdays Average	4,964	2,548	2,416
(Vehicles/Day)		7 Day Average	4,510	2,309	2,201
Weekday	AM	08:00	650	352	298
Peak hour start	PM	15:00	605	319	286
Speeds :		85th Percentile	29.4	32.3	26.4
(Km/Hr)		Average	25.6	27.6	23.5
Classification %:		Light Vehicles up to 5.5m	94.5%	94.3%	94.6%





THREED ASSESSED TO IN ISANG (EVALUATION TO BE SOLD PURPOSE OF HEIS AND ASSESSED TO PROPERTY IN CERTIFIC POINTS ON A SERVICE OF A PLANTING THE COPY MUST NOT be used for any other purpose.
Please note that the plan may not be to scale.

#### Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open.

These results should be used for indicative assessment only."



Site

Lismore St

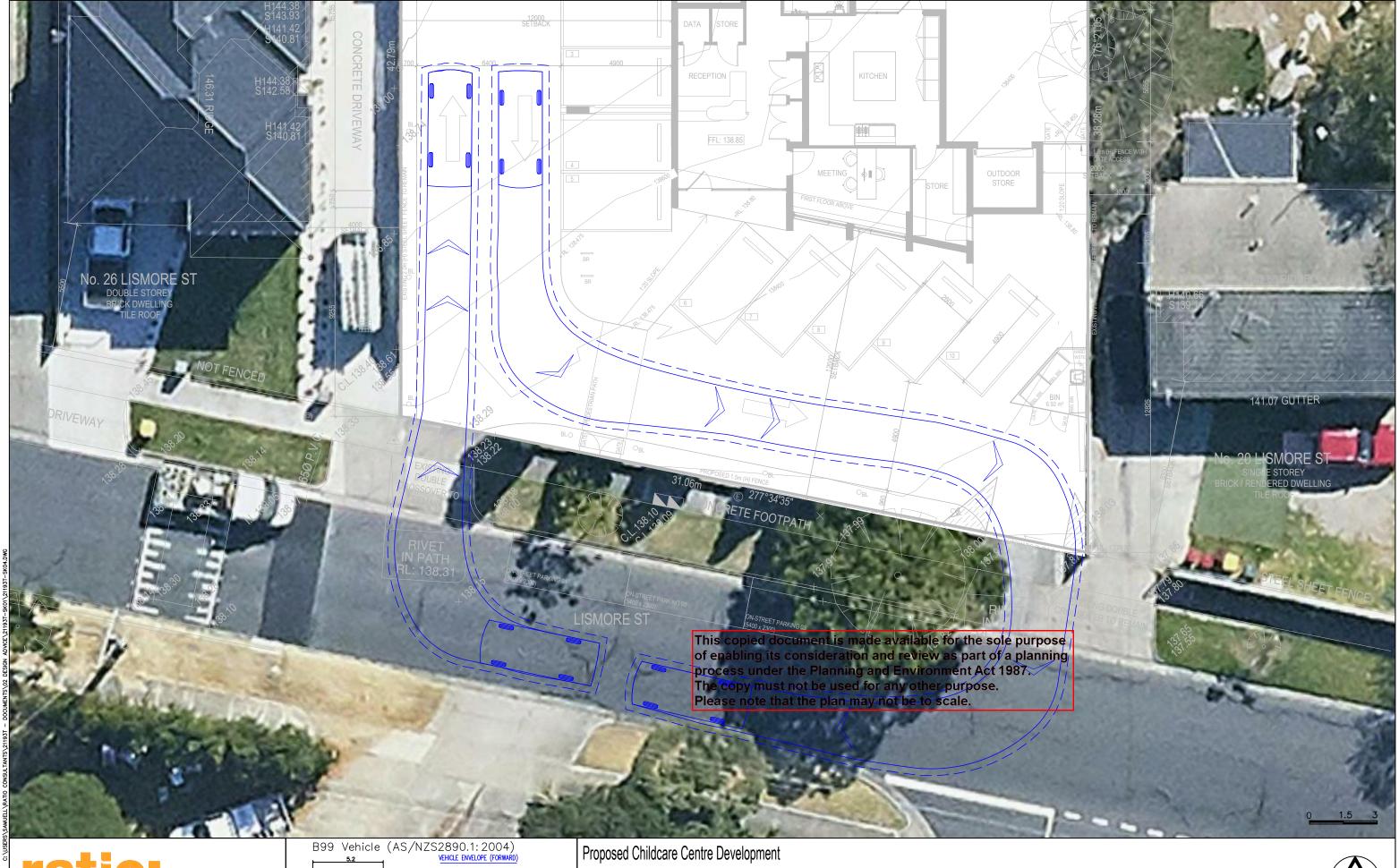
Direction

Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend	
Date	4/15/2024	4/16/2024	4/17/2024	4/18/2024	4/19/2024	4/20/2024	4/21/2024	Total	Average	Total	Average	Total	Average	
AM Peak	08:00	08:00	08:00	08:00	08:00	11:00	11:00	N/A	08:00	N/A	08:00	N/A	11:00	
PM Peak	15:00	15:00	15:00	15:00	15:00	16:00	17:00	N/A	15:00	N/A	15:00	N/A	18:00	
00:00	30	32	38	25	40	49	68	282	40	165	33	117	59	
01:00	19	16	16	13	13	37	32	146	21	77	15	69	35	
02:00	14	16	18	14	13	21	19	115	16	75	15	40	20	
03:00	9	5	11	15	7	20	24	91	13	47	9	44	22	
04:00	15	11	13	7	14	21	9	90	13	60	12	30	15	
05:00	20	25	32	22	27	21	23	170	24	126	25	44	22	
06:00	64	61	56	37	49	38	44	349	50	267	53	82	41	
07:00	123	146	132	137	131	64	36	769	110	669	134	100	50	
08:00	683	614	610	673	670	106	68	3424	489	3250	650	174	87	
09:00	251	232	285	259	254	195	113	1589	227	1281	256	308	154	
10:00	178	192	193	201	217	244	153	1378	197	981	196	397	199	
11:00	237	219	248	192	228	270	188	1582	226	1124	225	458	229	
12:00	235	192	291	245	359	297	196	1815	259	1322	264	493	247	
13:00	279	280	440	314	352	274	232	2171	310	1665	333	506	253	
14:00	358	375	338	373	390	239	219	2292	327	1834	367	458	229	
15:00	603	607	519	635	659	247	222	3492	499	3023	605	469	235	
16:00	430	559	489	492	475	312 <b>T</b>	nis <sup>26</sup> 8 pi	ed <sup>2</sup> 8%cu	m <del>e'n</del> ntis	made a	va <del>ľ</del> láble	fo⁵the	ടരില്ല	rpose
17:00	398	321	358	347	305	296	<b>274</b>	2299	328	. 1729	346	570	sole pu t of a pl	nnina
18:00	260	286	272	332	284	302	enapiii	19 19 30 CC	nsigera		n respen	aş <sub>7</sub> par	r orsa bi	anning
19:00	207	216	175	210	195	194 <b>pr</b>	ocessi	ınden th	e Plann	ingoænd	Enviro	nment A	ct 1987	
20:00	176	149	153	159	140	153	e conv	miles n	ot b <mark>éz</mark> us	ed <sup>7</sup> for a	ny <sup>15</sup> the	r niirno	se <sup>161</sup>	
21:00	139	130	100	119	140	131	104	863	123	628	126	235	118	
22:00	103	97	96	102	119	116	eas <del>a</del> no	ne <del>ma</del> at	the <mark>i</mark> pĭlan	may no	ot plesto	scąlę.	109	
23:00	59	55	41	68	83	93	49	448	64	306	61	142	71	
Total	4890	4836	4924	4991	5164	3740	3025	31570	4508	24805	4960	6765	3387	
% Heavy	6.07%	5.09%	6.38%	5.53%	5.33%	4.52%	5.62%	5.5	3%	5.6	8%	5.0	)1%	

### Appendix C - Swept Path Assessment



RATIO CONSULTANTS PTY LTD ABN 005 422 104 8 GWYNNE STREET CREMORNE, VICTORIA 3121 TELEPHONE (03)9429 3111 FACSIMILE (03)9429 3011 300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

3.05

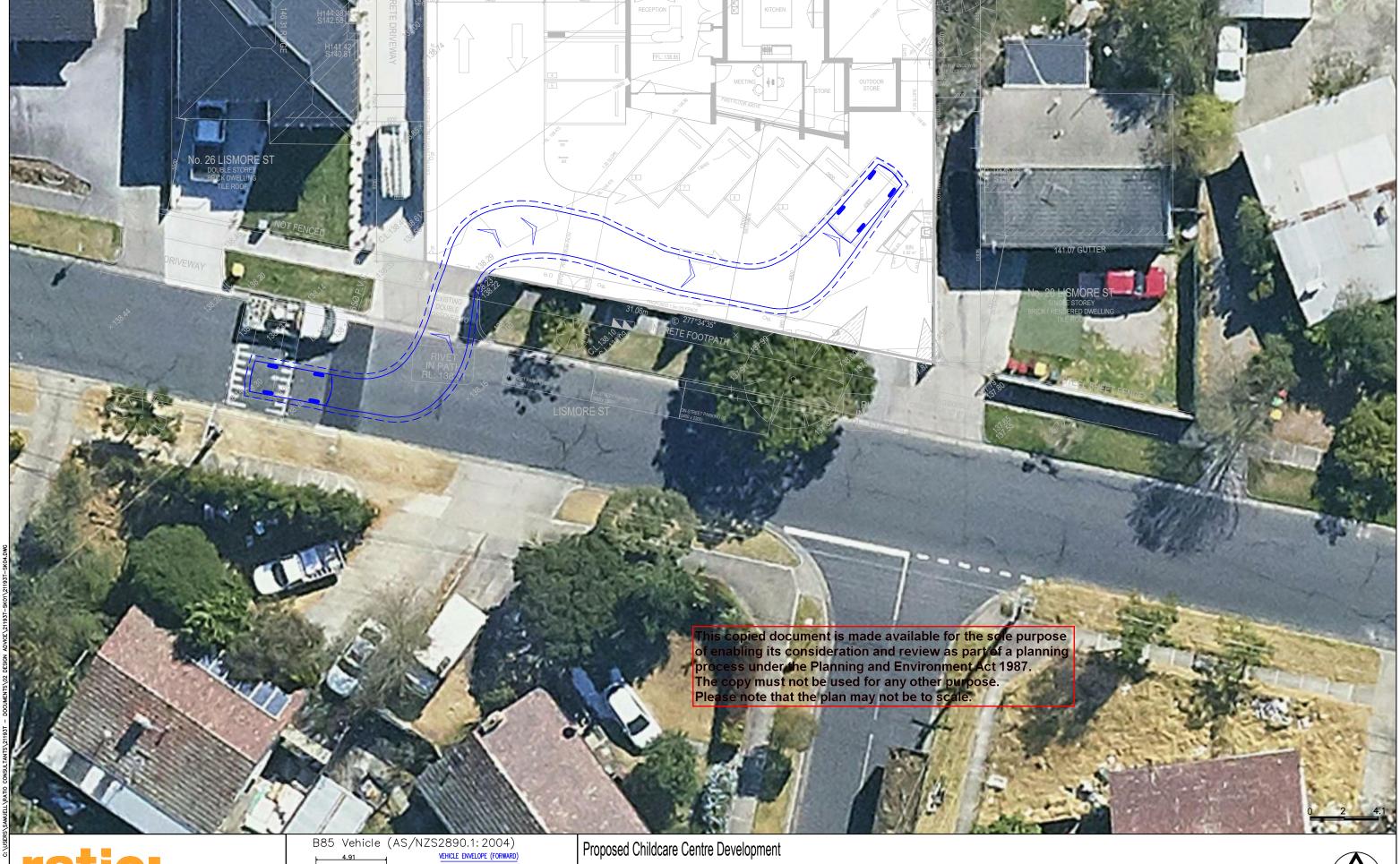
300mm CLEARANCE (REVERSE)

5.200m 1.940m 2.200m 0.312m Proposed Childcare Centre Development
22-24 Lismore Street, Dallas
Swept Path Assessment

CWOPE	ati 1 7 1000	,001110111

NOTE: 1) Base Plan Supplied on 06/08/2024 2) Maximum Design Speed 10km/h

RATIO REFERENCE 21193T-SK04/SD SHEET No. 1 of 5 SCALE 1:150@A3 DATE 06/08/2024



RATIO CONSULTANTS PTY LTD ABN 005 422 104 8 GWYNNE STREET CREMORNE, VICTORIA 3121 TELEPHONE (03)9429 3111 FACSIMILE (03)9429 3011



Proposed Childcare Centre Development 22-24 Lismore Street, Dallas Swept Path Assessment

NOTE:	RATIO REFERENCE	SHEET No.	SCALE	DATE
1) Base Plan Supplied on 06/08/2024		0.12211101		
2) Maximum Design Speed 10km/h	21193T-SK04/SD	2 of 5	Custom@A3	06/08/2024



RATIO CONSULTANTS PTY LTD ABN 005 422 104 8 GWYNNE STREET CREMORNE, VICTORIA 3121 TELEPHONE (03)9429 3111 FACSIMILE (03)9429 3011



Proposed Childcare Centre Development 22-24 Lismore Street, Dallas Swept Path Assessment

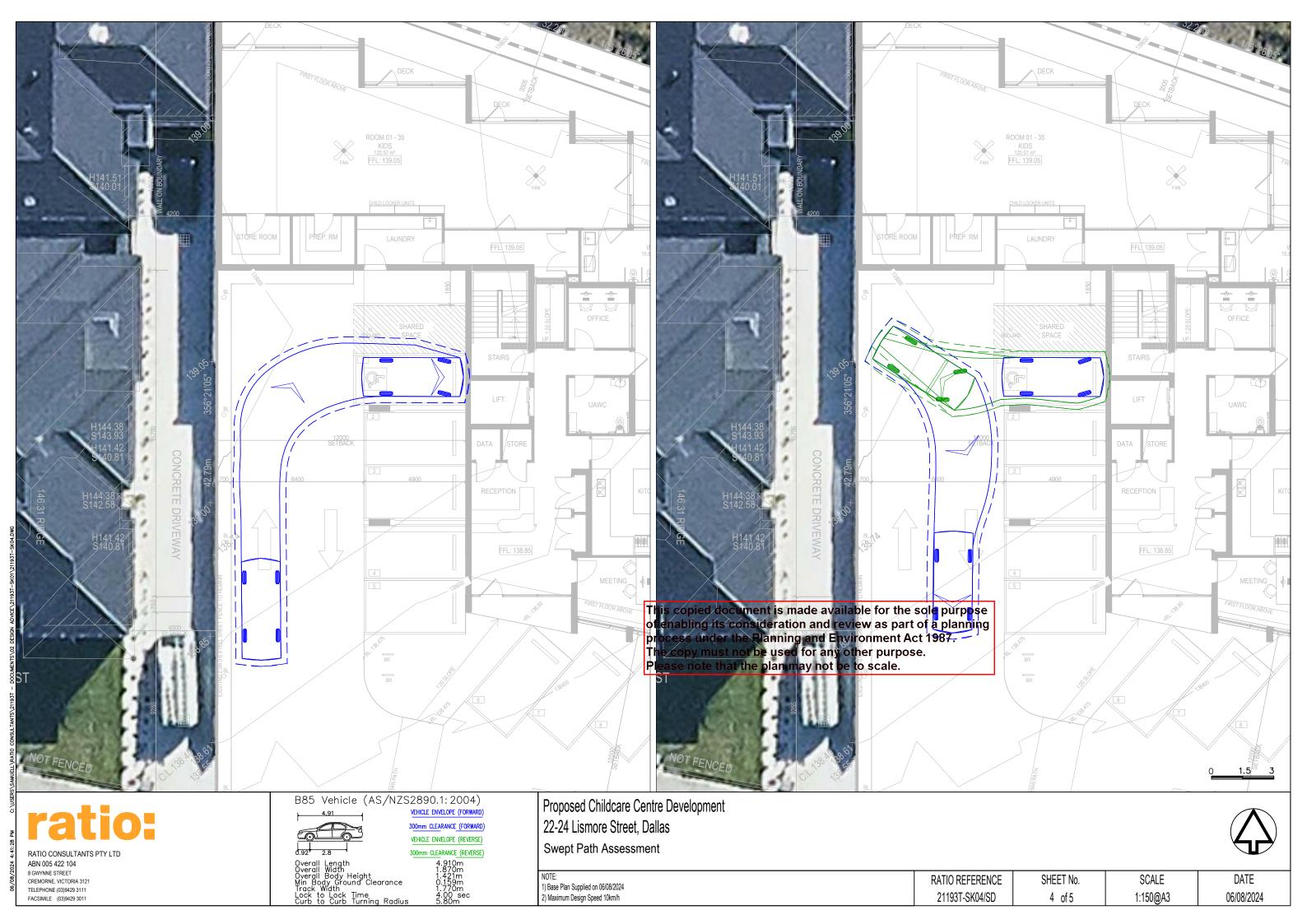
NOTE:
1) Base Plan Supplied on 06/08/2024
2) Maximum Design Speed 10km/h

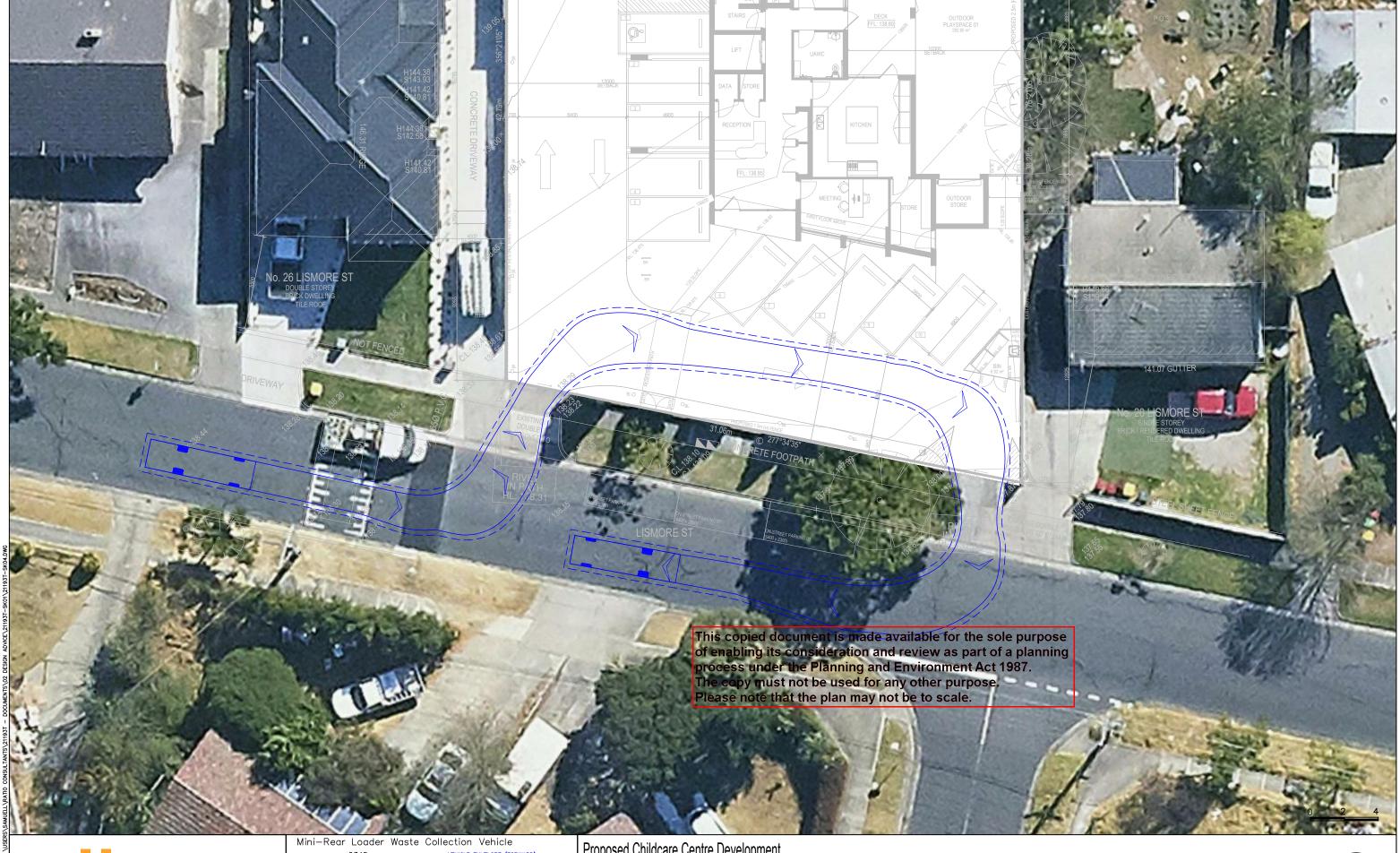
 RATIO REFERENCE
 SHEET No.
 SCALE

 21193T-SK04/SD
 3 of 5
 Custom@A3

DATE

06/08/2024





RATIO CONSULTANTS PTY LTD ABN 005 422 104 8 GWYNNE STREET CREMORNE, VICTORIA 3121 TELEPHONE (03)9429 3111 FACSIMILE (03)9429 3011 6345

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Overall Length
Body Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time

Proposed Childcare Centre Development 22-24 Lismore Street, Dallas

Swept Path Assessment

NOTE: 1) Base Plan Supplied on 06/08/2024	RATIO REFERENCE	SHEET No.	SCALE	DATE
2) Maximum Design Speed 10km/h	21193T-SK04/SD	5 of 5	1:200@A3	06/08/2024

22-24 Lismore S

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning Acoustic Design Reportcess under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

M240194RP1 Revision 0 Monday, 22 July 2024



#### **Document Information**

Project	22-24 Lismore Street, Dallas
Client	KLM Spatial
Report title	Acoustic Design Report
Project Number	M240194

#### **Revision Table**

Report revision	Date	Description	Author	Reviewer
0	22 July 2024	For issue	Harry Miles	Xun Li

### **Glossary**

ANEF	Australian Noise Exposure Forecast as defined in AS/NZS 2021. A single number

index for predicting the cumulative exposure to aircraft noise in communities near

aerodromes during a specified time period (normally one year).

**ANR** Aircraft Noise Reduction as defined in AS/NZS 2021. For design purposes, the

arithmetic difference between the aircraft noise level at a site and the indoor design

level.

A-weighting A spectrum adaption that is applied to measured noise levels to represent human

hearing. A-weighted levels are used as human hearing does not respond equally at all

frequencies.

Aggravated noise Noise defined by the Environment Protection Regulations to exceed the noise limits

established under the Noise Protocol by more than 15 dB or to exceed a noise level of 75 dB during the day period, 70 dB during the evening period or 65 dB during the night

period.

Background Level for the purposes of Part I

(Commercial, industrial and

trade premises)

The arithmetic average of the hourly L<sub>A90</sub> levels that represents the background sounds in a noise sensitive area, in the absence of noise from any commercial, industrial or trade premises which appears to be intrusive at the point where the background level is measured, when measured according to Part I, Section A4 of the

Noise Protocol.

Day period Monday to Saturday (except public holidays), from 7 am to 6 pm as defined in the

Environment Protection Regulations.

dB Decibel—a unit of measurement used to express sound level. It is based on a

logarithmic scale which means a sound that is 3 dB higher has twice as much energy.

We typically perceive a 10 dB increase in sound as a doubling of loudness.

Effective noise level The level of noise emitted from the commercial, industrial or trade premises and

adjusted if appropriate for duration, character and position as defined in Part I, Section

The objectives of these Regulations are to further the purposes of, and give effect to,

B2 of the Noise Protocol.

**Environment Protection** 

Regulations

the Environment Protection Act 2017

**EPA Victoria** 

Evening period

This copied document is made available for the sole purpose ironment Protection Authority Victoria of enabling its consideration and review as part of a planning Month page to esta united left of the Britation of integral and Environmental Act to 1928/7, from 7 am

to 1<mark>07 bre, copyrined stith of Ebreirers eacht Brotantijo of Ragruptimpose.</mark>

Extraneous noise

Extrareous note that the plan may not be to scale emissions from a commercial, industrial or trade premise and is not relevant to the typical background noise. Extraneous noise includes noise from aircraft, local traffic, construction works, insects, bird chirping, people talking, rustling leaves, and the effect of wind on the

microphone diaphragm.

Frequency (Hz) The number of times a sound pressure wave oscillates (moves back and forth) in one

> second. Fast movements produce high frequency sound (high pitch/tone), but slow movements mean the frequency (pitch/tone) is low. 1 Hz is equal to 1 cycle per

second.

**GED** General Environmental Duty. As defined by Section 25(1) of the Environment

> Protection Act 2017, it requires that any person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste

must minimise those risks, so far as reasonably practicable.

A-weighted sound pressure level, measured using the Fast time-weighting, that is  $L_{A90}$ exceeded for 90% of the time interval considered. The L<sub>A90</sub> metric is used to quantify

the background noise level in an environment.

The equivalent continuous A-weighted sound pressure level. It is the value of the Aweighted sound pressure level of a continuous steady sound that has the same

> acoustic energy as a given time-varying A- weighted sound pressure level when determined over the same measurement time interval. The LAeq metric is used to

quantify the effective noise level from a premises.

Between 10 pm and 7 am of the following day as defined in the Environment Night period

Protection Regulations.

residential use, or

Environmental Protection Authority 1826 Noise limit and assessment protocol for the

control of noise from commercial, industrial and trade premises and entertainment venues. The current version is published by EPA Victoria on its website.

Noise sensitive area Defined by the Environment Protection Regulations as the part of the land within the

boundary of a parcel of land that is:

within 10 m of the outside of external walls of dwellings (including a residential care facility but not including a caretaker's house), residential building or noise sensitive

within 10 m of the outside of external walls of any dormitory, ward, bedroom or living room of a caretaker's house, hospital, hotel, residential hotel, motel, specialist disability accommodation, corrective institution, tourist establishment,

retirement village or residential village, or within 10 m of the outside of external walls of a classroom or any room in which learning occurs during the operating hours of a child care centre, kindergarten, primary school or secondary school.

Premises or a place at which an activity is undertaken, or a machine or device is

operated, resulting in the emission of noise

Noise defined by the Environment Protection Regulations to exceed the noise limits. This copied document is made available for the sole purpose established under the Noise Protocol, of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

 $L_{\text{Aeq}}$ 

Noise Protocol

Noise source

Unreasonable noise

### 1 Introduction

This report outlines the acoustic requirements for the childcare development at 22-24 Lismore Street, Dallas. It details the acoustic criteria and indicative recommended treatments for the proposed development.

The proposed childcare centre is located in the Melbourne Airport Environs 2 Overlay (MAE2O) and must satisfy the following planning permit requirement:

- Any building for which a permit is required under this overlay must be constructed so as to comply with any noise attenuation measures required by Section 3 of Australian Standard AS 2021-2015, Acoustics - Aircraft Noise Intrusion - Building Siting and Construction issued by Standards Australia Limited.

The main acoustic issues addressed in this report are:

- Control of noise from children within the outdoor playground areas to adjacent land users in accordance with the Association of Australian Acoustical Consultants (AAAC) Guideline for Child Care Centre Acoustic Assessment v3.0 (the Guideline)
- Control environmental noise emissions from external mechanical plants to adjacent land uses in accordance with the Environment Protection Regulations (the Regulation) and supporting Noise Protocol<sup>1</sup>.
- Control noise from car movements within the onsite carpark to adjacent land users in accordance with the Regulation and Noise Protocol.
- Control aircraft noise intrusion on building in accordance with AS 2021:2015.

The drawing set Proposed Childcare Centre 12318 TP03, Issues P1, 03/07/24 has been reviewed against the following guidelines:

- AS/NZS 2107:2016 Recommended design sound levels and reverberation times for building interiors
- AS2021:2015 Acoustics Aircraft Noise Intrusion Building Siting and Construction
- Association of Australasian Acoustical Consultants (AAAC) Guideline Childcare Centre Acoustic Assessment V3.0

<sup>&</sup>lt;sup>1</sup> EPA Victoria Publication 1826.4, Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues

### 2 Site

The subject site is located at 22-24 Lismore Street Dallas, within and bounded by a General Residential Zone (GRZ1) zone. The planning property report is provided in Appendix B. The subject site and nearest sensitive receivers are shown in Figure 1.



Figure 1 Site location

According to the ANEF contour provided by the M3R Flight Path and Noise Tool, the subject site is located marginally beyond of the ANEF 20 contour which would deem the proposed location as 'acceptable'. However, Note 1 for Table 2.1 of AS 2021:2015 states that:

This copied document is made available for the sole purpose

- The actual location of the 20 of prosess under the Planning aircraft flight paths. Because prosess under the Planning and Environment Avotgless outside but near to the 20 ANEF confidere copy must not be used for any other purpose.

Please note that the plan may not be to scale.

Consequently, the impact of aircraft noise intrusion to the project building will be assessed according to the 'Conditionally Acceptable' category as stated in Clause 2.3.2 of AS 2021:2015. Figure 2 provides the site location in relation to the ANEF noise contour from the M3R Flight Path and Noise Tool.

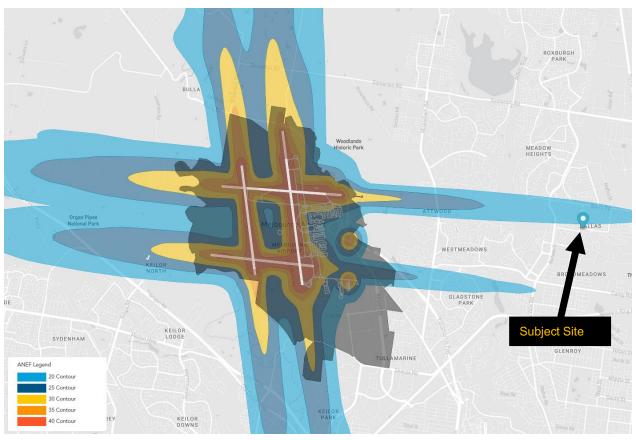


Figure 2 Site location within ANEF contour (https://caportal.com.au/melair/virtual/m3r, 18/7/2024)

### 3 Noise survey

#### 3.1 Existing noise levels

Existing ambient and background noise levels have been monitored at the location shown in Figure 1 from 3 to 12 April 2024 in accordance with EPA Publication 1997 *Technical guide: Measuring and analysing industry noise and music noise.* Details of the instrumentation used for noise measurements are presented in Table 1.

Table 1 Noise monitoring instrumentation

Туре	Manufacturer	Model	Serial Number	Calibration Status
Sound Level Meter	Rion	NL – 42	946979	Current
Calibrator	Brüel & Kjær	4231	2528316	Current

The weather conditions during the monitoring period were assessed using data from the Essendon Airport weather station operated by the Bureau of Meteorology. Time periods where weather conditions exceeded 5.5 m/s windspeed or more than 0.2 mm/h of rain were excluded from the data analysis in accordance with EPA Publication 1997.

Table 2 presents a summary of the lowest average background noise levels for each period. These noise levels will be used to establish the noise limits for the project.

Table 2 Background noise level summary

Time Period	Time		Background Level L <sub>A90</sub> dB	Background Level L <sub>Aeq</sub> dB		
Day	7 am to 6 pm, from Wed 2024 (not including wee	Inesday 3 April 2024 to Friday 12 April kends)	41	49		
Evening	6 pm to 10 pm Monday 7am to 10 pm Sundays	,	39	47		
Night	10 pm to 7 am Everyday	This copied document is made available of enabling its consideration and representation and Englishing and Engl	eview 🕯 s part o	f a planning		
	process under the Planning and Environment Act 1987. The copy must not be used for any other purpose.					

Table 3 and Table 4 present the L<sub>A90</sub> and Table 4 present the L<sub>A90</sub> and Table 3 and Table 4 present the L<sub>A90</sub> and Table 4

Table 3 Background LA90 noise level summary

Date	Day Background level, L <sub>A90</sub> dB	Evening Background level, L <sub>A90</sub> dB	Night Background level, L <sub>A90</sub> dB
Wednesday 3 April 2024	43	39	40
Thursday 4 April 2024	44	42	39
Friday 5 April 2024	42	43	39
Saturday 6 April 2024	41	41	33

Date	Day Background level, L <sub>A90</sub> dB	Evening Background level, L <sub>A90</sub> dB	Night Background level, L <sub>A90</sub> dB
Sunday 7 April 2024	40	41	37
Monday 8 April 2024	42	45	41
Tuesday 9 April 2024	46	44	38
Wednesday 10 April 2024	44	42	37
Thursday 11 April 2024	42	42	34
Friday 12 April 2024	41	-	-

#### Table 4 Ambient $L_{\text{Aeq}}$ dB noise level summary

Date	Day Background level, L <sub>Aeq</sub> dB	Evening Background level, L <sub>Aeq</sub> dB	Night Background level, L <sub>Aeq</sub> dB
Wednesday 3 April 2024	53	48	47
Thursday 4 April 2024	51	47	44
Friday 5 April 2024	50	52	44
Saturday 6 April 2024	50	53	42
Sunday 7 April 2024	50	51	49
Monday 8 April 2024	59	56	48
Tuesday 9 April 2024	52	49	42
Wednesday 10 April 2024	51	49	42
Thursday 11 April 2024	51	51	44
Friday 12 April 2024	49	-	-



### 4 Legislative, standard and guidelines

#### 4.1 General Environmental Duty

The *Environment Protection Act 2017* (the Act) sets out environmental obligations and protections for Victorians. The cornerstone of the Act is the General Environmental Duty (GED), which states:

A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

In the context of the Act, 'reasonably practicable' measures mean putting in controls to eliminate the risk of harm to human health and the environment so far as reasonably practicable. If eliminating the risk of harm is not reasonably practicable, then the risk of harm must be reduced so far as reasonably practicable. A number of matters must be considered in deciding what is reasonably practicable in the circumstances:

- the likelihood of those risks eventuating
- the degree of harm that would result if those risks eventuated
- what the person concerned knows, or ought reasonably to know, about the harm or risks of harm and any ways
  of eliminating or reducing those risks
- the availability and suitability of ways to eliminate or reduce those risks
- the cost of eliminating or reducing those risks.

EPA Victoria Publication 1856: *Reasonably practicable* explains that, when dealing with a common risk or harm, it is possible to demonstrate that the risk has been reduced so far as reasonably practicable if well-established effective practices or controls have been adopted to eliminate or manage risk. Where well-established practices or controls do not exist, then it is necessary to show that effective controls have been assessed and adopted.

### 4.2 Environment Protection Regulations

The *Environment Protection Regulations* are subordinate legislation that support the Act and prescribe noise limits for commercial, industrial and trade premises.

Under the *Environment Protection Regulations 2021*, the assessment of noise from commercial, industrial and trade premises at NSAs must be carried out in accordance with EPA Victoria Publication 1826.4 *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues* (Noise Protocol), both in terms of establishing noise limits as noise sensitive areas and in terms of the measurement of noise from the subject premises.

This copied document is made available for the sole purpose

The Environment Protection Regulation specific parts of a planning process under the Planning and Environment Act 1987.

Table 5 Time periods defined in Environ The GORNIE IN USE IN USE USED for any other purpose.

Period	Please note that the plan may not be to scale.
Day	7 am to 6 pm Monday to Saturday
Evening	6 pm to 10 pm Monday to Saturday
	7 am to 10 pm Sundays and Public Holidays
Night	10 pm to 7 am Everyday

Compliance with the noise limits set forth in the *Environment Protection Regulations* is one aspect of meeting a duty holder's obligations with respect to noise emissions. The noise limits are established to support the GED requirements of minimising risks to human health and the environment. However, compliance with the limits does not remove the overarching requirement to take steps to minimise risks so far as reasonably practicable in accordance with the GED.



#### 4.3 Noise protocol

Environmental noise limits for mechanical plant noise emissions from the site are established in accordance with Environmental Protection Authority Protocol 1826 *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues* (Noise Protocol).

The Noise Protocol prescribes procedures for determining the statutory environmental noise limits that apply at noise sensitive locations, such as residential areas, with respect to noise due to commercial, industrial and trade operations.

The Noise Protocol limits are dependent on:

- Zoning Levels, which are based on the planning scheme zoning types within 70 m and 200 m radii of the noise sensitive area
- The time of day i.e., different limits apply at different times of the day
- The background noise level (L<sub>A90</sub>) in the noise sensitive area, in the absence of noise due to commercial, industrial or trade operations

Typically, zoning levels are considered along with the background noise levels in the area to establish the applicable noise limits. Background noise levels can be classified as 'Low', 'Neutral' and 'High'. In cases where background noise levels are sufficiently low such that does not influence the zoning levels, the background noise level is called 'Neutral'. In 'Neutral' background noise conditions, the applicable noise limit is equal to the zoning levels. 'High' background levels will increase the applicable noise limits above the zoning levels and 'Low' background noise levels reduce the applicable noise limits below the zoning level.

The town planning map around the development site is shown in Appendix B.

Table 6 presents the zoning levels and Noise Protocol noise limits for Day, Evening and Night periods at residences surrounding the site.

**Table 6 Applicable Noise Protocol limits** 

Time Period	Background Level,	L <sub>A90</sub> dB	Zoning Level, L <sub>Aeq</sub> dB	Classification	Noise Limit, L <sub>Aeq</sub> dB
Day	41		51	Neutral	51
Evening	39	This co	oied document is ma	Neutrai de available fo	45 or the sole purpose
Night	33	of enab process	ling its consideration under the Planning	and review a and Environm	s part of a planning ent Act 1987.
4.4. D		-	by must not be used f note that the plan ma		•

#### 4.4 Drop off and Pickup ''

The AAAC Guideline for Childcare Centre Acoustic Assessment (Version 3.0) notes that noise emitted from vehicles arriving and parking on the premises of the childcare centre should be considered. Any noise emitted from vehicles arriving and parking on the premises should not exceed the background noise level by more than 5 dB outside the nearest habitable room window at residential houses. Accordingly, noise limits for noise emitted from vehicles arriving and parking on the premises of the childcare centre are provided in Table 7.

Table 7 Vehicle Noise limits within childcare carpark

Background level, L <sub>A90</sub>	Proposed design criteria, L <sub>Aeq</sub>
41 dB	46 dB



#### 4.5 Outdoor play areas

Noise Protocol is not applicable to the assessment of noise generated by voices, the Kindergarten and Daycare is still obliged to adhere to the GED. As such, the AAAC *Guideline for Child Care Centre Acoustic Assessment V3*, the industry standard for childcare acoustic assessment, has been adopted to assess noise from outdoor play and provide recommendations for attenuation if required.

Under the AAAC Guideline, noise assessment criteria for childcare centres are based on the emergence of child play noise above the background noise level, assessed at the nearest noise sensitive receivers. The AAAC Guideline states:

**Base criteria** – With the development of child care centres in residential areas, the background noise level within these areas can at certain times, be low. Thus, a base criterion of a contributed L<sub>eq.15min</sub> 45 dB(A) for the assessment of outdoor play is recommended in locations where the background noise level is less than 40 dB(A).

**Background greater than 40 dB(A)** – The contributed  $L_{eq,15min}$  noise level emitted from an outdoor play and internal activity areas shall not exceed the background noise level by more than 5 or 10 dB at the assessment location, depending on the usage of the outdoor play area. AAAC members regard that a total time limit of approximately 2 hours outdoor play per morning and afternoon period should allow an emergence above the background of 10 dB (i.e., background +10 dB if outdoor play is limited to 2 hours in the morning and 2 hours in the afternoon).

**Up to 4 hours (total) per day** – If outdoor play is limited to no more than 2 hours in the morning and 2 hours in the afternoon, the contributed  $L_{eq,15 \, min}$  noise level emitted from the outdoor play shall not exceed the background noise level by more than 10 dB at the assessment location.

More than 4 hours (total) per day – If outdoor play is not limited to no more than 2 hours in the morning and 2 hours in the afternoon, the contributed  $L_{eq,15 \text{ min}}$  noise level emitted from the outdoor play area shall not exceed the background noise level by more than 5 dB at the assessment location.

The assessment location is defined as the most affected point on or within any residential receiver property boundary. Examples of this location may be: 1.5 m above ground level; On a balcony at 1.5 m above floor level; Outside a window on the ground <u>or higher floors</u>.

The daytime noise limits from outdoor play areas at the nearby residences were established based on measured background noise levels and are shown in Table 8.

This copied document is made available for the sole purpose							
Table 8 Noise limits from outdoor play a <b>ரை உள்ளன்று ஈக்</b> சி <b>ரு சக்</b> சிர <b>ைக</b> ideration and review as part of a planning							
	T	and Fayirenment Act 1987 Acq					
	Please note that the plan ma						
More than 4 hours (total) per day	41	<b>46</b> (41 + 5 dB)					

We note that the nearest properties at 5 and 7 Moe Ct are residential properties that back onto the outdoor play area. Figure 3 presents the proposed outdoor play areas and the nearby residential receiver locations.



Figure 3 Outdoor play locations and nearest sensitive residential locations

#### 4.6 Aircraft noise criteria

4.6.1 Aircraft noise imparting copied document is made available for the sole purpose Assessment of the impact of aircraft noise mabiling its consideration and carrieval as a second interest of a development of the original and carrieval and familiar a

Table 9 Building site acceptability based on ANEF zones, AS 2021:2015

	ANEF zone of site					
Building type	Acceptable	Conditionally acceptable	Unacceptable			
School, university	< 20 ANEF	20 – 25 ANEF	>25 ANEF			
House, home unit, flat, caravan park	< 20 ANEF	20 – 25 ANEF	>25 ANEF			
Commercial building	< 25 ANEF	25 – 35 ANEF	>35 ANEF			



#### **Acceptable**

If from the table above the building site is classified as 'acceptable', there is usually no need for the building construction to provide protection specifically against aircraft noise. However, it should not be inferred that aircraft noise will be unnoticeable in areas outside the ANEF 20 contour.

#### Conditionally acceptable

If from the table above the building site is classified as 'conditionally acceptable', the maximum aircraft noise levels for the relevant aircraft and required noise reduction should be determined in accordance with Clause 3.2, AS 2021:2015, and the aircraft noise attenuation to be expected from the proposed construction should be determined in accordance with Clause 3.3, AS 2021:2015.

#### Unacceptable

If from the table above the building site is classified as 'unacceptable', construction of the proposed building should not normally be considered.

#### 4.6.2 Internal noise level (AS 2021:2015)

The targeted internal noise levels for the development were established in accordance with AS 2021:2015. These internal noise levels were implemented to derive the required Aircraft Noise Reduction (ANR). For design purposes, the ANR is the arithmetic difference between the aircraft noise level at a site and the indoor design level.

Table 10 presents the appropriate internal noise levels for this project.

#### Table 10 Indoor design sound levels (AS 2021:2015)

Room types	Indoor design sound level, L <sub>Smax</sub> dB(A)
Sleeping areas, dedicated lounges	50
Other habitable spaces	55

### 5 Noise impact assessment

#### 5.1 Outdoor playground noise (AAAC)

#### 5.1.1 Children noise

To assess the impact of noise from outdoor play areas at nearby residences, a 3D sound prediction model was created using a proprietary noise modelling software package, SoundPLAN (version 8.2). In the prediction model the following was assumed:

- The proposed number of children for outdoor play areas:
  - Playground: total 60 children, aged from 0 to 5 years. Age has been distributed as follows:
    - 0 to 2 years = 10 children
    - 2 to 3 years = 25 children
    - 3 to 5 years = 25 children
  - We note that the upper outdoor play space will hold 25 children, the remaining 35 will be in the outdoor play space.
- To achieve compliance with noise level criteria, we recommend the fence between the Outdoor Play Space 01 and the residential receivers at 5 and 7 Moe Court is 2.5 metres high and achieves minimum Rw30. Possible Rw30 construction could be the following:
  - Double layer wall: One layer of 0.48 mm Colorbond sheet / 50 mm space with insulation / one layer of 0.48 mm Colorbond sheet. OR
  - Single layer wall: 9mm compressed fibre cement sheet.

Sound source levels from all children were modelled at 1 metre in height above ground level. Sound source levels of children are based on the AAAC *Guideline for Child Care Centre Acoustic Assessment* (Ver.3.0) as presented in Table 11 for groups of 10 children.

Table 11 Sound power spectrum (Lw per  $10^{\text{-}12}$  Watts reference) for children at play, dB

Age of children	Number of		Sound power spectrum (Lw) at octave band, dB						Overall,	
children	children in group	63 Hz	125 Hz	250 Hz	500 Hz	1kHz	2 kHz	4 kHz	8 kHz	dB(A)
0 to 2 years	10	54	60	66	72	74	71	67	64	78
2 to 3 years	10	61							<del>e sole p</del> irt ठी <sup>9</sup> a p Act 198	<del>urpose</del> lanที่กิต 7.
3 to 5 years	10	64	The co	py mus note th	not1be	used fo	angyoth	er <del>p</del> urp	os <del>ę</del> .2	87

(1) Per AAAC Guidelines, the effective sound power level for 'n' children is calculated at: (10 children SWL) + 10log('n'/10)

The adjusted sound power levels used for the modelling of the distribution of children is provided in Table 12.

Table 12 Sound power spectrum (Lw per  $10^{-12}$  Watts reference) for distribution of children at play, dB



Age of	Number of	Sound power spectrum (L <sub>w</sub> ) at octave band, dB								Overall,
children in group		63 Hz	125 Hz	250 Hz	500 Hz	1kHz	2 kHz	4 kHz	8 kHz	dB(A)
0 to 2 years	10	54	60	66	72	74	71	67	64	78
2 to 3 years	25	65	71	77	83	85	82	78	74	89
3 to 5 years	25	68	74	79	85	87	84	80	76	91

Proposed plans, elevations and assumptions used for the acoustic assessment are summarised below:

• Ground floor receivers: 1.5 m from ground, approximately 1 m from building façade

Table 13 presents the predicted noise levels from the use of the outdoor play areas at the nearby residential properties. The predicted noise levels are based on the recommendation of a 2.5 metres fence being provided as indicated in Appendix A.

Table 13 Predicted child noise at nearby residential houses – up to 4 hours duration of outdoor play

Residential house	Number of children playing	Predicted noise level, L <sub>Aeq</sub> dB	Compliance (L <sub>Aeq</sub> 51 dB criteria)
7 Moe Court	60	49	✓
5 Moe Court	60	49	✓
20 Lismore Street	60	47	✓
26 Lismore Street	60	42	✓

#### 5.2 Vehicle noise

To predict noise emitted from the childcare centre carpark to nearby noise receivers a typical sound power spectrum for a car starting is adopted from previous projects and is presented in Table 10. The total sound power used for the modelling of vehicle noise is 81dB(A) as a sessment V3.0. Vehicle noise sources the analyting at succession and articlar at long at the Planning and Environment Act 1987.

Table 14 Sound power level for a typical threstarting must not be used for any other purpose.

Sound power Level at Octave Bante chart the plan மூலுந்தி be to scale.								
	64	125	250	500	1000	2000	4000	8000
Car starting	57	69	62	66	66	64	58	45

In the prediction model, 5 cars are assumed to operate simultaneously as a worst-case scenario. Table 15 provides the predicted noise levels at the nearby worst case residential receivers. The prediction assumes that the 2.5 m high fence is provided between the carpark and 20 Lismore Street and that cars are only operating for 2 minutes within the carpark.



Table 15 Predicted carpark noise at nearby residential receiver

Residential receiver	Predicted noise level	Design criterion	Compliance
20 Lismore Street	42	46	✓
26 Lismore Street	42	46	✓

#### 5.3 Mechanical service noise

It is recommended that the equipment selected for the development be reviewed by an acoustic consultant during the detailed design stage of the project when acoustic specifications of equipment are available.

#### 5.4 Aircraft noise

Table 16 presents the constructions of building envelopes for the childcare centre. The table has provided different construction requirements based on the criteria of the space (Sleeping area or general area).

Table 16 Recommended construction for building envelope

Table to recommended construction for Sundaing envelope					
Building element	Proposed element	Minimum acoustic rating, Rw	Construction requirements		
Sleeping areas – 50dB	Sleeping areas – 50dB(A) criteria				
Wall	Exotec Façade Panel	34	Understand Exotec Façade Panel is proposed (9mm fibre cement sheet).  Element to achieve Rw34, this may need a		
			thicker construction to achieve the Rw requirement.		
Roof	Colorbond roof	40	Roof construction to be:  Colourbond 75mm 14kg/m3 insulation 13mm standard plasterboard		
Glazing	Single or double	31	Single 6mm glazing is suitable.		
	glazing This cop	ied documen	t is made available for the sole purpose		
General areas - 55dB(A	General areas - 55dB(A) criteria of enabling its consideration and review as part of a plan process under the Planning and Environment Act 1987.				
Wall			used for any other purpose. Exotec Facade Panel is suitable lan may not be to scale.		
Roof	Colorbond roof	40	Roof construction to be:  Colourbond 75mm 14kg/m3 insulation 13mm standard plasterboard		
Glazing	Single or double glazing	30	Glazing to achieve minimum Rw30. Single 6mm glazing is suitable.		

Alternative constructions for these building elements can be selected if the acoustic performance is equal to or greater than the minimum  $R_W$  rating.

#### 6 Conclusion

This report provides an acoustic assessment for the proposed childcare centre located at 22 - 24 Lismore Street, Dallas. The assessment has been conducted with reference to legislative requirements (in particular the GED), the AAAC design guideline and Australian Standard AS 2021:2015.

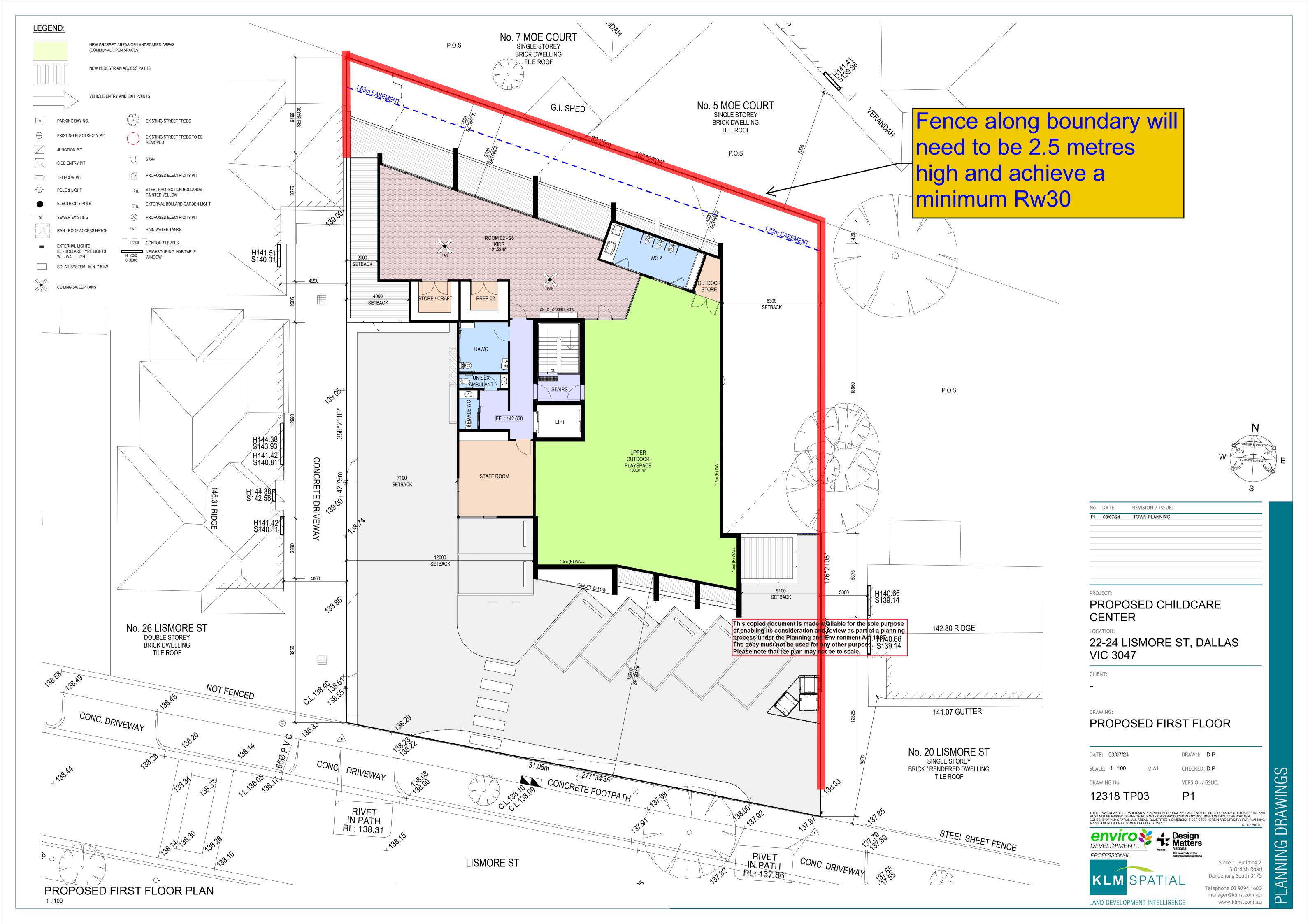
To establish noise limits for the assessments, unattended background noise measurements at a representative location were conducted between Wednesday 3 April 2024 to Friday 12 April 2024. The information has been used to establish noise limits for the proposed site at nearby residential dwellings.

Based on the predicted noise levels to the nearest sensitive receivers, we recommend that outdoor play time does not exceed a total of 4 hours throughout the day so that a criteria of 51dB(A) is applicable.

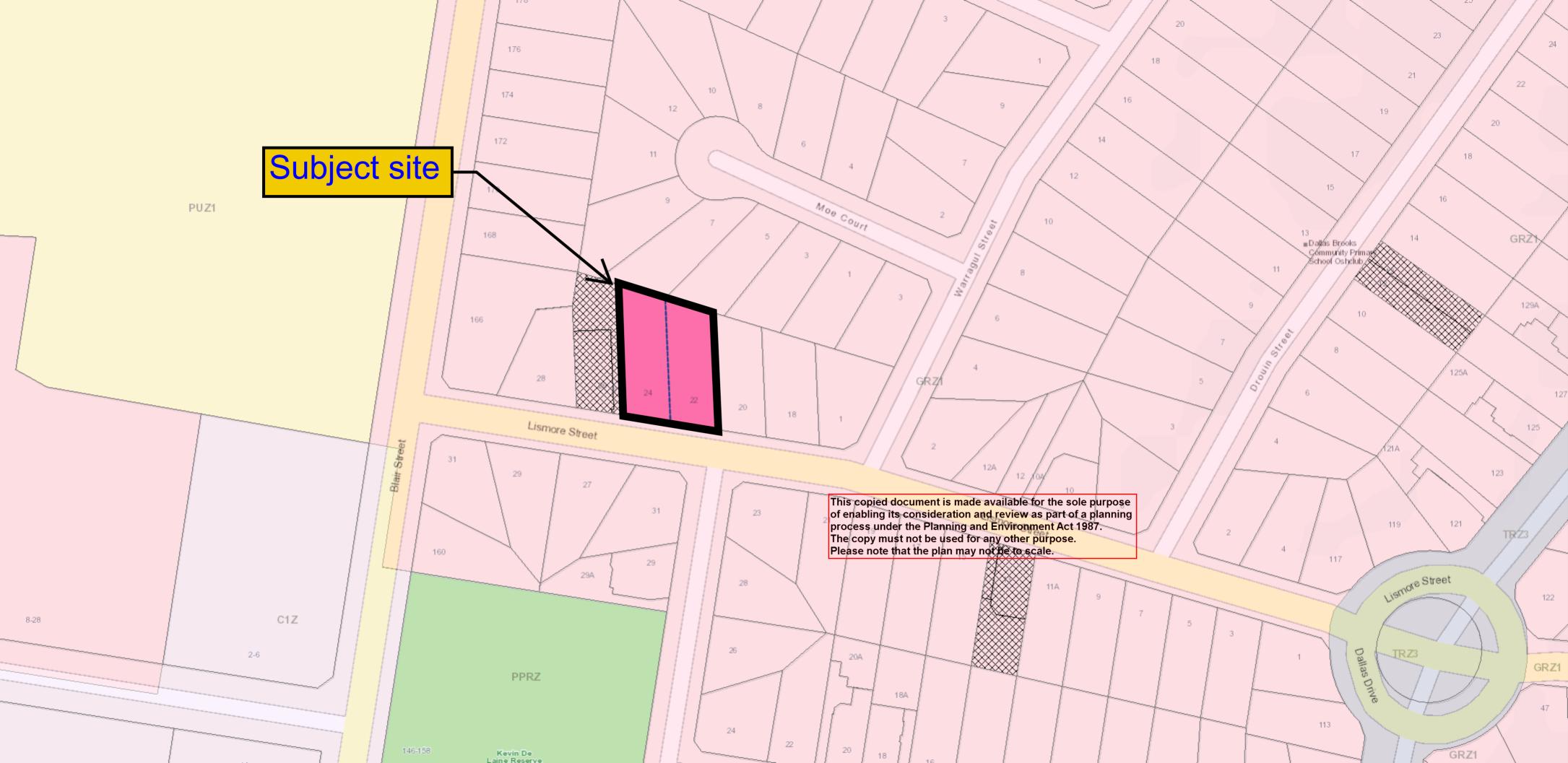
Assessments have indicated that, providing the recommended noise mitigation measures as detailed in Section 5 and at locations shown in Appendix A, the noise emissions from 60 children and cars within the carpark will meet the established criteria.

Equipped with the information contained herein, our client can make informed decisions about their next steps.

### Appendix A – Acoustic barrier markup

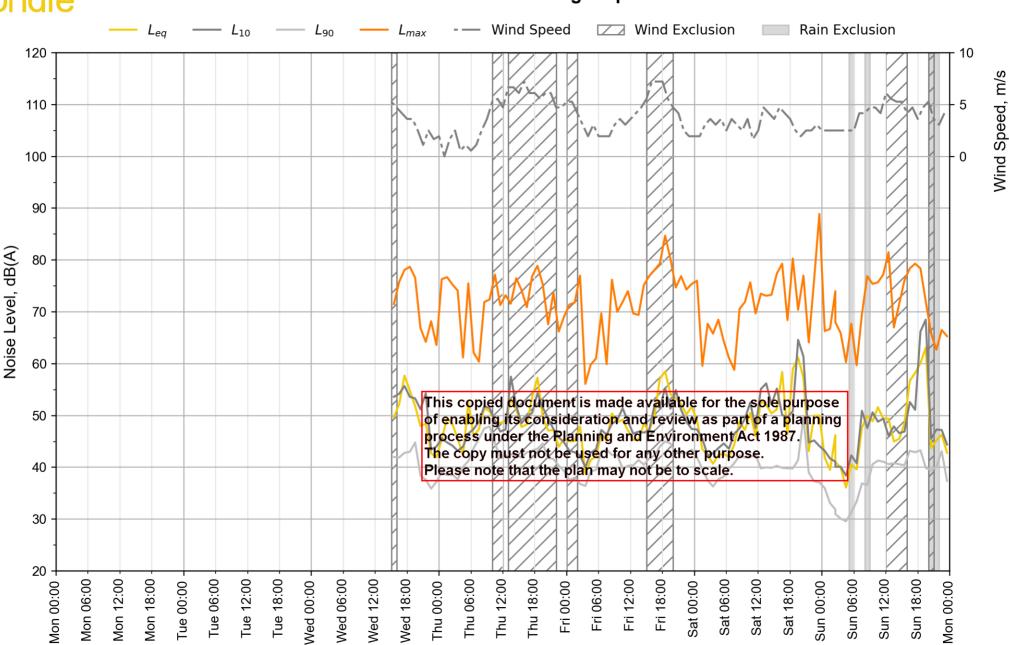


### Appendix B – Planning property report



### **Appendix C – Noise monitoring graph**

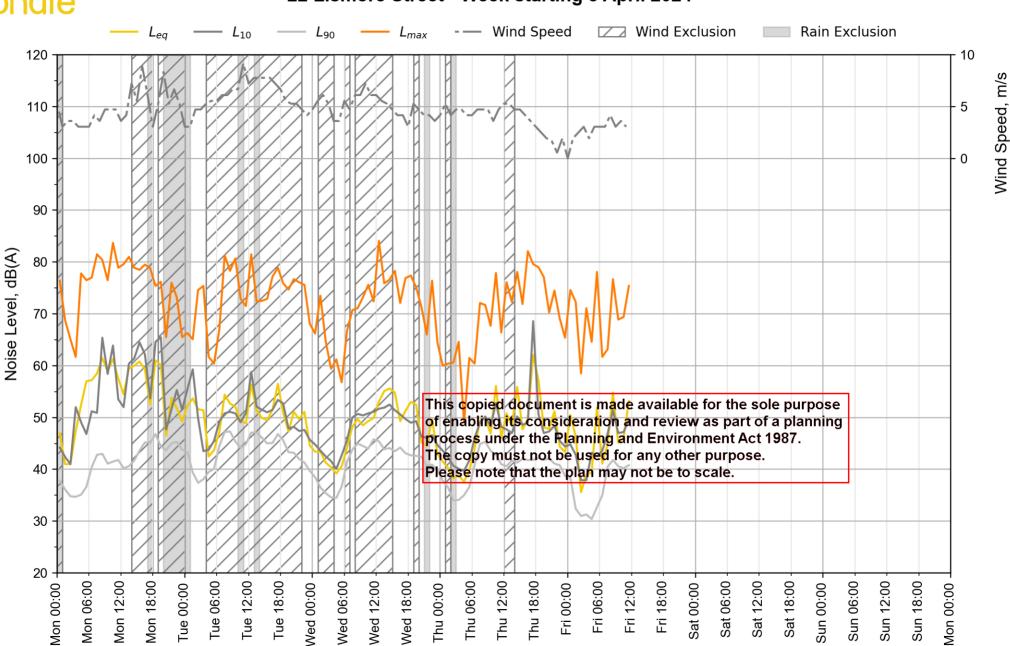
#### 22 Lismore Street - Week starting 1 April 2024



Rion NL-42

Calibration: 2024-07-19

#### 22 Lismore Street - Week starting 8 April 2024



Rion NL-42

Calibration: 2024-07-19

## Waste Management Plan 22-24 Lismore Street, Dallas (VIC)



#### Project 22-24 Lismore Street, Dallas (VIC)

Prepared for KLM Spatial

Our reference 21193W R02F01

Directory path

https://ratioconsultants1.sharepoint.com/sites/21193W790/Shared Documents/7. Waste management plans/21193W R02F01.docx

Version	Date	Issue	Prepared by	Checked by	
R01D01	9/08/2024	Town Planning – Draft	W Psiwa	M Fairlie	
R01F01	9/08/2024	Town Planning – Final	W Psiwa	M Fairlie	
R02F01	15/10/2024	Updated to address Council's comments	W Psiwa	M Fairlie	

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987.

The copy must not be used for any other purpose.

Please note that the plan may not be to scale.

#### Ratio Consultants Pty Ltd

This work is copyright. Apart from any use as permitted under Copyright Act 1968, no part may be reproduced without written permission of Ratio Consultants Pty Ltd.

Disclaimer: neither Ratio Consultants Pty Ltd nor any member or employee of Ratio Consultants Pty Ltd takes responsibility in anyway whatsoever to any person or organisation (other than that for which this report is being prepared) in respect of the information set out in this report, including any errors or omissions therein. Ratio Consultants Pty Ltd is not liable for errors in plans, specifications, documentation or other advice not prepared or designed by Ratio Consultants Pty Ltd.



# **Table of Contents**

	Section	Page No.	
1.	Introduction	5	
1.1.	Project Details	5	
1.2.	Purpose	5	
1.3.	Limitations	5	
1.4.	Applicable Standards and References	6	
2.	Operational Waste Management Guide	7	
2.1.	Recycling Victoria: A new economy	7	
2.2.	Guide for Childcare Centre Staff	8	
2.3.	Guide for the Childcare Centre Operator	9	
2.4.	Waste Management Plan Communication Strategy	9	
2.5.	Waste Management Plan Revisions	10	
3.	Waste Volume Details	11	
3.1.	Waste Volume Assessment	11	
4.	Waste Storage Details	12	
4.1.	Waste Storage Requirements	12	
4.2.	Waste Storage Layout	13	
5.	Waste Collection Details	15	
5.1.	Waste Collection Requirements	15	
5.2.	Waste Collection Methodology	15	
5.3.	Waste Collection Time  This copied document is made available for the sol of enabling its consideration and review as part of		
6.	Design Standards process under the Planning and Environment Act 1		
6.1.	The copy must not be used for any other purpose. Bin Storage Area Design R ହାଞ୍ଚଳକ୍ଷ୍ୟ that the plan may not be to scale.	17	
6.2.	Bin Colour Requirements	17	
6.3.	Signage Requirements	18	
6.4.	Internal Waste Receptacle Requirements	18	
7.	Contact Details	19	
7.1.	List of Contractors and Suppliers	19	

### **Appendices**

Appendix A - Plans Assessed

Appendix B - Waste Collection Vehicle Swept Path Assessment

### 1. Introduction

#### 1.1. **Project Details**

Site Address

22-24 Lismore Street, Dallas (VIC)

**Local Council** 

Hume City Council (Phone: 03 9205 2802)

Planning Application Number

To be assigned

**Development Type** 

60-place childcare centre

#### **Development Summary**

Level	Waste Source	Floor Area (m²)	
Ground level	Playroom 1	120.57	
Level 1	Playroom 2	85.20	
То	205.77		

#### 1.2. **Purpose**

This Waste Management Plan has been prepared to accompany the Town Planning Application for the proposed development.

#### 1.3. Limitations

This copied document is made available for the sole purpose of enabling its consideration and review as part of a planning Waste management arrangement arrangement

arrangements for the devel by a set to the whole which the plan many not be to set of ment are outside the scope of this Waste Management Plan.

#### 1.4. Applicable Standards and References

Relevant policies and guidelines considered as part of the preparation of this Waste Management Plan include:

- Australian Government National Waste Policy: Less Waste, More Resources (2018).
- Australian Standards:
  - AS 4123.1-7 (Mobile Waste Containers).
  - AS 1668.2 (Odour).
  - AS 2890.2 (Parking Facilities).
  - AS 5377:2013 (E-waste).
  - AS 4736-2006 & AS 5810-2010 (Biodegradable plastics).
  - AS 4564-2012 (Composts).
  - AS 1319 (Safety signs).
- Environment Protection Act 2017.
- Environment Protection Regulations 2021.
- Disability Discrimination Act 1992.
- Victorian Government Recycling Victoria: A New Economy (2020).
- Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments (2019).

# Operational Waste Management Guide

#### 2.1. Recycling Victoria: A new economy

Victoria is on a path towards a 'circular economy', whereby residents and businesses are encouraged to keep valuable materials in use for as long as possible and to avoid waste generation as a priority. An example of the principles of the circular economy is displayed in figure 2.1 below.



Figure 2.1: The Circular Economy

Source: Recycling Victoria: A New Economy

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of waste generated in New Economy (2020) sets out strategies to reduce the amount of waste generated in New Economy (2020) sets out strategies to reduce the amount of waste generated in New Economy (2020) sets out strategies to reduce the service and strategies in the dead of the strategies to reduce the amount of waste on the environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment in New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria: A New Economy (2020) sets out strategies to reduce the amount of environment.

The Government's Recycling Victoria is a strategies to reduce the plantage of environment.

The Government's Recycling Victoria is a strategies to reduce the plantage of environment.

The Government's Recycling Victoria is a strategies to reduce the plantage of environment.

The Government's Recycling Victoria is a strategies to reduce the plantage of environment.

The Government's Recycling Victoria is a strategies to reduce the plantage of environment.

Therefore, supporting users to participate in the circular economy and encouraging waste as a last rather than a first resort, through clever design of the waste and recycling systems, should be given due consideration.

Establishing waste reduction and recycling targets, periodic audits, proper record keeping of waste streams and ongoing monitoring the quantity of recyclables is an important means of understanding your waste profile and progress over time. Audit results should be shared with all users, to raise awareness and encourage further reductions in waste wherever possible.

#### 2.2. Guide for Childcare Centre Staff

#### General Waste Disposal

- Staff shall place general waste into dedicated general waste receptacles (to be provided by the Operator).
- Staff shall take full general waste receptacles to the ground level bin storage area and empty them into the general waste collection bin.
- General waste must be placed within tied plastic bags prior to being placed into the general waste collection bin.

#### **Organics Disposal**

- Staff shall place food scraps into dedicated organics receptacles (to be provided by the Operator).
- Staff shall take full organics receptacles to the ground level bin storage area and empty them into the organics collection bin.
- Organics must be unbagged or placed within contractor-approved compostable bags prior to being placed into the organics collection bin.

#### Recycling Disposal

- Staff shall place recycling into dedicated recycling receptacles (to be provided by the Operator).
- Staff shall take full recycling receptacles to the ground level bin storage area and empty them into the recycling collection bin.
- Bottles, cans, and containers must be rinsed, and lids/packaging separated, prior to being placed into the recycling collection bin. Recycling must be loose and unbagged.

#### Paper and Cardboard Disposal

- Staff shall place paper and cardboard into dedicated paper and cardboard receptacles (to be provided by the Operator).
- Staff shall take full receptacles to the ground level bin storage area and empty them into the paper and cardboard collection bin.
- Paper and cardboard must be flattened prior to being placed into the paper and cardboard collection bin. Paper and cardboard must be loose and unbagged.

Disposal of Other Waste Streams its consideration and review as part of a planning

- Hard Waste & E-Waste Dispossi แน่งคระที่สารที่สายที่สุดที่สุดเลาสู่ สายก็เราตาและโคร ที่ ที่ 1987 edicated area provided within the The GPRV enusting the used for any asthern Rushaste shall be collected by a private configered potential the interpretation by a private configered potential the configered potential Alternatively, hard waste and e-waste can be taken directly to a nearby waste transfer station. For more information, refer to this link: https://www.hume.vic.gov.au/Residents/Waste/Your-options-for-waste-disposal.
- Nappy Waste Disposal: it is highly recommended that separate nappy waste bins/receptacles are provided within the childcare centre to encourage the separation of nappy waste from general waste, in all room/areas expected to generate waste. If provided. staff shall place nappy waste directly into the dedicated bins/receptacles, which shall be collected by a licensed contractor.



#### 2.3. Guide for the Childcare Centre Operator

The Operator shall be responsible for the following:

- Ongoing management of the waste management system, including the maintenance of the bin storage area and associated equipment and components, to the satisfaction of all waste system users and the relevant authority, and in accordance with the manufacturer's specifications.
- Engaging an appropriate contractor(s) to conduct services, replacements, or upgrades, as required.
- Ensure site safety for all building users and contractors.
- Organising regularly nappy waste collection via a licensed contractor.
- Abide by all relevant OH&S legislation, regulations, and guidelines.
- Assess any manual handling risks and prepare a manual handling control plan for waste and bin transfers.
- Provide to staff/contractors equipment manuals, training, health and safety procedures, risk assessments, and PPE to control hazards associated with all waste management activities.
- Engaging and managing the waste collection contractor(s).
- Ensuring the waste collection contractor(s) has access to the site and bin storage area on collection days.
- Publishing and distributing information to ensure that staff are familiar about the waste management system and the location of the bin storage area.
- Informing staff that bagged recycling and paper & cardboard is not permitted.
- Advising staff on where and how to dispose of each waste stream correctly.
- Securing the bin storage area and labelling/numbering the bins according to the property address to protect the equipment from theft and vandalism.
- Servicing all public areas through sweeping and removal of litter on a regular basis to prevent stormwater pollution.
- Preventing overfilled bins by keeping lids closed.
- Ensuring that bins are not removed from the site.
- Ensuring that the bin storage area and associated waste management equipment are provided as per the design requirements outlined in Section 6.
- 2.4. Waste Manage This CPP redesement is made 3 vailable, for the sole purpose of enabling its consideration and review as part of a planning. The waste collection contraction and review as part of a planning material to inform staff about the convenient of the convenient between the content of the convenient of the content of the convenient of the con



#### 2.5. Waste Management Plan Revisions

From time to time, due to changes in legislative requirements, changes in the development's needs and/or waste patterns (such as waste composition, volume, or distribution), or to address unforeseen operational issues, the Operator shall be responsible for coordinating the necessary Waste Management Plan revisions, including (on an as-required basis):

- A waste audit and new waste management strategy.
- Revision of the waste system (bin size / quantity / waste streams / collection frequency / update of equipment).
- Revision of the services provided by the waste collection contractor(s).
- Re-education of users.
- Any necessary statutory / regulatory requirements / approvals.

## 3. Waste Volume Details

#### 3.1. Waste Volume Assessment

At the time of preparation of this Waste Management Plan, Hume City Council has no published waste generation rates for commercial land uses. Sustainability Victoria's 'Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments' provides the following general waste and recycling generation rates applicable to childcare centres:

#### Childcare

Adopted for all activity rooms

- General Waste: 350 L/100m² floor area/week

- Recycling: 350 L/100m<sup>2</sup> floor area/week

To allow for the separation of organics and paper and cardboard from the general waste and recycling streams (respectively), the above waste generation rates have been modified to allow for an 80:20 ratio split for general waste: organics and a 50:50 ratio split for recycling: paper & cardboard.

Applying the above modified waste generation rates, the waste volume estimates for the development are outlined in Tables 3.1 and 3.2 below.

Table 4.1: General Waste & Organics Volume Estimates

Waste Floor Area Source (m²)		General Waste Volume (L/Week)	Waste Volume  Generation Rate (1 /100m²/	
205.77	280	576	70	144
205.77 TI	nis copied docum	ent is made av	ailable <u>f</u> or the s	sole pu <u>rp</u> ose
	(m²) 205.77	(m²) Rate (L/100m²/ Week)	Waste   General   Waste   Waste   General   Waste   Volume   (L/100m²/ Week)	Waste Floor Area (m²)  Rate (L/100m²/ Week)  General Waste General Waste Volume (L/Week)  (L/Week)  Week)  Organics Generation Rate (L/100m²/ Week)

Table 4.2: Recycling and Paper & Caroboard Volume Estimates. The copy must not be used for any other purpose.

	Plea	se note that th	e plan may not	be to scale.	
Waste Source	Floor Area (m²)	Recycling Generation Rate (L/100m²/ Week)	Recycling Volume (L/Week)	Paper & Cardboard Generation Rate (L/100m²/ Week)	Paper & Cardboard Volume (L/Week)
Playrooms	205.77	175	360	175	360
Total	205.77	-	360	-	360

# 4. Waste Storage Details

### 4.1. Waste Storage Requirements

The waste storage requirements for the development are outlined in Table 4.1 below.

**Table 4.1: Waste Storage Requirements** 

Waste Stream	Bin Size (L)	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m²)		
General waste	660	1	1200	1260	780	0.98		
Organics	240	1	1060	585	730	0.43		
Recycling	660	1	1200	1260	780	0.98		
Paper & cardboard	660	660 1 1200 1260 780						
Hard waste & E-waste	0.5 sgm storage area					0.50		
Total Footprint Excluding Circulation					3.88			
Total Area Provided					6.92			

<u>Note:</u> nappy waste bins/receptacles (if provided) will be located within the childcare centre, in all rooms/areas expected to generate nappy waste. No separate, secured storage area is required for these bins/receptacles.

#### 4.2. Waste Storage Layout

The bin storage area shown on the architectural plans has been sufficiently sized to accommodate the bins and hard waste & e-waste storage area outlined in the above table, including suitable circulation for accessing and manoeuvring the bins.

The bin storage area shall be semi-enclosed via 2060mm high walls, roofing, and tight-fitting gates to minimise potential odours escaping from the bin storage area, protect against theft/vandalism of the bins, and prevent pests/vermin accessing the bins.

The proposed waste storage layout for the development is shown in Figures 4.1 to 4.3 below.

Figure 4.1: Waste Storage Layout - Bins

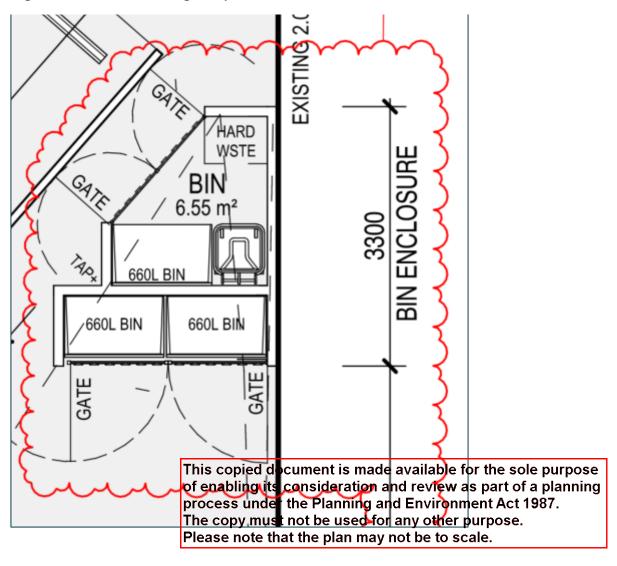


Figure 4.2: Waste Storage Layout - Roof

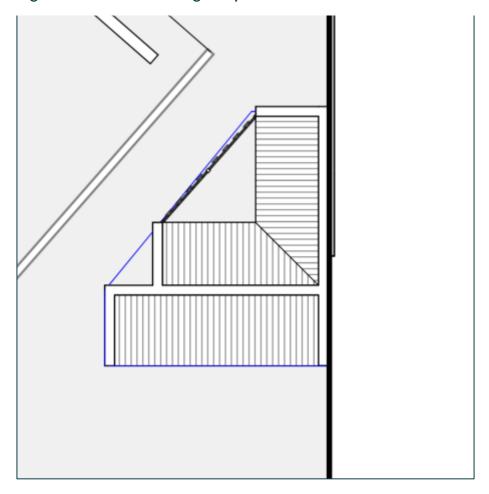
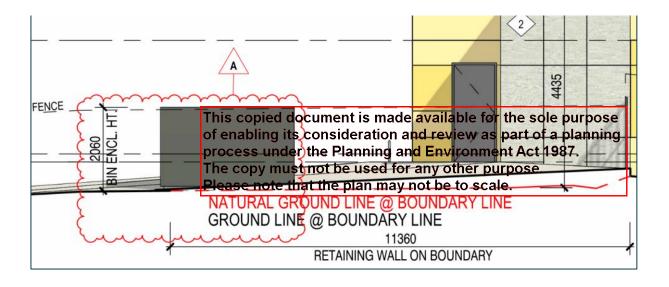


Figure 4.2: Waste Storage Layout - Elevation



## 5. Waste Collection Details

### 5.1. Waste Collection Requirements

The waste collection requirements for the development are outlined in Table 5.1 below

Table 5.1: Waste Collection Requirements

Waste Stream	Volume (L/week)	Bin Size (L)	Quantity	Collection Frequency (per week)	Capacity (L/week)
General waste	576	576 660		1	660
Organics	144	240	1	1	240 660
Recycling	360	660	1	1	
Paper & cardboard	360	660	1	1	660
Hard waste & e-waste	-	-	0.5 sqm	As required	-

### 5.2. Waste Collection Methodology

The proposed waste collection methodology for the development is outlined below:

- Waste collection shall be performed on-site by a private waste collection contractor.
- The nominated waste collection vehicle is the 6.4-metre-long mini rear loader, which has a travel height clearance requirement of 2.2 metres and an operational height clearance requirement of 2.4 metres when collecting bins up to a size of 660 litres. No height clearance issues have been collecting bins up to a wailable for the sole purpose
- A swept path assessme of leasabling pits pare desiration to deliver the princess under the deliver the deliver to demonstrating that the normalized under the deliver the de
- The waste collection contractor shall enter the site and park within close proximity to the bin storage area. The contractor shall wheel the bins from the bin storage area to the waste vehicle for collection and then return the emptied bins to their original positions within the bin storage area once collection is complete. The collection procedure is expected to take no longer a few minutes.
- Nappy waste collection (if provided) will be undertaken on a regular basis. A licensed nappy waste collection contractor will attend the site and collect full nappy bins/receptacles directly from the rooms/areas within the childcare centre expected to generate nappy waste.
- The waste collection contractor shall also be responsible for the development of a Safe Work Method Statement (SWMS) to ensure safety is considered for every aspect of the collection process.

#### 5.3. Waste Collection Time

Waste collection from the subject site shall be undertaken in accordance with EPA Victoria's 'Noise Control Guidelines' (Publication 1254.2, May 2021, Section 5 – Domestic Refuse Collection), as outlined below:

- Collections occurring more than once a week should be restricted to the hours 7 am 6 pm
   Monday to Saturday.
- Compaction should only be carried out while on the move.
- Bottles should not be broken up at the point of collection.
- Routes that service entirely residential areas should be altered regularly to reduce early morning disturbance.
- Compliance with Heavy Vehicle National Law (HVNL) for vehicles with mass greater than 4.5 tonne GVM.

Further to the above, given the site's proposed use as a childcare centre and the resultant high presence of children expected, waste collection shall be undertaken outside of the childcare centre's operating hours.

## 6. Design Standards

#### 6.1. Bin Storage Area Design Requirements

The bin storage area shall be provided in accordance with the following requirements:

- Designed to comply with Building Code of Australia (BCA) and all relevant Australian Standards.
- Allow storage of all collection bins on site at all times.
- Allow easy access to bins for all waste system users.
- Allow direct and convenient transfer of bins to/from the collection point.
- Appropriately screened to prevent unsightly impacts on amenity.
- Provided with artificial light to enable waste system users to dispose of waste safely and appropriately.
- Sized to accommodate all waste arising on the premises together with any associated waste management equipment.
- Concrete (or similar) floor finished to a smooth, even surface, covered at the intersection of walls and plinths.
- The bin storage area shall be semi-enclosed via 2060mm high walls, roofing, and tight-fitting gates to minimise potential odours escaping from the bin storage area, protect against theft/vandalism of the bins, and prevent pests/vermin accessing the bins.
- Provided with adequate bin washing facilities (wall-mounted hot and cold mixing tap with floor graded to wastewater drain with litter trap) in accordance with the relevant authority requirements.

#### 6.2. Bin Colour Requirements

All collection bins shall be sourced from a private supplier. The below bin colours are specified by AS 4123.7, however due to the private nature of the collection these are only recommendations and not mandatory:

- General waste: dark gre**ศาหาร เปอดูห่องของเท่าคะกะ**li**s**d**made available for the sole purpose**
- Organics: dark green or page abling its ronsideration and review as part of a planning process under the Planning and Environment Act 1987.
- Recycling: dark green or ที่คะใยอยู่ หางเร่า หอง เพื่อใช้ แระd for any other purpose.
- Paper and cardboard: da Rigase note that be plath many that be to scale.

#### 6.3. Signage Requirements

The bin storage area / bins shall be provided with instructions and signage informing staff of the following:

- How to correctly separate and dispose of / recycle each waste stream.
- The necessary measures to be undertaken in the event of waste spillages / bag ruptures.
- That no hazardous material is to be stored within the bin storage area.

All bins / the bin storage area shall be provided with Sustainability Victoria or equivalent signage (visit: <a href="https://www.sustainability.vic.gov.au/recycling-and-reducing-waste/waste-systems-in-residential-commercial-and-industrial-buildings/waste-signage">https://www.sustainability.vic.gov.au/recycling-and-reducing-waste/waste-systems-in-residential-commercial-and-industrial-buildings/waste-signage</a>).

#### 6.4. Internal Waste Receptacle Requirements

Internal waste receptacles shall meet the following requirements:

 Suitably sized receptacles no larger than 60 litres for general waste, organics, recycling, and paper and cardboard to ensure ease of manual handling. <u>Note:</u> If receptacles are larger than 60 litres, a bin lifter should be provided.

## 7. Contact Details

### 7.1. List of Contractors and Suppliers

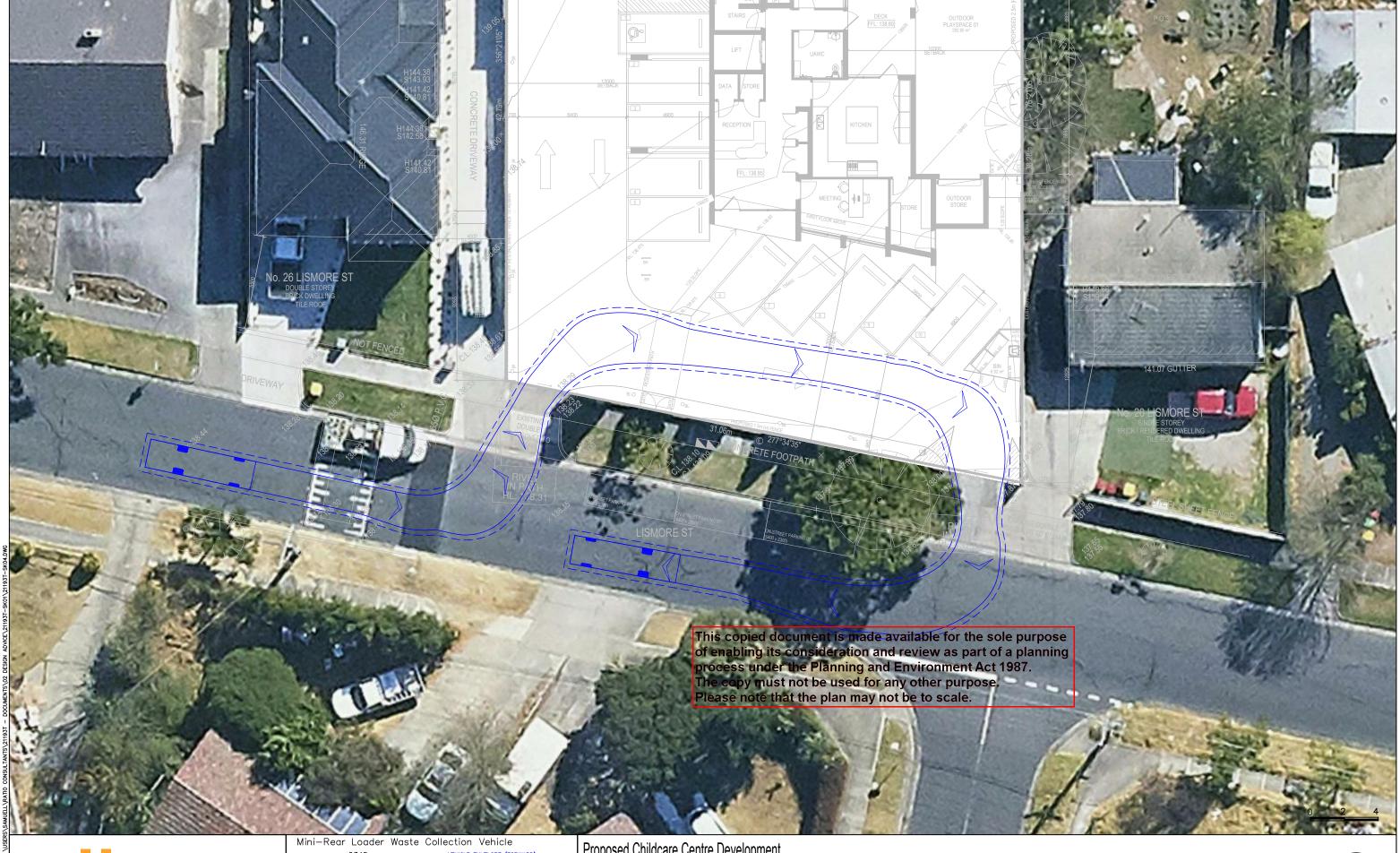
Table 7.1 below includes a complimentary listing of contractors and equipment suppliers. The Project Principal shall not be obligated to procure goods / services from these companies. Ratio Consultants does not warrant or make representations for the goods / services provided by these contractors and suppliers.

Table 7.1: List of Contractors and Suppliers

Service	Contractor/ Supplier	Phone	Website			
	Cleanaway	13 13 39	www.cleanaway.com.au			
	CSC Waste & Recycling	1300 499 927	www.cscwaste.com.au			
	iDump	1300 443 867	www.idump.com.au			
Private Waste Collection	JJ Richards	03 9794 5722	www.jjrichards.com.au			
Contractor and/or Bin Supplier	Premier Waste	1300 219 001	www.premierwaste.com.au			
	Veolia	132 955	www.veolia.com/anz			
	Wastewise Environmental	1300 550 408	www.wastewise.com.au			
	Sulo Australia	1300 364 388	www.sulo.com.au			
	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au			
Bin Washing	Calcorp Services 1800 225 267 www.calcorpservices.com.au This copied document is made available for the sole purpose					
Bill washing	Kerbside Clean-ABin consideration and review as part of a planning process under the Planning and Environment Act 1987.					
	WBC <b>MEe\copynemus</b> t <b>Please</b> inote tha	not be used for 1300 800 621 It the plan may	r any other purpose. www.wbcm-aust.com.au not be to scale.			
Odour Control	Eco-Safe Technologies	1300 135 039	www.eco-safe.com.au			
Odour Control	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au			
E-Waste Collection	Tech Collect	1300 229 837	www.techcollect.com.au			

# Appendix A - Plans Assessed

# Appendix B - Waste Collection Vehicle Swept Path Assessment



ratio:

RATIO CONSULTANTS PTY LTD ABN 005 422 104 8 GWYNNE STREET CREMORNE, VICTORIA 3121 TELEPHONE (03)9429 3111 FACSIMILE (03)9429 3011 6345

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Overall Length
Body Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time

Proposed Childcare Centre Development 22-24 Lismore Street, Dallas

Swept Path Assessment

NOTE: 1) Base Plan Supplied on 06/08/2024	RATIO REFERENCE	SHEET No.	SCALE	DATE
2) Maximum Design Speed 10km/h	21193T-SK04/SD	5 of 5	1:200@A3	06/08/2024