TOWN PLANNING APPLICATION

No. 24-26 Honeyeater Way, Pakenham 3810.

FOR THE USE AND DEVELOPMENT OF LAND FOR

A CHILDCARE CENTRE IN A GRZ

Mar 2023

24-26 Honeyeater Way, Pakenham.

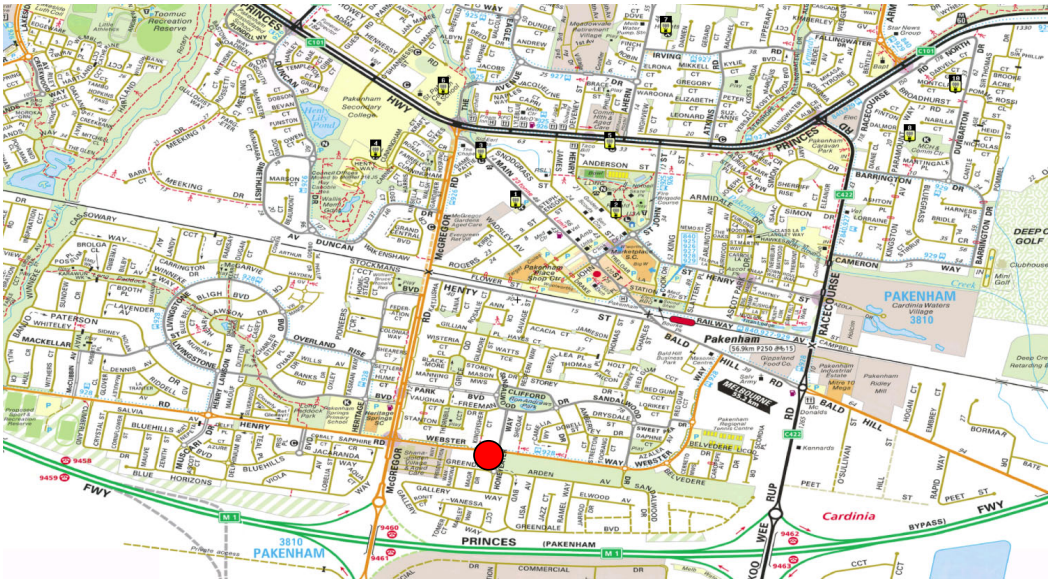
1. INTRODUCTION

The following report has been prepared for the owner of the land (Monomeath Developments Pty Ltd) and sets out the details and relevant planning considerations in support of the development at No. **24- 26 Honeyeater Way, Pakenham** relating to the construction of a Childcare centre and associated car parking.

The report has been prepared to assist Council in the processing of the Planning Application and to satisfy the requirements of the Planning Scheme.

Overall, the report demonstrates that the proposal has a high level of compliance with the relevant Planning Scheme Provisions, Clause 54, Neighbourhood character and internal and external amenity considerations and is therefore an appropriate response to the site and policy context. Traffic and Acoustic reports are also provided to support the educational use in this location, confirming the suitability of the design, planning, layout and features.

2. LOCATION



The development site, made up of two lots (101 and 102) addresses the corner of Webster way (South side) and Honeyeater at No. 24 Honeyeater Way.
No 26 Honeyeater sits directly behind No. 24 on the Western side of Honeyeater Way.

The site is located between the Princes Hwy and Princes Freeway. 55Km's SE of Melbourne.

The subject site is rectangular in shape, with a radius to its intersecting corner. Ignoring the radius the site has a frontage to Honeyeater (over the two lots) of ~36 metres and a depth of 32.0 metres with a total site area of 1159.0 square metres.

The site(s) 101 and 102 are currently vacant lots.

Two single width crossovers exist along Honeyeater Way, to the east side of each lot.

There is a small street tree (DBH 0.13m) in the middle of the nature strip between both existing crossovers and another, mature street tree to the Northern boundary along Webster Way.

No trees are present within either lot.

View north along Honeyeater ^
View South from Webster v

3. TITLE PARTICULARS

The land is lot 101 and 102 on plan of subdivision 515605T– Vol. 10986, Folio 609.

There is a sewer/drainage easement (1.5metres) into the rear, SW corner of the property at 101 (24), and running the full length of the western boundary of lot 102, 3 metres wide.

A Covenant (expired) is also noted on title – **AE991066F, AE958201Q** dated 19/03/2007 **(expired in 2017)** and shall not at any time:-

(a) Erect, cause or permit to be erected or remain on the burdened land more than one dwelling which expression shall include a unit, flat or apartment;
(b) erect, cause or permit to be erected or remain on the burdened land a garage other than a double garage unless the lot has an area of 500m2 or less in which case a single garage may be erected;
(c) if the lot has an area in excess of 500m2 erect, cause or permit to be erected or remain on the burdened land a dwelling having a floor area (excluding the floor area of a garage, porch or verandah) which is less than 140m in area;
(d) erect, cause or permit to be erected or remain on the burdened land a dwelling or structure other than a dwelling or structure with external walls (excluding windows) constructed of materials which include no less than 60% of brick, brick or masonry veneer or a texture coated material;
(e) erect, cause or permit to be erected or remain on the burdened land· a dwelling or structure using materials which are not new;
(f) erect, cause or permit to be erected or remain on the burdened land a boundary side fence greater in height than l .8 metres and other than a fence constructed of timber with exposed posts and timber capping.
(g) subdivide or permit to be subdivided or allow to remain subdivided the burdened land except for the purpose of re-alignment of boundaries:
(h) within six months of issue of an occupancy permit in respect of a dwelling house erected on the burdened land fail to complete the front landscaping on the burdened land which expression shall include establishment of trees, shrubs. and garden beds for areas which are visible from the street frontage.

And in the case of the burdened land having a frontage of two or more streets the street frontage shall be deemed to be the street frontage to which the facade of the dwelling erected on the burdened land shall face.

And these conditions and each of them shall be included in the transfer to the Transferee as restrictive covenants to run with the burdened land and to be noted on any-certificate of title to be issued pursuant to the transfer as an encumbrance affecting the same and these covenants shall expire ten years after the date of registration of the plan of subdivision at the Land Registry.

4. SITE DESCRIPTION

A site context plan is enclosed and should be read with the following;

To the **North**, the subject site faces (on the opposite side of the road) 136 and 134 Webster Way.

Both typical examples for the area, they are volume built single storey dwellings featuring brick facades with a rendered entry portico.
Concrete tiled roofs, usually with no eaves address small front yards with limited setbacks.

To the **East** (pictured below), the subject site neighbours a large land reserve that fills the space between Webster Way and Arden Avenue. Some trees line the perimeter of the reserve within the nature strip along Arden Ave.

Immediately to the **West**, the subject site adjoins No.139, 137 and 135 Webster Way. Comprising a double storey brick and rendered dwelling with a pitched, tile roof form; Two single storey dwellings again volume built featuring brick facades with a rendered entry porticos.

Moving South, directly behind our site is 28, 30 and 32 Honeyeater Way. The repetition of standard forms, materials, roof pitches can be found in any number of adjoing properties where even window configurations create commonality amongst a large number of properties.

View looking down Honeyeater Way toward No. 32 on the opposite corner (Greendale Boulevard and Honeyeater)

5. GENERAL NEIGHBOURHOOD CONTEXT

The wider site features a common typology of built forms and features which can be summarised as follows:

- Dwellings built in the last 20 years predominately from volume builders
- Detached dwellings of predominantly single and double storey scale
- Dwellings that have limited side setbacks and high levels of site coverage, with recent developments generally comprising the highest site coverage.
- A mix of pitched roof forms generally comprising hip and gable roofs of tile, most without eaves.
- Building materials are predominantly brick with some render, standard narrow windows grouped to form
- Front setbacks vary from 5 to 7metres on average across the precinct.
- New landscaping, with few mature examples of fully established large trees.

The site is in an established residential area with good vehicle access and local amenities.

6. THE PROPOSAL

The development proposes the construction of a double storey development for a Childcare Centre featuring a maximum attendance of 80 children with 17 car spaces provided to be accessed off Honeyeater Way.
Detailed plans of the proposal have been prepared and are submitted as part of this application including Landscaping, Traffic analysis and Acoustic Report.

The proposed development is summarised below:

Ground Floor:-

Footprint 300m2
3 rooms (45,64,70) totalling 180m2
Staff administration area
Building amenities
Outdoor spaces dedicated for play approx.. 275m2
Provision for a maximum of 50 Children

First Floor:-

Footprint 250m2
2 rooms (56,56) totalling 110m2
Staff facilities area
Kitchen Area
Building amenities
Outdoor spaces dedicated for play approx.. 60m2
Provision for a maximum of 30 Children

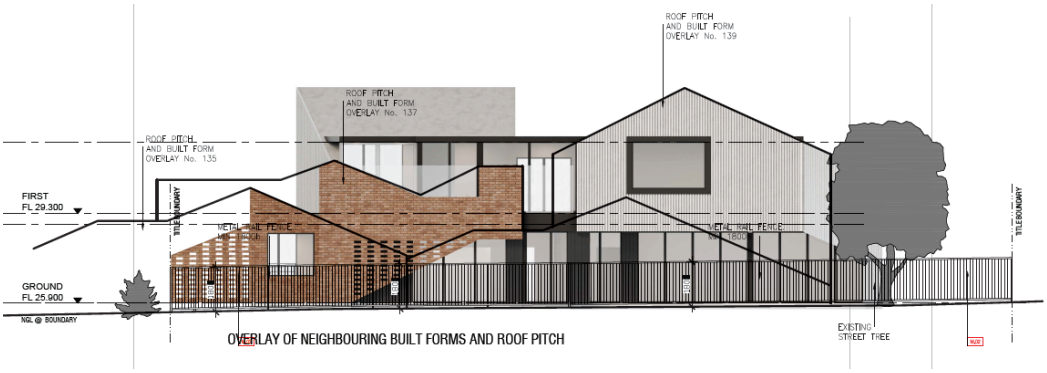
Vehicle access is proposed by way of a new crossover near the existing crossover to lot 102 which will be re-instated as nature strip.
Access from Webster was deemed inappropriate given the location of the existing 'mature' street tree and distance to the roundabout. Please refer to TTM's detailed traffic report for full details.

It is also proposed to provide a 1.5 to 1.8-metre-high 'acoustic' fence along the outdoor areas on Webster way and the return along Honeyeater. Details for the fencing/ acoustic barriers can be found in the development drawings and acoustic report.

7. BUILDING DESIGN

The proposed development has taken reference from the surrounding housing forms and overlayed the roof pitches of its immediate neighbours to inform its general massing.

The use of brick as the predominate building material also directly references the look and feel of the wider neighbourhood.



The resulting form and composition has been designed to be of high architectural merit and is considered an appropriate contemporary response to the site's context.

The built form and setbacks have been carefully considered and designed to mitigate impacts of over shadowing and visual bulk. Balustrades and screening are mostly achieved within the building form and acoustic separation is therefore passive and achieved without the need for many visual barriers provided in addition to the proposed form.

Further articulation has been achieved through the incorporation of a range of modem construction materials and finishes that further assist in providing visual interest and articulation to the development.

The development will include brick, render, feature cladding and glazing with aluminium frames.

8. FACILITY DETAILS

The centre is proposed to accommodate up to 80 children plus staff. It is proposed that the centre will operate from 6:30am – 7:00pm, Monday to Friday.

Based on the centre based ratio up to 20 staff members could be expected to run the centre for 80 children.

17 car spaces have been made available to the development. Waste management can occur onsite, outside of the general operation hours of the centre. Additional collections can be called as needed.

9. PLANNING CONTROLS

Planning summary:-

Address:	24 – 26 Honeyeater Way, Pakenham
Proposal:	Development and Use for a Childcare Centre
Zoning:	General Residential Zone - Schedule 1 (GRZ1)
Overlays:	Development contributions plan overlay – Schedule 1 (DCP01)
Permit triggers:	General Residential Zone; A permit is required for the proposed development and land use.

PLANNING SCHEME PROVISIONS:

State Planning Policy Framework (PPF)

The relevant clauses of the Planning Policy Framework are:

11. Settlement
11.02 Managing Growth
11.03 Planning for places
15.01 Built Environment
17. Economic Development
18.01 Land Use and Transport
19.02 Community Infrastructure

Local Planning Policy Framework (LPPF)

The relevant clauses of the LPPF are:
21.04-1 Employment
21.05-6 Community services and facilities
21.06-1 Urban Design
21.06-2 Community Safety

Cardinia Shire's Liveability Plan 2017-2029

This proposal has regard to Cardinia Shire's Liveability Plan 2017-2029, in particular:

- Improved Social Cohesion
- Improved safety
- Improve financial wellbeing and resilience
- Employment
- Education
- Community Infrastructure and services

Zone

The land is subject to the General Residential Zone. Schedule 1 (GRZ1)

Overlays

Development contributions plan overlay – Schedule 1 (DCP01)

Particular Provisions:

• Clause 32.08-9 Building and works associated with a section 2 Use.

- Construct a building or construct or carry out works where: The building or works are not associated with a dwelling, primary school or secondary school and have an estimated cost of up to $100,000; or

- The building or works are associated with a primary school or secondary school and have an estimated cost of up to $500,000; and

- The requirements in the following standards of Clause 54 are met, where the land adjoins land in a residential zone used for residential purposes:

  A10 Side and rear setbacks.
  A11 Walls on boundaries.
  A12 Daylight to existing windows.
  A13 North-facing windows.
  A14 Overshadowing open space.
  A15 Overlooking.

- Clause 54 standards specified above are mandatory. If a schedule to the zone specifies a requirement of a standard different from a requirement set out in the Clause 54 standard, the requirement in the schedule to the zone applies and must be met.

Schedule 1 to the zone dose not vary any of the standards.

• Clause 52.06 – Car parking

PLANNING PERMIT TRIGGERS

The proposal for a childcare centre requires a planning permit under the following clauses of the Cardinia Planning Scheme:

• Pursuant to Clause *32.09-8 (GRZ)* a permit is required *to* construct a building or construct or carry out works for a use in Section 2 of Clause 32.09-2

10.COMPLIANCE WITH POLICY

The proposed development on the subject site is considered to meet the objectives of both State and Local Planning Policy Frameworks for the following reasons:

- The proposed development is compliant with the General Residential Zone and all aspects of clause 54.
- We fulfil objectives and strategies to help deliver a range of social service types to residential areas, while being consistent with the existing and/or preferred neighbourhood character.
- The proposed development responds to Policy Frameworks and will support the increase of housing close to the Pakenham major activity centre and contribute towards a diversity of jobs.
- The childcare centre is in an established residential area, allowing increased amenity for the area and greater opportunity to access services within the immediate community.
- The proposal maintains a built form consistent with neighbouring properties and will maintain generous setbacks from all boundaries.
- The design, height and setbacks of the proposed building respect the built form of the area. The development is not considered to be over development the site as it allows for generous landscaping around the extended building.
- The building is unlikely to cause unreasonable amenity impacts as it is modest in scale with two storey elements set well back from boundaries and the development supported with acoustic analysis.
- The urban design of the building incorporates contemporary design by retaining the features of the existing buildings to provide high quality architectural response.
- The proposal will service the local communities need for child care and is considered to be of a scale and intensity that is appropriate for the area.
- The number of children proposed (80) is considered an appropriate number having consideration for the growing population in Pakenham and Cardinia and the need for greater community services in the area such as early education centres.

On balance, the proposal is consistent with the objectives of the General Residential Zone and will not unreasonably impact the amenity of the adjoining neighbours.

Clause 52.06 Car Parking

Pursuant to Clause 52.06-5 the number of car parking spaces required for the proposal is 0.22 spaces per child.

The proposed child care centre is to accommodate 80 children; therefore, the overall use generates a requirement for 17 car parking spaces.

11.CONCLUSION

The proposed development does not replicate the areas traditional built form but instead proposes a contemporary design that represents modern architecture, scale and form consistent with the area.

It is our submission that the proposal is an appropriate development for the land for the following reasons;

- The proposed development is site responsive. Taking reference from adjoining forms and materials but conceived in a unique way enhancing the area.
- The development is appropriate in, built form, scale and in the context of the area, It contributes to increasing amenity by providing the facilities required to live and work within the area.
- The design of the proposed development is appropriate having regard to the emerging character for the area.
  The proposal represents a contemporary form which is respectful of the mixed development character of the area and consistent with the emerging character associated with modem development.
- The layout and design provide a high level of amenity for future residents, which overall satisfies the objectives and standards of Clause 55.
  The proposal is an appropriately sited infill development that is well supported by its location in proximity to services and facilities including public transport provisions and open space.
- The development is designed to ensure that the amenity of nearby residents is not unreasonably affected and is well supported by acoustic planning assessments.
- The built form design incorporates appropriate setbacks to all boundaries in direct response to adjoining interfaces, and to facilitate landscaping opportunities which will assist with screening of built form and the integration of the site with the streetscape.
- The proposal has a high level of compliance with Clause 54 and accords with Council's local policies.

Accordingly, for the above reasons, it is considered appropriate for Council to support the application.

ACOUSTIC PLANNING ASSESSMENT

KR Kids Pakenham
Childcare Centre - 24-26 Honeyeater Way Pakenham

Prepared for:

Monomeath Developments Pty Ltd

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Monomeath Developments Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
640.30577-R01-v1.0	23 March 2023	Dianne Williams	Jim Antonopoulos	Dianne Williams

CONTENTS

CONTENTS

DOCUMENT REFERENCES

TABLES

FIGURES

APPENDICES

1 Introduction

SLR Consulting Australia Pty Ltd (SLR) was retained by Monomeath Developments Pty Ltd to undertake an acoustical assessment of the Childcare Centre proposed for 24-26 Honeyeater Way, Pakenham, Victoria.

The report has been prepared to address the Cardinia Shire Council acoustic RFI for the project (reproduced below):

> 3. Acoustic assessment prepared by a suitably qualified professional assessing the anticipated noise impacts associated with the operation of the childcare centre on neighbouring sensitive noise receptors. This includes, but is not limited to, an assessment of outdoor play areas, any private waste collection etc. and must include recommendations for the appropriate management of noise and whether, in the opinion of the professional, the noise can be mitigated to an acceptable level for a residential environment.

The following assessment is based on Revision 1 of the architectural drawing set prepared by Christopher Vaughan Architects (CVA), dated 1 September 22.

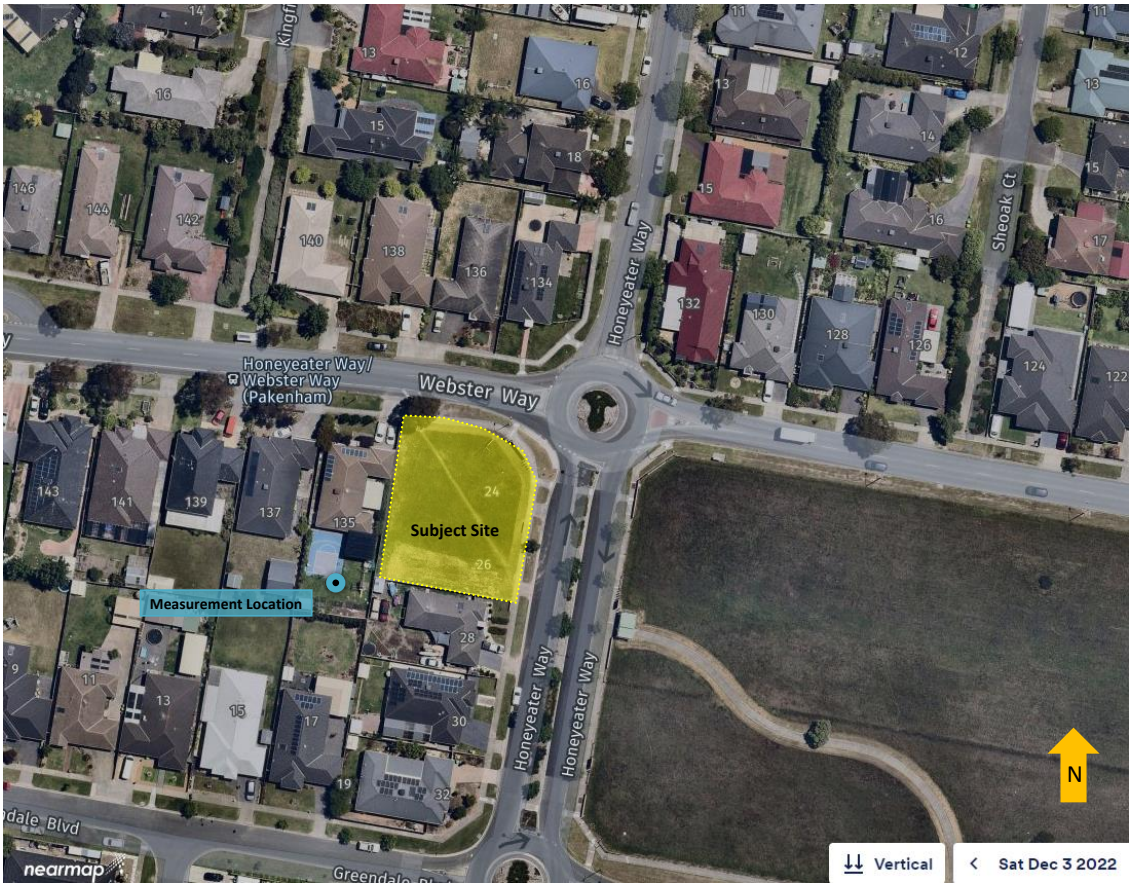
2 Background information

2.1 Site context and sensitive receiver locations

The site is located at 24-26 Honeyeater Way, Pakenham. The nearest existing residential dwellings are located directly adjacent to the west (135 Webster Way), south (28 Honeyeater Way) and north of the subject site (132-138 Webster Way).

Refer to **Figure 1** for an aerial view of the site and surrounding receptors. The site background noise testing location (as described in **Section 4**) is also shown. The existing site includes timber fences to the residential boundaries.

Figure 1 Site Aerial (*Nearmaps*)



2.2 Facility details

The centre is proposed to accommodate up to 80 children plus staff and is to operate from 6:30 am to 7 pm, Monday to Friday.

The preliminary drawings prepared by CVA show a two storey building with 3 children's rooms on the ground floor and 2 children's room on the first floor. Each room has an associated outdoor play area and amenities space. A reception and office is located on the ground floor and a staff kitchen and tea room on the first floor.

Outdoor play areas are generally located on the north, northeast and west sides of the building at ground level, and on northeast and west sides of the building on the first floor. The outdoor play areas are proposed to be used during the 'day' period only (i.e. between 7 am and 6 pm Monday to Friday).

Figure 2 Ground floor plan (TP04, Rev 1)

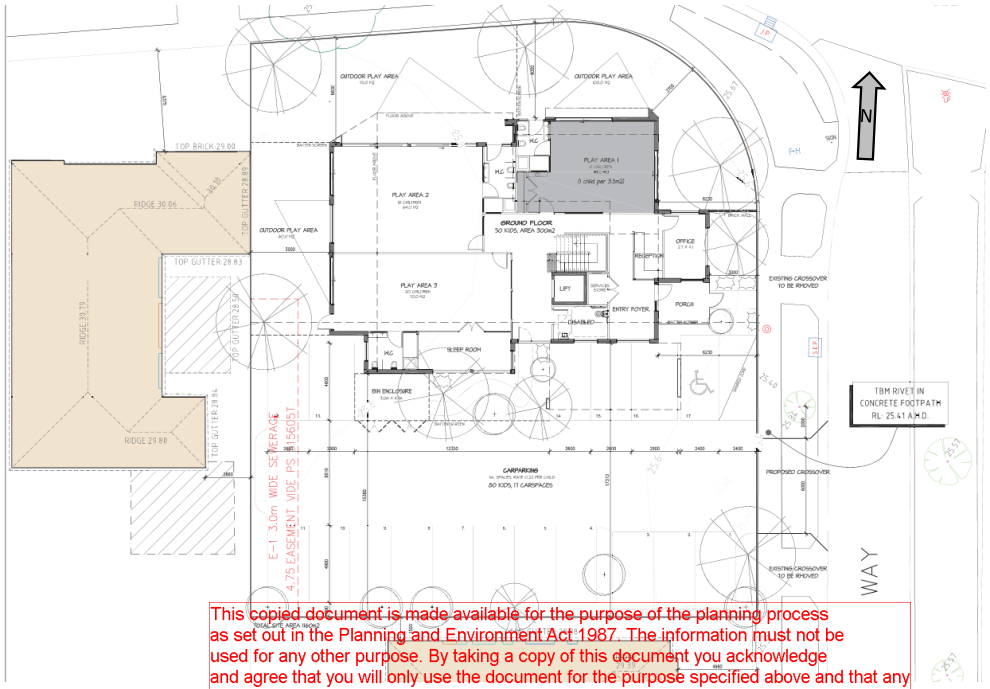
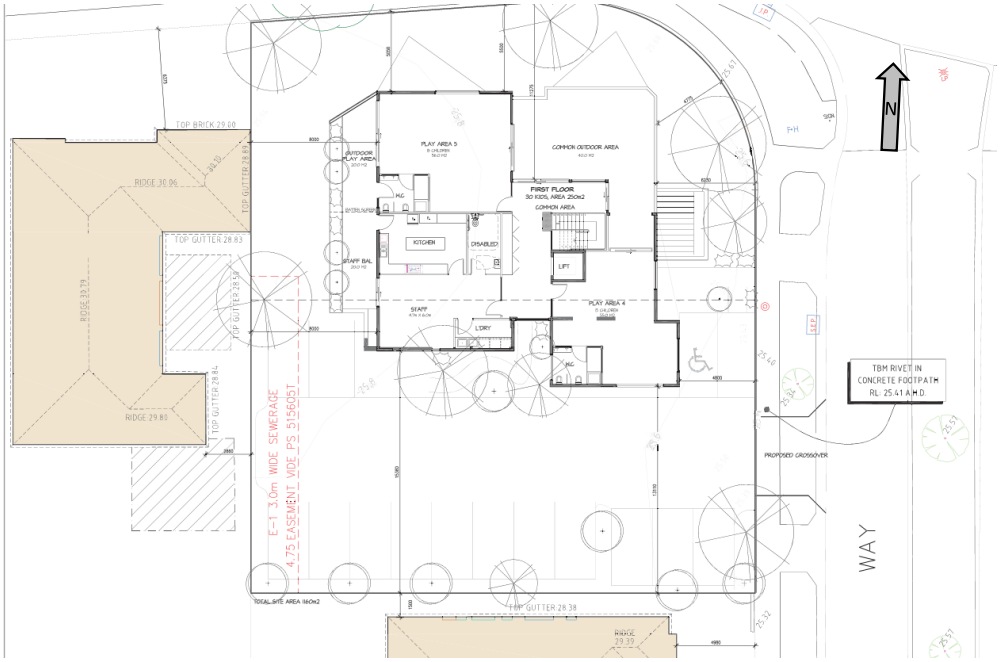


Figure 3 First floor plan (TP05, Rev 1)



2.3 Potential acoustic issues

From our experience, the issues requiring acoustical assessment for childcare centres include:

- Noise from children playing outdoors to nearby residential uses. We note that while there are no mandatory guidelines or policies addressing noise from children's voices, this is an issue that has been regularly assessed and considered in planning applications and VCAT hearings over the last few years.
- Noise from mechanical plant associated with the facility.
- Noise from carpark activity during drop off / pickup to dwellings.
- Road traffic noise impacts to children's outdoor play areas.

3 Assessment Criteria

Assessment criteria relevant to the proposal are discussed in the following sub-sections.

3.1 Victorian EPA Regulations

The new Victorian Environment Protection Act (EPA) 2017 came into effect in July 2021. The General Environmental Duty (GED) is a centrepiece of the new laws and requires all Victorians to reduce the risk of activities potentially harming the environment or human health through pollution or waste.

Subordinate legislation – the Environment Protection Regulations 2021 (Regulations) and Environment Reference Standard (ERS) – have been released to support the new environment protection laws.

The Regulations incorporate the new *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues*, Publication 1826.4 (the Noise Protocol). The Noise Protocol supersedes the previous State Environment Protection Policies N-1 and N-2.

3.1.1 Regulated noise

Centrally located project mechanical plant and equipment associated with the development is assessable to the Noise Protocol, Part I.

The Noise Protocol sets noise limits at residential premises and there are separate limits for the day, evening, night, and weekends, as defined in the Policy and included in here **Table 1.**

Table 1 Noise protocol definitions

Period	Day	Time
Day	Monday to Saturday	7 am to 6 pm
Evening	Monday to Saturday Sunday and public holidays	6 pm to 10 pm 7 am to 10 pm
Night	Monday to Sunday	10 pm to midnight midnight to 7 am

Under the Noise Protocol, noise limits are based on the land-use zoning of the area surrounding the residence, as defined by the relevant authority, and on the measured background noise levels at the residence when those levels are especially high or low.

Noise limits apply to any part of the land that is within the boundary of the potentially affected residential property but no further than 10 m from the external wall of that property. In addition, under the Noise Protocol, assessment is also required within 10 m of any room used for learning within a childcare centre.

The measured noise from commercial, industrial or trade sites are adjusted for character, including tonality, intermittency, and duration. The adjusted noise level is compared with the noise limit to determine whether or not the premise complies with the Noise Protocol.

Noise Protocol Noise Limits

The Noise Protocol limits for the childcare centre have been calculated from zoning levels and the background noise measurements conducted for the project (detailed in **Section 4**) and are presented in **Table 2**.

Table 2 Determination of noise limits

Period	Zoning Levels, dB	Background Level, dBA	Background classification	Noise Limit, dBA
Day	50	39	Neutral	50
Evening	44	44	High	47
Night	39	39	High	42

While not formally applicable to voice noise, the Noise Protocol limits can also be used to quantify impacts of voice from children playing in childcare centres.

3.1.2 Unregulated noise

Noise from children's voice and private vehicles in a commercial carpark is not assessable to the numerical limits provided in the Noise Protocol, and as such can be considered as 'unregulated'.

However, the ERS provides a framework that allows impacts from unregulated noise to be quantified through the provision of benchmark values, indicators and objectives.

For the activity in question the relevant environmental values are:

- Domestic and recreational activities – an ambient sound environment that supports recreational and domestic activities in a residential setting
- Normal conversation – an ambient sound environment that allows for a normal conversation indoors without the need to raise voices[1]

The relevant benchmark indicators and objectives take into consideration the land use category of the sensitive receiver locations. The land in the vicinity of the proposed carpark is classified as 'Category III', being low density residential development and detached housing.[2] The corresponding acoustic indicators and objects are:

- 40 dBA $L_{Aeq,8h}$ from 10 pm to 6 am
- 50 dBA $L_{Aeq,16h}$ from 6 am to 10 pm[3]

Given the proposed daytime only use of the childcare centre, the relevant benchmark level is 50 dBA $L_{Aeq,16h}$. Comparison of the introduced noise to this benchmark level is one means by which the risk of harm to human health posed by the new activity can be quantified.

[1] ERS Section 7, Table 3.1
[2] ERS Section 8, Table 3.2
[3] ERS Section 9, Table 3.3

3.2 AAAC Guideline

The Association of Australian Acoustic Consultants (AAAC) guidance document *"Guideline for Child Care Centre Acoustic Assessment",* September 2020, Version 3.0 (AAAC Guideline) provides recommended acoustic design criteria and assessment methodologies for childcare centres.

3.2.1 Children's voice noise

The AAAC Guideline nominates the following criteria for children's voice noise from external play areas:

- Areas used up to 4h per day – 'background noise + 10 dB'
- Areas used more than 4h per day – 'background + 5 dB'

The recommended base noise criteria (i.e. minimum noise limit) is 45 $L_{Aeq,15\ mins}$ dB.

We note that the 'background + 5 dB' criteria does not align well with standard acoustic practice in Victoria, and acoustic consultants typically apply a 'background + 10 dB' criterion for all outdoor play areas used during the day period, irrespective of duration of time they are occupied. Refer to **Appendix A** for further discussion of this matter.

Based on the measured background noise levels, as detailed in **Section 4**, the criterion for children's voice noise will be **48 dBA**.

3.2.2 Road traffic noise to childcare centres

The AAAC Guideline provides guidance on recommended noise levels from traffic to outdoor play or activity areas as follows:

> *The $L_{Aeq,1hr}$ noise level from road traffic, rail or industry at any location within the outdoor play or activity area during the hours when the Centre is operating should not exceed 55 dB(A).*

3.2.3 Sleep disturbance

To minimise the risk of sleep disturbance, noise from the centre at night (i.e. before 7 am and after 10 pm) should not exceed 65 dBA L_{max}.

3.3 Summary of Noise Criteria

The noise criteria proposed for this project are summarised in **Table 3**.

Table 3 Recommended project criteria

Noise source	Criterion, dBA	Criteria derivation	Comments / status
Children's voice noise	Bg+10 dB = 48 dBA L_{Aeq}[1]	AAAC Guideline for play areas used up to 4h per day	Target to be achieved where possible
	50 $L_{Aeq,16h}$	ERS	For consideration[2]
	50 dBA L_{eff}	Noise Protocol, Part I	For consideration
Mechanical plant noise	Day = 50 dBA	Noise Protocol, Part I	Mandatory requirement
	Evening = 47 dBA		
	Night = 42 dBA		
Private vehicle noise	L_{Amax} ≤ 65 dBA	AAAC Guideline	Target to be achieved where possible
Road traffic noise to childcare centres	55 L_{Aeq}, dB	AAAC Guideline	Target to be achieved where possible

Note 1: Based on the L90 of the hourly L90 levels for all the hours that the childcare centre outdoor play areas are proposed to be used.

4 Site Testing

SLR undertook noise logging in the rear yard of 135 Webster Way from Tuesday 1 March to Friday 17 March 2023 to quantify existing ambient and background noise levels. Noise was logged using an ARL 316 noise logger, Serial No. 16-207-043.

The measurement results are summarised in **Table 4**. Detailed data is provided in **Appendix B**.

Table 4 Noise Logging Measurement Results

Date	Average Background Noise Levels L_{90}, dBA (Noise Protocol, Part I)		
	Day	Evening	Night
Wednesday 8 March 2023	46	47	40
Thursday 9 March 2023	46	47	39
Friday 10 March 2023	40	44	40
Tuesday 14 March 2023	39	45	48
Wednesday 15 March 2023	41	44	47
Thursday 16 March 2023	46	48	49
Friday 17 March 2023	42	47	43
Adopted L_{90} Level	39	44	39

Further to the above, we note that the overall L_{90} level for all daytime hours that the childcare centre is proposing to operate (i.e. the L_{90} of the L_{90} hourly levels) was **38 dBA**. This metric has been used to quantify the typical lowest noise level.

5 Assessments

5.1 Noise from the subject site

5.1.1 Children's voice

Voice noise from the proposed outdoor play areas has been predicted to noise sensitive receiver using the iNoise 3-D noise modelling software (iNoise version 2022.11).

Noise model inputs include:

- Noise sensitive receiver locations as identified from NearMaps imagery
- 'Flat' ground terrain
- 'Hard' ground
- Proposed site buildings as shown in the CVA drawing set dated 1 September 2022
- Sound power levels for children playing based on the reference sound power data provided in the AAAC Guideline for childcare centres. The Guideline includes noise data for children of different age groups based on data collected from various acoustical consultants. A summary of the reference data used is presented in **Table 5**. SLR has undertaken measurements and has found good correlation with the AAAC nominated sound power levels. The calculated sound power levels for each of the outdoor play areas proposed are provided in **Table 7**.
- Children modelled as 1 m high horizontal area sources distributed evenly throughout the outdoor play areas.
- 80% of children are assumed to be playing outside at any one time.
- Balcony balustrade and boundary acoustic barriers as detailed in **Section 6** of this report (balcony balustrade and barrier heights have been selected to achieve compliance with the identified noise criteria where practical.)
- Noise predictions were to a height of 1.5 m above ground level for all receptors (all surrounding residential buildings are single storey).

Table 5 AAAC Effective sound power levels ($L_{Aeq,15mins}$) for groups of 10 children playing

Age Bracket	Number of Children	Sound Power Level, dBA[1]
0 to 2 years old	10	78
2 to 3 years old	10	85
3 to 5 years old	10	87

Note 1: If applicable, an adjustment to the above sound power levels of -6 dB could be applied in each age group for children involved in passive play.

Table 6 Sound power levels ($L_{Aeq,15mins}$) for KR Kids childcare centre outdoor play areas

Outdoor play area	Location	Total no. children (80% of total assumed to be outside)	Age range (years)	Sound Power Level of children outside, dBA
1	Gnd northeast	12	4-5	86
2	Gnd north	18	4-5	88
3	Gnd west	15	2-3	85
		5	0-2	74
4	First northeast	30	4-5	90
5	First west (passive play only)	10	4-5	80

The predicted voice noise levels are compared with the identified noise criteria in **Table 7** and **Table 8**.

Table 7 Predicted voice noise levels and assessment to Noise Protocol and AAAC criteria

Location	Predicted Voice Noise Levels, LAeq, 15 min dBA	Noise Protocol Based Criteria, dBA	Background level + 10 dBA (AAAC Guideline for up to 2 hours dBA)	Compliance status
135 Webster Way	47	50	48	Compliant with all criteria
138 Webster Way	48	50	48	
136 Webster Way	48	50	48	
134 Webster Way	48	50	48	
132 Webster Way	43	50	48	
28 Honeyeater Way	43	50	48	

Table 8 Predicted $L_{Aeq,16h}$ voice noise levels and assessment to ERS

Location	Predicted Voice Noise Levels, $L_{Aeq,16h}$ dBA[1]	ERS, $L_{Aeq,16h}$ dBA	Compliance status
135 Webster Way	42	50	Compliant with all criteria
138 Webster Way	43		
136 Webster Way	43		
134 Webster Way	43		
132 Webster Way	38		
28 Honeyeater Way	38		

Note 1: The calculated L_{Aeq} has been adjusted down by 5 dB to reflect outdoor play area occupancy of 6h between 7 am and 6 pm daily. The estimated occupancy period takes into consideration the hours of operation of the centre, and the expectation that children will spend at least 5 hr of the day indoors.

The above analysis shows that predicted noise levels from outdoor children activity comply with all identified criteria.

5.1.2 Noise from Internal Activities

Voice noise from within the childcare facility would typically be well below the levels we have predicted for noise from children's voice outdoors due to the available building façade attenuation.

5.1.3 Mechanical Plant

Any plant and equipment associated with the facility will operate typically during the day period, when a limit of 50 dBA applies. Limited operation is also proposed for the night period (6:30 am to 7 am) when a limit of 42 dBA applies, and evening period (6 pm – 7 pm), when a limit of 47 dBA applies.

The proposed plant and equipment should be reviewed by a suitably qualified acoustic consultant to ensure that the noise limits are met. Advice can be provided for managing excessive noise is it is predicted. Such advice may include:

- Relocation of equipment to less sensitive locations
- Construction of barriers
- Limits to times of operation and / or the extent of equipment that can be operated during the 6:30 am to 7 am period, when the most onerous limits apply.

5.1.4 Other Noise

Drop Off and Pick Up

Noise from domestic vehicles and drop off and pickup activities is generally not formally assessable to any noise regulations although it is considered when it occurs at night and could cause sleep disturbance impacts. The centre is proposed to operate from 6:30 am daily, with the 6:30 am to 7 am period falling in the 'night' category.

The car park area is proposed to be accessed via Honeyeater Way, and parking is located adjacent to the boundary fence of the residences at 135 Webster Way and 28 Honeyeater Way.

Due to the proximity of dwelling windows to the carpark, there is some potential for noise from vehicles accessing the site to cause sleep disturbance. However, we note that:

- Only limited operation is proposed for the night period (30 mins)
- There may not be bedrooms located on the façades of the residences interfacing the carpark.
- Increased height barriers will reduce light to the dwellings and may not be desirable to the dwelling occupants.

Given the above, it is recommended that further investigations / discussions are carried out with the residents to determine whether there is a need and / or preference for an acoustic barrier at this location.

It is recommended that an acoustic barrier not less that 2.1 m high is constructed along the boundaries between the carpark and dwellings to assist in the control of noise from car movement / car doors during the night period, if there are bedrooms along the carpark sides of these dwellings, and if residents approve their construction. Refer to **Section 6** for barrier details.

Deliveries and Rubbish Collection

Noise from deliveries and rubbish collection is addressed through compliance with the Schedules provided in the Victorian EPA 'Noise Control Guidelines, Publication 1254.2, May 2021', (Publication 1254.2). The Schedules are reproduced below.

Domestic waste collection

- One collection a week: 6 am to 6 pm Monday to Saturday
- Two or more collections per week: 7 am to 6 pm Monday to Saturday

Industrial waste collection

- One collection a week:
  - 6:30 am to 8 pm Monday to Saturday
  - 9 am to 8 pm Sunday and public holidays
- Two or more collections per week:
  - 7 am to 8 pm Monday to Saturday
  - 9 am to 8 pm Sunday and public holidays

Deliveries to shops, supermarkets & service stations

- 7 am to 10 pm Monday to Saturday
- 9 am to 10 pm Sundays and public holidays

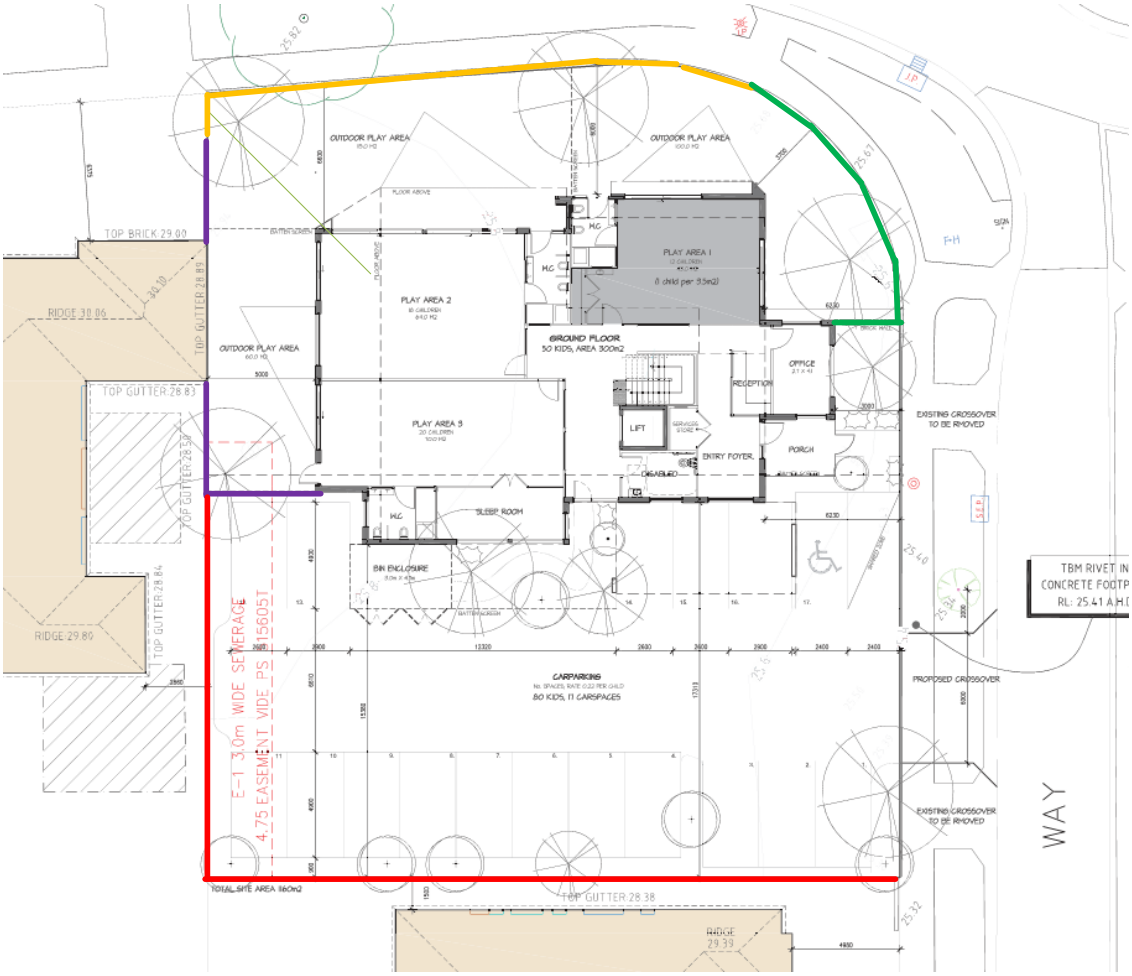
5.2 Noise to subject site – Road traffic

Noise from road traffic noise on both Webster Way and Honeyeater Way to outdoor play areas of the childcare centre will be controlled via the barriers recommended for addressing children's voice noise.

6 Recommendations

The recommended locations and heights of acoustic barriers are proposed in **Figure 4** and **Figure 5.** Recommended construction options are provided below.

Figure 4 Ground level acoustic barriers



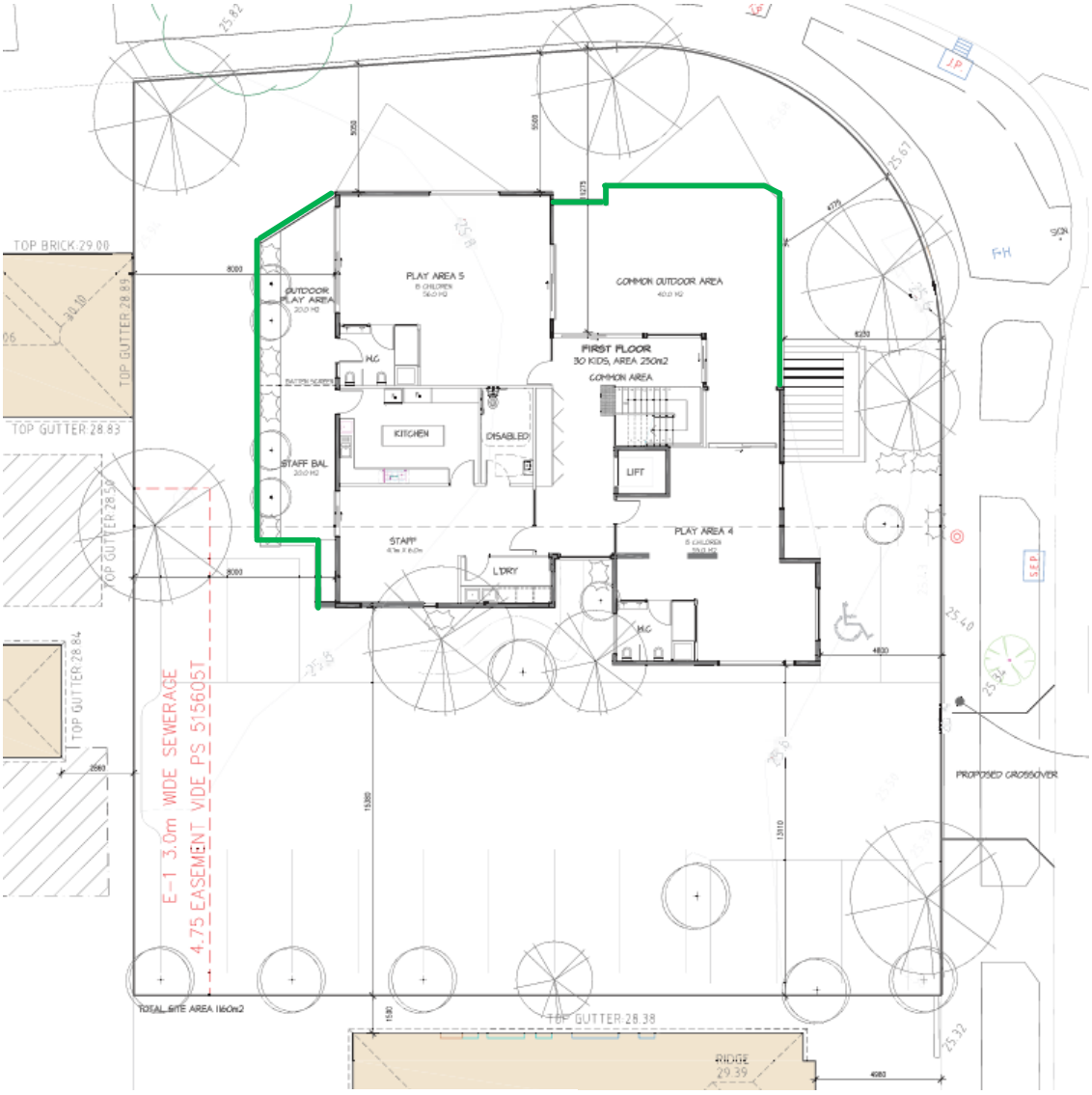
2.4 m high acoustic barrier

2.1 m high acoustic barrier

1.8 m high acoustic barrier

1.5 m high acoustic barrier

Figure 5 First floor acoustic barriers / balustrades



1.5 m high balcony balustrades

Barriers and balustrades up to 1.8 m high

Barriers and balustrades 1.8 m high or less can be constructed of 0.48 mm thick steel (e.g. Colorbond), glass (any thickness), 6 mm thick cement sheet, 6 mm thick Perspex, or not less than 12 mm thick timber.

Standard timber paling fences are not suitable due to their typical deterioration over time.

If timber paling fences are preferred, the fences are to be an upgraded construction, e.g. Lee Group 'Light Acoustic Fence'.

The barriers are to be free from gaps and holes, with the exception of balcony balustrades. A gap of up to 15 mm is acceptable below balustrades for drainage purposes.

Barriers 2.1 m high and greater

Acoustic barriers 2.1 m in height and greater are to be constructed of a material with a surface density of at least 9 kg/m². Standard timber paling fences are not suitable due to their typical deterioration over time. Suitable cladding products include: 6 mm thick fibre cement sheet; 18 mm thick plywood; 10 mm thick Perspex of 6 mm thick glass.

The barriers are to be free of gaps and holes.

If timber paling fences are preferred, the fences are to be an upgraded construction, e.g. Lee Group 'Light Acoustic Fence'.

7 Conclusion

An acoustic review of the childcare centre development and associated noise sources proposed for 24-26 Honeyeater Way has been undertaken. The following provides a summary of our findings and recommendations.

Children Voice and Activity Noise

Noise from children's activities in the outdoor play areas is predicted to comply with all identified noise limits provided that the proposed acoustic barriers and balustrades are constructed.

Drop off and Pick Up Noise

Acoustic barriers with a height of 2.1 m have been recommended for parts of the west and south boundaries of the subject site to control noise from carpark activity during the night period (6:30 am to 7 am), when sleep disturbance criteria may be relevant. However, as discussed in **Section 5.1.4**, these criteria are not relevant if there are no bedrooms overlooking the carpark. Further, given that noise limits are not mandatory and the impacts are limited, it would be reasonable to take resident preferences into consideration with respect to the proposed barriers. The proposed increased height fences will further reduce solar access.

Mechanical Plant

Noise limits for any on site mechanical plant have been identified. An acoustic review should be undertaken during the detailed design phase of the project, once equipment selections have been made, to ensure that the limits are met.

Traffic Noise

The external traffic noise to the childcare centre will comply with the recommended AAAC Guidelines with the proposed noise barriers in place.
In summary, we expect the proposed use will provide an acceptable amenity outcome to surrounding residents, provided that the recommendations in this report are adopted.

Appendix A:

Criteria for children's voice noise

The criterion of 'background + 10 dB is typically adopted for children's voice noise from childcare centres in Victoria, irrespective of the duration of time that the areas are occupied. This approach, which is 5 dB greater than the level recommended in the AAAC *Guideline for Child Care Centre Acoustic Assessment* has been derived taking into consideration the following:

- Voice noise is specifically excluded in the current Victorian noise legislation
- Restrictions to children's voice and activity noise could have significant implications for our community
- The sound of children's voices may in some cases be considered a desirable sound
- There has been a precedent set in previous VCAT decisions that specifically state that noise from children playing should not be considered as offensive. The following excerpt is from a VCAT decision *McCarthy & Ors v Ballarat CC [2010] VCAT 745* (28 April 2010)

  "Amenity concerns

  "30. Some concern was raised with respect to noise and amenity impacts. It has been a long held principle of the Tribunal that the noise from children playing is not an offensive one and one which is entirely appropriate for a residential zone. In addition, there is the often repeated quote of the former Planning Appeals Board:

  > *"Children of preschool age who will be brought to the premises will spend much of their time sleeping and some of the time engaged in occupations within the house. It will be a sad day for this community when responsible authorities find that the laughter of little children or their exuberance in playing their games becomes a nuisance"[6]."*

- Any potential voice and activity noise impacts will be limited to weekdays and daylight hours.
- The AAAC Guideline was developed by consultants predominantly based in NSW, and it is more consistent with the acoustic practices in that State.

If an exceedance of the proposed targets is identified, options for noise control are typically investigated taking into account practical considerations.

Consideration should also be given to the relevant ERS levels.

Appendix B:

Daily Background Noise Level Summary Graphs

SLR Consulting Australia Pty Ltd

Results of Noise Monitoring

Client: Monomeath Developments Pty Ltd
Job Number: 640.30659 **Location:** 135 Webster Way
Microphone position: Backyard **Initials:** DW
Initial calibration: 93.7 dBA **Final calibration:** 93.8 dBA

Hour	Sound Pressure Level, dB(A)																				
	Tue, 07-03-2023			Wed, 08-03-2023			Thu, 09-03-2023			Fri, 10-03-2023			Sat, 11-03-2023			Sun, 12-03-2023			Mon, 13-03-2023		
	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}
00:00 to 01:00				50.7	42.1	47.9	48.0	38.2	44.8	45.9	37.2	42.9	51.1	42.8	49.3	45.2	37.7	44.1	47.3	36.7	43.7
01:00 to 02:00				48.3	40.9	45.7	47.8	37.8	44.7	50.1	35.8	47.9	47.1	35.5	44.2	48.8	41.3	46.3	48.5	38.4	45.7
02:00 to 03:00				55.4	42.0	53.8	47.9	35.2	47.5	55.2	37.9	50.9	45.9	33.0	41.9	51.6	38.8	47.8	45.0	35.1	42.4
03:00 to 04:00				45.5	39.5	43.2	45.6	35.3	42.0	48.6	37.2	46.9	43.1	35.1	41.3	51.3	33.4	45.6	47.8	38.3	45.1
04:00 to 05:00				47.9	38.9	44.9	47.0	40.3	44.4	44.1	37.4	41.9	49.6	38.5	44.7	47.5	34.4	43.5	47.2	37.7	44.4
05:00 to 06:00				52.1	47.0	50.2	48.3	43.4	46.4	49.3	40.7	46.9	45.9	39.6	43.6	49.2	41.2	46.6	46.3	37.1	43.4
06:00 to 07:00				52.7	49.3	51.3	49.5	45.2	47.8	49.8	43.1	46.9	48.0	39.9	44.5	50.4	45.8	48.7	49.4	41.6	47.0
07:00 to 08:00				52.1	46.2	51.3	49.9	45.3	49.2	49.3	42.1	47.2	54.9	42.1	52.8	46.9	37.8	44.5	47.9	42.1	46.6
08:00 to 09:00				49.8	44.4	49.1	49.8	44.7	48.7	47.6	40.7	46.4	55.6	36.9	55.7	48.7	35.4	52.0	47.8	40.6	48.2
09:00 to 10:00				51.2	45.1	49.8	49.5	43.6	50.6	46.3	38.3	45.6	51.2	36.0	56.2	50.8	38.1	50.3	45.2	38.8	46.2
10:00 to 11:00				49.3	44.8	47.5	49.8	44.1	48.3	46.2	39.3	45.4	56.1	37.5	50.7	49.1	39.5	48.4	46.0	37.4	48.9
11:00 to 12:00				49.4	44.2	47.3	48.4	44.3	46.9	47.3	38.2	46.2	47.0	36.8	44.5	49.1	42.4	49.8	46.1	36.9	44.2
12:00 to 13:00				49.8	44.6	47.7	50.1	45.4	48.3	47.0	39.4	47.6	45.9	37.7	44.0	46.2	38.9	44.3	43.8	35.4	44.5
13:00 to 14:00				51.1	46.0	49.0	50.7	46.3	48.8	52.3	38.6	50.8	53.8	40.9	50.2	47.2	42.6	45.8	48.5	36.7	45.4
14:00 to 15:00				52.4	47.0	50.1	51.1	46.6	49.7	48.7	38.3	46.0	47.5	40.1	45.5	48.2	43.0	49.1	43.6	36.5	43.2
15:00 to 16:00				52.9	47.7	51.4	51.4	46.6	50.3	47.6	39.8	45.7	51.6	43.2	49.1	49.2	45.4	49.4	44.1	37.0	42.8
16:00 to 17:00				55.3	48.8	53.4	56.0	47.4	57.7	46.1	39.8	45.1	48.2	44.3	46.6	49.5	45.5	50.4	50.4	38.0	50.6
17:00 to 18:00	54.6	46.8	67.8	53.4	48.1	52.3	52.6	47.6	51.5	48.0	41.9	50.5	49.5	46.0	48.5	49.7	45.8	52.1	52.5	45.2	54.7
18:00 to 19:00	52.4	46.8	50.1	52.5	48.0	51.4	52.7	47.0	50.6	51.1	46.0	51.4	51.0	46.7	49.6	50.5	46.3	49.5	49.8	45.2	48.3
19:00 to 20:00	51.5	45.7	49.5	52.3	47.8	51.2	52.0	47.0	50.3	49.7	46.1	48.3	48.9	44.6	48.1	49.4	45.6	50.1	63.5	44.1	62.6
20:00 to 21:00	50.8	45.3	51.2	51.2	46.1	49.4	51.5	47.4	49.7	50.8	45.4	48.8	53.8	46.6	51.2	50.1	44.8	47.8	57.1	45.3	60.9
21:00 to 22:00	49.5	43.6	47.4	49.6	44.5	47.4	50.7	46.4	49.6	49.7	44.3	47.7	50.3	45.0	48.2	52.1	47.8	50.5	51.6	44.4	49.2
22:00 to 23:00	47.8	40.7	45.1	49.5	42.7	47.4	48.1	42.3	45.9	45.9	42.1	44.2	47.6	42.6	45.4	49.9	44.7	48.1	49.6	43.6	47.3
23:00 to 24:00	52.5	41.9	49.5	49.8	40.5	47.3	46.3	39.2	43.9	45.9	41.0	43.9	49.1	41.5	45.9	49.5	41.3	47.2	47.0	40.5	44.5
$L10_{(18h),\ ar.av.}$ 6-24h				51.4			50.6			48.3			50.6			49.3			49.1		
$L_{eq(16h),\ log\ av.}$ 6-22h						50.4			50.8			47.9			50.7			49.4			54.0
$L_{eq(8h),\ log\ av.}$ 22-6h			48.9			45.9			46.8			44.8			45.8			45.4			44.0
$L_{eq(24h),\ log\ av.}$ 0-24h						49.9			49.6			47.6			49.5			48.6			52.5
L90 Day					46.1			45.6			39.7			37.8						38.6	
L90 Evening		45.4			46.6			47.0			45.5			44.2			42.6			44.8	
L90 Night		42.5			39.8			39.0			38.6			39.6			39.0			39.5	
Wind @0900h, km/h	NNW 9			NW 9			NNE 7			NNE 6									CALM		
Wind @1500h, km/h	NNW 19			WNW 17			WNW 11			SW 6									S 7		

Hourly percentiles based on Lp at 0.1s intervals.

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SLR

SLR Consulting Australia Pty Ltd

Results of Noise Monitoring

Client: Monomeath Developments Pty Ltd
Job Number: 640.30659 **Location:** 135 Webster Way
Microphone position Backyard **Initials:** DW
Initial calibration: 93.7 dBA **Final calibration:** 93.8 dBA

Hour	Sound Pressure Level, dB(A)																				
	Tue, 14-03-2023			Wed, 15-03-2023			Thu, 16-03-2023			Fri, 17-03-2023			Sat, 18-03-2023			Sun, 19-03-2023			Mon, 20-03-2023		
	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}	L_{10}	L_{90}	L_{eq}
00:00 to 01:00	43.0	37.2	40.8	52.1	46.7	50.1	51.1	45.4	48.9	55.7	50.2	53.7	50.1	41.2	47.1	51.8	41.7	49.0	43.9	35.1	40.5
01:00 to 02:00	41.8	34.4	39.6	51.9	45.2	49.2	49.5	44.7	47.8	53.5	48.6	51.2	49.9	42.8	47.5	53.0	47.3	50.5	41.7	35.2	39.1
02:00 to 03:00	43.1	36.2	40.5	50.3	44.3	48.1	50.8	45.9	48.7	54.0	47.7	51.4	50.3	41.8	48.8	49.9	43.7	47.8	47.2	39.1	44.7
03:00 to 04:00	43.6	35.9	41.1	51.2	46.2	49.2	55.6	50.3	53.2	55.3	49.1	53.1	51.4	40.1	46.9	49.5	44.9	47.6	46.1	39.8	43.7
04:00 to 05:00	47.0	39.4	44.1	54.7	49.1	52.1	54.5	48.6	52.5	54.7	50.1	52.8	46.8	39.8	44.2	52.8	45.8	50.2	50.4	43.5	47.7
05:00 to 06:00	48.7	44.0	47.0	55.3	52.5	54.1	55.3	51.6	53.9	54.8	50.4	52.9	50.7	44.9	48.2	53.6	48.4	51.5	53.4	47.5	51.2
06:00 to 07:00	50.2	44.4	48.0	53.5	49.8	51.9	56.4	51.1	54.6	56.1	52.0	54.5	52.1	48.1	50.2	53.9	48.6	51.8	55.0	52.3	53.8
07:00 to 08:00	49.8	43.1	49.2	51.8	45.1	50.2	52.2	47.8	50.7	51.6	46.1	49.9	53.3	48.2	51.5	52.9	40.7	52.7	55.2	50.8	54.1
08:00 to 09:00	49.6	42.7	48.7	50.4	42.2	47.8	52.4	48.2	50.7	49.7	42.9	48.4	50.3	43.8	49.2	45.7	35.9	44.5	52.6	48.1	51.0
09:00 to 10:00	47.7	41.8	45.9	49.2	42.1	48.8	52.3	44.4	51.3	47.9	41.5	47.6	52.6	45.2	50.1	48.8	39.7	48.7	54.0	49.1	52.3
10:00 to 11:00	52.6	40.6	49.1	47.3	41.5	45.6	50.7	43.1	48.2	47.3	41.4	45.5	55.2	46.9	54.3	46.1	41.0	44.7	52.6	47.4	74.3
11:00 to 12:00	44.7	37.3	44.2	46.9	39.1	43.9	48.1	42.9	46.0	46.7	40.3	45.0	56.5	48.5	53.8	46.1	39.3	45.7			
12:00 to 13:00	49.6	36.3	46.4	42.6	35.8	42.1	50.9	43.2	48.7	46.5	40.9	45.3	55.8	47.3	52.9	48.7	41.3	47.2			
13:00 to 14:00	44.1	34.9	42.5	43.3	36.2	41.7	52.0	45.5	49.8	46.6	40.8	44.8	54.7	46.5	52.2	50.0	45.0	49.2			
14:00 to 15:00	44.4	36.4	42.2	46.5	38.9	44.0	51.8	46.7	50.0	49.5	42.3	47.1	54.7	46.1	51.9	50.5	44.7	48.4			
15:00 to 16:00	54.7	38.1	56.9	47.7	41.9	46.0	52.1	47.3	50.7	48.3	41.0	46.2	50.1	43.4	47.6	52.8	45.3	53.5			
16:00 to 17:00	46.5	38.7	44.8	48.7	44.0	47.9	52.3	48.1	51.5	49.0	41.8	47.1	49.8	43.1	47.8	49.8	45.5	48.3			
17:00 to 18:00	46.3	40.1	44.6	53.1	45.6	59.6	53.2	48.2	51.5	49.9	42.3	47.6	52.1	44.2	49.9	50.1	46.0	48.5			
18:00 to 19:00	48.9	39.4	45.4	51.9	45.4	49.6	52.1	47.6	50.4	53.2	47.3	50.8	52.5	48.4	50.8	50.6	45.9	48.6			
19:00 to 20:00	50.3	44.4	48.6	48.2	42.1	46.0	51.3	46.0	49.1	51.1	45.0	48.9	49.8	44.5	47.6	50.1	46.0	48.7			
20:00 to 21:00	52.5	48.0	50.8	55.8	46.4	53.3	54.3	49.1	52.6	51.7	46.4	49.5	51.2	42.2	48.7	49.2	46.0	47.8			
21:00 to 22:00	52.5	47.8	50.5	52.9	43.7	49.4	53.3	47.6	51.3	53.5	48.0	51.3	49.5	43.6	47.5	50.1	45.0	48.9			
22:00 to 23:00	53.9	48.4	51.6	52.6	43.9	49.4	52.2	45.7	49.7	53.2	47.0	51.1	50.6	43.7	47.7	46.7	41.5	44.5			
23:00 to 24:00	50.0	45.4	48.2	49.1	42.7	46.7	51.6	45.6	49.5	52.5	42.8	49.1	49.9	45.2	48.1	47.2	38.8	44.5			
$L10_{(18h),\ ar.av.}$ 6-24h	49.4			49.5			52.2			50.2			52.3			49.4					
$L_{eq(16h),\ log\ av.}$ 6-22h			49.2			50.9			50.4			48.1			51.0			49.1			
$L_{eq(8h),\ log\ av.}$ 22-6h			50.8			50.9			52.4			48.5			49.6			47.9			
$L_{eq(24h),\ log\ av.}$ 0-24h			48.4			50.7			50.9			50.3			50.1			49.1			
L90 Day		39.1			41.1			45.9			41.9			46.7						48.9	
L90 Evening		44.9			44.4			47.6			46.7			44.7			43.2				
L90 Night		47.5			47.1			48.8			43.2			45.5			41.4				
Wind @0900h, km/h		S 7			NNE 4			W 13			S 2										
Wind @1500h, km/h		SW 15			NNE 4			WSW 9			WNW 6										

Hourly percentiles based on Lp at 0.1s intervals.

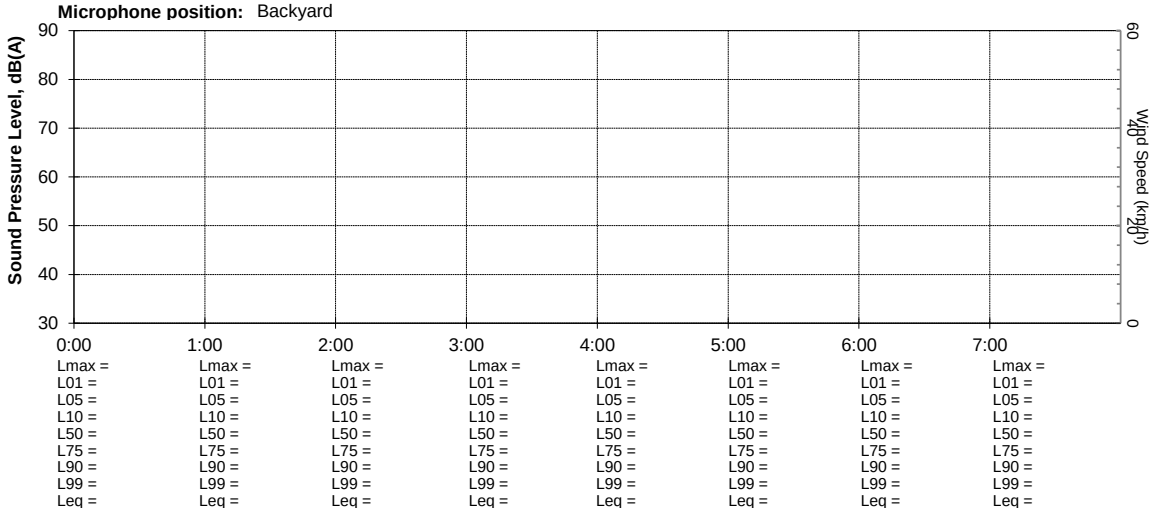
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 8:06 PM

SLR

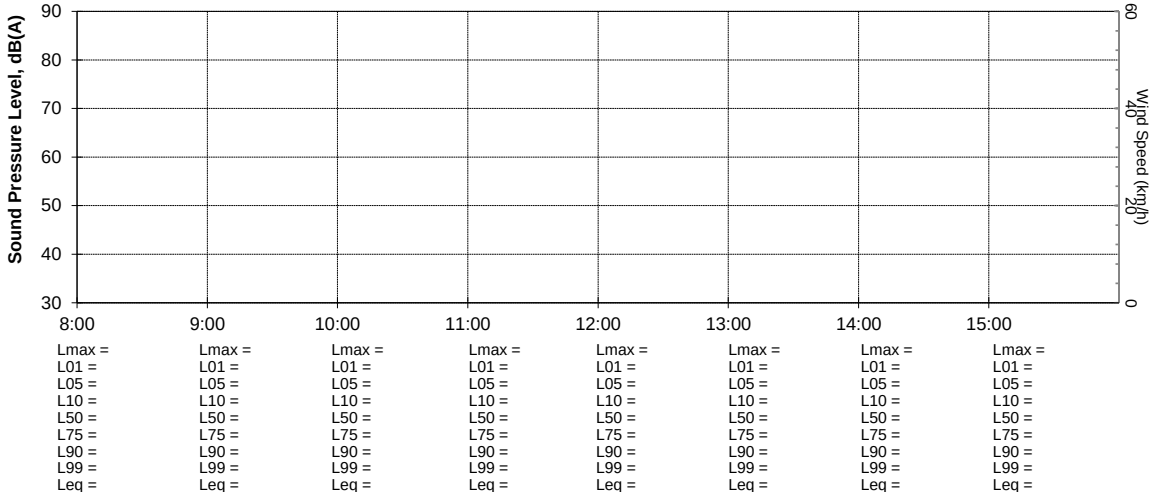
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Tuesday 07 Mar 2023

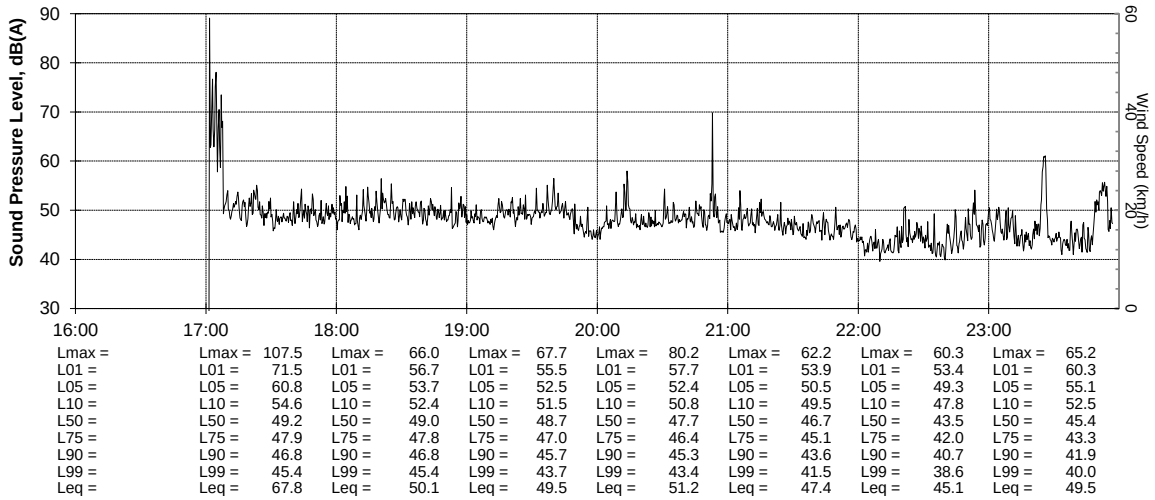
Microphone position: Backyard



Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =
L01 =	L01 =	L01 =	L01 =	L01 =	L01 =	L01 =	L01 =
L05 =	L05 =	L05 =	L05 =	L05 =	L05 =	L05 =	L05 =
L10 =	L10 =	L10 =	L10 =	L10 =	L10 =	L10 =	L10 =
L50 =	L50 =	L50 =	L50 =	L50 =	L50 =	L50 =	L50 =
L75 =	L75 =	L75 =	L75 =	L75 =	L75 =	L75 =	L75 =
L90 =	L90 =	L90 =	L90 =	L90 =	L90 =	L90 =	L90 =
L99 =	L99 =	L99 =	L99 =	L99 =	L99 =	L99 =	L99 =
Leq =	Leq =	Leq =	Leq =	Leq =	Leq =	Leq =	Leq =



Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =	Lmax =
L01 =	L01 =	L01 =	L01 =	L01 =	L01 =	L01 =	L01 =
L05 =	L05 =	L05 =	L05 =	L05 =	L05 =	L05 =	L05 =
L10 =	L10 =	L10 =	L10 =	L10 =	L10 =	L10 =	L10 =
L50 =	L50 =	L50 =	L50 =	L50 =	L50 =	L50 =	L50 =
L75 =	L75 =	L75 =	L75 =	L75 =	L75 =	L75 =	L75 =
L90 =	L90 =	L90 =	L90 =	L90 =	L90 =	L90 =	L90 =
L99 =	L99 =	L99 =	L99 =	L99 =	L99 =	L99 =	L99 =
Leq =	Leq =	Leq =	Leq =	Leq =	Leq =	Leq =	Leq =



Lmax =	Lmax =	107.5	Lmax =	66.0	Lmax =	67.7	Lmax =	80.2	Lmax =	62.2	Lmax =	60.3	Lmax =	65.2
L01 =	L01 =	71.5	L01 =	56.7	L01 =	55.5	L01 =	57.7	L01 =	53.9	L01 =	53.4	L01 =	60.3
L05 =	L05 =	60.8	L05 =	53.7	L05 =	52.5	L05 =	52.4	L05 =	50.5	L05 =	49.3	L05 =	55.1
L10 =	L10 =	54.6	L10 =	52.4	L10 =	51.5	L10 =	50.8	L10 =	49.5	L10 =	47.8	L10 =	52.5
L50 =	L50 =	49.2	L50 =	49.0	L50 =	48.7	L50 =	47.7	L50 =	46.7	L50 =	43.5	L50 =	45.4
L75 =	L75 =	47.9	L75 =	47.8	L75 =	47.0	L75 =	46.4	L75 =	45.1	L75 =	42.0	L75 =	43.3
L90 =	L90 =	46.8	L90 =	46.8	L90 =	45.7	L90 =	45.3	L90 =	43.6	L90 =	40.7	L90 =	41.9
L99 =	L99 =	45.4	L99 =	45.4	L99 =	43.7	L99 =	43.4	L99 =	41.5	L99 =	38.6	L99 =	40.0
Leq =	Leq =	67.8	Leq =	50.1	Leq =	49.5	Leq =	51.2	Leq =	47.4	Leq =	45.1	Leq =	49.5

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

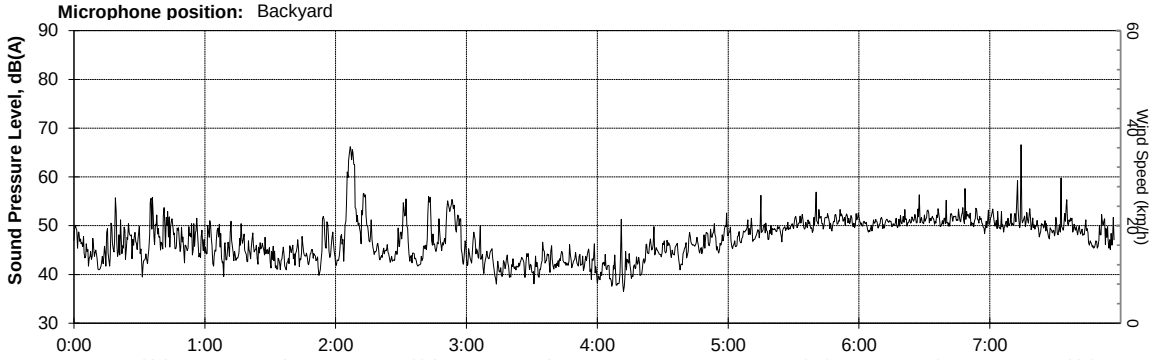
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

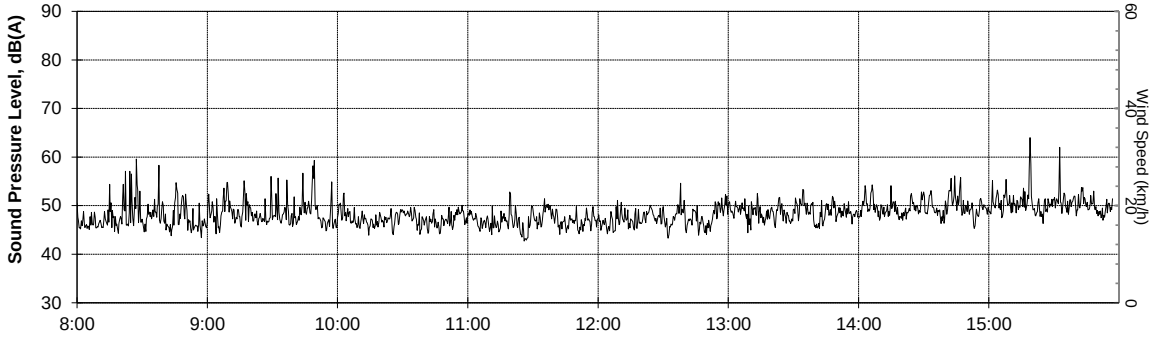
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Wednesday 08 Mar 2023

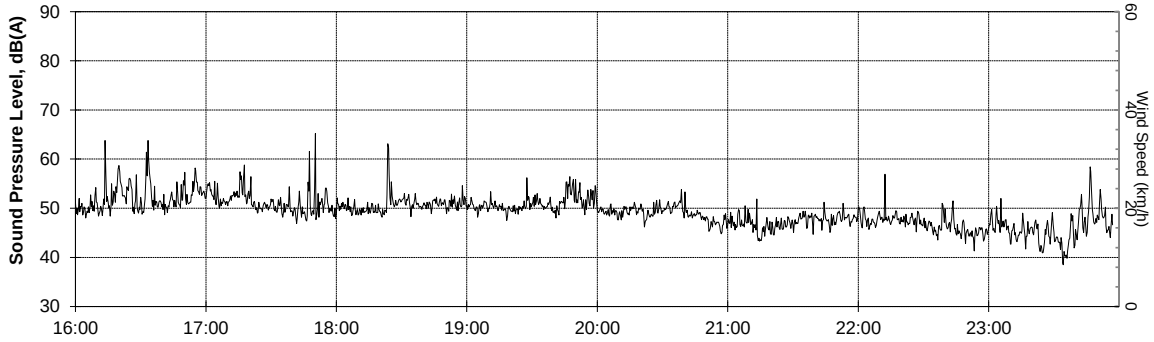
Microphone position: Backyard



Lmax =	68.3	Lmax =	58.1	Lmax =	69.3	Lmax =	58.7	Lmax =	57.5	Lmax =	64.0	Lmax =	65.7	Lmax =	83.9
L01 =	55.9	L01 =	52.7	L01 =	65.7	L01 =	49.3	L01 =	50.7	L01 =	54.8	L01 =	55.8	L01 =	57.1
L05 =	52.4	L05 =	49.9	L05 =	60.3	L05 =	46.7	L05 =	48.9	L05 =	52.8	L05 =	53.5	L05 =	53.6
L10 =	50.7	L10 =	48.3	L10 =	55.4	L10 =	45.5	L10 =	47.9	L10 =	52.1	L10 =	52.7	L10 =	52.1
L50 =	45.9	L50 =	44.5	L50 =	46.7	L50 =	42.3	L50 =	43.9	L50 =	49.7	L50 =	50.8	L50 =	49.3
L75 =	43.7	L75 =	42.7	L75 =	44.0	L75 =	41.0	L75 =	41.3	L75 =	48.3	L75 =	50.0	L75 =	47.9
L90 =	42.1	L90 =	40.9	L90 =	42.0	L90 =	39.5	L90 =	38.9	L90 =	47.0	L90 =	49.3	L90 =	46.2
L99 =	39.7	L99 =	37.9	L99 =	39.5	L99 =	36.7	L99 =	36.2	L99 =	44.9	L99 =	48.1	L99 =	44.2
Leq =	47.9	Leq =	45.7	Leq =	53.8	Leq =	43.2	Leq =	44.9	Leq =	50.2	Leq =	51.3	Leq =	51.3



Lmax =	73.6	Lmax =	72.1	Lmax =	65.2	Lmax =	67.0	Lmax =	71.9	Lmax =	63.3	Lmax =	64.9	Lmax =	72.8
L01 =	59.5	L01 =	59.1	L01 =	52.9	L01 =	52.9	L01 =	52.8	L01 =	53.9	L01 =	56.3	L01 =	59.3
L05 =	52.6	L05 =	53.8	L05 =	50.2	L05 =	50.4	L05 =	50.9	L05 =	51.9	L05 =	53.6	L05 =	54.1
L10 =	49.8	L10 =	51.2	L10 =	49.3	L10 =	49.4	L10 =	49.8	L10 =	51.1	L10 =	52.4	L10 =	52.9
L50 =	46.2	L50 =	47.3	L50 =	46.9	L50 =	46.5	L50 =	47.0	L50 =	48.3	L50 =	49.1	L50 =	49.8
L75 =	45.2	L75 =	46.1	L75 =	45.8	L75 =	45.3	L75 =	45.7	L75 =	47.1	L75 =	47.9	L75 =	48.7
L90 =	44.4	L90 =	45.1	L90 =	44.8	L90 =	44.2	L90 =	44.6	L90 =	46.0	L90 =	47.0	L90 =	47.7
L99 =	43.2	L99 =	42.9	L99 =	43.3	L99 =	42.3	L99 =	42.9	L99 =	44.2	L99 =	45.5	L99 =	46.3
Leq =	49.1	Leq =	49.8	Leq =	47.5	Leq =	47.3	Leq =	47.7	Leq =	49.0	Leq =	50.1	Leq =	51.4



Lmax =	82.0	Lmax =	78.3	Lmax =	67.5	Lmax =	68.7	Lmax =	66.1	Lmax =	64.1	Lmax =	73.9	Lmax =	68.4
L01 =	61.9	L01 =	58.1	L01 =	59.8	L01 =	59.2	L01 =	53.9	L01 =	52.1	L01 =	52.4	L01 =	56.7
L05 =	57.3	L05 =	54.3	L05 =	53.3	L05 =	53.1	L05 =	51.9	L05 =	50.2	L05 =	50.1	L05 =	51.2
L10 =	55.3	L10 =	53.4	L10 =	52.5	L10 =	52.3	L10 =	51.2	L10 =	49.6	L10 =	49.5	L10 =	49.8
L50 =	51.2	L50 =	50.6	L50 =	50.4	L50 =	50.3	L50 =	49.0	L50 =	46.9	L50 =	46.8	L50 =	45.4
L75 =	49.8	L75 =	49.2	L75 =	49.1	L75 =	49.1	L75 =	47.5	L75 =	45.6	L75 =	44.7	L75 =	42.7
L90 =	48.8	L90 =	48.1	L90 =	48.0	L90 =	47.8	L90 =	46.1	L90 =	44.5	L90 =	42.7	L90 =	40.5
L99 =	47.5	L99 =	46.3	L99 =	46.4	L99 =	46.0	L99 =	44.1	L99 =	42.5	L99 =	39.5	L99 =	38.0
Leq =	53.4	Leq =	52.3	Leq =	51.4	Leq =	51.2	Leq =	49.4	Leq =	47.4	Leq =	47.4	Leq =	47.3

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

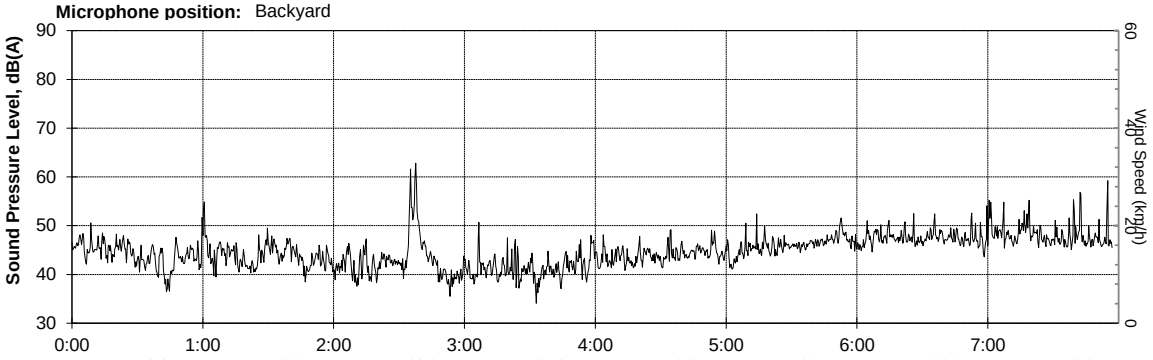
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

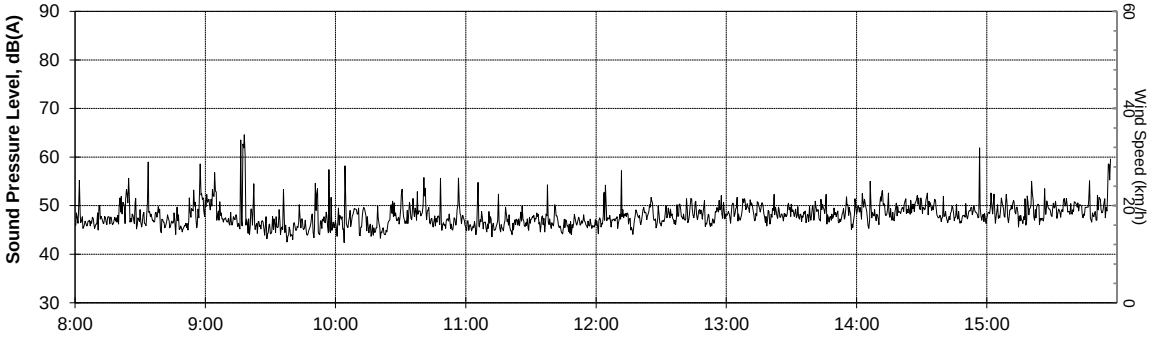
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Thursday 09 Mar 2023

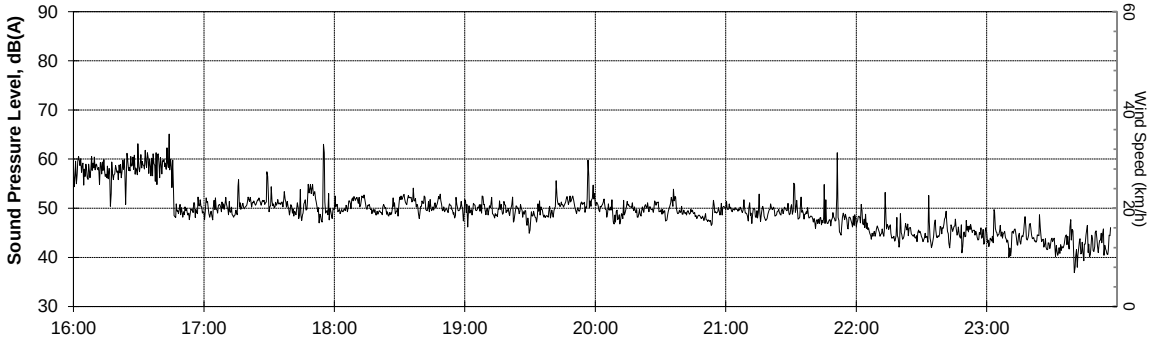
Microphone position: Backyard



Lmax =	58.2	Lmax =	59.0	Lmax =	68.6	Lmax =	61.6	Lmax =	59.6	Lmax =	60.4	Lmax =	60.6	Lmax =	70.0
L01 =	50.9	L01 =	51.5	L01 =	59.9	L01 =	49.3	L01 =	50.0	L01 =	52.1	L01 =	53.6	L01 =	59.3
L05 =	48.8	L05 =	49.0	L05 =	51.9	L05 =	46.8	L05 =	47.8	L05 =	49.1	L05 =	50.4	L05 =	52.0
L10 =	48.0	L10 =	47.8	L10 =	47.9	L10 =	45.6	L10 =	47.0	L10 =	48.3	L10 =	49.5	L10 =	49.9
L50 =	43.4	L50 =	42.8	L50 =	40.8	L50 =	39.8	L50 =	43.5	L50 =	45.8	L50 =	47.2	L50 =	46.9
L75 =	40.5	L75 =	39.8	L75 =	37.7	L75 =	37.5	L75 =	41.8	L75 =	44.6	L75 =	46.1	L75 =	46.0
L90 =	38.2	L90 =	37.8	L90 =	35.2	L90 =	35.3	L90 =	40.3	L90 =	43.4	L90 =	45.2	L90 =	45.3
L99 =	35.0	L99 =	34.8	L99 =	32.3	L99 =	32.8	L99 =	38.1	L99 =	40.8	L99 =	43.8	L99 =	43.8
Leq =	44.8	Leq =	44.7	Leq =	47.5	Leq =	42.0	Leq =	44.4	Leq =	46.4	Leq =	47.8	Leq =	49.2



Lmax =	69.7	Lmax =	77.7	Lmax =	74.3	Lmax =	71.6	Lmax =	68.3	Lmax =	67.4	Lmax =	76.2	Lmax =	73.8
L01 =	58.0	L01 =	58.5	L01 =	55.5	L01 =	52.0	L01 =	53.9	L01 =	53.3	L01 =	55.1	L01 =	55.9
L05 =	52.1	L05 =	51.8	L05 =	51.2	L05 =	49.2	L05 =	51.1	L05 =	51.4	L05 =	52.1	L05 =	52.5
L10 =	49.8	L10 =	49.5	L10 =	49.8	L10 =	48.4	L10 =	50.1	L10 =	50.7	L10 =	51.1	L10 =	51.4
L50 =	46.6	L50 =	45.9	L50 =	46.5	L50 =	46.1	L50 =	47.4	L50 =	48.2	L50 =	48.6	L50 =	48.8
L75 =	45.6	L75 =	44.6	L75 =	45.2	L75 =	45.1	L75 =	46.3	L75 =	47.2	L75 =	47.5	L75 =	47.6
L90 =	44.7	L90 =	43.6	L90 =	44.1	L90 =	44.3	L90 =	45.4	L90 =	46.3	L90 =	46.6	L90 =	46.6
L99 =	43.4	L99 =	42.2	L99 =	42.3	L99 =	43.1	L99 =	43.9	L99 =	45.0	L99 =	45.1	L99 =	45.3
Leq =	48.7	Leq =	50.6	Leq =	48.3	Leq =	46.9	Leq =	48.3	Leq =	48.8	Leq =	49.7	Leq =	50.3



Lmax =	81.5	Lmax =	76.4	Lmax =	62.5	Lmax =	68.4	Lmax =	66.9	Lmax =	71.6	Lmax =	63.6	Lmax =	59.4
L01 =	69.9	L01 =	58.2	L01 =	56.4	L01 =	55.9	L01 =	54.0	L01 =	55.3	L01 =	51.0	L01 =	49.5
L05 =	61.8	L05 =	53.6	L05 =	54.0	L05 =	52.7	L05 =	52.3	L05 =	51.3	L05 =	48.9	L05 =	47.2
L10 =	56.0	L10 =	52.6	L10 =	52.7	L10 =	52.0	L10 =	51.5	L10 =	50.7	L10 =	48.1	L10 =	46.3
L50 =	49.4	L50 =	49.9	L50 =	50.1	L50 =	49.6	L50 =	49.3	L50 =	48.8	L50 =	45.0	L50 =	43.2
L75 =	48.3	L75 =	48.7	L75 =	48.2	L75 =	48.3	L75 =	48.3	L75 =	47.6	L75 =	43.6	L75 =	41.2
L90 =	47.4	L90 =	47.6	L90 =	47.0	L90 =	47.0	L90 =	47.4	L90 =	46.4	L90 =	42.3	L90 =	39.2
L99 =	46.1	L99 =	46.0	L99 =	45.1	L99 =	44.8	L99 =	44.6	L99 =	43.2	L99 =	39.6	L99 =	35.9
Leq =	57.7	Leq =	51.5	Leq =	50.6	Leq =	50.3	Leq =	49.7	Leq =	49.6	Leq =	45.9	Leq =	43.9

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

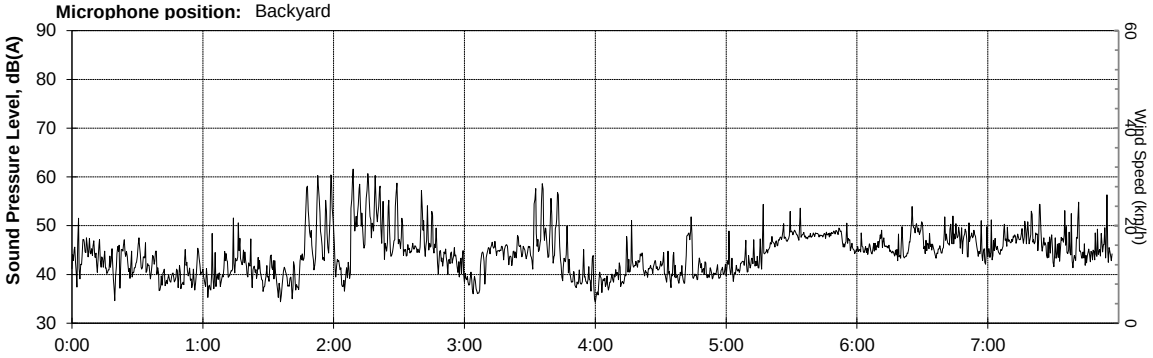
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

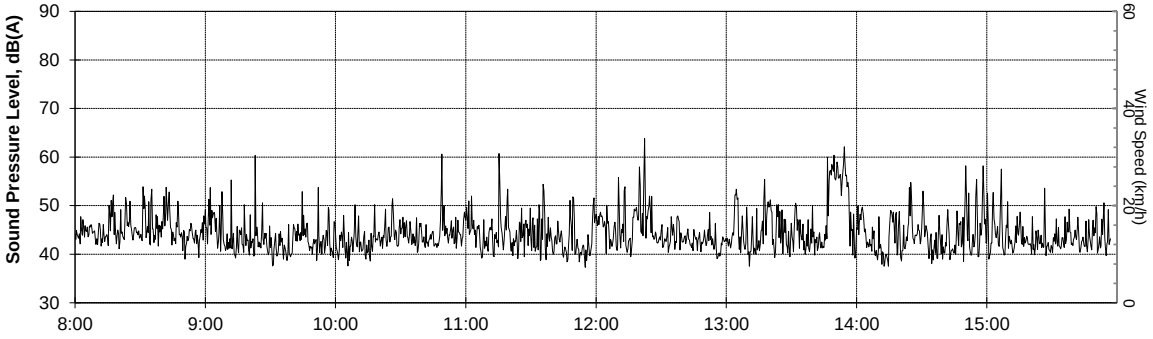
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Friday 10 Mar 2023

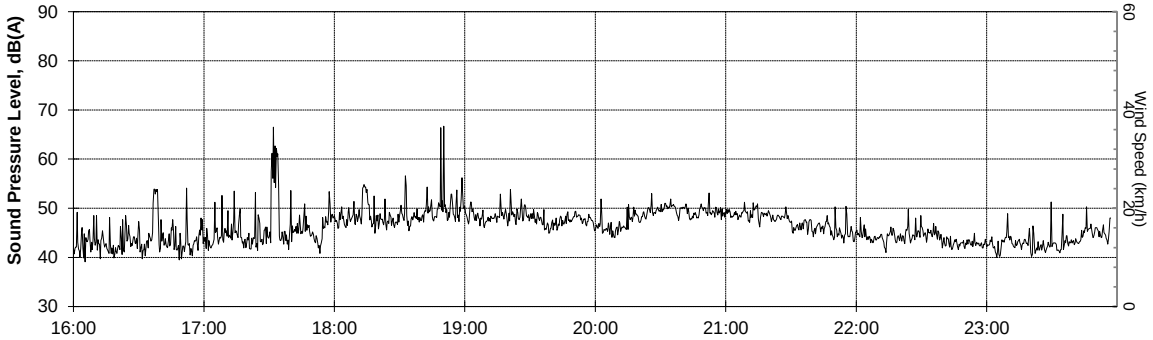
Microphone position: Backyard



Lmax =	62.3	Lmax =	64.9	Lmax =	67.5	Lmax =	63.9	Lmax =	55.8	Lmax =	62.3	Lmax =	64.9	Lmax =	65.8
L01 =	49.4	L01 =	60.2	L01 =	61.0	L01 =	58.4	L01 =	50.6	L01 =	52.3	L01 =	53.3	L01 =	56.8
L05 =	47.1	L05 =	54.8	L05 =	57.7	L05 =	52.3	L05 =	46.3	L05 =	49.8	L05 =	51.2	L05 =	51.3
L10 =	45.9	L10 =	50.1	L10 =	55.2	L10 =	48.6	L10 =	44.1	L10 =	49.3	L10 =	49.8	L10 =	49.3
L50 =	41.6	L50 =	40.7	L50 =	45.9	L50 =	42.9	L50 =	40.0	L50 =	46.5	L50 =	45.6	L50 =	44.8
L75 =	39.1	L75 =	37.7	L75 =	41.7	L75 =	38.9	L75 =	38.6	L75 =	43.0	L75 =	44.1	L75 =	43.2
L90 =	37.2	L90 =	35.8	L90 =	37.9	L90 =	37.2	L90 =	37.4	L90 =	40.7	L90 =	43.1	L90 =	42.1
L99 =	34.6	L99 =	33.7	L99 =	34.5	L99 =	34.9	L99 =	34.0	L99 =	38.4	L99 =	41.8	L99 =	40.8
Leq =	42.9	Leq =	47.9	Leq =	50.9	Leq =	46.9	Leq =	41.9	Leq =	46.9	Leq =	46.9	Leq =	47.2



Lmax =	68.6	Lmax =	74.6	Lmax =	76.7	Lmax =	74.0	Lmax =	79.9	Lmax =	79.5	Lmax =	68.0	Lmax =	65.5
L01 =	56.3	L01 =	54.9	L01 =	53.0	L01 =	56.6	L01 =	57.0	L01 =	62.2	L01 =	56.4	L01 =	56.3
L05 =	49.8	L05 =	48.3	L05 =	48.3	L05 =	50.4	L05 =	51.3	L05 =	55.9	L05 =	52.0	L05 =	50.5
L10 =	47.6	L10 =	46.3	L10 =	46.2	L10 =	47.3	L10 =	47.0	L10 =	52.3	L10 =	48.7	L10 =	47.6
L50 =	43.6	L50 =	41.5	L50 =	42.4	L50 =	41.4	L50 =	42.6	L50 =	42.1	L50 =	41.6	L50 =	42.2
L75 =	42.0	L75 =	39.5	L75 =	40.8	L75 =	39.5	L75 =	41.0	L75 =	40.2	L75 =	39.6	L75 =	41.0
L90 =	40.7	L90 =	38.3	L90 =	39.3	L90 =	38.2	L90 =	39.4	L90 =	38.6	L90 =	38.3	L90 =	39.8
L99 =	38.2	L99 =	37.0	L99 =	37.0	L99 =	36.2	L99 =	37.1	L99 =	36.6	L99 =	36.2	L99 =	37.6
Leq =	46.4	Leq =	45.6	Leq =	45.4	Leq =	46.2	Leq =	47.6	Leq =	50.8	Leq =	46.0	Leq =	45.7



Lmax =	72.3	Lmax =	83.4	Lmax =	85.2	Lmax =	65.1	Lmax =	65.0	Lmax =	62.7	Lmax =	59.9	Lmax =	59.4
L01 =	55.2	L01 =	59.5	L01 =	58.5	L01 =	53.5	L01 =	53.5	L01 =	51.7	L01 =	48.8	L01 =	50.4
L05 =	48.5	L05 =	50.8	L05 =	53.1	L05 =	50.6	L05 =	51.3	L05 =	50.4	L05 =	46.5	L05 =	46.8
L10 =	46.1	L10 =	48.0	L10 =	51.1	L10 =	49.7	L10 =	50.8	L10 =	49.7	L10 =	45.9	L10 =	45.9
L50 =	42.4	L50 =	44.3	L50 =	47.9	L50 =	47.8	L50 =	48.6	L50 =	47.5	L50 =	43.8	L50 =	43.1
L75 =	41.0	L75 =	43.0	L75 =	46.8	L75 =	46.9	L75 =	46.9	L75 =	45.6	L75 =	42.9	L75 =	42.0
L90 =	39.8	L90 =	41.9	L90 =	46.0	L90 =	46.1	L90 =	45.4	L90 =	44.3	L90 =	42.1	L90 =	41.0
L99 =	38.2	L99 =	40.2	L99 =	44.6	L99 =	44.8	L99 =	43.7	L99 =	42.8	L99 =	40.8	L99 =	38.7
Leq =	45.1	Leq =	50.5	Leq =	51.4	Leq =	48.3	Leq =	48.8	Leq =	47.7	Leq =	44.2	Leq =	43.9

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

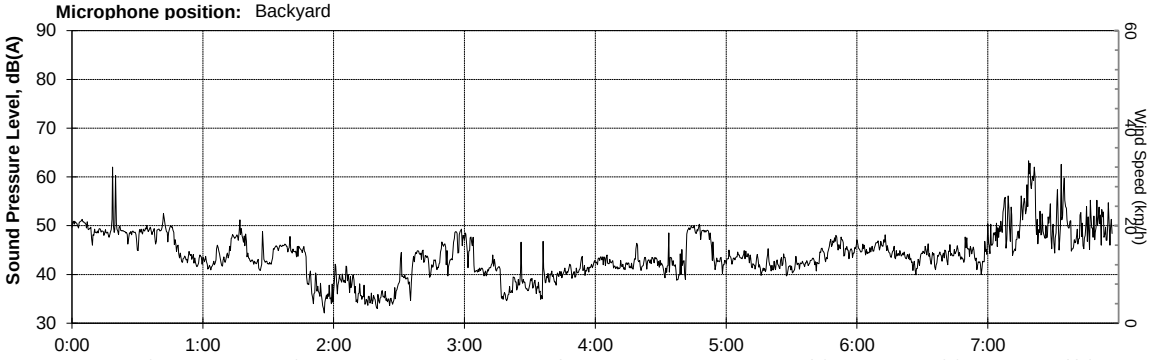
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

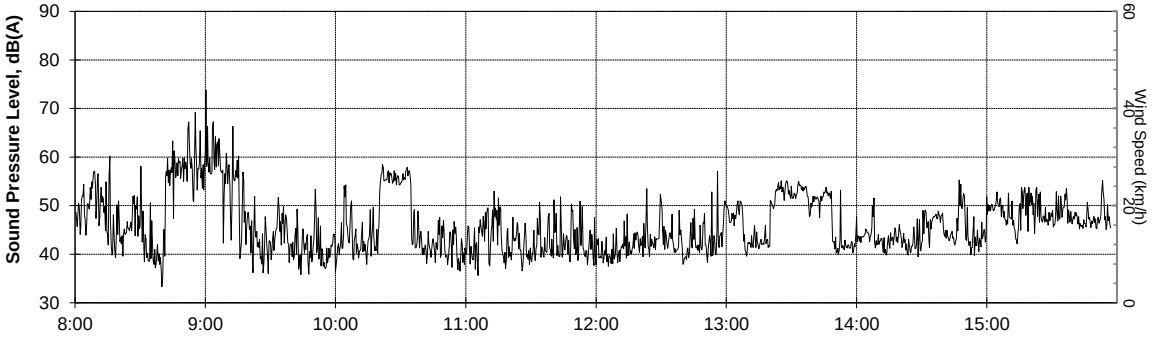
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Saturday 11 Mar 2023

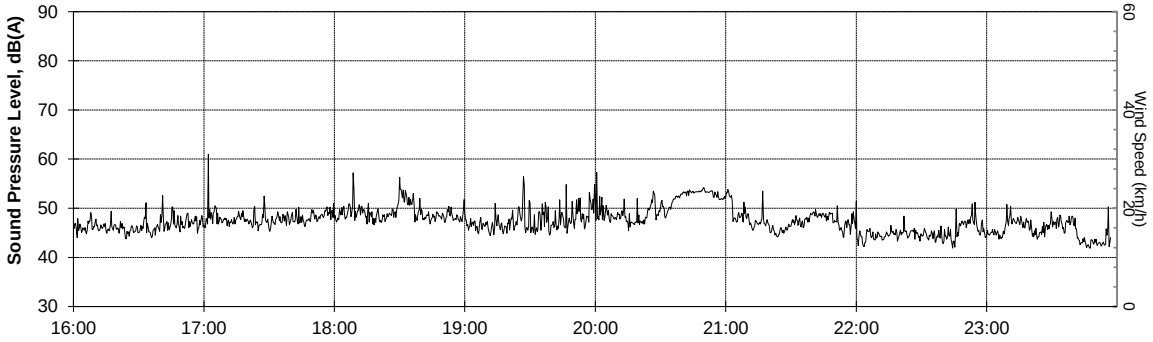
Microphone position: Backyard



Lmax =	70.5	Lmax =	57.6	Lmax =	51.7	Lmax =	54.8	Lmax =	57.5	Lmax =	53.0	Lmax =	59.0	Lmax =	82.6
L01 =	54.1	L01 =	50.2	L01 =	50.4	L01 =	50.1	L01 =	51.6	L01 =	49.7	L01 =	50.0	L01 =	64.4
L05 =	51.7	L05 =	48.7	L05 =	48.0	L05 =	45.6	L05 =	50.7	L05 =	47.4	L05 =	48.9	L05 =	58.4
L10 =	51.1	L10 =	47.1	L10 =	45.9	L10 =	43.1	L10 =	49.6	L10 =	45.9	L10 =	48.0	L10 =	54.9
L50 =	48.8	L50 =	43.2	L50 =	38.4	L50 =	39.7	L50 =	42.5	L50 =	42.9	L50 =	43.2	L50 =	45.6
L75 =	44.5	L75 =	40.7	L75 =	34.9	L75 =	37.1	L75 =	40.5	L75 =	41.3	L75 =	41.7	L75 =	43.6
L90 =	42.8	L90 =	35.5	L90 =	33.0	L90 =	35.1	L90 =	38.5	L90 =	39.6	L90 =	39.9	L90 =	42.1
L99 =	39.9	L99 =	31.6	L99 =	30.1	L99 =	32.5	L99 =	34.5	L99 =	36.5	L99 =	37.4	L99 =	40.0
Leq =	49.3	Leq =	44.2	Leq =	41.9	Leq =	41.3	Leq =	44.7	Leq =	43.6	Leq =	44.5	Leq =	52.8



Lmax =	82.6	Lmax =	88.5	Lmax =	66.8	Lmax =	66.5	Lmax =	67.2	Lmax =	66.9	Lmax =	63.8	Lmax =	66.9
L01 =	66.8	L01 =	65.9	L01 =	58.7	L01 =	55.0	L01 =	54.0	L01 =	55.8	L01 =	55.2	L01 =	58.3
L05 =	59.9	L05 =	55.9	L05 =	57.1	L05 =	49.8	L05 =	48.2	L05 =	54.6	L05 =	49.9	L05 =	54.1
L10 =	55.6	L10 =	51.2	L10 =	56.1	L10 =	47.0	L10 =	45.9	L10 =	53.8	L10 =	47.5	L10 =	51.6
L50 =	42.8	L50 =	41.5	L50 =	42.1	L50 =	40.3	L50 =	40.7	L50 =	49.3	L50 =	42.8	L50 =	46.4
L75 =	39.4	L75 =	38.3	L75 =	39.2	L75 =	38.4	L75 =	39.0	L75 =	42.3	L75 =	41.3	L75 =	44.9
L90 =	36.9	L90 =	36.0	L90 =	37.5	L90 =	36.8	L90 =	37.7	L90 =	40.9	L90 =	40.1	L90 =	43.2
L99 =	33.2	L99 =	33.7	L99 =	34.8	L99 =	34.5	L99 =	35.9	L99 =	39.2	L99 =	38.5	L99 =	39.8
Leq =	55.7	Leq =	56.2	Leq =	50.7	Leq =	44.5	Leq =	44.0	Leq =	50.2	Leq =	45.5	Leq =	49.1



Lmax =	66.4	Lmax =	78.4	Lmax =	68.4	Lmax =	71.4	Lmax =	72.3	Lmax =	62.8	Lmax =	59.5	Lmax =	59.8
L01 =	51.8	L01 =	53.8	L01 =	56.6	L01 =	56.1	L01 =	54.9	L01 =	53.8	L01 =	50.8	L01 =	51.3
L05 =	49.1	L05 =	50.5	L05 =	52.2	L05 =	50.6	L05 =	54.1	L05 =	52.3	L05 =	48.8	L05 =	50.2
L10 =	48.2	L10 =	49.5	L10 =	51.0	L10 =	48.9	L10 =	53.8	L10 =	50.3	L10 =	47.6	L10 =	49.1
L50 =	46.0	L50 =	47.5	L50 =	48.6	L50 =	46.4	L50 =	50.2	L50 =	47.2	L50 =	44.7	L50 =	44.5
L75 =	45.1	L75 =	46.6	L75 =	47.5	L75 =	45.5	L75 =	47.8	L75 =	46.1	L75 =	43.6	L75 =	42.9
L90 =	44.3	L90 =	46.0	L90 =	46.7	L90 =	44.6	L90 =	46.6	L90 =	45.0	L90 =	42.6	L90 =	41.5
L99 =	42.9	L99 =	44.8	L99 =	45.4	L99 =	43.2	L99 =	44.9	L99 =	43.2	L99 =	40.0	L99 =	38.9
Leq =	46.6	Leq =	48.5	Leq =	49.6	Leq =	48.1	Leq =	51.2	Leq =	48.2	Leq =	45.4	Leq =	45.9

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

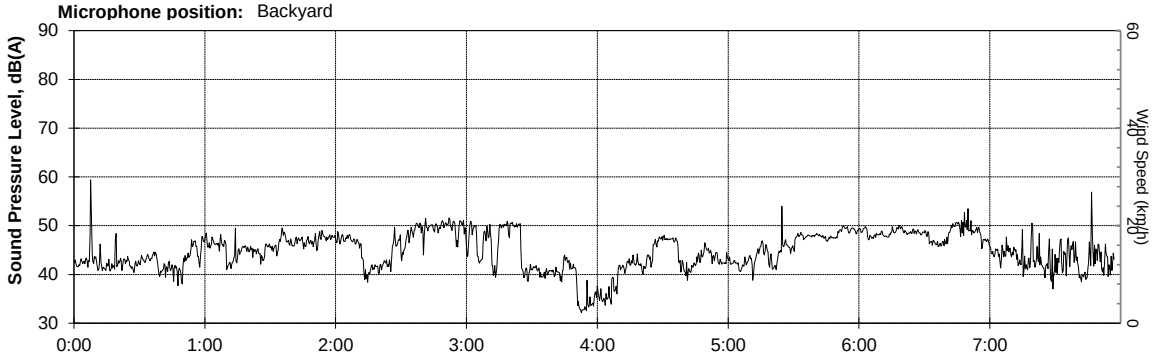
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

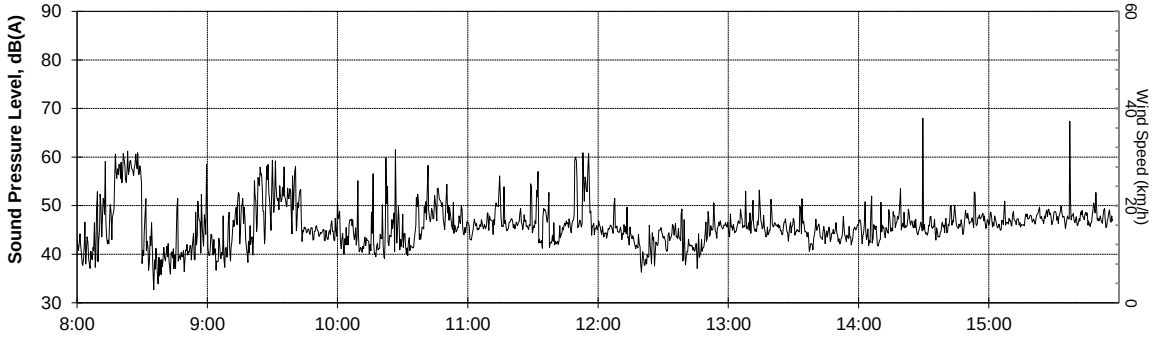
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Sunday 12 Mar 2023

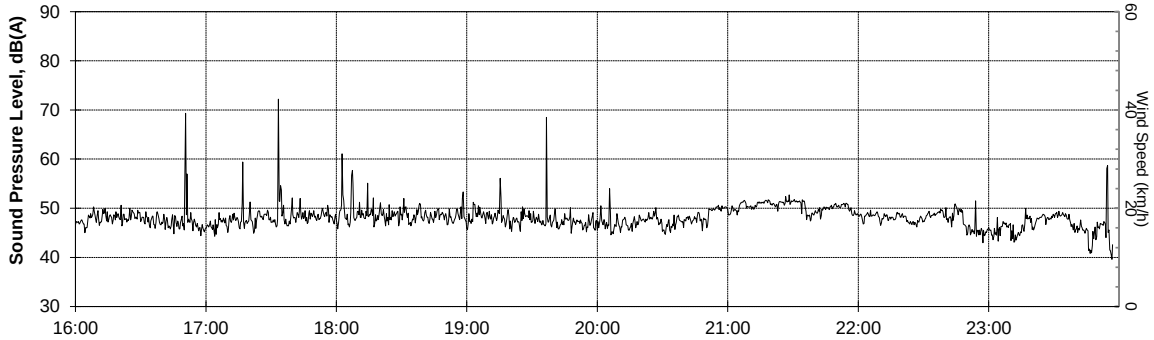
Microphone position: Backyard



Lmax =	63.8	Lmax =	57.6	Lmax =	57.9	Lmax =	53.3	Lmax =	54.0	Lmax =	66.4	Lmax =	70.6	Lmax =	73.6
L01 =	51.2	L01 =	51.1	L01 =	52.9	L01 =	52.5	L01 =	49.3	L01 =	50.9	L01 =	52.1	L01 =	53.1
L05 =	46.7	L05 =	49.8	L05 =	52.1	L05 =	52.0	L05 =	48.3	L05 =	49.9	L05 =	50.9	L05 =	48.6
L10 =	45.2	L10 =	48.8	L10 =	51.6	L10 =	51.3	L10 =	47.5	L10 =	49.2	L10 =	50.4	L10 =	46.9
L50 =	42.3	L50 =	45.8	L50 =	46.6	L50 =	41.8	L50 =	42.3	L50 =	46.0	L50 =	48.3	L50 =	41.5
L75 =	40.1	L75 =	43.5	L75 =	43.0	L75 =	38.2	L75 =	38.1	L75 =	42.9	L75 =	47.1	L75 =	39.2
L90 =	37.7	L90 =	41.3	L90 =	38.8	L90 =	33.4	L90 =	34.4	L90 =	41.2	L90 =	45.8	L90 =	37.8
L99 =	33.1	L99 =	37.5	L99 =	32.5	L99 =	30.4	L99 =	30.4	L99 =	37.7	L99 =	43.0	L99 =	35.3
Leq =	44.1	Leq =	46.3	Leq =	47.8	Leq =	45.6	Leq =	43.5	Leq =	46.6	Leq =	48.7	Leq =	44.5



Lmax =	78.7	Lmax =	76.9	Lmax =	75.8	Lmax =	79.0	Lmax =	63.5	Lmax =	72.1	Lmax =	87.7	Lmax =	86.7
L01 =	63.8	L01 =	61.5	L01 =	59.0	L01 =	59.2	L01 =	51.5	L01 =	53.2	L01 =	54.5	L01 =	52.0
L05 =	54.2	L05 =	54.6	L05 =	52.8	L05 =	52.2	L05 =	47.1	L05 =	48.2	L05 =	49.2	L05 =	49.9
L10 =	48.7	L10 =	50.8	L10 =	49.1	L10 =	49.1	L10 =	46.2	L10 =	47.2	L10 =	48.2	L10 =	49.2
L50 =	39.5	L50 =	43.7	L50 =	43.2	L50 =	45.7	L50 =	43.5	L50 =	44.9	L50 =	45.5	L50 =	47.1
L75 =	37.1	L75 =	40.8	L75 =	41.0	L75 =	44.3	L75 =	41.3	L75 =	43.7	L75 =	44.3	L75 =	46.2
L90 =	35.4	L90 =	38.1	L90 =	39.5	L90 =	42.4	L90 =	38.9	L90 =	42.6	L90 =	43.0	L90 =	45.4
L99 =	32.1	L99 =	35.2	L99 =	37.3	L99 =	40.5	L99 =	36.2	L99 =	40.7	L99 =	40.7	L99 =	44.1
Leq =	52.0	Leq =	50.3	Leq =	48.4	Leq =	49.8	Leq =	44.3	Leq =	45.8	Leq =	49.1	Leq =	49.4



Lmax =	86.3	Lmax =	89.2	Lmax =	70.0	Lmax =	88.4	Lmax =	65.3	Lmax =	59.1	Lmax =	58.5	Lmax =	66.0
L01 =	53.2	L01 =	54.8	L01 =	57.6	L01 =	53.1	L01 =	52.3	L01 =	52.9	L01 =	51.7	L01 =	52.2
L05 =	50.2	L05 =	50.4	L05 =	51.7	L05 =	50.2	L05 =	50.8	L05 =	52.3	L05 =	50.5	L05 =	50.1
L10 =	49.5	L10 =	49.7	L10 =	50.5	L10 =	49.4	L10 =	50.1	L10 =	52.1	L10 =	49.9	L10 =	49.5
L50 =	47.3	L50 =	47.6	L50 =	48.1	L50 =	47.3	L50 =	47.3	L50 =	50.5	L50 =	48.0	L50 =	46.3
L75 =	46.3	L75 =	46.7	L75 =	47.1	L75 =	46.4	L75 =	45.8	L75 =	49.2	L75 =	46.7	L75 =	43.7
L90 =	45.5	L90 =	45.8	L90 =	46.3	L90 =	45.6	L90 =	44.8	L90 =	47.8	L90 =	44.7	L90 =	41.3
L99 =	43.9	L99 =	44.1	L99 =	45.0	L99 =	44.1	L99 =	43.1	L99 =	44.0	L99 =	40.2	L99 =	37.2
Leq =	50.4	Leq =	52.1	Leq =	49.5	Leq =	50.1	Leq =	47.8	Leq =	50.5	Leq =	48.1	Leq =	47.2

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

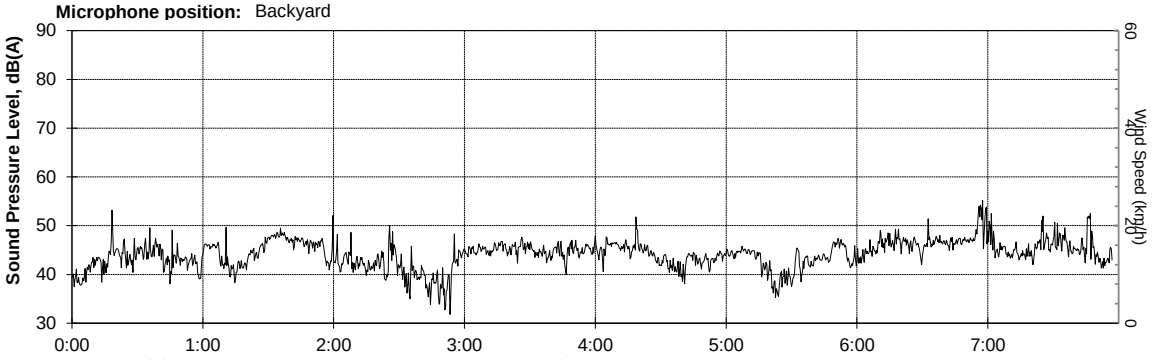
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

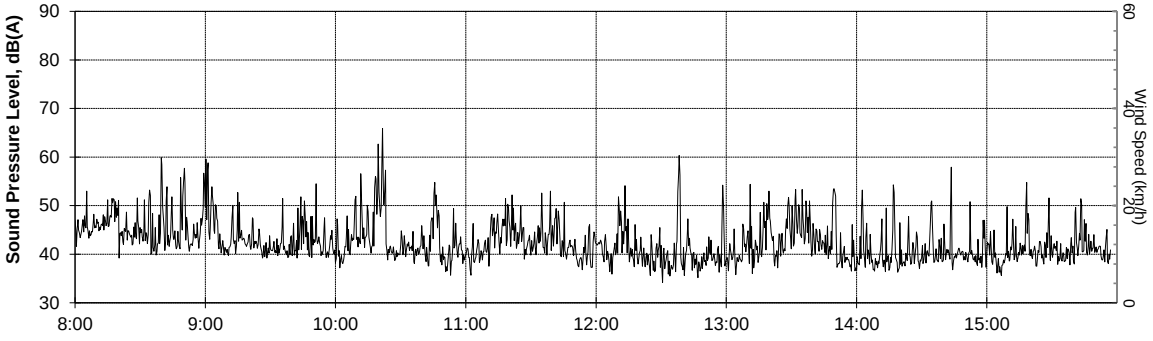
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Monday 13 Mar 2023

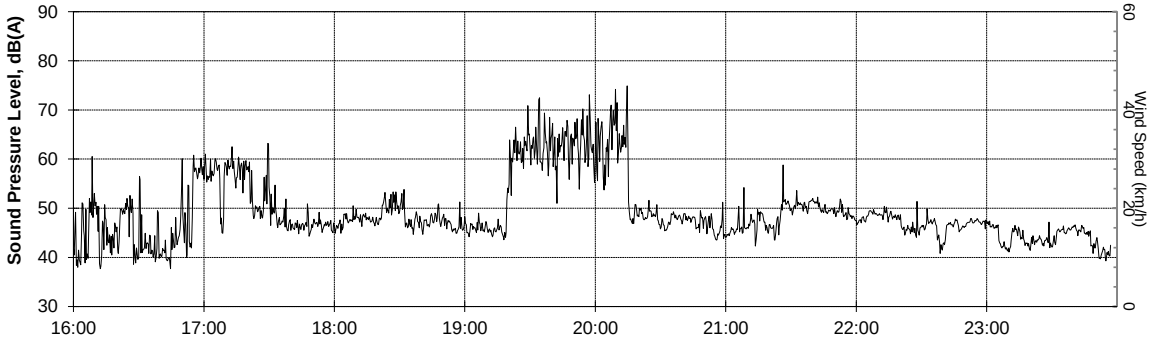
Microphone position: Backyard



Lmax =	63.2	Lmax =	57.9	Lmax =	67.0	Lmax =	55.8	Lmax =	62.4	Lmax =	55.4	Lmax =	64.3	Lmax =	65.6
L01 =	49.8	L01 =	50.3	L01 =	51.0	L01 =	50.9	L01 =	50.1	L01 =	48.0	L01 =	54.7	L01 =	56.4
L05 =	47.9	L05 =	49.2	L05 =	46.1	L05 =	48.9	L05 =	48.2	L05 =	46.9	L05 =	50.3	L05 =	49.3
L10 =	47.3	L10 =	48.5	L10 =	45.0	L10 =	47.8	L10 =	47.2	L10 =	46.3	L10 =	49.4	L10 =	47.9
L50 =	41.0	L50 =	45.2	L50 =	40.5	L50 =	44.5	L50 =	43.6	L50 =	43.1	L50 =	45.5	L50 =	44.5
L75 =	38.6	L75 =	42.3	L75 =	37.6	L75 =	41.6	L75 =	40.7	L75 =	40.0	L75 =	43.5	L75 =	43.2
L90 =	36.7	L90 =	38.4	L90 =	35.1	L90 =	38.3	L90 =	37.7	L90 =	37.1	L90 =	41.6	L90 =	42.1
L99 =	33.5	L99 =	33.5	L99 =	32.0	L99 =	32.7	L99 =	33.7	L99 =	34.0	L99 =	38.7	L99 =	40.3
Leq =	43.7	Leq =	45.7	Leq =	42.4	Leq =	45.1	Leq =	44.4	Leq =	43.4	Leq =	47.0	Leq =	46.6



Lmax =	76.2	Lmax =	78.2	Lmax =	81.1	Lmax =	68.7	Lmax =	71.6	Lmax =	73.8	Lmax =	66.3	Lmax =	64.9
L01 =	58.8	L01 =	56.7	L01 =	59.0	L01 =	54.1	L01 =	53.9	L01 =	55.5	L01 =	54.5	L01 =	52.9
L05 =	51.2	L05 =	48.1	L05 =	50.0	L05 =	48.6	L05 =	46.5	L05 =	51.2	L05 =	47.0	L05 =	47.2
L10 =	47.8	L10 =	45.2	L10 =	46.0	L10 =	46.1	L10 =	43.8	L10 =	48.5	L10 =	43.6	L10 =	44.1
L50 =	43.4	L50 =	41.2	L50 =	40.6	L50 =	40.3	L50 =	38.9	L50 =	40.4	L50 =	38.8	L50 =	39.5
L75 =	41.9	L75 =	39.9	L75 =	38.9	L75 =	38.3	L75 =	37.0	L75 =	38.1	L75 =	37.4	L75 =	38.0
L90 =	40.6	L90 =	38.8	L90 =	37.4	L90 =	36.9	L90 =	35.4	L90 =	36.7	L90 =	36.5	L90 =	37.0
L99 =	38.7	L99 =	37.4	L99 =	35.2	L99 =	35.3	L99 =	33.8	L99 =	34.6	L99 =	35.1	L99 =	35.3
Leq =	48.2	Leq =	46.2	Leq =	48.9	Leq =	44.2	Leq =	44.5	Leq =	45.4	Leq =	43.2	Leq =	42.8



Lmax =	77.0	Lmax =	79.3	Lmax =	67.8	Lmax =	87.6	Lmax =	89.2	Lmax =	68.3	Lmax =	58.9	Lmax =	57.2
L01 =	60.9	L01 =	67.0	L01 =	55.6	L01 =	74.4	L01 =	72.4	L01 =	53.6	L01 =	51.1	L01 =	48.5
L05 =	53.7	L05 =	57.1	L05 =	50.9	L05 =	67.4	L05 =	62.6	L05 =	52.1	L05 =	50.1	L05 =	47.6
L10 =	50.4	L10 =	52.5	L10 =	49.8	L10 =	63.5	L10 =	57.1	L10 =	51.6	L10 =	49.6	L10 =	47.0
L50 =	41.8	L50 =	47.0	L50 =	47.2	L50 =	47.6	L50 =	48.4	L50 =	48.6	L50 =	47.0	L50 =	43.8
L75 =	39.5	L75 =	46.0	L75 =	46.1	L75 =	45.3	L75 =	46.8	L75 =	45.9	L75 =	45.4	L75 =	42.0
L90 =	38.0	L90 =	45.2	L90 =	45.2	L90 =	44.1	L90 =	45.3	L90 =	44.4	L90 =	43.6	L90 =	40.5
L99 =	35.9	L99 =	43.9	L99 =	43.8	L99 =	42.1	L99 =	43.1	L99 =	41.6	L99 =	40.3	L99 =	38.4
Leq =	50.6	Leq =	54.7	Leq =	48.3	Leq =	62.6	Leq =	60.9	Leq =	49.2	Leq =	47.3	Leq =	44.5

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

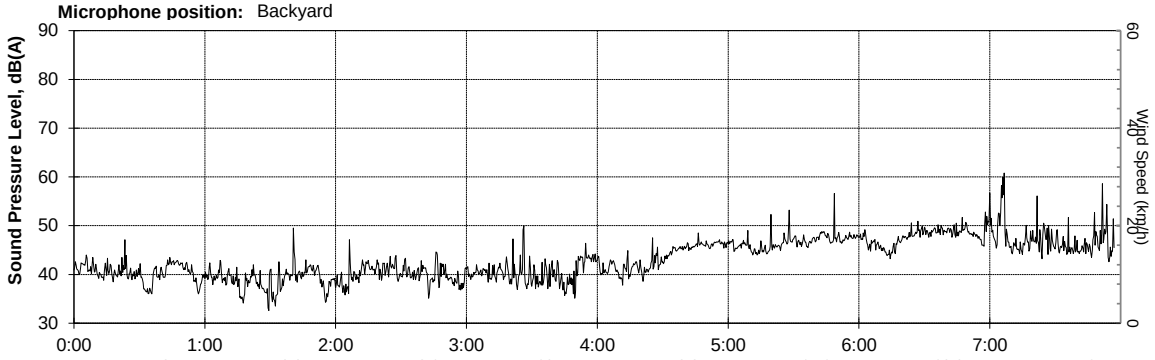
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

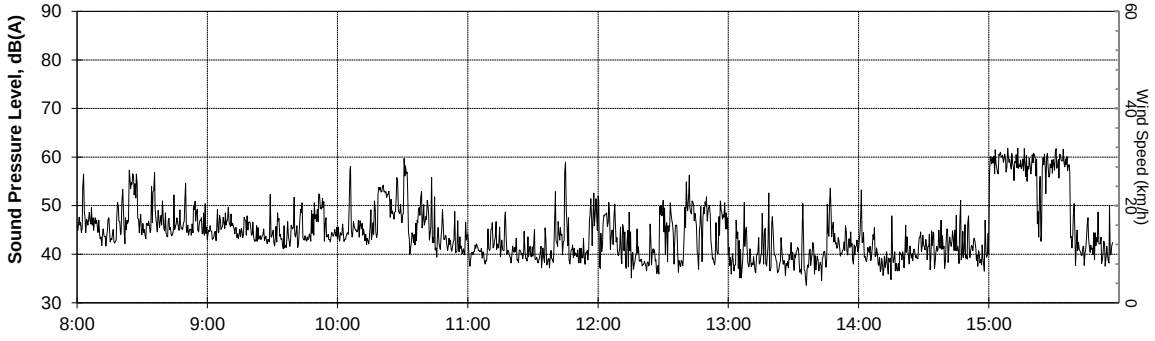
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Tuesday 14 Mar 2023

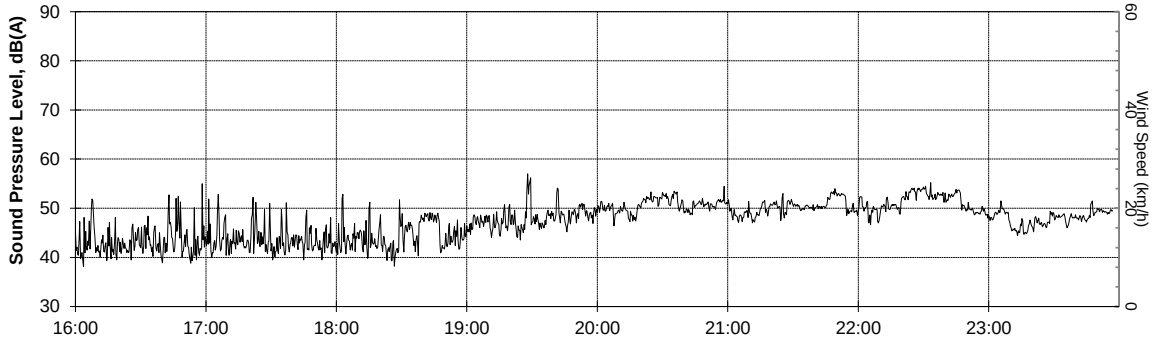
Microphone position: Backyard



Lmax =	54.8	Lmax =	58.3	Lmax =	52.6	Lmax =	62.5	Lmax =	58.3	Lmax =	64.0	Lmax =	62.2	Lmax =	74.0
L01 =	45.6	L01 =	45.8	L01 =	46.1	L01 =	47.0	L01 =	48.5	L01 =	51.1	L01 =	52.1	L01 =	59.2
L05 =	43.6	L05 =	42.6	L05 =	44.1	L05 =	44.6	L05 =	47.5	L05 =	49.2	L05 =	50.8	L05 =	52.5
L10 =	43.0	L10 =	41.8	L10 =	43.1	L10 =	43.6	L10 =	47.0	L10 =	48.7	L10 =	50.2	L10 =	49.8
L50 =	40.4	L50 =	38.6	L50 =	39.6	L50 =	40.0	L50 =	43.2	L50 =	46.5	L50 =	47.5	L50 =	45.5
L75 =	38.8	L75 =	36.8	L75 =	37.8	L75 =	37.9	L75 =	40.9	L75 =	45.3	L75 =	45.8	L75 =	44.2
L90 =	37.2	L90 =	34.4	L90 =	36.2	L90 =	35.9	L90 =	39.4	L90 =	44.0	L90 =	44.4	L90 =	43.1
L99 =	34.8	L99 =	31.6	L99 =	32.6	L99 =	33.0	L99 =	36.7	L99 =	41.5	L99 =	42.5	L99 =	41.5
Leq =	40.8	Leq =	39.6	Leq =	40.5	Leq =	41.1	Leq =	44.1	Leq =	47.0	Leq =	48.0	Leq =	49.2



Lmax =	73.1	Lmax =	66.9	Lmax =	71.7	Lmax =	70.7	Lmax =	69.3	Lmax =	62.8	Lmax =	61.7	Lmax =	79.3
L01 =	59.1	L01 =	54.0	L01 =	59.2	L01 =	54.7	L01 =	57.3	L01 =	53.4	L01 =	51.6	L01 =	69.0
L05 =	52.4	L05 =	49.5	L05 =	54.2	L05 =	47.6	L05 =	52.7	L05 =	47.2	L05 =	46.4	L05 =	61.4
L10 =	49.6	L10 =	47.7	L10 =	52.6	L10 =	44.7	L10 =	49.6	L10 =	44.1	L10 =	44.4	L10 =	54.7
L50 =	44.9	L50 =	43.9	L50 =	43.8	L50 =	39.9	L50 =	39.4	L50 =	38.5	L50 =	39.5	L50 =	42.1
L75 =	43.7	L75 =	42.7	L75 =	42.1	L75 =	38.4	L75 =	37.5	L75 =	36.6	L75 =	37.8	L75 =	39.9
L90 =	42.7	L90 =	41.8	L90 =	40.6	L90 =	37.3	L90 =	36.3	L90 =	34.9	L90 =	36.4	L90 =	38.1
L99 =	41.2	L99 =	40.3	L99 =	39.1	L99 =	35.7	L99 =	34.6	L99 =	33.1	L99 =	34.4	L99 =	35.5
Leq =	48.7	Leq =	45.9	Leq =	49.1	Leq =	44.2	Leq =	46.4	Leq =	42.5	Leq =	42.2	Leq =	56.9



Lmax =	70.5	Lmax =	60.8	Lmax =	67.2	Lmax =	69.2	Lmax =	61.9	Lmax =	61.9	Lmax =	63.3	Lmax =	55.2
L01 =	53.9	L01 =	54.7	L01 =	53.1	L01 =	55.0	L01 =	54.1	L01 =	54.0	L01 =	55.4	L01 =	51.9
L05 =	48.6	L05 =	48.8	L05 =	50.0	L05 =	51.1	L05 =	53.1	L05 =	53.2	L05 =	54.6	L05 =	50.5
L10 =	46.5	L10 =	46.3	L10 =	48.9	L10 =	50.3	L10 =	52.5	L10 =	52.5	L10 =	53.9	L10 =	50.0
L50 =	41.8	L50 =	42.5	L50 =	42.7	L50 =	47.2	L50 =	50.7	L50 =	50.3	L50 =	51.0	L50 =	48.1
L75 =	40.0	L75 =	41.2	L75 =	40.9	L75 =	45.6	L75 =	49.4	L75 =	48.9	L75 =	49.6	L75 =	46.7
L90 =	38.7	L90 =	40.1	L90 =	39.4	L90 =	44.4	L90 =	48.0	L90 =	47.8	L90 =	48.4	L90 =	45.4
L99 =	36.9	L99 =	38.4	L99 =	37.5	L99 =	42.9	L99 =	45.9	L99 =	46.0	L99 =	45.7	L99 =	43.4
Leq =	44.8	Leq =	44.6	Leq =	45.4	Leq =	48.6	Leq =	50.8	Leq =	50.5	Leq =	51.6	Leq =	48.2

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

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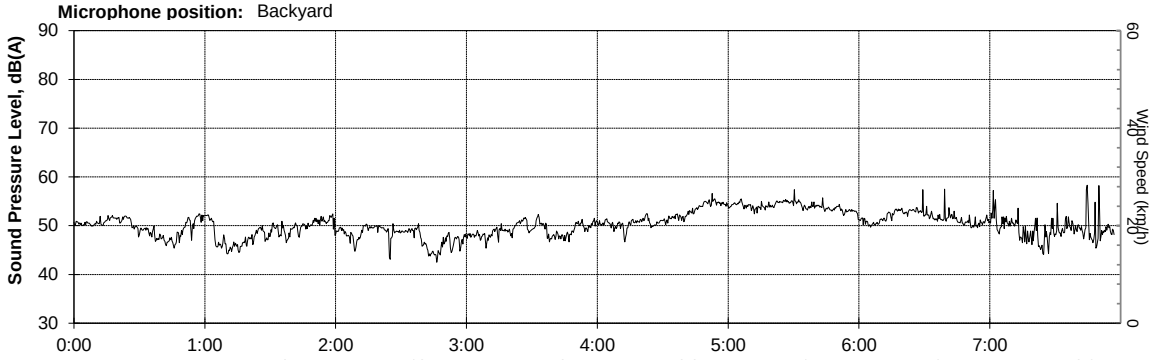
SLR

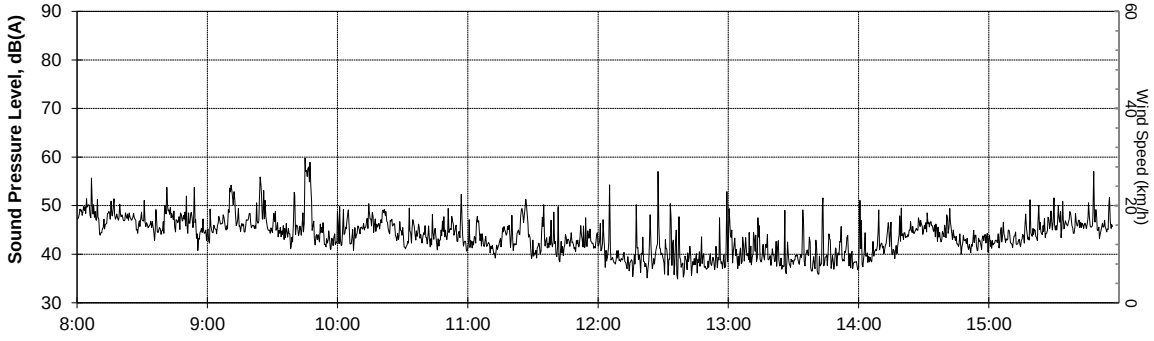
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Wednesday 15 Mar 2023

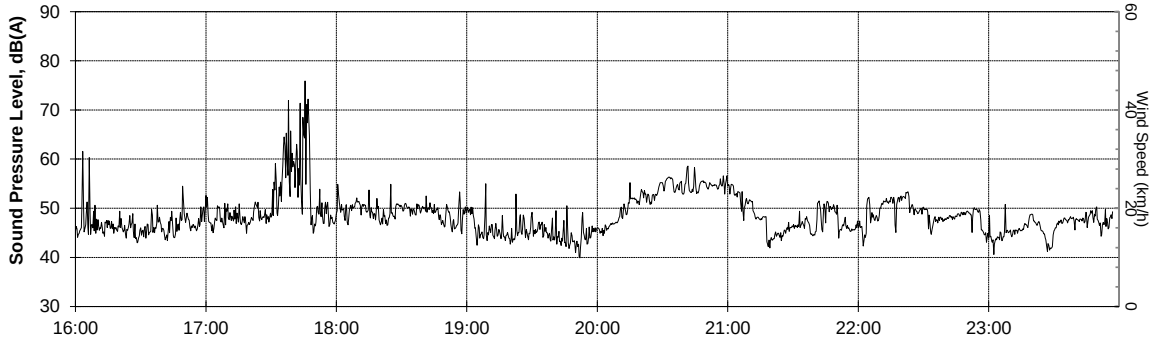
Microphone position: Backyard



Lmax =	54.5	Lmax =	58.1	Lmax =	62.4	Lmax =	57.8	Lmax =	58.8	Lmax =	64.1	Lmax =	65.5	Lmax =	73.0
L01 =	53.2	L01 =	53.5	L01 =	51.4	L01 =	52.7	L01 =	56.0	L01 =	56.4	L01 =	55.1	L01 =	57.5
L05 =	52.5	L05 =	52.6	L05 =	50.7	L05 =	51.8	L05 =	55.2	L05 =	55.7	L05 =	54.0	L05 =	52.9
L10 =	52.1	L10 =	51.9	L10 =	50.3	L10 =	51.2	L10 =	54.7	L10 =	55.3	L10 =	53.5	L10 =	51.8
L50 =	50.1	L50 =	48.7	L50 =	48.1	L50 =	49.0	L50 =	51.5	L50 =	54.0	L50 =	51.5	L50 =	48.5
L75 =	48.5	L75 =	46.6	L75 =	45.9	L75 =	47.7	L75 =	50.3	L75 =	53.2	L75 =	50.5	L75 =	46.4
L90 =	46.7	L90 =	45.2	L90 =	44.3	L90 =	46.2	L90 =	49.1	L90 =	52.5	L90 =	49.8	L90 =	45.1
L99 =	44.1	L99 =	42.9	L99 =	40.7	L99 =	42.0	L99 =	46.4	L99 =	51.0	L99 =	48.3	L99 =	42.2
Leq =	50.1	Leq =	49.2	Leq =	48.1	Leq =	49.2	Leq =	52.1	Leq =	54.1	Leq =	51.9	Leq =	50.2



Lmax =	70.9	Lmax =	71.6	Lmax =	65.9	Lmax =	63.9	Lmax =	76.3	Lmax =	67.5	Lmax =	60.9	Lmax =	71.9
L01 =	56.4	L01 =	59.5	L01 =	53.9	L01 =	51.8	L01 =	50.9	L01 =	51.5	L01 =	51.2	L01 =	52.8
L05 =	51.5	L05 =	52.5	L05 =	49.3	L05 =	48.7	L05 =	44.6	L05 =	45.5	L05 =	47.6	L05 =	49.2
L10 =	50.4	L10 =	49.2	L10 =	47.3	L10 =	46.9	L10 =	42.6	L10 =	43.3	L10 =	46.5	L10 =	47.7
L50 =	45.7	L50 =	45.1	L50 =	44.1	L50 =	41.9	L50 =	38.7	L50 =	38.7	L50 =	42.7	L50 =	44.7
L75 =	44.1	L75 =	43.5	L75 =	42.6	L75 =	40.4	L75 =	37.1	L75 =	37.3	L75 =	40.9	L75 =	43.1
L90 =	42.2	L90 =	42.1	L90 =	41.5	L90 =	39.1	L90 =	35.8	L90 =	36.2	L90 =	38.9	L90 =	41.9
L99 =	37.5	L99 =	40.1	L99 =	39.8	L99 =	37.6	L99 =	34.2	L99 =	34.9	L99 =	36.4	L99 =	40.3
Leq =	47.8	Leq =	48.8	Leq =	45.6	Leq =	43.9	Leq =	42.1	Leq =	41.7	Leq =	44.0	Leq =	46.0



Lmax =	77.5	Lmax =	89.8	Lmax =	66.3	Lmax =	64.7	Lmax =	62.4	Lmax =	62.9	Lmax =	55.4	Lmax =	60.6
L01 =	54.1	L01 =	69.7	L01 =	54.9	L01 =	52.9	L01 =	58.5	L01 =	55.8	L01 =	54.1	L01 =	51.6
L05 =	50.0	L05 =	57.8	L05 =	52.5	L05 =	50.4	L05 =	56.4	L05 =	54.4	L05 =	53.3	L05 =	50.0
L10 =	48.7	L10 =	53.1	L10 =	51.9	L10 =	48.2	L10 =	55.8	L10 =	52.9	L10 =	52.6	L10 =	49.1
L50 =	45.9	L50 =	47.9	L50 =	48.8	L50 =	44.5	L50 =	53.1	L50 =	47.2	L50 =	48.9	L50 =	46.1
L75 =	44.9	L75 =	46.6	L75 =	46.7	L75 =	43.3	L75 =	49.8	L75 =	45.3	L75 =	46.2	L75 =	44.3
L90 =	44.0	L90 =	45.6	L90 =	45.4	L90 =	42.1	L90 =	46.4	L90 =	43.7	L90 =	43.9	L90 =	42.7
L99 =	42.7	L99 =	44.1	L99 =	43.3	L99 =	39.6	L99 =	40.8	L99 =	41.1	L99 =	39.6	L99 =	38.7
Leq =	47.9	Leq =	59.6	Leq =	49.6	Leq =	46.0	Leq =	53.3	Leq =	49.4	Leq =	49.4	Leq =	46.7

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

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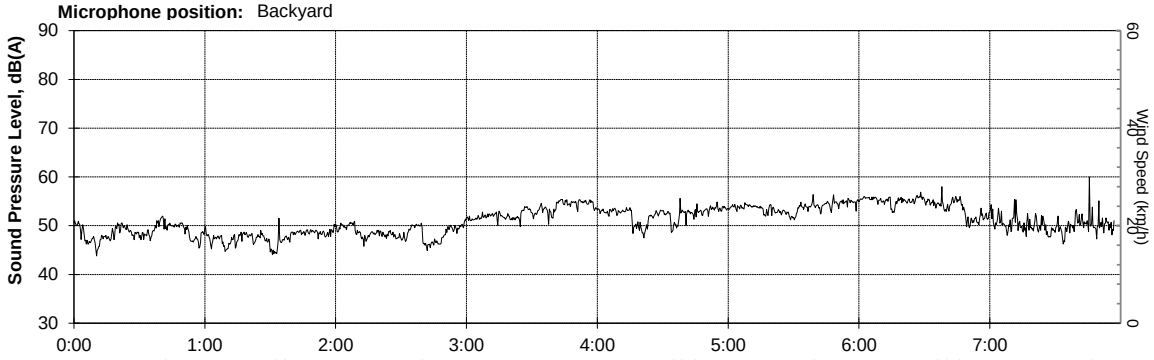
SLR

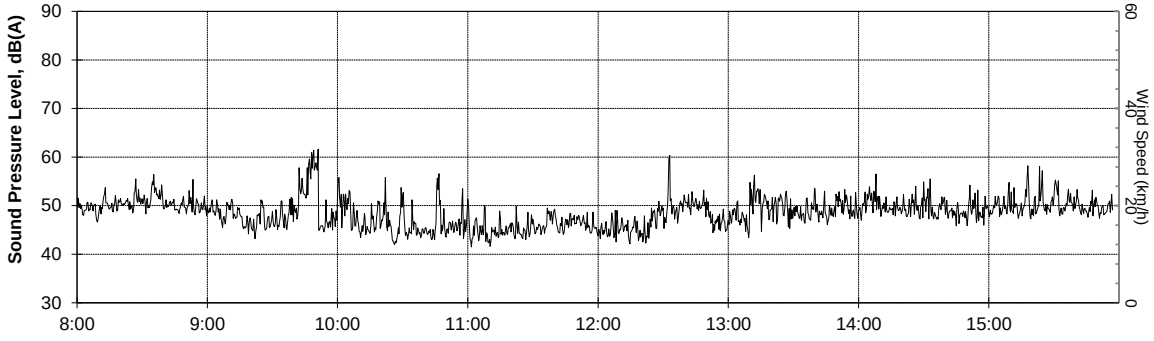
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Thursday 16 Mar 2023

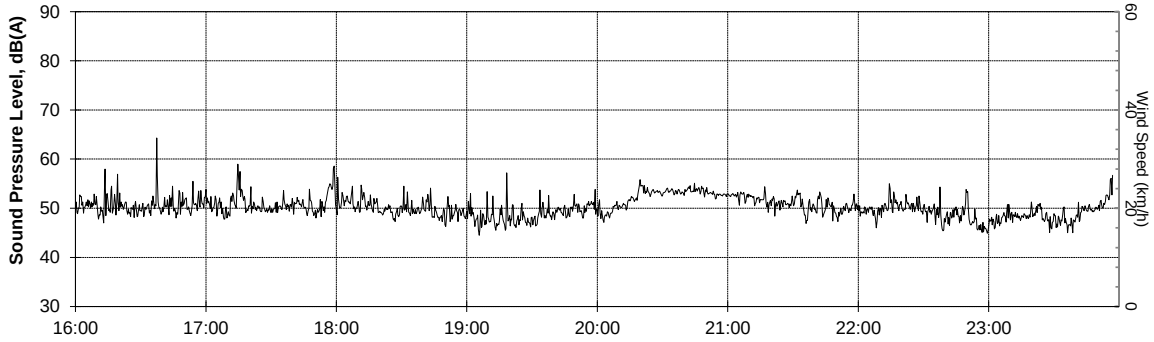
Microphone position: Backyard



Lmax =	54.9	Lmax =	68.4	Lmax =	56.1	Lmax =	57.5	Lmax =	62.6	Lmax =	70.5	Lmax =	66.2	Lmax =	75.9
L01 =	52.9	L01 =	50.7	L01 =	51.9	L01 =	56.6	L01 =	55.3	L01 =	56.3	L01 =	57.3	L01 =	56.6
L05 =	51.8	L05 =	49.9	L05 =	51.2	L05 =	56.1	L05 =	54.7	L05 =	55.7	L05 =	56.7	L05 =	53.3
L10 =	51.1	L10 =	49.5	L10 =	50.8	L10 =	55.6	L10 =	54.5	L10 =	55.3	L10 =	56.4	L10 =	52.2
L50 =	48.6	L50 =	47.8	L50 =	48.5	L50 =	52.7	L50 =	52.7	L50 =	53.8	L50 =	54.7	L50 =	49.7
L75 =	47.2	L75 =	46.4	L75 =	47.0	L75 =	51.5	L75 =	49.8	L75 =	52.5	L75 =	52.8	L75 =	48.7
L90 =	45.4	L90 =	44.7	L90 =	45.9	L90 =	50.3	L90 =	48.6	L90 =	51.6	L90 =	51.1	L90 =	47.8
L99 =	42.0	L99 =	41.5	L99 =	42.8	L99 =	47.3	L99 =	46.7	L99 =	50.2	L99 =	49.0	L99 =	46.3
Leq =	48.9	Leq =	47.8	Leq =	48.7	Leq =	53.2	Leq =	52.5	Leq =	53.9	Leq =	54.6	Leq =	50.7



Lmax =	73.2	Lmax =	73.4	Lmax =	70.3	Lmax =	63.0	Lmax =	70.4	Lmax =	69.6	Lmax =	74.8	Lmax =	76.3
L01 =	55.7	L01 =	62.4	L01 =	58.0	L01 =	52.1	L01 =	57.8	L01 =	57.5	L01 =	56.0	L01 =	57.2
L05 =	53.3	L05 =	55.4	L05 =	53.0	L05 =	49.2	L05 =	52.9	L05 =	53.6	L05 =	53.0	L05 =	53.3
L10 =	52.4	L10 =	52.3	L10 =	50.7	L10 =	48.1	L10 =	50.9	L10 =	52.0	L10 =	51.8	L10 =	52.1
L50 =	50.0	L50 =	46.9	L50 =	45.4	L50 =	45.2	L50 =	46.0	L50 =	48.1	L50 =	48.7	L50 =	49.2
L75 =	49.0	L75 =	45.5	L75 =	44.1	L75 =	43.9	L75 =	44.4	L75 =	46.7	L75 =	47.6	L75 =	48.2
L90 =	48.2	L90 =	44.4	L90 =	43.1	L90 =	42.9	L90 =	43.2	L90 =	45.5	L90 =	46.7	L90 =	47.3
L99 =	46.8	L99 =	42.9	L99 =	41.0	L99 =	41.2	L99 =	41.6	L99 =	43.5	L99 =	45.1	L99 =	46.1
Leq =	50.7	Leq =	51.3	Leq =	48.2	Leq =	46.0	Leq =	48.7	Leq =	49.8	Leq =	50.0	Leq =	50.7



Lmax =	83.8	Lmax =	72.2	Lmax =	72.7	Lmax =	65.5	Lmax =	61.8	Lmax =	63.6	Lmax =	60.9	Lmax =	60.7
L01 =	56.9	L01 =	59.0	L01 =	56.4	L01 =	55.5	L01 =	55.6	L01 =	54.8	L01 =	55.0	L01 =	57.4
L05 =	53.3	L05 =	55.3	L05 =	53.1	L05 =	52.1	L05 =	54.7	L05 =	53.8	L05 =	53.0	L05 =	52.9
L10 =	52.3	L10 =	53.2	L10 =	52.1	L10 =	51.3	L10 =	54.3	L10 =	53.3	L10 =	52.2	L10 =	51.6
L50 =	49.8	L50 =	50.0	L50 =	49.5	L50 =	48.2	L50 =	52.8	L50 =	51.3	L50 =	48.8	L50 =	48.3
L75 =	48.9	L75 =	49.0	L75 =	48.5	L75 =	47.0	L75 =	51.0	L75 =	49.2	L75 =	47.0	L75 =	46.8
L90 =	48.1	L90 =	48.2	L90 =	47.6	L90 =	46.0	L90 =	49.1	L90 =	47.6	L90 =	45.7	L90 =	45.6
L99 =	46.7	L99 =	46.9	L99 =	46.0	L99 =	44.5	L99 =	46.7	L99 =	45.3	L99 =	43.8	L99 =	43.8
Leq =	51.5	Leq =	51.5	Leq =	50.4	Leq =	49.1	Leq =	52.6	Leq =	51.3	Leq =	49.7	Leq =	49.5

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

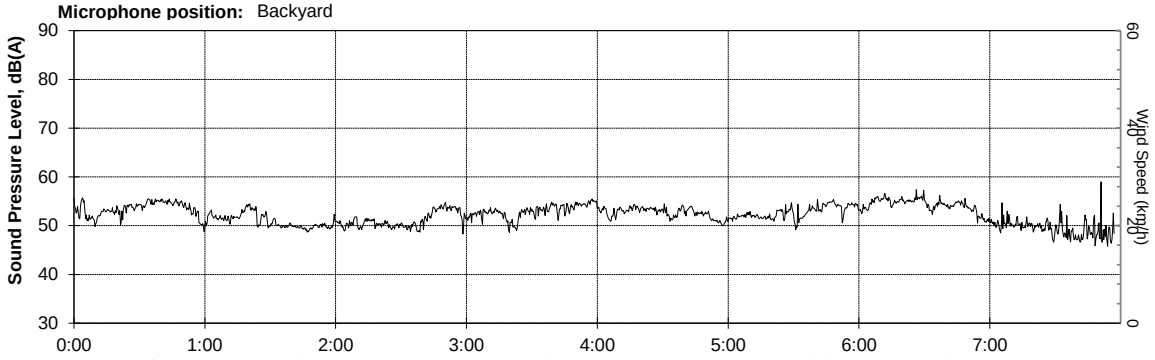
v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

SLR

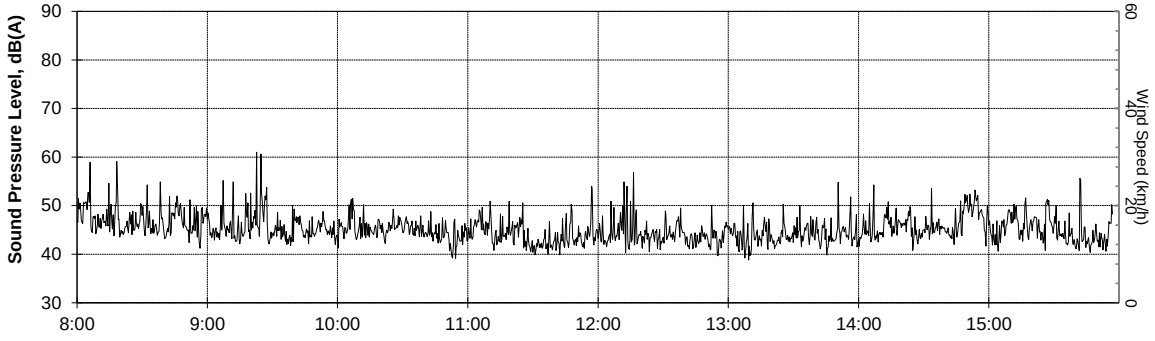
Results of Noise Monitoring

Client: Monomeath Developments **Location** 135 Webster Way **Date:** Friday 17 Mar 2023

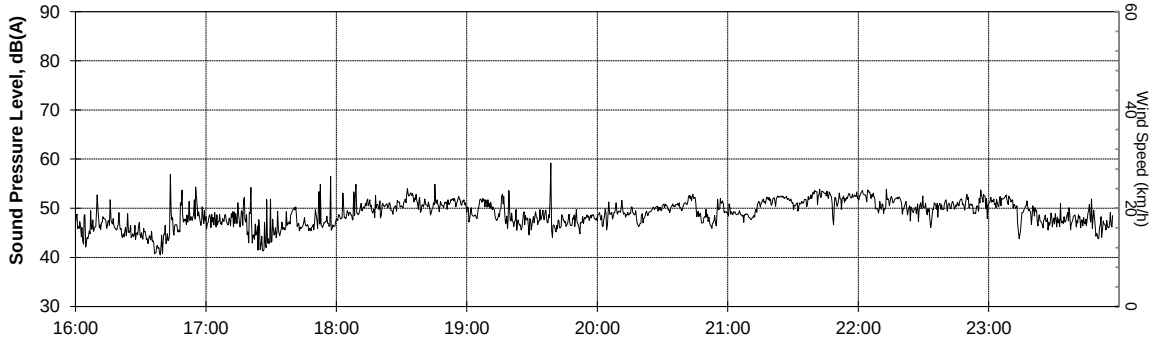
Microphone position: Backyard



Lmax =	58.1	Lmax =	59.3	Lmax =	56.9	Lmax =	58.0	Lmax =	57.9	Lmax =	72.3	Lmax =	63.4	Lmax =	70.6
L01 =	56.8	L01 =	55.2	L01 =	55.6	L01 =	56.5	L01 =	55.8	L01 =	56.1	L01 =	57.4	L01 =	56.1
L05 =	56.1	L05 =	54.1	L05 =	54.8	L05 =	55.8	L05 =	55.1	L05 =	55.3	L05 =	56.5	L05 =	52.5
L10 =	55.7	L10 =	53.5	L10 =	54.0	L10 =	55.3	L10 =	54.7	L10 =	54.8	L10 =	56.1	L10 =	51.6
L50 =	53.6	L50 =	50.4	L50 =	50.8	L50 =	52.9	L50 =	52.7	L50 =	52.5	L50 =	54.5	L50 =	49.2
L75 =	51.7	L75 =	49.5	L75 =	49.3	L75 =	51.1	L75 =	51.4	L75 =	51.4	L75 =	53.2	L75 =	47.6
L90 =	50.2	L90 =	48.6	L90 =	47.7	L90 =	49.1	L90 =	50.1	L90 =	50.4	L90 =	52.0	L90 =	46.1
L99 =	47.9	L99 =	46.6	L99 =	45.1	L99 =	46.1	L99 =	48.0	L99 =	48.5	L99 =	50.3	L99 =	44.6
Leq =	53.7	Leq =	51.2	Leq =	51.4	Leq =	53.1	Leq =	52.8	Leq =	52.9	Leq =	54.5	Leq =	49.9



Lmax =	69.9	Lmax =	73.0	Lmax =	63.7	Lmax =	66.0	Lmax =	75.7	Lmax =	66.9	Lmax =	66.6	Lmax =	68.6
L01 =	58.5	L01 =	56.7	L01 =	53.7	L01 =	53.5	L01 =	53.7	L01 =	52.1	L01 =	55.8	L01 =	54.5
L05 =	52.1	L05 =	49.5	L05 =	48.8	L05 =	48.5	L05 =	48.3	L05 =	48.0	L05 =	51.5	L05 =	50.2
L10 =	49.7	L10 =	47.9	L10 =	47.3	L10 =	46.7	L10 =	46.5	L10 =	46.6	L10 =	49.5	L10 =	48.3
L50 =	45.3	L50 =	44.0	L50 =	44.1	L50 =	43.0	L50 =	43.1	L50 =	43.3	L50 =	44.8	L50 =	43.8
L75 =	44.0	L75 =	42.7	L75 =	42.7	L75 =	41.5	L75 =	41.9	L75 =	42.0	L75 =	43.5	L75 =	42.2
L90 =	42.9	L90 =	41.5	L90 =	41.4	L90 =	40.3	L90 =	40.9	L90 =	40.8	L90 =	42.3	L90 =	41.0
L99 =	40.7	L99 =	40.0	L99 =	38.8	L99 =	38.6	L99 =	39.2	L99 =	38.5	L99 =	40.4	L99 =	39.1
Leq =	48.4	Leq =	47.6	Leq =	45.5	Leq =	45.0	Leq =	45.3	Leq =	44.8	Leq =	47.1	Leq =	46.2



Lmax =	76.2	Lmax =	65.3	Lmax =	69.4	Lmax =	65.7	Lmax =	59.4	Lmax =	63.5	Lmax =	60.5	Lmax =	59.2
L01 =	55.2	L01 =	56.0	L01 =	55.5	L01 =	55.5	L01 =	54.4	L01 =	55.1	L01 =	55.3	L01 =	54.7
L05 =	50.8	L05 =	51.5	L05 =	53.8	L05 =	53.3	L05 =	52.5	L05 =	54.3	L05 =	54.3	L05 =	53.6
L10 =	49.0	L10 =	49.9	L10 =	53.2	L10 =	51.1	L10 =	51.7	L10 =	53.5	L10 =	53.2	L10 =	52.5
L50 =	45.3	L50 =	45.9	L50 =	49.8	L50 =	47.6	L50 =	49.0	L50 =	51.2	L50 =	50.9	L50 =	48.3
L75 =	43.6	L75 =	44.1	L75 =	48.4	L75 =	46.3	L75 =	47.8	L75 =	49.3	L75 =	49.2	L75 =	44.8
L90 =	41.8	L90 =	42.3	L90 =	47.3	L90 =	45.0	L90 =	46.4	L90 =	48.0	L90 =	47.0	L90 =	42.8
L99 =	39.4	L99 =	39.3	L99 =	45.7	L99 =	42.6	L99 =	44.7	L99 =	45.0	L99 =	43.1	L99 =	40.0
Leq =	47.1	Leq =	47.6	Leq =	50.8	Leq =	48.9	Leq =	49.5	Leq =	51.3	Leq =	51.1	Leq =	49.1

Graph based on Leq at 20s intervals,
Hourly percentiles based on Lp at 0.1s intervals.

v. CESARL10_20200120.xlsm, Printed : 22/03/2023 5:32 PM

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Traffic Engineering

24-26 Honeyeater Way, Pakenham

Proposed Child Care Centre

Traffic Impact Assessment

Contents

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1 Introduction and Scope

TTM Consulting (Vic) Pty Ltd has been requested by the applicant to provide a traffic report for the proposed child care centre at 24-26 Honeyeater Way, Pakenham.

This report reviews the proposed parking layout and the existing conditions proximate to the site. The report includes an assessment of the parking provision and estimated traffic generation and concludes that there are no traffic or parking grounds which should warrant refusal of the sought planning permit.

2 Existing Conditions

2.1 The Site

The subject site is located at 24-26 Honeyeater Way, Pakenham and occupies an area of approximately 1,158 square metres. The subject site has approximately 25.64 metres eastern frontage and 19.70 northern frontage to Honeyeater Way and Webster Way respectively. Figure 1 show the location of the site and the surrounding road network.

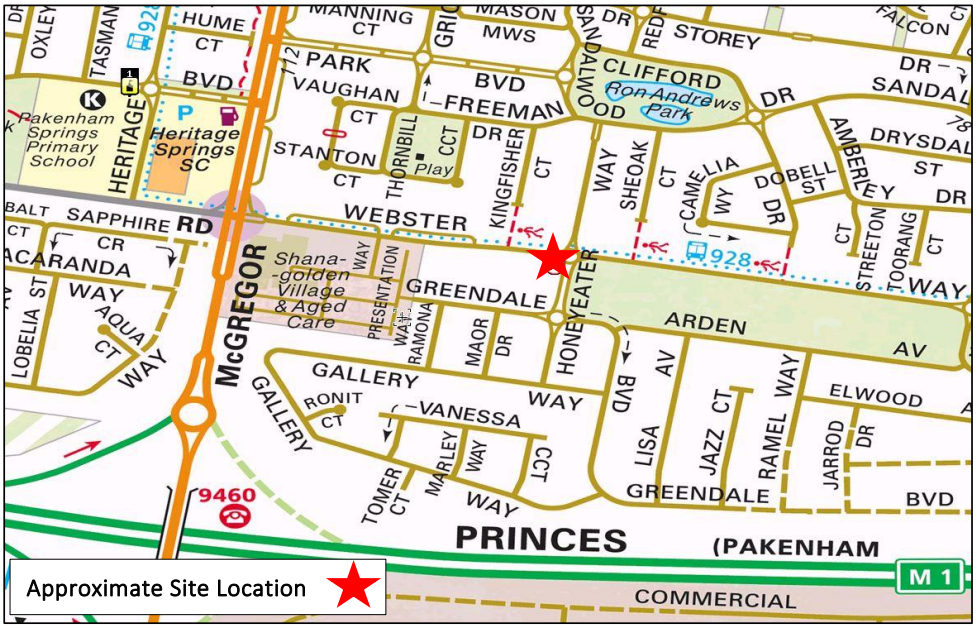


Figure 1: Site Location

The site is zoned in the General Residential Zone (GRZ1) in the Cardinia Planning Scheme. Figure 2 shows the surrounding Planning Scheme Zones.

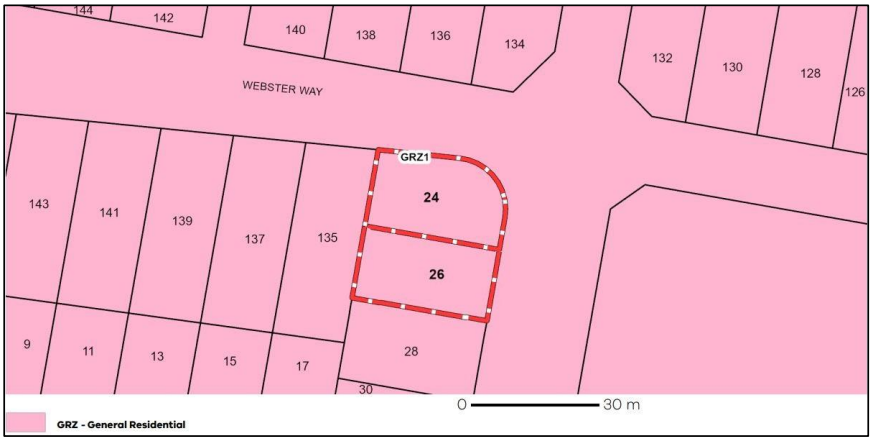


Figure 2: Surrounding Planning Scheme Zones

2.2 Road Network

Honeyeater Way is a local road and comprise a single, two-way carriageway separated by a central median strip that is approximately 15.44 metres wide. There is a continuous pedestrian footpath on each side of the road reserve which can accommodate on-street parallel parking on both sides of the carriageway. The default posted speed limit in built up areas is 50 km/h. Figure.3 shows the road configuration along Honeyeater Way proximate to the site.

Figure.3: Honeyeater Way Configuration (Facing South)

Webster Way is a local road and comprises a single, two-way carriageway that is approximately 8.7 metres wide. There is a continuous pedestrian footpath on each side of the road reserve which can accommodate on-street parallel parking westbound of the carriageway. The default posted speed limit in built up areas is 50 km/h. Figure 4 shows the road configuration along Webster Way proximate to the site.

Figure 4: Webster Way Configuration (Facing East)

2.3 Local Public Transport Services

The following public transport services are the closest to the site.

Table 1: Nearby Public Transport Services

Services	Route No.	Routes	Nearest stop
Train		Pakenham Line/V Line Services	Pakenham Station (approx. 1.4km from the site)
Bus	928	Pakenham Station – Cardinia Road Station	Honeyeater Way/Webster Way (approx. 100 metres from the site)

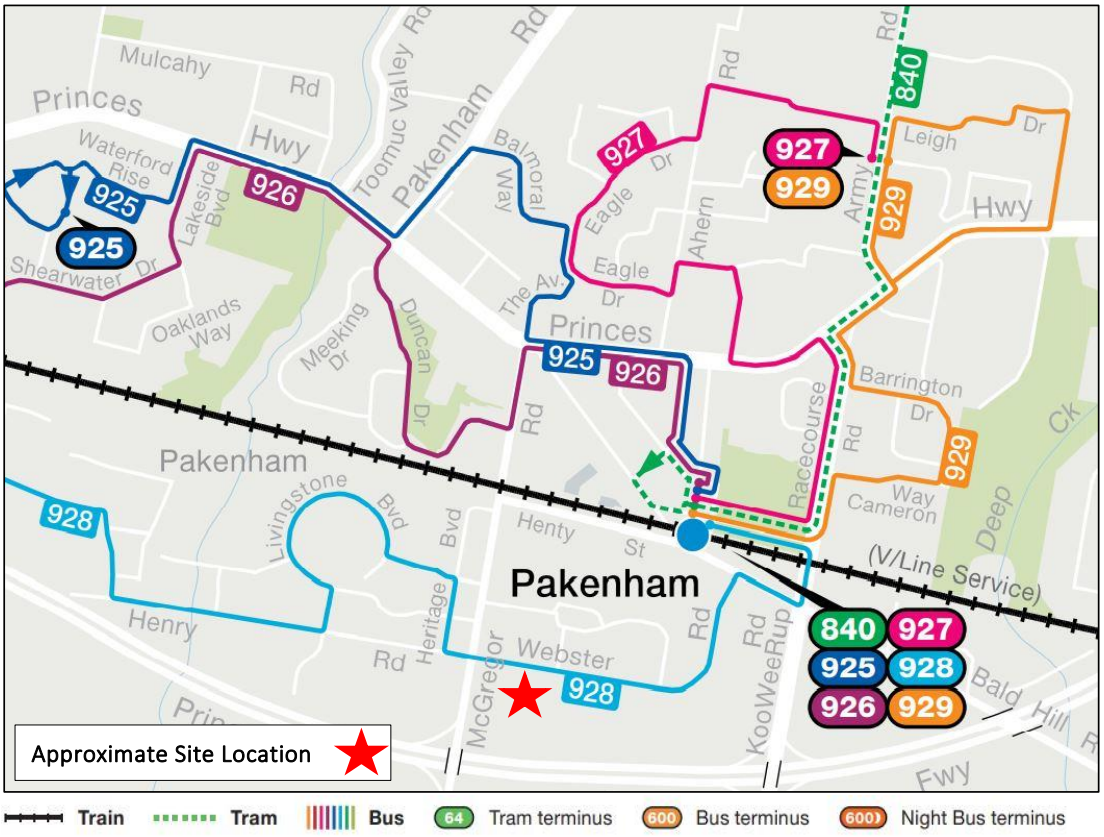


Figure 5: Local Public Transport Routes.

3 The Proposal

The Applicant is proposing a child care centre at 24-26 Honeyeater Way, Pakenham. Access to the site is proposed via a new crossover onto Honeyeater Way.

The following table summarises the proposed inventory and uses.

Table 2: Proposed Inventory

Item	Inventory
Child Care Centre	80 children
Car Parking	17 no.

4 Car Parking Requirements and Provision

4.1 Clause 52.06-5 Planning Scheme Requirements

Clause 52.06-5 of the Planning Scheme outlines the parking requirements for the subject proposal. The number of car parking spaces required is summarised in Table 3.

Table 3: Parking Supply Requirement

Land Use	Car Parking Rate	Inventory	Car Parking Spaces Requirement	Provision
Child Care Centre	0.22 to each child	80 no.	17 no.	17 no.
Total			**17 no.**	**17 no.**

The applicant has provision for a total of 17 on-site parking spaces which satisfies the minimum parking requirements of the Planning Scheme.

5 Traffic Generation

5.1 Likely Traffic Generation on Honeyeater Way

5.1.1 Empirical Survey Data

A traffic survey was conducted by TTM Consulting at Goodstart Child Care Centre at 104-106 Warrigal Road, Mentone with a permit for the following:

- The centre operates from 6:30am to 7:00pm, Monday to Friday.
- 60 places and is fully booked.
- 9 on-site parking spaces (although only 8 are available as bins are currently stored in the location of one-parking space).

A full copy of the survey data is attached in Appendix A. Table 4 provides a summary of the findings at Goodstart Child Care.

The survey indicates the peak parking demand rate is equal to **0.20 spaces per child patron (inclusive of staff parking)**.

Table 4: Goodstart Child Care Data

	AM Period		PM Period	
Survey period	7:25am to 9:40am		2:30pm to 6:15pm	
Total children arrive/depart (Capacity)	41 (60)		50 (60)	
Proportion arrive as 2 children	34%		32%	
Time of Stay – Average	5' 56"		10' 28"	
Staff Parking - Maximum	9		9	
On-Street Staff Parking – Average	3.14		3.96	
On-Site Staff Parking - Average	1.95		1.00	
Set-down Parking – Average	2.26		3.44	
Peak Parking Rate per child (Staff plus set-down)	***0.20***		***0.20***	
Peak Period vehicle arrivals	25		21	
Peak Hour Traffic Generation Rate (movements per child)	***0.73***		***0.68***	
	0.42 in	***0.32 out***	***0.35 in***	***0.33 out***
Peak Traffic Hours	7:30am to 8:30am		4pm to 5pm	
Daily Traffic Generation Rate (movements per child)	***1.61***		***1.64***	

5.1.2 Trip Generation for Proposed Child Care Centre

Adopting the trip generation rate as outlined in the survey undertaken at Goodstart Mentone, the AM and PM peak hour movements are estimated to be 0.73 per child place and 0.68 per child place. The trip generation rates from the survey will be used to generate the estimated traffic flow for the proposed child care centre on Honeyeater Way. The estimated trip generation is summarised in Table 5. See Appendix A for Goodstart survey data.

Table 5: Trip Generation Estimation for Proposed Child Care Centre

Use	Inventory	AM Peak Period 7:30am to 8:30am				PM Peak Period 4:00pm to 5:00pm			
		Rate		Estimated Peak Hour Two-Way Traffic Flow (veh/hr)		Rate		Estimated Peak Hour Two-Way Traffic Flow (veh/hr)	
Child Care Centre	80 no.	0.73		58		0.68		54	
		0.42 IN	0.32 OUT	33 IN	25 OUT	0.35 IN	0.33 OUT	28 IN	26 OUT

From the above table, the peak hour traffic volumes were generated by the proposed child care centre. For up to 80 child places, an estimated 58 vehicles per hour during AM peak hour (33 inbound / 25 outbound) and 54 vehicles per hour during PM peak hour (28 inbound / 26 outbound) are likely to occur.

Honeyeater Way would be classified as a Connector Street – Level 1 from Clause 56.06-8 of the Planning Scheme.

Connector Street - Level 1

A street that carries higher volumes of traffic. It connects access places and access streets through and between neighbourhoods.

Traffic volume[1]	3000 vpd
Target speed[2]	50 kph[7] reduced to 40 kph at schools and 20 kph at pedestrian and cycle crossing points.

Figure 6: Clause 56.06-8 - Connector Street Level 1

For the proposed 80 place child care centre, the daily traffic volume is in the order 160 vehicle movements per day from the site access onto Honeyeater Way.

The classification of Honeyeater Way as a Connector Street – Level 1 confirms that the traffic generated by the proposal combined with the existing volumes is in the order of 5% of the environmental capacity.

Thus, the additional traffic generated by the child care centre can be adequately accommodated within the surrounding street network.

6 Parking and Access Area Design

6.1 Site and Access Layout

Site access is proposed via a proposed crossover onto Honeyeater Way. The proposed crossover is 6.0 metres wide and will allow concurrent entry and exit movements. The dimensions comply with the Design Standards of the Planning Scheme Clause 52.06-9.

6.2 Parking Spaces

6.2.1 Clause 52.06-9 Design Standards

The proposal comprises 17 on-site car parking spaces. One space is allocated for disabled parking and is dimensioned at 2.4 metres wide by 5.4 metres long. The remaining car park spaces are dimensioned from 2.6 to 2.9 metres wide by 4.9 metres long.

All spaces are accessed from the 6.4 metres wide aisle. These dimensions are in accordance with the Planning Scheme Clause 52.06-9.

6.3 Waste Collection and Access

Waste collection will be undertaken on site. A dedicated loading bay is not considered necessary because waste can be collected outside of peak operating hours (i.e. 7:00am to 10:00am and 3:00pm to 6:00pm on weekdays). Outside of peak traffic hours the waste mini rear loader vehicle will be able to stop in the parking aisle adjacent to the bin enclosure area to collect the bins.

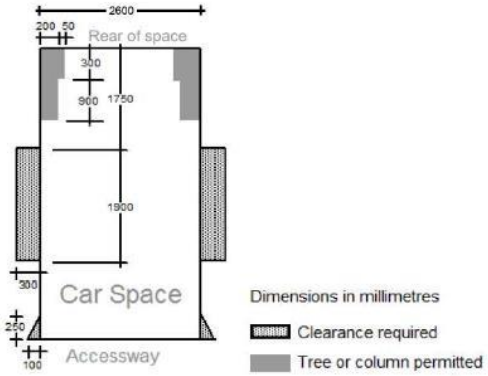
Swept path diagram have been prepared using AutoTrack v22 for a waste truck circulating the site. The 'Waste-Wise Mini' was used, the dimensions of which can be found at the bottom of the diagrams attached in Appendix B. The swept path diagram demonstrates sufficient space for the Waste-Wise Mini to enter and exit the site in a forward direction.

6.4 Response to Clause 52.06-9 Design Standards

Clause 52.06-9 of the Planning Scheme outlines design criteria for car parking and accessways. The following table provides a response to each of the relevant design criteria.

Table 6: Response to Relevant Design Criteria

Clause 52.06-9 design criteria	TTM Response
Note: Design standards 1, 3, 6 and 7 do not apply to an application to construct one dwelling on a lot.	
Design Standard 1 - Accessways	
Be at least 3 metres wide.	Satisfied.
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	Satisfied.
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	Not applicable as it is a private car park.
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheelbase of 2.8 metres.	Not Applicable.
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	Satisfied. See attached Swept Path Diagrams in Appendix B of this report.
Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Transport Zone 2 or Transport Zone 3.	Not applicable as subject site does not connect to a road in a Transport Zone 2 or Transport Zone 3.
Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage, to provide a clear view of pedestrians on the 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, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	Satisfied.
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6 metres from the road carriageway.	Not Applicable as accessway is from land in General Residential Zone (GRZ).

<table>
<tr><th>Clause 52.06-9 design criteria</th><th>TTM Response</th></tr>
<tr><td colspan="2">Design Standard 2 – Car parking spaces</td></tr>
<tr><td>Car parking spaces and accessways must have the minimum dimensions as outlined in Table 2.
Table 2: Minimum dimensions of car parking spaces and accessways
<table>
<tr><th>Angle of car parking spaces to access way</th><th>Accessway width</th><th>Car space width</th><th>Car space length</th></tr>
<tr><td>Parallel</td><td>3.6 m</td><td>2.3 m</td><td>6.7 m</td></tr>
<tr><td>45°</td><td>3.5 m</td><td>2.6 m</td><td>4.9 m</td></tr>
<tr><td>60°</td><td>4.9 m</td><td>2.6 m</td><td>4.9 m</td></tr>
<tr><td>90°</td><td>6.4 m</td><td>2.6 m</td><td>4.9 m</td></tr>
<tr><td></td><td>5.8 m</td><td>2.8 m</td><td>4.9 m</td></tr>
<tr><td></td><td>5.2 m</td><td>3.0 m</td><td>4.9 m</td></tr>
<tr><td></td><td>4.8 m</td><td>3.2 m</td><td>4.9 m</td></tr>
</table>
Note Some dimensions in Table 2 vary from those shown in the Australian Standard AS2890.1-2004 (off street). The dimensions shown in Table 2 allocate more space to aisle widths and less to marked spaces to provide improved operation and access. The dimensions in Table 2 are to be used in preference to the Australian Standard AS2890.1-2004 (off street) except for disabled spaces which must achieve Australian Standard AS2890.6-2009 (disabled).</td><td>Satisfied.</td></tr>
<tr><td>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, other than:
A column, tree or tree guard, which may project into a space if it is within the area marked ‘tree or column permitted’ on Diagram 1.
A structure, which may project into the space if it is at least 2.1 metres above the space.
Diagram 1 Clearance to car parking spaces
 
</td><td>Satisfied.</td></tr>
<tr><td>Car spaces in garages or carports must be at least 6 metres long and 3.5 metres wide for a single space and 5.5 metres wide for a double space measured inside the garage or carport.</td><td>Not applicable.</td></tr>
<tr><td>Where parking spaces are provided in tandem (one space behind the other) an additional 500 mm in length must be provided between each space.</td><td>Not applicable.</td></tr>
</table>

Clause 52.06-9 design criteria	TTM Response
Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover.	Not applicable.
Disabled car parking spaces must be designed in accordance with Australian Standard AS2890.6-2009 (disabled) and the Building Code of Australia. Disabled car parking spaces may encroach into an accessway width specified in Table 2 by 500mm.	Satisfied.
Design Standard 3 – Gradients	
Accessway grades must not be steeper than 1:10 (10 per cent) within 5 metres of the frontage to ensure safety for pedestrians and vehicles. The design must have regard to the wheelbase of the vehicle being designed for; pedestrian and vehicular traffic volumes; the nature of the car park; and the slope and configuration of the vehicle crossover at the site frontage. **This does not apply to accessways serving three dwellings or less.**	Satisfied.
Ramps (except within 5 metres of the frontage) must have the maximum grades as outlined in Table 3 and be designed for vehicles travelling in a forward direction.	Satisfied.
Where the difference in grade between two sections of ramp or floor is greater that 1:8 (12.5 per cent) for a summit grade change, or greater than 1:6.7 (15 per cent) for a sag grade change, the ramp must include a transition section of at least 2 metres to prevent vehicles scraping or bottoming. Plans must include an assessment of grade changes of greater than 1:5.6 (18 per cent) or less than 3 metres apart for clearances, to the satisfaction of the responsible authority.	Satisfied.

Type	Length Ramp	Max Grade
Public	<20m	1:5
	>20m	1:6
Private	<20m	1:4
	>20m	1:5

7 Summary and Conclusions

The Applicant is proposing a child care centre at 24-26 Honeyeater Way, Pakenham. The proposal is appropriate from a traffic and parking context. The analysis of the development is summarised as follows:

- The applicant has provision for a total of 17 on-site parking spaces which satisfies the minimum parking requirements of the Planning Scheme.
- The proposed car park layout and access arrangements are appropriately designed for this form of development and are designed in accordance with Design Standards 1, 2 and 3 from Clause 52.06 of the Planning Scheme.
- The expected traffic generated by the proposed will have no adverse impact on the adjacent road network.

There are no traffic or parking grounds which should warrant refusal of the sought Planning Permit.

TTM Consulting (Vic) Pty Ltd

Michael Srea
Traffic Engineer

Record

No.	Author	Reviewed/Approved	Description	Date
1.	M. Srea	D. Hancox	Proposed Child Care Centre	30/08/2022

Appendix A Child Care Traffic Survey Data

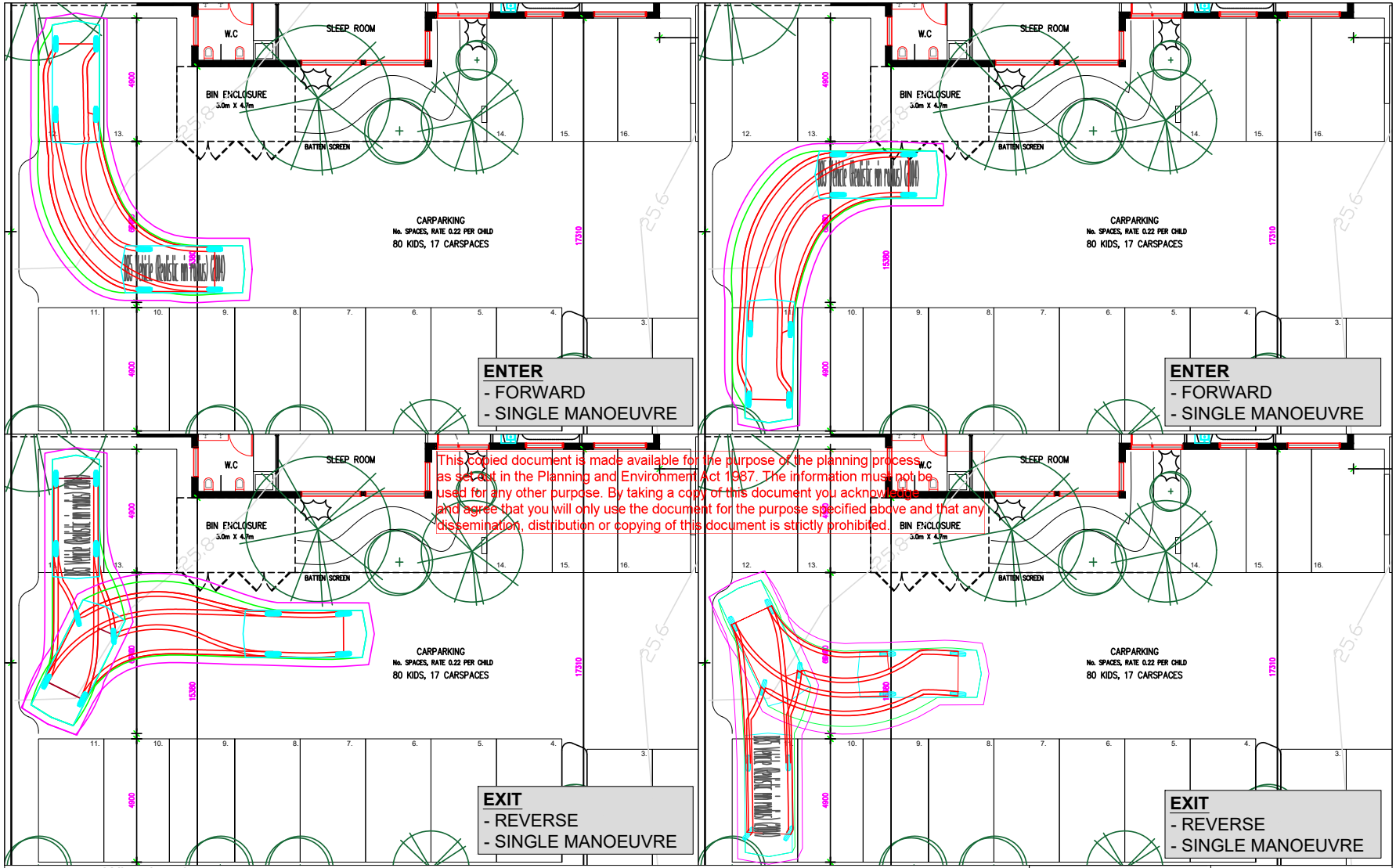
Goodstart-Mentone - AM

Time in	Time out	Activity			Location	Parking Demand				Time on site
		Child	Staff	School stud		Staff:on-site	Staff:on-street	Drop-Off	Total	
7:25:00	Survey start					2	0	0	2	
7:28:00	7:34:00	1			Parked on site	2	1	1	4	0:06:00
7:30:00	7:33:00	1			Parked on site	2	1	2	5	0:03:00
7:34:00	7:48:00	1			Parked on site	2	1	1	4	0:14:00
7:34:00	7:41:00	1			Parked on site	2	1	2	5	0:07:00
7:36:00	7:40:00	1			Parked on site	2	1	3	6	0:04:00
7:41:00			1		Parked on street	2	1	2	5	
7:42:00	7:50:00	1			Parked on site	2	1	2	5	0:08:00
7:47:00	7:49:00	1			Parked on site	2	1	3	6	0:02:00
7:47:00	7:55:00	1			Parked on site	2	1	4	7	0:08:00
7:50:00	7:56:00	1			Parked on site	2	1	2	5	0:06:00
7:54:00	8:03:00	1			Parked on site	2	1	3	6	0:09:00
7:55:00	8:04:00	2			Parked on site	2	1	3	6	0:09:00
7:59:00	8:03:00	1			Parked on site	2	1	3	6	0:04:00
7:59:00	8:16:00	2			Parked on site	2	1	4	7	0:17:00
8:01:00	-		1		Parked on street	2	2	4	8	
8:03:00	8:06:00	1			Parked on site	2	2	3	7	0:03:00
8:06:00	8:13:00	1		1	Parked on site	2	2	2	6	0:07:00
8:11:00	8:18:00	2			Parked on site	2	2	3	7	0:07:00
8:11:00	8:16:00	2			Parked on site	2	2	4	8	0:05:00
8:16:00	8:20:00	1			Parked on site	2	2	2	6	0:04:00
8:17:00	-		1		Parked on street	2	3	2	7	
8:19:00	8:24:00	1			Parked on site	2	3	2	7	0:05:00
8:19:00	8:27:00	2			Parked on site	2	3	3	8	0:08:00
8:20:00	-		1		Parked on street	2	4	3	9	
8:26:00	8:31:00	2			Parked on site	2	4	2	8	0:05:00
8:27:00	8:31:00	1			Parked on site	2	4	3	9	0:04:00
8:32:00	8:34:00	1			Parked on site	2	4	2	8	0:02:00
8:35:00	8:40:00	1		1	Parked on site	2	4	2	8	0:05:00
8:37:00	8:43:00	1			Parked on site	2	4	3	9	0:06:00
8:40:00	8:45:00	1			Parked on site	2	4	3	9	0:05:00
8:50:00	-		1		Parked on street	2	5	0	7	
8:50:00	8:54:00	1			Parked on site	2	5	1	8	0:04:00
8:52:00	8:56:00	1			Parked on site	2	5	1	8	0:04:00
8:57:00	9:01:00	1			Parked on site	2	5	2	9	0:04:00
9:07:00	9:16:00	1			Parked on site	2	5	2	9	0:09:00
9:07:00	-		1		Parked on street	2	6	2	10	
9:14:00	9:17:00	1			Parked on site	2	6	3	11	0:03:00
9:15:00	-		1		Parked on street	2	7	3	12	
9:22:00	9:30:00	2			Parked on site	2	7	1	10	0:08:00
9:26:00	9:30:00	1			Parked on site	2	7	2	11	0:04:00
	9:26:00		1		Departed site	1	7	2	10	
9:33:00	9:36:00	1			walk	1	7	0	8	0:03:00
	Total	**41**	**8**	**2**	**Average**	**1.95**	**3.14**	**2.26**	**7.35**	**0:05:56**
	1 Child	**27**	**66%**		**85th Percentile**	**2.00**	**5.70**	**3.00**	**9.00**	**0:08:03**
	2 Child	**14**	**34%**		**Maximum**	**2.00**	**7.00**	**4.00**	**12.00**	**0:17:00**

Goodstart-Mentone - PM

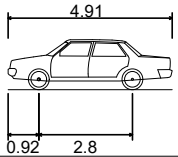
Time in	Time out	Activity			Location	Parking Demand				Time on site
		Child	Staff	School stud		Staff:on-site	Staff:on-street	Drop-Off	Total	
14:30:00	Survey start					1	8	0	9	
14:58:00	15:02:00				Parked on site	1	8	1	10	0:04:00
	14:59:00		1		Parked on street	1	8	1	10	
	15:10:00		1		Parked on street	1	7	0	8	
15:16:00	15:22:00	1			Parked on site	1	6	2	9	0:06:00
15:32:00	15:44:00				Parked on site	1	6	2	9	0:12:00
	15:35:00	1			walked	1	6	1	8	
15:39:00	15:47:00	1			Parked on site	1	6	3	10	0:08:00
15:45:00	15:58:00	1			Parked on site	1	6	3	10	0:13:00
15:47:00	15:50:00	1			Parked on site	1	6	3	10	0:03:00
15:47:00	15:50:00	1			Parked on site	1	6	4	11	0:03:00
15:48:00	15:52:00	1			Parked on site	1	6	5	12	0:04:00
15:50:00	15:55:00	1			Parked on site	1	6	4	11	0:05:00
15:56:00	16:05:00	1			Parked on site	1	6	3	10	0:09:00
	16:01:00		1		Parked on street	1	6	3	10	
16:05:00	16:17:00	2			Parked on site	1	5	1	7	0:12:00
	16:05:00		1		Parked on street	1	5	1	7	
16:08:00	16:34:00	1			Parked on site	1	4	2	7	0:26:00
16:11:00	16:25:00	1			Parked on site	1	4	3	8	0:14:00
16:18:00	16:27:00	1			Parked on site	1	4	3	8	0:09:00
16:20:00	16:33:00	2			Parked on site	1	4	4	9	0:13:00
16:22:00	16:27:00	1			Parked on site	1	4	5	10	0:05:00
16:26:00	16:32:00	1			Parked on site	1	4	5	10	0:06:00
16:28:00	16:33:00	1			Parked on site	1	4	5	10	0:05:00
16:30:00	16:39:00	1			Parked on site	1	4	6	11	0:09:00
16:34:00	16:43:00	2			Parked on site	1	4	2	7	0:09:00
16:37:00	16:54:00	2			Parked on site	1	4	3	8	0:17:00
	16:37:00		1		Parked on street	1	4	3	8	
16:40:00	17:03:00	2			Parked on site	1	3	3	7	0:23:00
16:41:00	16:47:00	1			Parked on site	1	3	4	8	0:06:00
16:41:00	16:50:00	1			Parked on site	1	3	5	9	0:09:00
16:41:00	16:52:00	1			Parked on site	1	3	6	10	0:11:00
16:46:00	16:58:00	1			Parked on site	1	3	7	11	0:12:00
16:46:00	16:57:00	1			Parked on site	1	3	8	12	0:11:00
16:50:00	17:02:00	2			Parked on site	1	3	6	10	0:12:00
16:50:00	17:06:00	2			Parked on site	1	3	7	11	0:16:00
16:53:00	17:04:00	1			Parked on site	1	3	7	11	0:11:00
16:54:00	17:06:00	1			Parked on site	1	3	7	11	0:12:00
17:01:00	17:12:00	1			Parked on site	1	3	6	10	0:11:00
17:02:00	17:14:00	1			Parked on site	1	3	7	11	0:12:00
17:15:00	17:22:00	1			Parked on site	1	3	1	5	0:07:00
17:17:00	17:23:00	2			Parked on site	1	3	2	6	0:06:00
	17:18:00		1		Parked on street	1	3	2	6	
	17:20:00		1		Parked on street	1	2	2	5	
17:27:00	17:49:00	1			Parked on site	1	1	1	3	0:22:00
17:30:00	18:02:00	1			Parked on site	1	1	2	4	0:32:00
17:33:00	17:43:00	1			Parked on site	1	1	3	5	0:10:00
17:44:00	17:52:00	1			Parked on site	1	1	3	5	0:08:00
17:44:00	17:54:00	1			Parked on site	1	1	4	6	0:10:00
17:49:00	17:54:00	1			Parked on site	1	1	5	7	0:05:00
18:00:00	18:05:00	1			Parked on site	1	1	2	4	0:05:00
18:06:00	18:13:00	1			Parked on site	1	1	1	3	0:07:00
	Total	**50**	**7**	**0**	**Average**	**1.00**	**3.96**	**3.44**	**8.40**	**0:10:28**
	1 Child	**34**	**68%**		**85th Percentile**	**1.00**	**6.00**	**6.00**	**11.00**	**0:13:42**
	2 Child	**16**	**32%**		**Maximum**	**1.00**	**8.00**	**8.00**	**12.00**	**0:32:00**

Appendix B Swept Path Diagrams
B85 Design Vehicle/Waste Collection Vehicle



Wheel path
Vehicle Overhang
Vehicle Overhang + 300mm Clearance

Swept Path Diagram Prepared using AutoTrack v22



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.499m
Min Body Ground Clearance	0.120m
Track Width	1.770m
Lock to Lock Time	4.00sec
Curb to Curb Turning Radius	5.750m

Issue	Appd	Date	Comments
A	MS	31/08/22	Original Issue

ttm
Acoustics Data Traffic Waste
TTM Consulting (Vic) Pty Ltd
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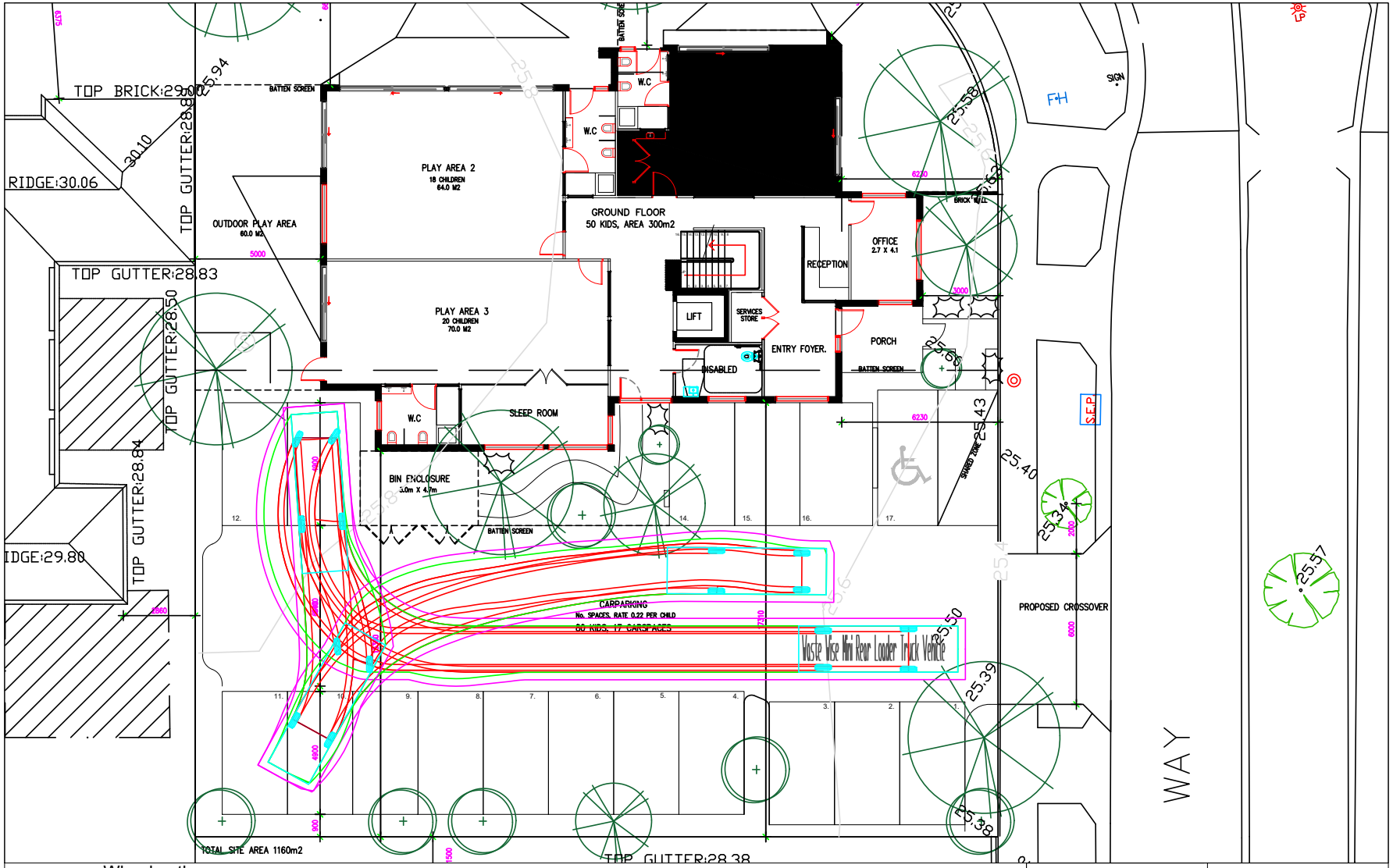
PROPOSED RESIDENTIAL DEVELOPMENT
24-26 HONEYEATER WAY, PAKENHAM
SWEPT PATH DIAGRAMS

Scale 0 1 2 3 4 1:200 @ A4
Drawing No : 1186701
Sheet No : 1 Issue : A



Issue	Appd	Date	Comments
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SWEPT PATH DIAGRAMS

Scale 1:200 @ A4
Drawing No : 1186701
Sheet No : 2 Issue : A