COVER LETTER RESPONSE TO REQUEST FOR FURTHER INFORMATION

Application No.: TP505/2024(1)
Site Address: 7–9 & 11 Keith Street, Maidstone
Proposal: Construction of four warehouses with car parking reduction
Submitted By: Clovis Architectural Plans & Permits
Date: 26 May 2025

Item	Council Request	Response
1	Cover letter responding to all RFI and preliminary concerns	This table serves as the formal response.
2a	Amend address to include 11 Keith Street	Amended application form submitted. Address now reads 7–9 & 11 Keith Street, Maidstone.
2b	Include Clause 52.06-3 (car park reduction)	Application form amended to include car parking reduction request.
3	Information on intended occupiers	Proposed warehouses are for general light industrial/storage use. No schedule 1 uses under Clause 53.10 are intended. Each tenancy will comply with ‘as-of-right’ warehousing provisions unless a future use triggers a new permit.
4a	Site services locations	Updated on TP Plan Set, Sheet 1 of 6
4b	Pedestrian visibility splays	Visibility splays shown on TP plan, sheet 1 of 6. Notation included to confirm compliance with Clause 52.06-9.
4c	Details of fencing	Noted on plans – includes notations of existing and proposed fence material and height

4b	Ground levels in AHD.	AHD levels are shown site and elevation plans.

4e	Finished Floor Levels (FFL) in AHD	FFLs in AHD included on all relevant floor and elevation plans.

5	Materials schedule (fences & gates)	Materials schedule updated (Sheet 3 of 6). Fence materials shown. Swatch references included.
6	Sustainable Design Assessment (SDA) / BESS	SDA and BESS Report submitted with application. BESS rating exceeds 50% overall and in each mandatory category.
7a	Stormwater system assessment	STORM Rating Report submitted (100% score). MUSIC model available if required.
7b	Cooling & habitat	WSUD elements include vegetated raingardens and landscape areas that enhance urban ecology and site cooling.
7c	Plan notations for WSUD	Plans indicate rainwater tanks (2000L) connected to toilets and raingardens per warehouse. Refer Sheets 1 & 6 of 6.
7d	Construction site management	A Construction Site Management Plan is included
8	Waste Management Plan (WMP)	WMP included. Addresses waste generation, access, bin storage, mechanical ventilation, signage, tap/drainage, and private collection. Swept path analysis included in traffic report

9a	Car Parking Demand Assessment	Traffic Report with Clause 52.06-7 assessment included, addressing visitor/employee demand, access, public transport, cyclist facilities, and local conditions.

9b	Swept path analysis	Swept path diagrams provided for waste trucks and private vehicles confirming forward entry/exit.

10	Amended application fee	If not paid please send through invoice and owner will pay.
Preliminary concerns	Referral to Melbourne Water	Floor and site levels shown in AHD. Plans ready for referral. Awaiting further advice post-referral.
Preliminary concerns	Internal referral to Engineering	Plans address stormwater and access requirements. Awaiting any additional feedback following internal referral.

Attachments Submitted:

- Amended Planning Permit Application Form
- Amended Plan Set (dated 22/05/2025)
- Sustainable Design Assessment + BESS
- Waste Management Plan (WMP)
- Traffic Report + Car Parking Demand Assessment
- Swept Path Analysis

Please advise if any further information is required prior to advertising or referral.

Kind regards,
Clovis Architectural Plans & Permits
Email: admin@clovisapp.com.au
Phone: (03) 9416 9822

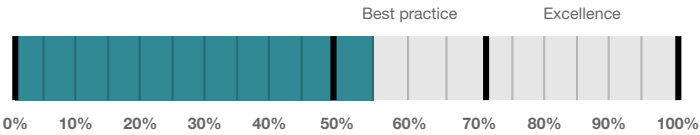
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 7 Keith St Maidstone Victoria 3012. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Maribyrnong City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

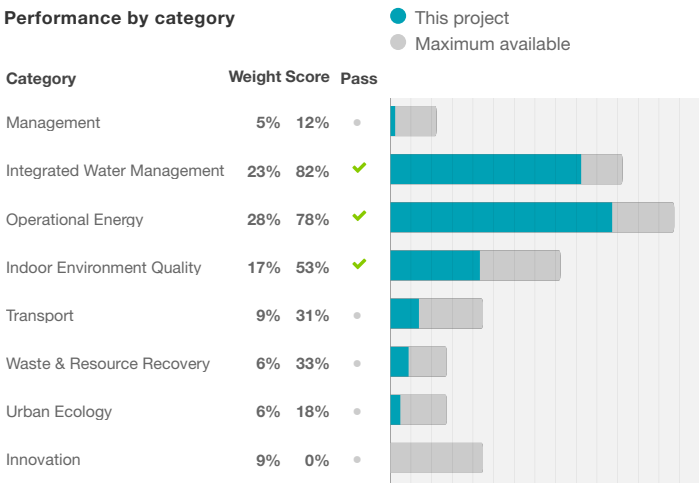


55%

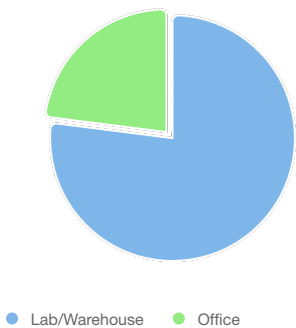
Project details

Name	7 Keith Street, Maidstone VIC, Australia
Address	7 Keith St Maidstone Victoria 3012
Project ID	D3A7449A-R1
BESS Version	BESS-9
Site type	Non-residential development
Account	patrick@clovisapp.com.au
Application no.	
Site area	1,812 m²
Building floor area	1,479 m²
Date	22 May 2025
Software version	2.1.0-B.596

Performance by category



Project composition



Buildings

Name	Height	Footprint	% of total footprint
Warehouses/Offices	8400	1,302 m^2	100%

Dwellings & Non Res Spaces

Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Office				
Warehouse 4	1	85.6 m^2	Warehouses/Offices	5%
Warehouse 3	1	84.6 m^2	Warehouses/Offices	5%
Warehouse 2	1	84.6 m^2	Warehouses/Offices	5%
Warehouse 1	1	85.6 m^2	Warehouses/Offices	5%
Total	**4**	**340 m^2**	**23%**	
Lab/Warehouse				
Unconditioned Warehouse/Factory 4	1	286 m^2	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 3	1	284 m^2	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 2	1	284 m^2	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 1	1	286 m^2	Warehouses/Offices	19%
Total	**4**	**1,138 m^2**	**76%**	

Supporting Evidence

Shown on Floor Plans

Credit	Requirement	Response	Status
Management 3.2	Annotation: Individual utility meters to be provided to all individual commercial tenancies		-
Integrated Water Management 2.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)		-
Integrated Water Management 3.1	Annotation: Water efficient garden details		-
Operational Energy 3.1	Carpark with natural ventilation or CO monitoring system		-
Operational Energy 4.2	Location and size of solar photovoltaic system		-
Transport 1.4	Location of non-residential bicycle parking spaces		-
Transport 2.2	Location of car share parking space(s)		-
Waste & Resource Recovery 2.2	Location of recycling facilities		-
Urban Ecology 1.1	Location and size of communal spaces		-
Urban Ecology 2.1	Location and size of vegetated areas		-
Urban Ecology 3.2	Location of food production areas		-

Supporting Documentation

Credit	Requirement	Response	Status
Integrated Water Management 2.1	STORM report or MUSIC model		-
Operational Energy 1.1	Energy Report showing calculations of reference case and proposed buildings		-
Operational Energy 3.1	Details of either the fully natural carpark ventilation or CO monitoring system proposed		-
Operational Energy 3.7	Average lighting power density and lighting type(s) to be used		-
Operational Energy 4.2	Specifications of the solar photovoltaic system(s)		-
Indoor Environment Quality 1.4	A short report detailing assumptions used and results achieved.		-

Credit summary

Management Overall contribution 4.5%

12%

1.1 Pre-Application Meeting	0%
2.3 Thermal Performance Modelling - Non-Residential	0%
3.2 Metering - Non-Residential	100%
3.3 Metering - Common Areas	0%
4.1 Building Users Guide	0%

IWM Overall contribution 22.5%

82% ✔ **Pass**

1.1 Potable Water Use	64%	✔ Achieved
2.1 Stormwater Treatment	100%	✔ Achieved
3.1 Water Efficient Landscaping	100%	
4.1 Building Systems Water Use	0%	

Operational Energy Overall contribution 27.5%

	Minimum required 50%	78%	Pass
1.1 Thermal Performance Rating - Non-Residential		37%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		100%	
2.6 Electrification		100%	
2.7 Energy consumption		100%	
3.1 Carpark Ventilation		100%	
3.2 Hot Water - Non-Residential		100%	
3.7 Internal Lighting - Non-Residential		100%	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A	Scoped Out
		No cogeneration or trigeneration system in use.	
4.2 Renewable Energy Systems - Solar		100%	
4.4 Renewable Energy Systems - Other		N/A	Scoped Out
		No other (non-solar PV) renewable energy is in use.	

IEQ Overall contribution 16.5%

	Minimum required 50%	53%	Pass
1.4 Daylight Access - Non-Residential		81%	Achieved
2.3 Ventilation - Non-Residential		46%	Achieved
3.4 Thermal comfort - Shading - Non-Residential		15%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	
4.1 Air Quality - Non-Residential		100%	

Transport Overall contribution 9.0%

	31%	
1.4 Bicycle Parking - Non-Residential	76%	
1.5 Bicycle Parking - Non-Residential Visitor	0%	
1.6 End of Trip Facilities - Non-Residential	0%	Disabled
	Credit 1.4 must be complete first.	
2.1 Electric Vehicle Infrastructure	0%	
2.2 Car Share Scheme	100%	
2.3 Motorbikes / Mopeds	0%	

Waste & Resource Recovery Overall contribution 5.5%

33%

1.1 Construction Waste - Building Re-Use	0%
2.1 Operational Waste - Food & Garden Waste	0%
2.2 Operational Waste - Convenience of Recycling	100%

Urban Ecology Overall contribution 5.5%

18%

1.1 Communal Spaces	23%
2.1 Vegetation	25%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
3.2 Food Production - Non-Residential	23%

Innovation Overall contribution 9.0%

0%

1.1 Innovation	0%

Credit breakdown

Management Overall contribution 4.5%

12%

1.1 Pre-Application Meeting	0%
Score Contribution	This credit contributes 37.5% towards the category score.
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?
Question	Criteria Achieved ?
Project	No
2.3 Thermal Performance Modelling - Non-Residential	0%
Score Contribution	This credit contributes 25% towards the category score.
Criteria	Has a preliminary facade assessment been undertaken in accordance with NCC2022 Section J4D6?
Question	Criteria Achieved ?
Office	No
Lab/Warehouse	No
Criteria	Has preliminary modelling been undertaken in accordance with either NCC2022 Section J (Energy Efficiency), NABERS or Green Star?
Question	Criteria Achieved ?
Office	No
Lab/Warehouse	No
3.2 Metering - Non-Residential	100%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Have utility meters been provided for all individual commercial tenants?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes
3.3 Metering - Common Areas	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Have all major common area services been separately submetered?
Question	Criteria Achieved ?
Office	No
Lab/Warehouse	No
4.1 Building Users Guide	0%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Will a building users guide be produced and issued to occupants?
Question	Criteria Achieved ?
Project	No

IWM Overall contribution 22.5%

82% ✔ Pass

Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No

Stormwater profile

Which stormwater modelling software are you using?:	Melbourne Water STORM tool
STORM score achieved:	121
Flow:	-
Total Suspended Solids:	-
Total Phosphorus:	-
Total Nitrogen:	-

Rainwater tank profile

What is the total roof area connected to the rainwater tank?: Warehouse 1-4 Rainwater Tank	505 m^2
Tank Size: Warehouse 1-4 Rainwater Tank	8,000 Litres
Irrigation area connected to tank: Warehouse 1-4 Rainwater Tank	-
Is connected irrigation area a water efficient garden?: Warehouse 1-4 Rainwater Tank	No
Other external water demand connected to tank?: Warehouse 1-4 Rainwater Tank	-

Fixtures, fittings & connections profile

Building: All	Warehouses/Offices
Showerhead: All	Scope out
Bath: All	Scope out
Kitchen Taps: All	>= 5 Star WELS rating
Bathroom Taps: All	>= 5 Star WELS rating
Dishwashers: All	>= 5 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Scope out
Which non-potable water source is the dwelling/space connected to?: All	Warehouse 1-4 Rainwater Tank
Non-potable water source connected to Toilets: All	Yes
Non-potable water source connected to Laundry (washing machine): All	No
Non-potable water source connected to Hot Water System: All	No

1.1 Potable Water Use 64% ✔ Achieved

Score Contribution	This credit contributes 31.2% towards the category score.
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.
Output	Reference
Project	1534 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	1121 kL
Output	Proposed (including rainwater and recycled water use)
Project	872 kL
Output	% Reduction in Potable Water Consumption
Project	43 %
Output	% of connected demand met by rainwater
Project	49 %
Output	How often does the tank overflow?
Project	Never / Rarely
Output	Opportunity for additional rainwater connection
Project	165 kL

2.1 Stormwater Treatment — 100% ✔ Achieved

Score Contribution	This credit contributes 56.2% towards the category score.
Criteria	Has best practice stormwater management been demonstrated?
Output	Min STORM Score
Project	100
Output	STORM Score
Project	121

3.1 Water Efficient Landscaping — 100%

Score Contribution	This credit contributes 6.2% towards the category score.
Criteria	Will water efficient landscaping be installed?
Question	Criteria Achieved ?
Project	Yes

4.1 Building Systems Water Use — 0%

Score Contribution	This credit contributes 6.2% towards the category score.
Criteria	Where applicable, have measures been taken to reduce potable water consumption by >80% in the buildings air-conditioning chillers and when testing fire safety systems?
Question	Criteria Achieved ?
Project	No

Operational Energy Overall contribution 27.5%

	Minimum required 50%	78%	✔ Pass

Project profile	
Use the BESS Deem to Satisfy (DtS) method for Non-residential spaces?:	Yes
Are you installing any renewable energy system(s) (other than solar photovoltaic)?:	No
Energy Supply:	All-electric
Solar Photovoltaic system profile	
System Size (lesser of inverter and panel capacity):	
SPVs (ALL WHs)	8.0 kW peak
SPVs (ALL OFFICES)	8.0 kW peak
Orientation (which way is the system facing)?:	
SPVs (ALL WHs)	North-East
SPVs (ALL OFFICES)	North-East
Inclination (angle from horizontal):	
SPVs (ALL WHs)	2.0 Angle (degrees)
SPVs (ALL OFFICES)	2.0 Angle (degrees)
Which Building Class does this apply to?:	
SPVs (ALL WHs)	Office
SPVs (ALL OFFICES)	Lab/Warehouse
Non-residential Deemed-to-Satisfy profile	
Do all exposed floors and ceilings (forming part of the envelope) demonstrate meeting the required NCC2022 insulation levels (total R-value upwards and downwards)?:	Yes
Does all wall and glazing demonstrate meeting the required NCC2022 facade calculator (or better than the total allowance)?:	Yes
Are heating and cooling systems within one Star of the most efficient equivalent capacity unit available, or Coefficient of Performance (CoP) & Energy Efficiency Ratios (EER) not less than 85% of the CoP & EER of the most efficient equivalent capacity unit available?:	Yes
Are water heating systems within one star of the best available, or 85% or better than the most efficient equivalent capacity unit?:	Yes

1.1 Thermal Performance Rating - Non-Residential		37%
Score Contribution	This credit contributes 34.8% towards the category score.	
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC2022 Section J)?	
2.1 Greenhouse Gas Emissions		100%
Score Contribution	This credit contributes 8.7% towards the category score.	
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?	

2.2 Peak Demand		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?	
2.6 Electrification		100%
Score Contribution	This credit contributes 13% towards the category score.	
Criteria	Is the development all-electric?	
Question	Criteria Achieved?	
Project	Yes	
2.7 Energy consumption		100%
Score Contribution	This credit contributes 17.4% towards the category score.	
Criteria	What is the % reduction in annual energy consumption against the benchmark?	
3.1 Carpark Ventilation		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	If you have an enclosed carpark, is it: (a) fully naturally ventilated (no mechanical ventilation system) or (b) 40 car spaces or less with Carbon Monoxide monitoring to control the operation and speed of the ventilation fans?	
Question	Criteria Achieved ?	
Project	Yes	
3.2 Hot Water - Non-Residential		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?	
3.7 Internal Lighting - Non-Residential		100%
Score Contribution	This credit contributes 8.7% towards the category score.	
Criteria	Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?	
Question	Criteria Achieved ?	
Office	Yes	
Lab/Warehouse	Yes	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A ◈ Scoped Out
		No cogeneration or trigeneration system in use.
This credit was scoped out	No cogeneration or trigeneration system in use.	
4.2 Renewable Energy Systems - Solar		100%

Score Contribution	This credit contributes 4.3% towards the category score.
Criteria	What % of the estimated energy consumption of the building class it supplies does the solar power system provide?
Output	Solar Power - Energy Generation per year
Office	9,059 kWh
Lab/Warehouse	9,059 kWh
Output	% of Building's Energy
Office	85 %
Lab/Warehouse	25 %

4.4 Renewable Energy Systems - Other N/A Scoped Out

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

This credit was scoped out	No other (non-solar PV) renewable energy is in use.

IEQ **Overall contribution 16.5%**

	Minimum required 50%	53%	✔ Pass

1.4 Daylight Access - Non-Residential		81%	✔ Achieved
Score Contribution	This credit contributes 35.3% towards the category score.		
Criteria	What % of the nominated floor area has at least 2% daylight factor?		
Question	Percentage Achieved?		
Office	36 %		
Lab/Warehouse	95 %		
2.3 Ventilation - Non-Residential		46%	✔ Achieved
Score Contribution	This credit contributes 35.3% towards the category score.		
Criteria	What % of the regular use areas are effectively naturally ventilated?		
Question	Percentage Achieved?		
Office	0 %		
Lab/Warehouse	100 %		
Criteria	What increase in outdoor air is available to regular use areas compared to the minimum required by AS 1668.2:2012?		
Question	Percentage Achieved?		
Office	50 %		
Lab/Warehouse	-		
Criteria	What CO2 concentrations are the ventilation systems designed to achieve, to monitor and to maintain?		
Question	Value		
Office	-		
Lab/Warehouse	-		
3.4 Thermal comfort - Shading - Non-Residential		15%	
Score Contribution	This credit contributes 17.6% towards the category score.		
Criteria	What percentage of east, north and west glazing to regular use areas is effectively shaded?		
Question	Percentage Achieved?		
Office	50 %		
Lab/Warehouse	-		
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	

Score Contribution	This credit contributes 5.9% towards the category score.
Criteria	What percentage of regular use areas in tenancies have ceiling fans?
Question	Percentage Achieved?
Office	-
Lab/Warehouse	-

4.1 Air Quality - Non-Residential 100%

Score Contribution	This credit contributes 5.9% towards the category score.

Criteria	Do all paints, sealants and adhesives meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

Criteria	Does all carpet meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

Criteria	Does all engineered wood meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

Transport Overall contribution 9.0%

31%

1.4 Bicycle Parking - Non-Residential — 76%

Score Contribution	This credit contributes 25% towards the category score.
Criteria	Have the planning scheme requirements for employee bicycle parking been exceeded by at least 50% (or a minimum of 2 where there is no planning scheme requirement)?
Question	Criteria Achieved ?
Office	No
Lab/Warehouse	Yes
Question	Bicycle Spaces Provided ?
Office	-
Lab/Warehouse	8

1.5 Bicycle Parking - Non-Residential Visitor — 0%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Have the planning scheme requirements for visitor bicycle parking been exceeded by at least 50% (or a minimum of 1 where there is no planning scheme requirement)?
Question	Criteria Achieved ?
Office	No
Lab/Warehouse	No
Question	Bicycle Spaces Provided ?
Office	-
Lab/Warehouse	0

1.6 End of Trip Facilities - Non-Residential — 0% ⊘ Disabled

Credit 1.4 must be complete first.

This credit is disabled	Credit 1.4 must be complete first.

2.1 Electric Vehicle Infrastructure — 0%

Score Contribution	This credit contributes 25% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	No

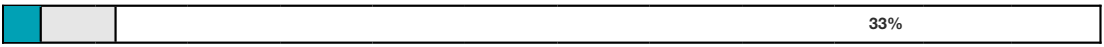
2.2 Car Share Scheme — 100%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Has a formal car sharing scheme been integrated into the development?
Question	Criteria Achieved ?
Project	Yes

2.3 Motorbikes / Mopeds — 0%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Are a minimum of 5% of vehicle parking spaces designed and labelled for motorbikes (must be at least 5 motorbike spaces)?
Question	Criteria Achieved ?
Project	No

Waste & Resource Recovery **Overall contribution 5.5%**



1.1 Construction Waste - Building Re-Use	0%

Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 Operational Waste - Food & Garden Waste	0%

Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	No

2.2 Operational Waste - Convenience of Recycling	100%

Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are the recycling facilities at least as convenient for occupants as facilities for general waste?
Question	Criteria Achieved ?
Project	Yes

Urban Ecology Overall contribution 5.5%

18%

1.1 Communal Spaces	23%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Is there at least the following amount of common space measured in square meters : * 1m² for each of the first 50 occupants * Additional 0.5m² for each occupant between 51 and 250 * Additional 0.25m² for each occupant above 251?
Question	Common space provided
Office	36.0 m²
Lab/Warehouse	20.0 m²
Output	Minimum Common Space Required
Office	27 m²
Lab/Warehouse	53 m²

2.1 Vegetation	25%
Score Contribution	This credit contributes 50% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?
Question	Percentage Achieved ?
Project	5 %

2.2 Green Roofs	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No

2.3 Green Walls and Facades	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No

3.2 Food Production - Non-Residential	23%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	Food Production Area
Office	10.0 m²
Lab/Warehouse	6.0 m²
Output	Min Food Production Area
Office	7 m²
Lab/Warehouse	15 m²

Innovation **Overall contribution 9.0%**

	0%

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

Disclaimer

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

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WASTE MANAGEMENT PLAN

PROPOSED WAREHOUSE DEVELOPMENT

7-9 & 11 KEITH STREET, MAIDSTONE

19 MAY 2025

7-9 & 11 KEITH STREET, MAIDSTONE

CLIENT: Clovis Architectural Plans & Permits

OBT JOB NUMBER: 27122

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Hawthorn East, Victoria 3123

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VERSION	DATE	ISSUE	PREPARED BY	REVIEWED BY
27122_draft_wmp	2 May 2025	Draft	Abdirahman Farah	Matt Harridge
27122_wmp	19 May 2025	Final	Abdirahman Farah	Matt Harridge

CONTENTS

1 INTRODUCTION

O'Brien Traffic has been engaged by Clovis Architectural Plans and Permits to prepare a Waste Management Plan for a proposed warehouse development at 7-9 & 11 Keith Street, Maidstone.

In the course of preparing this Plan, plans and relevant documentation have been examined.

2 EXISTING CONDITIONS

The subject site is located on the southern side of Keith Street. The location of the subject site and surrounding area is shown in **Figure 1.**

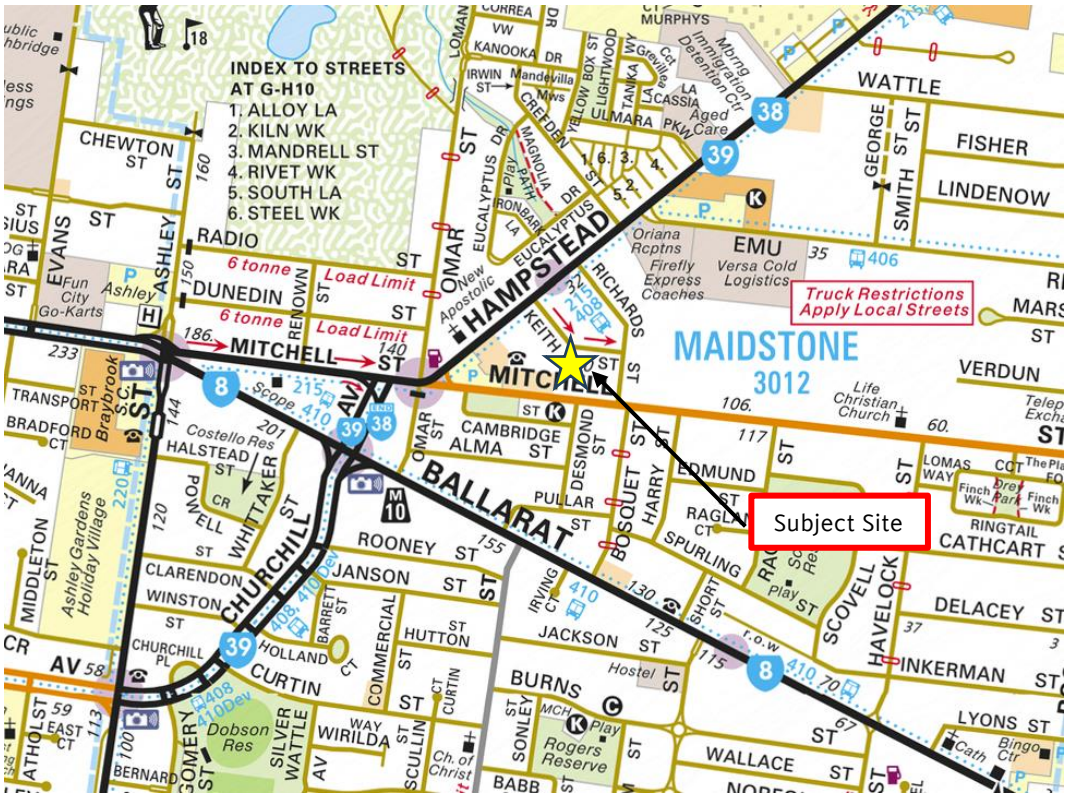

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FIGURE 1: LOCATION OF SUBJECT SITE

3 THE PROPOSAL

It is proposed to demolish the existing buildings and construct four warehouse units on the subject site. It is proposed to provide 13 car parking spaces (3 spaces each for Warehouses 1, 2 and 3 and 4 spaces for Warehouse 4).

Vehicle access to Warehouses 1 and 2 is proposed via a 7m wide crossover while vehicle access to Warehouses 3 and 4 each are proposed via separate 3.5m wide crossovers to Keith Street.

4 WASTE STREAMS

Tenants may sort waste on-site into the following streams:

- General Waste;
- Commingled Recycling;
- Large cardboard;
- Hard waste & E-waste.

No significant green waste is expected to be generated by the proposal.

4.1 GENERAL WASTE

Staff would place general waste in tied plastic bags in separate bins within the warehouse units. This waste would then be transferred by staff to the general waste bins of each warehouse as indicated in **Appendix A**.

4.2 COMMINGLED RECYCLING

Staff would place loose comingled recycling in separate bins within the warehouse units. This waste would then be transferred by staff to the commingled recycling bins of each warehouse as indicated in **Appendix A**.

4.3 LARGE CARDBOARD

Large cardboard waste shall be broken down and disposed of in the commingled recycling bin located in the bin store.

4.4 HARD WASTE & E-WASTE

Building management shall arrange hard waste collections to be undertaken by the waste contractor.

E-waste should be appropriately contained/stored to prevent breakage and contamination with other wastes. Building management shall arrange e-waste collections to be undertaken by the waste contractor.

5 WASTE GENERATION

The anticipated waste generation for the proposed development is shown below in Table 1.

SIZE	SIZE (M^2)	L/WEEK/UNIT		WASTE/WEEK	
		GENERAL WASTE	RECYCLING	GENERAL WASTE	RECYCLING
Warehouse 1	370	70L	70L	259L	259L
Warehouse 2	368	70L	70L	258L	258L
Warehouse 3	368	70L	70L	258L	258L
Warehouse 4	370	70L	70L	259L	259L

WASTE FIGURES BASED ON A 7 DAY WEEK AND MELBOURNE CITY COUNCIL GUIDELINES FOR WASTE MANAGEMENT PLANS

TABLE 1: WASTE GENERATION ASSESSMENT

6 BIN REQUIREMENTS

6.1 BIN QUANTITY, SIZE, COLLECTION FREQUENCY AND COLOUR

The bin quantity, size and collection frequency are shown in Table 2 below.

WASTE STREAM	TOTAL WASTE /WEEK	BIN SIZE	BIN QUANTITY	COLLECTION FREQUENCY	CAPACITY/ WEEK
General Waste	259L	360L	1 bin	Weekly (Private)	360L
Recycling	259L	360L	1 bin	Weekly (Private)	360L

1. SEE TABLE 1

TABLE 2: BIN QUANTITY, SIZE AND COLLECTION FREQUENCY PER WAREHOUSE

6.2 BIN DIMENSIONS AND COLOUR

The standard approximate dimensions and colours of bins are provided in Table 3 below.

WASTE STREAM	BIN SIZE	WIDTH (M)	DEPTH (M)	HEIGHT (M)	COLOUR	
					LID	BODY
General Waste	360L	0.68	0.77	1.1	Red	Light green
Recycling	360L	0.68	0.77	1.1	Yellow	Light green

NOTE: FOR PRIVATE BINS, BIN COLOURS SPECIFIED IN AS 4123.7 CAN BE ADOPTED. PRIVATE BINS SHALL BE LABELLED APPROPRIATELY TO IDENTIFY ADDRESS.

TABLE 3: STANDARD BIN SPECIFICATIONS (AS PER SULO MGB AUSTRALIA)

6.3 BIN STORAGE

6.3.1 Bin Storage Area

The required areas for the bins are indicated in Table 4.

WASTE STREAM	AREA REQUIRED (EXCL. CIRCULATION)
General Waste	0.52m2
Recycling	0.52m2
TOTAL	**1.05m2**

TABLE 4: REQUIRED WASTE STORAGE AREA

Bins would be stored within the warehouses as indicated in **Appendix A**. The plans indicate that sufficient area will be provided to store the required bins.

6.3.2 Washing, Stormwater Pollution Prevention & Vermin Prevention

An appropriately graded and drained area would be provided to allow washing. Bins are to be washed regularly by tenants. Alternatively, a bin washing company can be engaged to perform this service.

The waste contractor is required to clean-up any spills that might occur when collecting bins.

6.3.3 Ventilation

Waste areas shall provide ventilation in accordance with Australian Standard AS1668.

6.3.4 Noise Management

Waste areas shall meet relevant Building Code and AS2107 acoustic requirements.

Waste collection by private contractors shall be as per Council's local laws and EPA guidelines.

6.4 SIGNAGE

Waste storage areas and bins would be clearly marked and signed with standard signage approved. Examples of typical signage recommended by Sustainability Victoria are illustrated in **Figure 2**.

FIGURE 2: WASTE AND RECYCLING SIGNAGE

7 WASTE COLLECTION ARRANGEMENTS

Bins will be collected directly from the bin storage areas on collection days by the engaged waste contractor.

A 6.4m Small Rigid Vehicle SRV waste vehicle will reverse into the warehouse. Bins will be taken out to be emptied and then returned to the bin storage area. The waste vehicle will then exit in a forward direction. Swept path diagrams for a suitable waste vehicle are shown in Appendix B.

Alternatively, a larger waste collection vehicle could park on-street during non-peak periods and the bins taken to and the from the bin storage areas.

The private waste contractor will be responsible for the completion of a Job Safety Analysis (JSA) before collection commences.

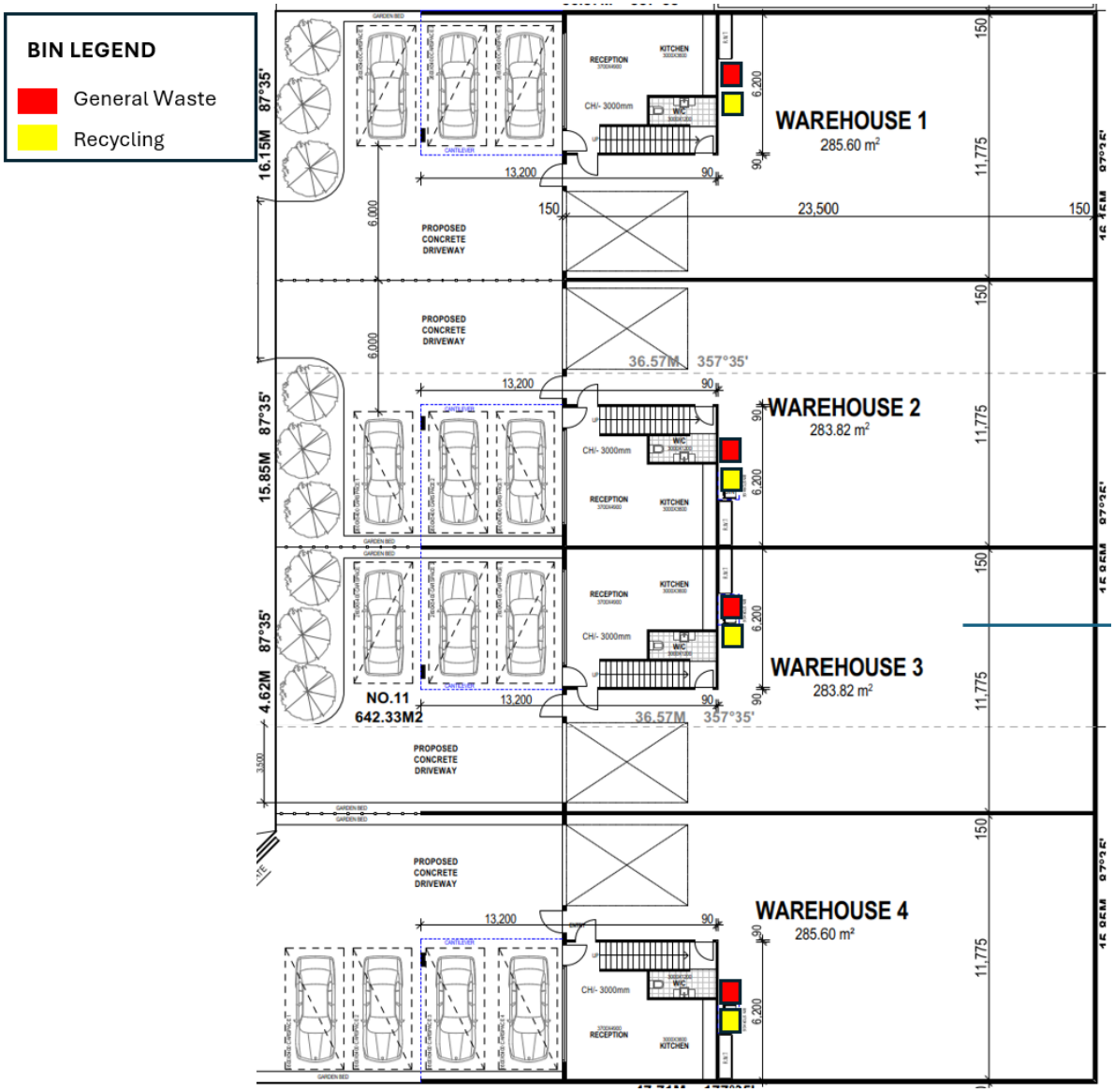
8 COUNCIL INFORMATION

Maribyrnong City Council Ph: 03 9688 0200

APPENDIX A

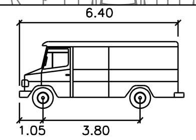
BIN LAYOUT PLAN

FIGURE A1: BIN STORAGE LOCATIONS



APPENDIX B

SWEPT PATH ANALYSIS



SRV

	meters
Width	: 2.30
Track	: 2.30
Lock to Lock Time	: 6.0
Steering Angle	: 38.1

6.4m SRV ENTRY/EXIT

7-9&11 Keith Street Maidstone

1:200 @ A3 02/04/25

DWG NO: 27122001

NOT FOR CONSTRUCTION

KEY

- CENTRE LINE OF FRONT WHEELS
- WHEEL PATH
- VEHICLE BODY
- VEHICLE CLEARANCE LINE (300mm FROM VEHICLE BODY)

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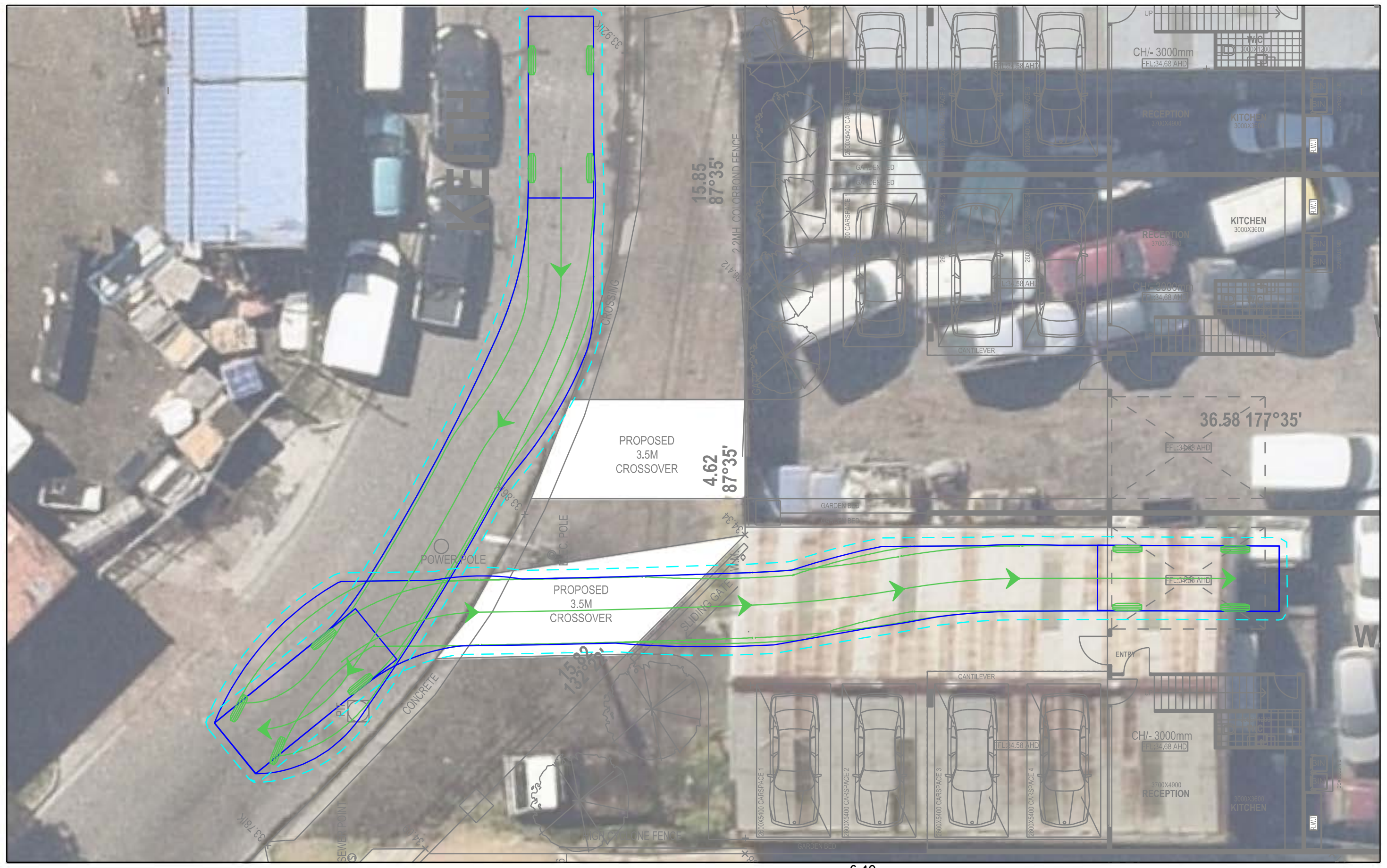

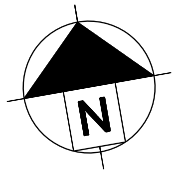

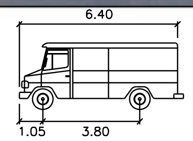

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CAR PARKING DEMAND ASSESSMENT

PROPOSED WAREHOUSE DEVELOPMENT

7-9 & 11 KEITH STREET, MAIDSTONE

7 APRIL 2025

7-9 & 11 KEITH STREET, MAIDSTONE

CLIENT: Clovis Architectural Plans & Permits

OBT JOB NUMBER: 27122

Suite 2.03, 789 Toorak Road
Hawthorn East, Victoria 3123

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ABN 55 007 006 037

VERSION	DATE	ISSUE	PREPARED BY	REVIEWED BY
27122 CPDA	7 March 2025	Draft	Urmila Karki	Matt Harridge
27122 CPDA	7 April 2025	Final	Urmila Karki	Matt Harridge

CONTENTS

1 INTRODUCTION

O'Brien Traffic has been engaged by Clovis Architectural Plans & Permits to undertake a car parking demand assessment of a proposed warehouse development at 7-9 & 11 Keith Street, Maidstone.

In the course of preparing this report:

- Plans and relevant documentation have been examined;
- The subject site and surrounding area have been inspected;
- Parking surveys have been undertaken and the results analysed; and
- Parking implications of the proposal have been assessed.

2 EXISTING CONDITIONS

2.1 LOCATION AND LAND USE

The subject site is located on the southern side of Keith Street. The location of the subject site and surrounding area is shown in **Figure 1.** A recent aerial photograph is shown in **Figure 2**.

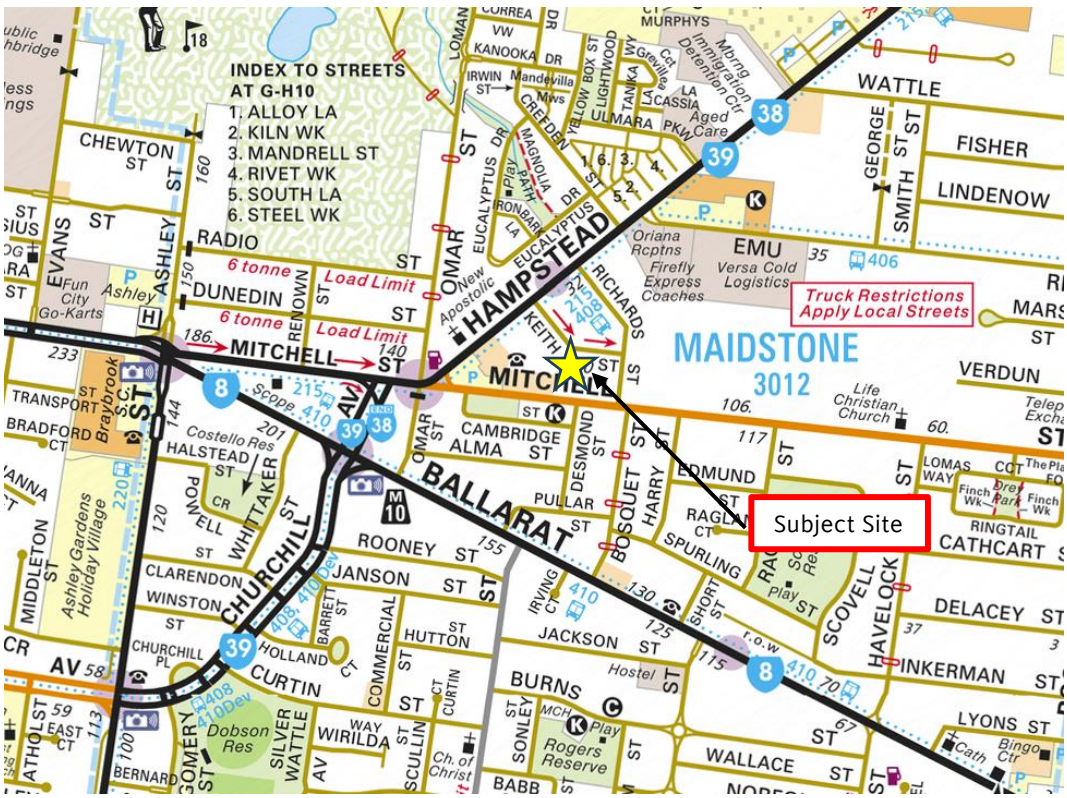

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FIGURE 1: LOCATION OF SUBJECT SITE

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FIGURE 2: AERIAL PHOTO OF SUBJECT SITE

The site, which is zoned Industrial 3 Zone (IN3Z), is irregular in shape with a frontage of 52.43 metres to Keith Street comprising an area of approximately 1812.80 square metres.

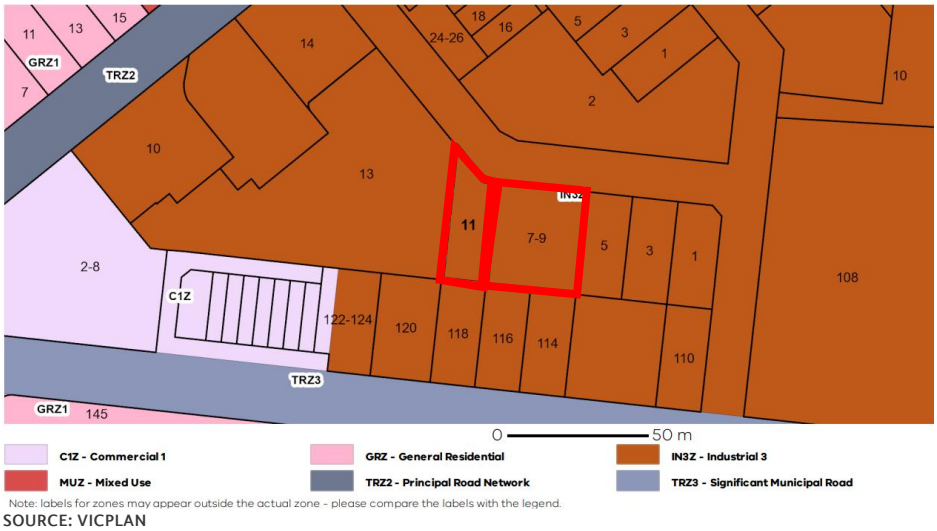
The site currently contains an industrial building and storage yard.

The site is also subject to Special Building Overlay (SBO) and Development Contributions Plan Overlay – Schedule 2 (DCPO2).

2.2 SURROUNDING LAND USE

Land use in close proximity to the subject site is industrial in nature. Commercial developments are to further southwest of the subject site.

A zoning map of the area is shown in **Figure 3.**



SOURCE: VICPLAN

FIGURE 3: ZONING MAP

2.3 ROAD NETWORK

Keith Street is an access road under the care and management of Maribyrnong City Council. It provides a carriageway width of approximately 6.78m and one-way movement is provided from the west to the east.

The speed limit of 40km/hr applies.

Views of Keith Street are shown in **Figure 4 and Figure 5.**

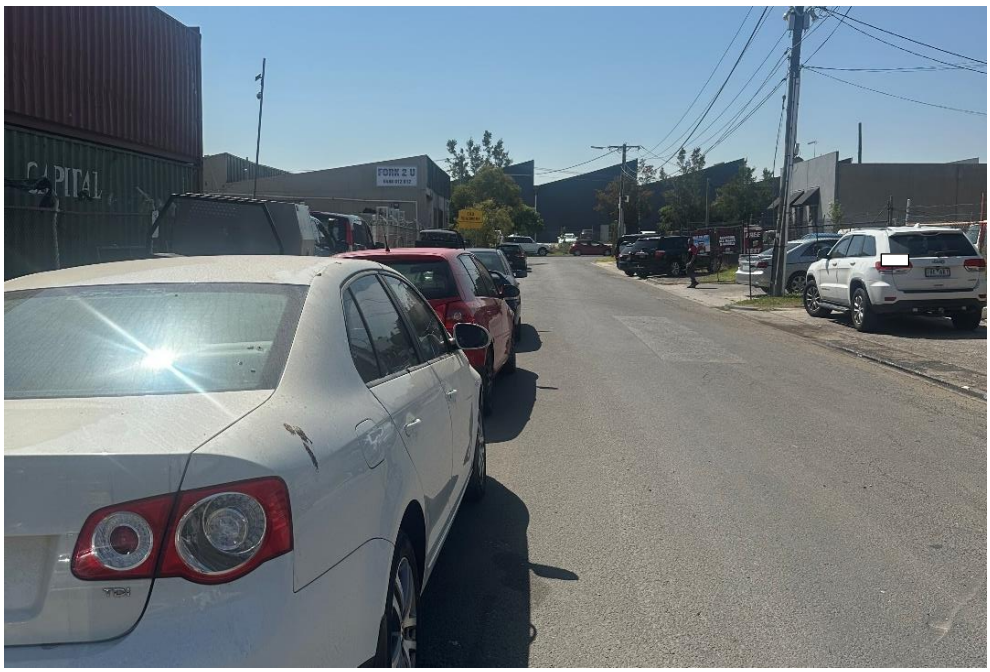


FIGURE 4: KEITH STREET, FACING EAST

FIGURE 5: KEITH STREET, FACING NORTHWEST

2.4 EXISTING TRAFFIC VOLUMES

It is anticipated that Keith Street would carry less than 1,000 vehicles per day.

2.5 CASUALTY CRASH HISTORY

A review of Department of Transport and Planning (DTP) casualty crash data for the most recent five-year period (2018 –2023) indicates that there was no casualty crashes recorded along Keith Street.

2.6 SUSTAINABLE TRANSPORT

2.6.1 Public Transport

The subject site is located in PPTN (Principal Public Transport Network) area and has good access to public transport.

Bus Route 215 (Caroline Springs – Highpoint Shopping Centres), and **Route 408** (St Albans Station - Highpoint SC via Sunshine Station) are within **230m** walking distance to the southwest of the subject site.

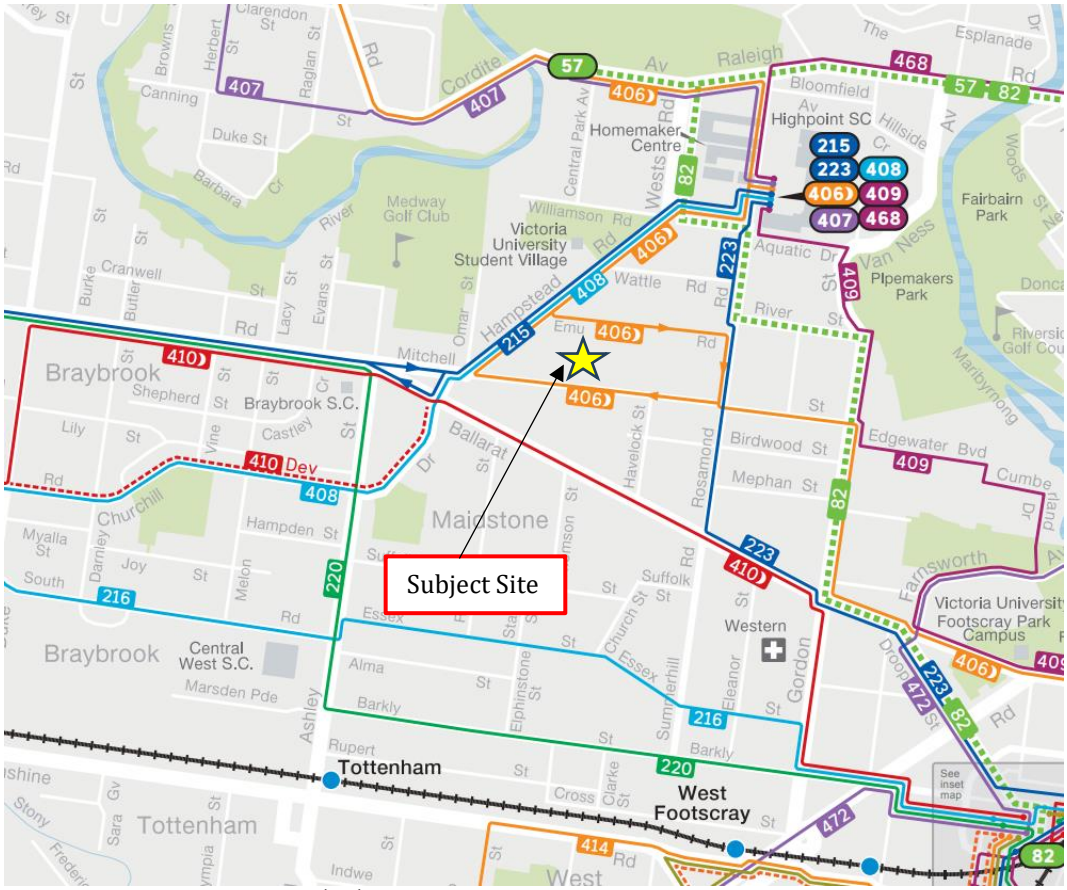
Bus route 406 (Keilor East - Footscray via Avondale Heights and Maribyrnong) is within **400m** walking distance to the north and **350m** walking distance to the south of the subject site.

Bus Route 410 (Sunshine Station - Footscray via Ballarat Road) is within **550m** walking distance to the southwest of the subject site.

The nearest train station **(Tottenham Train Station)** is within **2.8km** southwest of the

subject site.

The public transport services in the vicinity of the subject site are shown in Figure 6.



SOURCE: PUBLIC TRANSPORT VICTORIA (PTV) WEBSITE

FIGURE 6: PUBLIC TRANSPORT SERVICES

ROUTE NUMBER	ROUTE DESCRIPTION
215	Caroline Springs – Highpoint Shopping Centres
406	Keilor East - Footscray via Avondale Heights and Maribyrnong
408	St Albans Station - Highpoint SC via Sunshine Station
410	Sunshine Station - Footscray via Ballarat Road

TABLE 1: BUS SERVICES

2.7 AVAILABILITY OF PARKING IN THE LOCALITY

O'Brien Traffic prepared an inventory of on-street parking in Keith Street and Richards Street, revealing a total of 28 unrestricted kerbside car parking spaces as shown in **Figure 7.**

FIGURE 7: PARKING INVENTORY MAP

	Location	Side	Restriction	Supply	Thursday (06/02/2025) 11:21 AM
Keith Street					
A1	Property Boundary of No. 24 Hampstead Road to Property Boundary of No. 12-14 Richards Street	North	Unrestricted	12	11
Richards Street					
B1	Property Boundary of No. 110 Mitchell Street to Property Boundary of No. 12-14 Richards Street	West	Unrestricted	7	7
B2	Property Boundary of No. 110 Mitchell Street to Property Boundary of No. 12-14 Richards Street	East	Unrestricted	9	6
			Total	28	24

FIGURE 8: PARKING SURVEY DATA

O'Brien Traffic conducted a spot parking occupancy survey on Thursday, 6 February 2025, which indicated 24 of the 28 spaces were occupied.

3 THE PROPOSAL

It is proposed to demolish the existing buildings and construct four warehouse units on the subject site. It is proposed to provide 13 car parking spaces (3 spaces each for Warehouses 1, 2 and 3 and 4 spaces for Warehouse 4).

Vehicle access to Warehouses 1 and 2 are proposed via a 7m wide crossover while vehicle access to Warehouses 3 and 4 each are proposed via separate 3.5m wide crossovers to Keith Street.

4 CAR PARKING

4.1 PLANNING SCHEME CAR PARKING REQUIREMENT

Parking policy and requirements applicable to the proposed development are specified in Clause 52.06 of the Planning Scheme.

The purpose of Clause 52.06 is:

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

The Planning Scheme parking requirement for the proposal is shown in Table 2.

USE	SIZE	PLANNING SCHEME PARKING RATE	CAR PARKING REQUIREMENT
Warehouse 1	370.19m^2	2 spaces to each premises plus 1 space to each 100 sq m of net floor area	5 spaces
Warehouse 2	368.41m^2	2 spaces to each premises plus 1 space to each 100 sq m of net floor area	5 spaces
Warehouse 3	368.41m^2	2 spaces to each premises plus 1 space to each 100 sq m of net floor area	5 spaces
Warehouse 4	370.19m^2	2 spaces to each premises plus 1 space to each 100 sq m of net floor area	5 spaces
		TOTAL	**20 SPACES**

TABLE 2: PLANNING SCHEME CAR PARKING REQUIREMENT

On this basis, the proposed development has a Planning Scheme car parking requirement of 20 spaces.

As 13 car spaces will be provided on-site, the proposal requires a reduction of 7 spaces. The Planning Scheme allows for a reduction in parking where it can be justified.

4.2 CAR PARKING DEMAND ASSESSMENT

Before a requirement for car parking is reduced, Clause 52.06-7 of the Planning Scheme requires a Car Parking Demand Assessment, which must assess the parking demand *likely* to be generated by the proposed use.

The Car Parking Demand Assessment must address a number of specified matters to the satisfaction of the responsible authority. These are discussed as follows.

CRITERIA	RESPONSE
The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use	Given the nature of the proposed use and the location of the site in a purpose-built industrial area, there is a low likelihood of multi-purpose trips.
The variation of car parking demand likely to be generated by the proposed use over time	The staff parking demand would be reasonably constant across weekday business hours with intermittent demand for visitor parking.
The short-stay and long-stay car parking demand likely to be generated by the proposed use	Most of the parking demand is likely to be long stay associated with staff with very low (if any) demand for visitor parking.
The availability of public transport in the locality of the land	As discussed in **Section 2.6.1**, the subject site is located in PPTN (Principal Public Transport Network) area and has good access to public transport.
The convenience of pedestrian and cyclist access to the land	There are no specific bicycle facilities serving the subject site.
The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land	There are no public bicycle facilities in the locality of the land.
The anticipated car ownership rates of likely or proposed visitors to or occupants of the land	It is anticipated that most staff will be car owners. However, that does not necessarily mean that all staff will drive to the site.
Any empirical assessment or case study	The Planning Scheme parking requirement for Warehouse is generally considered to be excessive. A lower parking rate is typically observed at warehouse developments. Surveys by O'Brien Traffic and other traffic engineering consultants indicate typical peak parking rates for warehouses ranging between 0.7 - 1.2 spaces to each 100m^2 of net floor area with an average of 1 space to each 100m^2. Adopting a rate of 1 space/100m^2 and applying it to the net floor area results in a peak parking demand of up to 12 spaces for the warehouses. Warehouse 1 – 3 spaces Warehouse 2 – 3 spaces

CRITERIA	RESPONSE
	Warehouse 3 – 3 spaces Warehouse 4 – 3 spaces

TABLE 3: CAR PARKING DEMAND ASSESSMENT

Based on the Car Parking Demand Assessment, the proposed development is likely to generate a peak car parking demand of up to 12 spaces.

4.3 ADEQUACY OF PARKING SUPPLY

Clause 52.06-7 of the Planning Scheme states that before granting a permit to reduce the number of spaces, the responsible authority must consider a number of issues which include:

CRITERIA	RESPONSE
The Car Parking Demand Assessment	The Car Parking Demand Assessment indicates a likely peak parking demand of 12 spaces (3 spaces per each four warehouse units). As 13 spaces are provided on-site, the parking demand of the proposal will be readily accommodated.
The availability of alternative car parking in the locality of the land, including: • *Efficiencies gained from the consolidation of shared car parking spaces* • *Public car parks intended to serve the land.* • *On street parking in non residential zones.* • *Streets in residential zones specifically managed for non-residential parking*	Although the on-site parking provision will accommodate the expected parking demand of the proposal, a parking occupancy check on a typical weekday indicated there was a minimum of 4 vacant parking spaces within a 200m walk of the subject site which could also be utilised if required.
Access to or provision of alternative transport modes to and from the land	As discussed earlier, the site lies within the PPTN area and has excellent access to a number of public transport services.

TABLE 4: ADEQUACY OF CAR PARKING SUPPLY

Based on the above assessment there is sufficient justification to reduce the required parking requirement under the Planning Scheme.

5 CAR PARK ACCESS & LAYOUT

The following comments are provided in relation to car park access and layout:

- All car parking spaces are designed in accordance with the Australian Standard (AS/NZS 2890.1:2004) requirement of 2.6m long and 5.4m wide;
- A swept path analysis provided in **Appendix A** demonstrates that the proposed warehouse could accommodate an Australian Standard 6.4m small rigid vehicle (SRV) reversing off the street to the loading bay and exit the site in a forward direction.

6 BICYCLE FACILITIES

Bicycle parking requirements applicable to the proposed development are specified in Clause 52.34 of the Planning Scheme.

As Warehouse is not a listed land use under Clause 52.34, therefore the proposal does not trigger a Planning Scheme bicycle parking requirement.

7 LOADING

Clause 65.01 of the Planning Scheme states that before deciding on an application, the responsible authority must consider the adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.

All the proposed warehouses could accommodate an Australian Standard 6.4 m small rigid vehicle reversing off the street, which could also exit in a forward direction (refer to vehicle swept paths in **Appendix A**).

In accordance with AS 2890.2:2018 – Off-street commercial vehicle facilities, states:

"Where providing regular service from a minor road, maneuvering on-street, if permitted by the relevant authority, shall be strictly limited to one reverse movement either onto or off the street, and be subject to determination of both safety and obstruction to other on-street traffic.

The swept path of the maximum size design vehicle using the facility may be allowed to occupy the entire width (less specified clearances) of a two-way access driveway when the vehicle is entering or leaving the minor road."

On this basis, it is considered reasonable for truck access to be provided via a reverse-in movement from the street, with the truck exiting in a forward direction.

The proposed loading arrangements are therefore considered adequate to accommodate the loading needs of the proposed development.

8 CONCLUSION

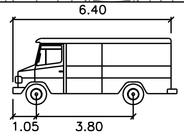
Based on the considerations outlined above, it is concluded that:

- The proposed development has a Planning Scheme car parking requirement of 20 spaces.
- As it is proposed to provide 13 on-site car parking spaces, the proposal has a shortfall of 7 spaces.
- A Car Parking Demand Assessment indicates that the proposal is anticipated to generate a peak parking demand of 12 spaces.
- As 13 car parking spaces are provided on-site, the parking demand of the proposal will be readily accommodated.
- The proposed car park access and layout complies with the relevant Australian Standard requirements.
- The proposal doesn't trigger the Planning Scheme bicycle parking requirement.
- Suitable loading arrangements are proposed to accommodate the needs of the development.

We therefore find no parking grounds to prevent the proposed warehouses development proceeding.

APPENDIX A

SWEPT PATH ANALYSIS



SRV

	meters
Width	: 2.30
Track	: 2.30
Lock to Lock Time	: 6.0
Steering Angle	: 38.1

N

NOT FOR CONSTRUCTION

6.4m SRV ENTRY/EXIT

7-9&11 Keith Street Maidstone

1:200 @ A3 02/04/25

DWG NO: 27122001

KEY

- CENTRE LINE OF FRONT WHEELS
- WHEEL PATH
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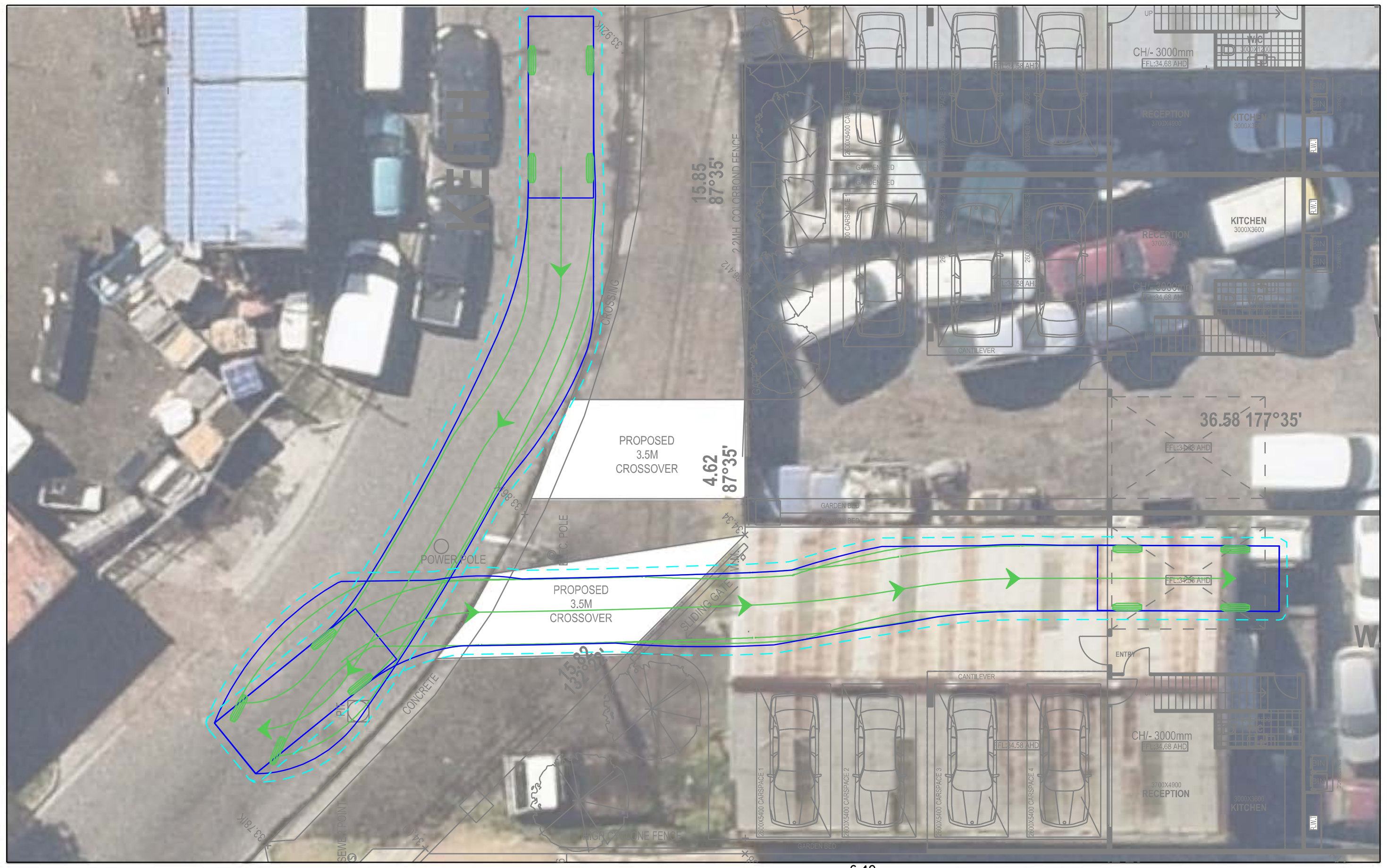

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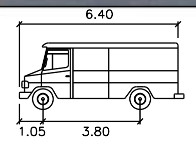

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CLOVIS ARCHITECTURAL
PLANS & PERMITS

Sustainability Design Assessment Report

7-9 Keith Street, Maidstone

Proposed Dual Occupancy Development

Maribyrnong
CITY COUNCIL

Report Number	TP_79KM
Date	23 May 2025
Consultant	Clovis Architectural
Contact	admin@clovisapp.com.au
Architect	Clovis Architectural

Disclaimer:

This material is provided solely for general advice and guidance on environmentally sustainable design (ESD) requirements. It is not intended to serve as construction documentation or detailed design advice. When applying this guidance to a planning application, it is essential to consult a suitably qualified professional and adapt the information to the specific circumstances of the site. No warranty is given regarding the accuracy or completeness of this material, and Clovis Architectural assumes no responsibility for any loss or damages resulting from its use.

Introduction

This report addresses Maribyrnong City Council's sustainability requirements, specifically the Sustainable Design Assessment (SDA) and the Environmentally Sustainable Development (ESD) policy. The Built Environment Sustainability Scorecard (BESS) and Melbourne Water's Stormwater Treatment Objective Relative Measure (STORM) Calculator were used to evaluate the development's environmental impact. This report aims to demonstrate that the proposed dual occupancy development at 7-9 Keith Street, Maidstone, meets best practices for environmental sustainability.

The SDAPP framework promotes thinking about the following ten important sustainable building categories:

SDAPP - 10 Key Sustainable Building Categories

1.0 Indoor Environment Quality: to achieve a healthy indoor environment quality for the wellbeing of building occupants.

2.0 Energy Efficiency: to ensure the efficient use of energy, to reduce total operating greenhouse emissions and to reduce energy peak demand.

3.0 Water Efficiency: to ensure the efficient use of water, to reduce total operating potable water use and to encourage the appropriate use of alternative water sources.

4.0 Stormwater Management: to reduce the impact of stormwater run-off, to improve the water quality of stormwater run-off, to achieve best practice stormwater quality outcomes and to incorporate the use of water sensitive urban design, including rainwater re–use.

5.0 Building Materials: to minimise the environmental impacts of materials used by encouraging the use of materials with a favourable lifecycle assessment

6.0 Transport: to minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking and cycling.

7.0 Waste Management: to ensure waste avoidance reuse and recycling during the construction and operation stages of development.

8.0 Urban Ecology: to protect and enhance biodiversity and to encourage the planting of indigenous vegetation.

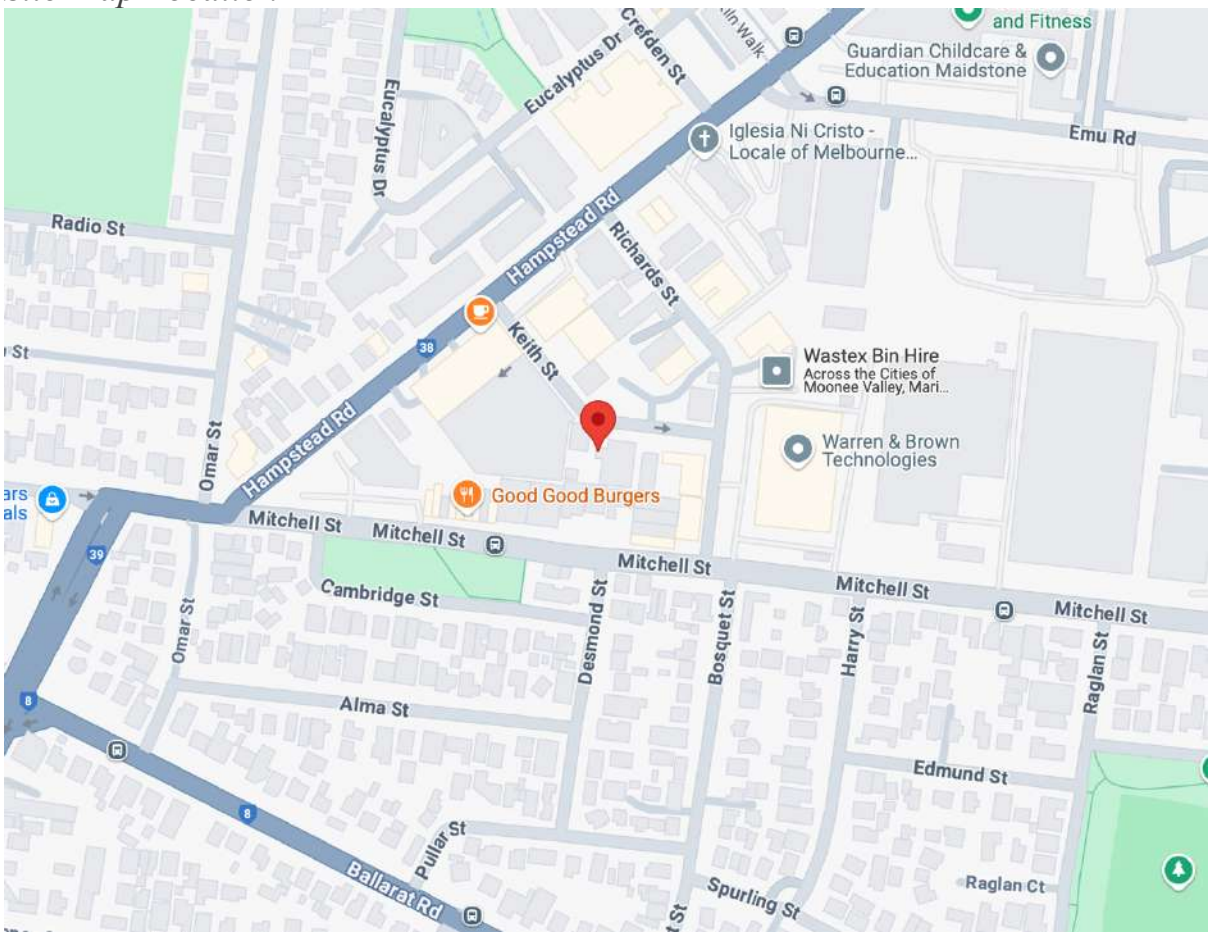
9.0 Innovation: to encourage innovative technology, design and processes in all development, so as to positively influence the sustainability of buildings.

10.0 Construction and Building Management: to encourage a holistic and integrated design and construction process and ongoing high performance.

Council recommends the use of tools to assist in verifying that the sustainable design elements of the building project meet their requirements.

Site Address	7-9 Keith street Maidstone
Site Area	1,812.80 m²
Project Description	Proposed construction of 4 warehouse/office units
Council	Maribyrnong City Council

Site Map Location



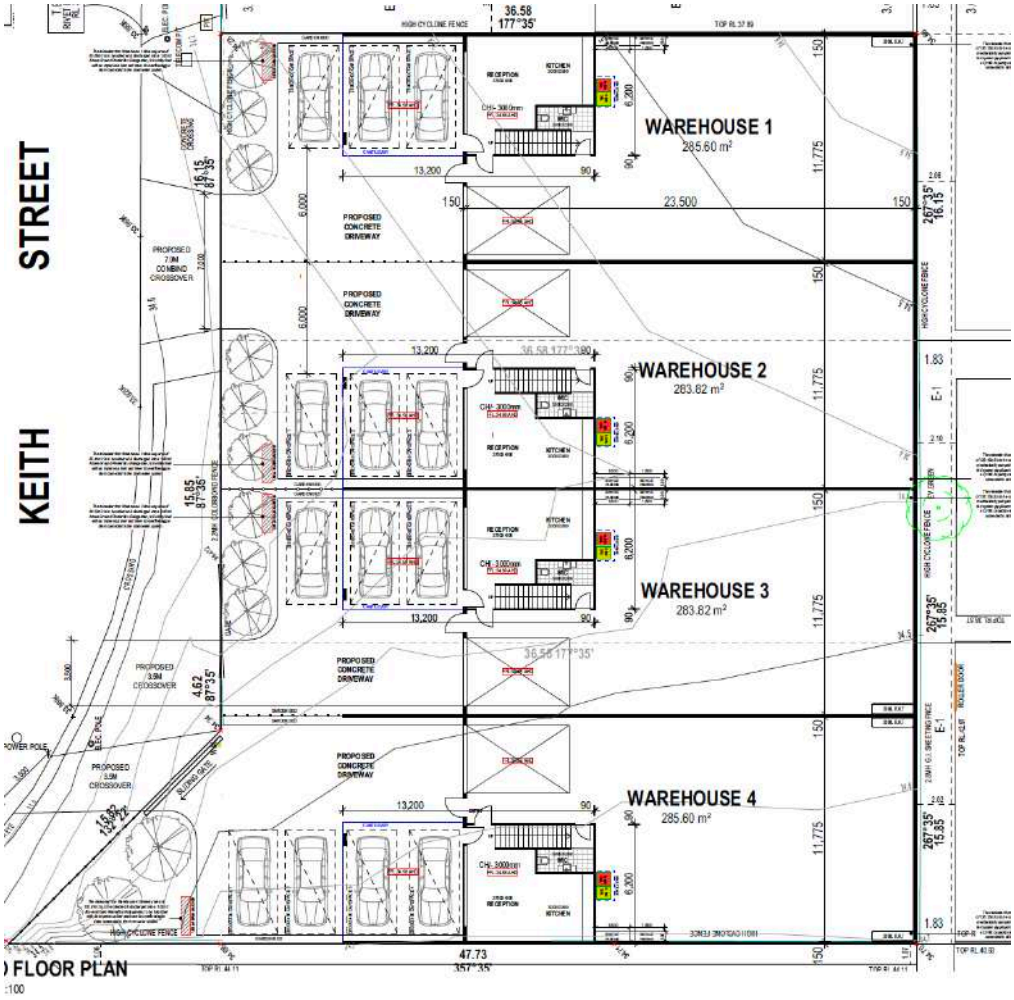
Source: Google Maps

Site Current Image

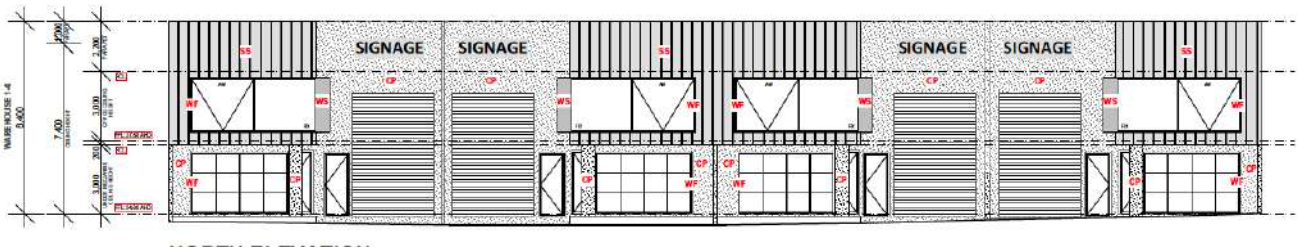
Source: Google Maps

Proposed Images

Site Plan



Keith Street View



Source: Clovis Architectural plans

BESS Assessment

The following categories were evaluated using the Built Environment Sustainability Scorecard (BESS) tool in order to meet the SDA requirements for the proposed development.

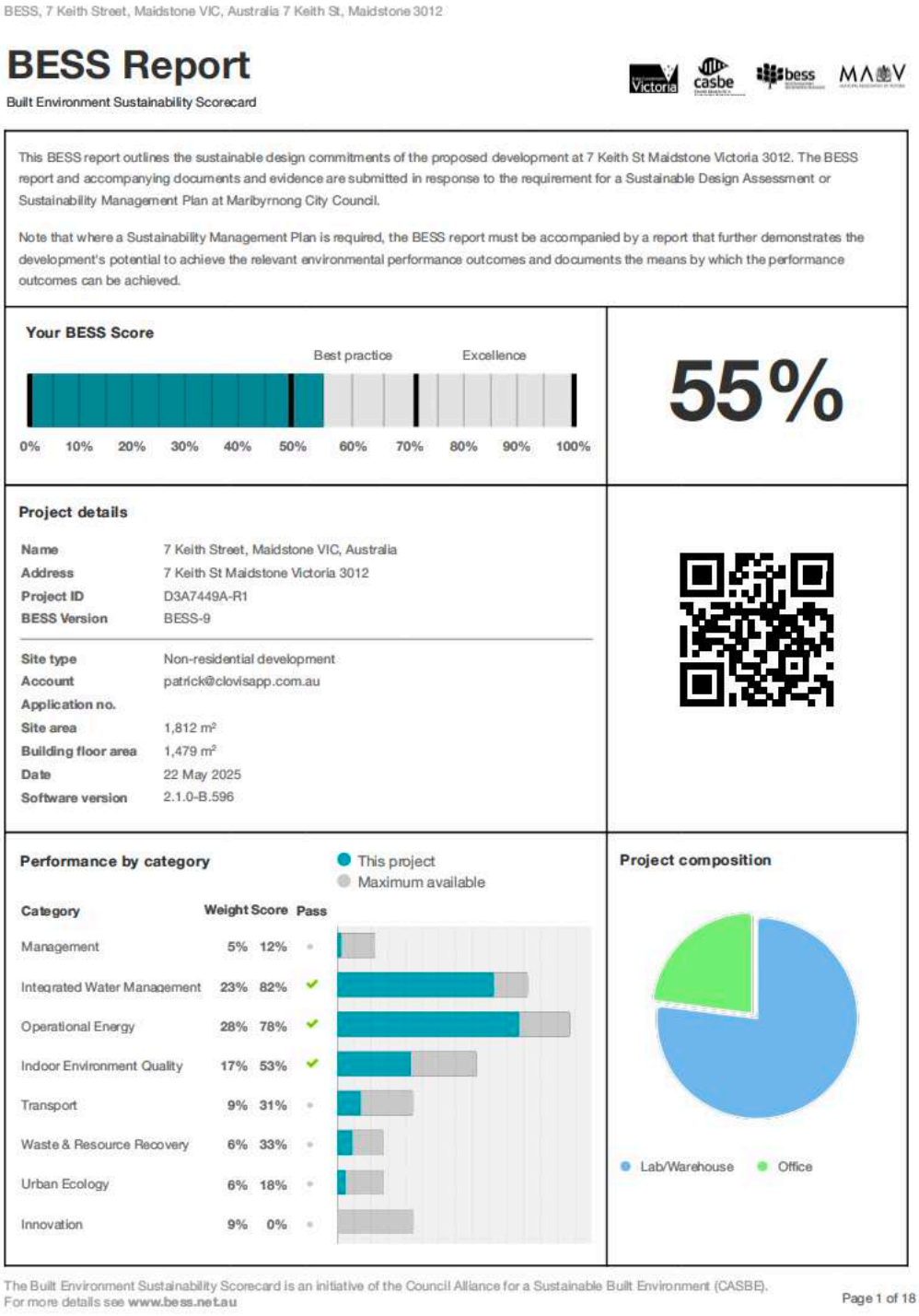
The Built Environment Sustainability Scorecard (BESS) tool was used to assess various sustainability categories.

A minimum score of 50% in key categories (Energy, Water, Stormwater, and Indoor Environmental Quality) is required.

A score above 70% represents excellence.

Project Score:

Overall successful BESS Score of 55% was reached for this development



BESS, 7 Keith Street, Maidstone VIC, Australia 7 Keith St, Maidstone 3012

BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 7 Keith St Maidstone Victoria 3012. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Maribyrnong City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

Best practice Excellence

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

55%

Project details

Name	7 Keith Street, Maidstone VIC, Australia
Address	7 Keith St Maidstone Victoria 3012
Project ID	D3A7449A-R1
BESS Version	BESS-9
Site type	Non-residential development
Account	patrick@clovisapp.com.au
Application no.	
Site area	1,812 m²
Building floor area	1,479 m²
Date	22 May 2025
Software version	2.1.0-B.596

Performance by category

This project
Maximum available

Category	Weight	Score	Pass
Management	5%	12%	
Integrated Water Management	23%	82%	✓
Operational Energy	28%	78%	✓
Indoor Environment Quality	17%	53%	✓
Transport	9%	31%	
Waste & Resource Recovery	6%	33%	
Urban Ecology	6%	18%	
Innovation	9%	0%	

Project composition

Lab/Warehouse Office

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

Page 1 of 18

Below is a summary of the BESS Assessment.

Appendix C includes a copy of the published BESS report, which Council can also view via the BESS web portal.

Schedule of ESD Commitments

1. **Indoor Environment Quality**
    - Provide natural ventilation via operable windows in all offices
    - Maximize daylight access; achieve 81% compliance
    - Include external shading to reduce heat gain
    - Meet NCC ventilation standards for air quality
2. **Energy Efficiency**
    - Develop an all-electric building with no natural gas connections
    - Install a total of 16kW solar PV (8kW office + 8kW warehouse rooftops)
    - Use high-performance glazing and insulation to meet NCC2022 Section J
    - Install efficient HVAC units (min. 85% of CoP/EER benchmark)
    - Achieve LPD < 4W/m² with high-efficiency internal lighting
3. **Water Efficiency**
    - Install 2,000L rainwater tanks to each warehouse
    - Connect rainwater tanks to all toilets for flushing
    - Use 5-star WELS rated taps and 4-star WELS rated toilets
4. **Stormwater Management**
    - Achieve a STORM rating of 121%
    - Provide four above-ground planter box raingardens
    - Collect and reuse roof runoff from 505 m² roof area
5. **Building Materials**
    - Apply durable, low-maintenance finishes
    - Use low-VOC internal paint and materials

- Insulate to reduce heat loss/gain and improve comfort

6. **Transport**
    - Provide one secure bicycle parking space per tenancy
    - Allocate one shared car space for car share use
    - Install EV-ready conduits in car parking spaces
7. **Waste Management**
    - Provide separate bins for general and recyclable waste per warehouse
    - Design bin storage areas to support source separation
8. **Urban Ecology**
    - Incorporate native/drought-tolerant plantings in raingardens and garden beds
    - Maintain 124.60 m² permeable area (6.9% of site)
9. **Innovation**
    - No specific innovation claimed, but design allows future installation of sustainability monitoring technology

Appendix A: STORM Assessment

The Melbourne Water STORM calculator was used to assess stormwater management. The development achieved a 100% STORM rating, which meets best practice requirements.

Proposed Water Treatment Measures:

Each unit is equipped with a 2,500-liter rainwater tank, capturing runoff from the roof. This harvested water is used for toilet flushing and garden irrigation, significantly reducing reliance on mains water.

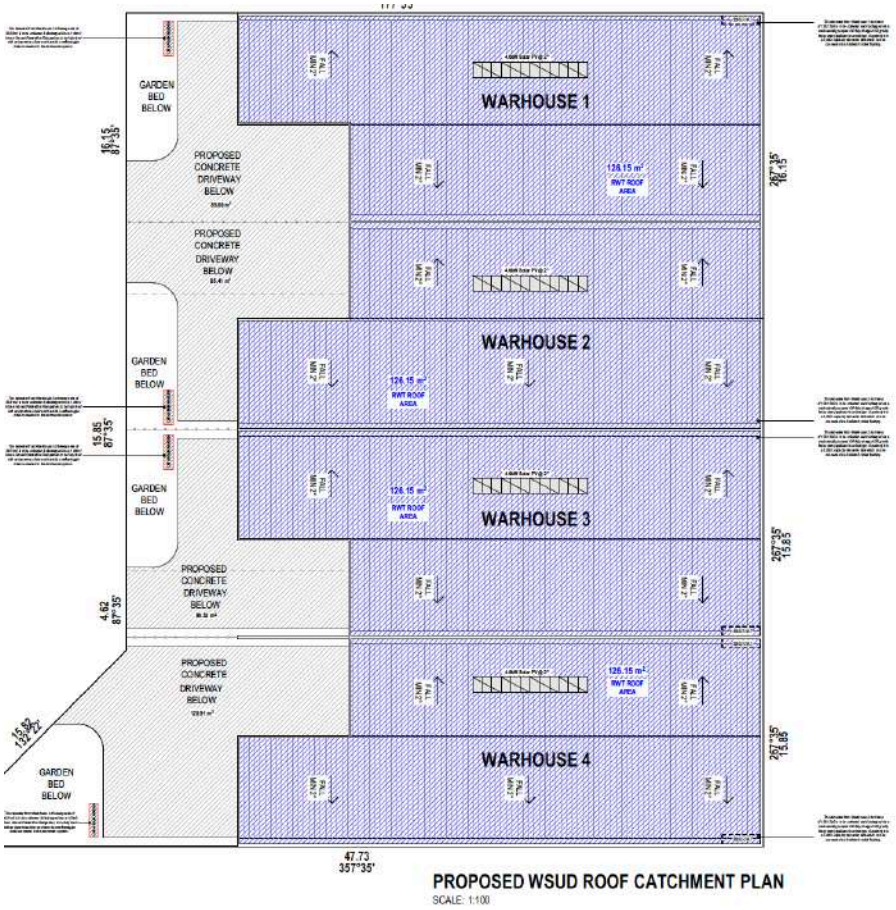
Additionally, the system is designed to collect and store sufficient rainwater during periods of rainfall, reducing stormwater runoff volume from the site.

Melbourne Water **STORM Rating Report**

TransactionID:	0
Municipality:	MARIBYRNONG
Rainfall Station:	MARIBYRNONG
Address:	7-9 & 11 KEITH STREET
	MAIDSTONE
	VIC 3012
Assessor:	CAPP
Development Type:	Industrial
Allotment Site (m2):	1,812.80
STORM Rating %:	121

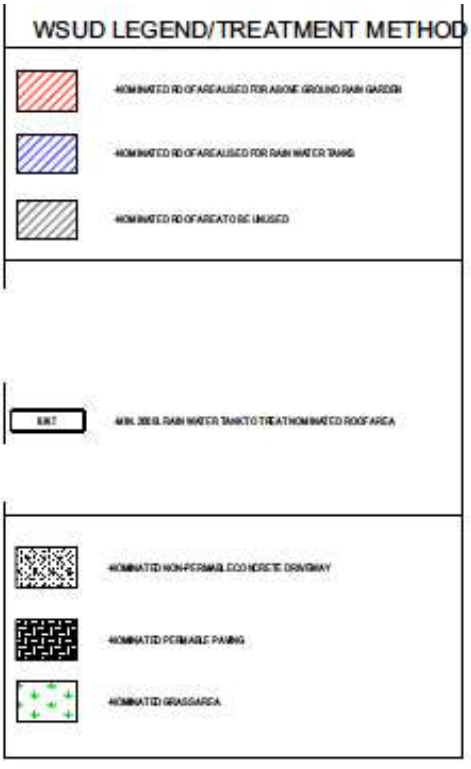
Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Warehouse 1-4 Rainwater Tank	504.60	Rainwater Tank	8,000.00	15	121.20	85.00
Warehouse 1-4-Driveway	372.49	Raingarden 300mm	4.00	0	121.20	0.00

A plan illustrating where the impervious surfaces will be treated and drained is shown in figure 1, below.



PROPOSED WSUD ROOF CATCHMENT PLAN

SCALE: 1:100



WSUD Treatment Summary for 7 – 9 Keith St Maidstone:

Element	Description	Impervious Area Treated (m²)	Treatment Type	Treatment Volume/Size
Warehouse 1 Roof	Connected to rainwater tank for toilet flushing	126.15 m²	Rainwater Tank	2,000 L
Warehouse 1 Driveway	Collected in raingarden	85.66 m²	Above Ground Planter Box	1.00 m²
Warehouse 2 Roof	Connected to rainwater tank for toilet flushing	126.15 m²	Rainwater Tank	2,000 L
Warehouse 2 Driveway	Collected in raingarden	85.41 m²	Above Ground Planter Box	1.00 m²
Warehouse 3 Roof	Connected to rainwater tank for toilet flushing	126.15 m²	Rainwater Tank	2,000 L
Warehouse 3 Driveway	Collected in raingarden	80.52 m²	Above Ground Planter Box	1.00 m²
Warehouse 4 Roof	Connected to rainwater tank for toilet flushing	126.15 m²	Rainwater Tank	2,000 L
Warehouse 4 Driveway	Collected in raingarden	120.91 m²	Above Ground Planter Box	1.00 m²

WSUD Treatment Elements:

1. Rainwater Tanks

- **Purpose**: Harvests rainwater from warehouse roof areas.
- **Connection**: Connected to toilets for flushing in each warehouse office.
- **Specifications**: 4 × 2,000L tanks (one per warehouse).
- **Roof Area Treated**: Approx. 504.6 m² total.
- **Benefit**: Reduces potable water demand and stormwater runoff.

Construction Schedule:

- Installed during final construction phase.
- Locations as shown on plans.
- To be plumbed by a licensed plumber and connected to toilets.

Maintenance:

- Inspect inlet screens monthly; clean as needed.
- Inspect roof/gutters bi-annually; remove debris.
- Check for leaks and structural integrity every 6 months.

- Desludge tank every 3–5 years.

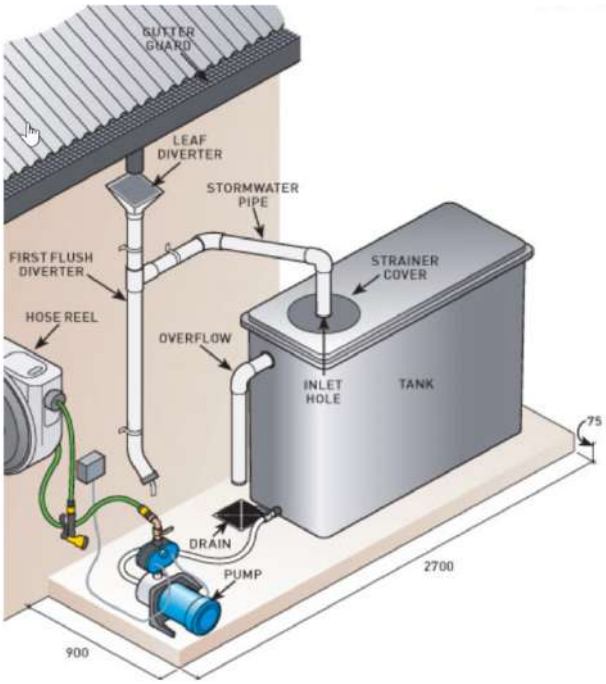


Figure 2 Typical Rain tank Installation

2. Above-Ground Planter Box Raingardens

- **Purpose**: Filters stormwater from driveways to remove pollutants.
- **Specifications**: 4 × 1.00 m² raingardens.
- **Driveway Area Treated**: Approx. 372.5 m² total.
- **Construction**: Fully lined with an impervious liner, with overflow connected to the stormwater system.
- **Benefit**: Reduces sediment and nutrient loads in runoff.

Construction Schedule:

- Installed during landscaping phase.
- Built in accordance with Melbourne Water's "Planter Box Raingarden Guidelines".
- Connected to stormwater drainage by a licensed plumber.

Maintenance:

- Check for clogging, sediment, and healthy plant growth monthly.
- Remove weeds and top up gravel mulch regularly.
- Ensure overflow pipe is unobstructed.
- Replace plants as needed.

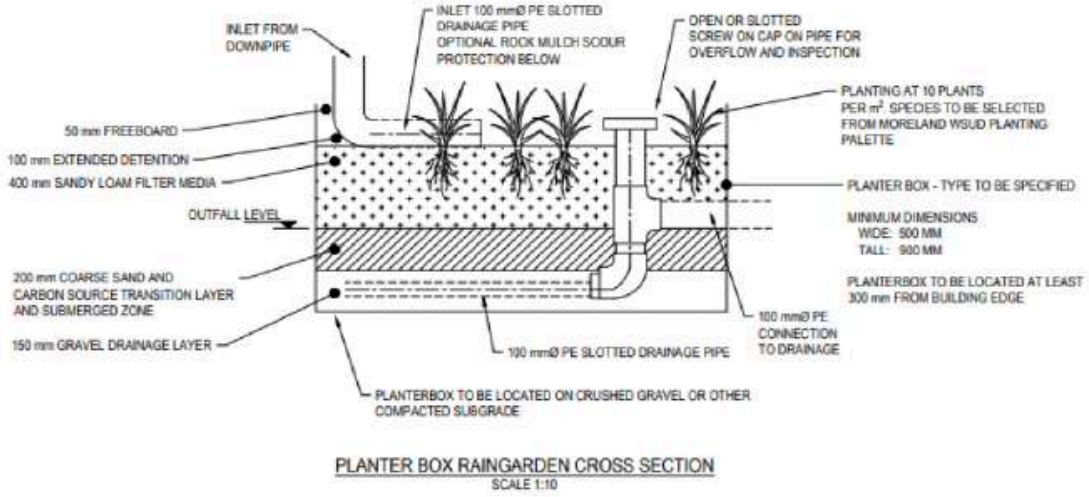


Figure 3: Typical construction of a planter box raingarden

3. Water Efficient Fixtures

- **Types**:
  - Tapware ≥5 Star WELS
  - Toilets ≥4 Star WELS
- **Connection**: Fed by rainwater tanks.
- **Benefit**: Reduces water consumption and enhances sustainability performance.

Construction Schedule:

- Installed during interior fit-out of each warehouse office.
- Coordinated with plumbing contractor.

Maintenance:

- Regular cleaning.
- Periodic checks for leaks or faulty fittings.

4. Bicycle Parking

- **Purpose**: Promotes sustainable transportation.
- **Location**: Allocated spaces for each warehouse.
- **Benefit**: Supports reduced reliance on vehicles.

Construction Schedule:

- Installed in external hardstand areas as per architectural drawings.
- Implemented toward the end of site works.

Maintenance:

- Annual inspection for corrosion or structural damage.
- Replace signage or racks if vandalised.

Maintenance Schedule for WSUD Elements:

WSUD Element	Monthly	Quarterly	**Annually**	**3–5 Years**
Rainwter Tanks	Clean nlet screens, inspect for blockages		Inspect roof, gutters, overflow, and structural integrity	Desludge tanks; service pumps as needed
Ground Raingardens	Inspect for sediment and debris buildup		Prune plants, check overflow pipe, add gravel as needed	Replace plants as needed
Non-permeable Concrete Driveway			Inspect for cracks or damage; clear drainage pathways	
Water-Efficient Landscaping	Inspect plant health, remove weeds		Replace failed plants, inspect irrigation system	Refresh mulch

Benefits of the Stormwater Management Systems for 7 – 9 Keith st Maidstone

The stormwater management systems implemented at 7-9 Keith st, serve to enhance environmental sustainability and provide multiple benefits to the property, its residents, and the surrounding community. Each element is designed to capture, treat, and manage stormwater effectively, contributing to a holistic approach to water-sensitive urban design (WSUD).

1. Rainwater Tanks

- **Potable Water Reduction**: Harvested rainwater is reused for toilet flushing, reducing reliance on mains water and cutting potable water consumption by up to 43% across the development.
- **Stormwater Volume Reduction**: Tanks store runoff during rainfall events, decreasing peak discharge and reducing the burden on the local stormwater network.
- **Cost Savings**: Lower water bills due to the reuse of captured rainwater.
- **Resilience**: Provides an alternative water source during water restrictions or drought conditions.

2. Raingardens

- **Improved Water Quality**: Raingardens filter stormwater to remove sediments, nutrients (phosphorus and nitrogen), and heavy metals before discharge into the drainage system.
- **Urban Amenity**: Enhance the visual appeal of the site with vegetated features that support biodiversity and soften the built environment.
- **Flood Mitigation**: By slowing down runoff and promoting infiltration, raingardens reduce localised flooding risk.
- **Low-Cost Maintenance**: Require relatively simple maintenance such as weeding and occasional replanting.

3. Integrated Stormwater Design

- **Best Practice Compliance**: The system achieves a STORM score of 121, exceeding the best practice target of 100, as per Melbourne Water guidelines.
- **Ecosystem Protection**: Reduced pollutant loads help protect downstream waterways, aquatic life, and natural ecosystems.
- **Infrastructure Longevity**: Lower flow and pollutant loads contribute to longer-lasting stormwater infrastructure with fewer blockages or failures.

Appendix B: Construction Site Management Plan for 7 – 9 Keith st Maidstone

This Construction Site Management Plan (CSMP) outlines the measures to be implemented during the construction of the dual occupancy development at 7-9 Keith st Maidstone. The plan ensures that the construction activities comply with best practices, reduce environmental impact, and meet all regulatory requirements.

Key Objectives:

- Erosion control
- Sediment control
- Dust suppression
- Litter management
- Waste separation
- Stockpile protection
- Vehicle hygiene
- Spill containment
- Chemical safety
- Concrete washout
- Signage compliance
- Site cleanliness
- Drain protection
- Contractor awareness
- Regulatory compliance

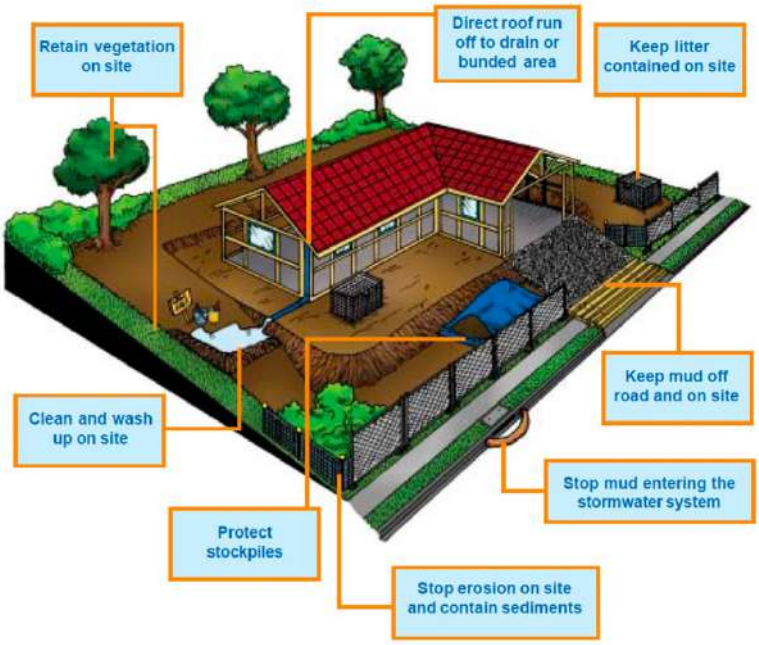


Figure 3 A diagram summary of the stormwater management techniques used on the construction site

Erosion and Sediment Control:
Before construction begins, sediment fences and catch drains will be installed to prevent soil from leaving the site. Drainage inlets will be protected to ensure they are not blocked by sediment. These systems will be inspected and maintained regularly throughout construction, especially after rainfall events.

Stockpile Management:
Soil and material stockpiles will be located away from stormwater drains and boundaries. All stockpiles will be stabilised with cover (e.g., tarpaulins) and surrounded by sediment fencing or barriers to prevent erosion and sediment transport.

Dust Control:
To reduce airborne dust, exposed soils will be watered regularly during dry and windy conditions. Construction roads and access paths will also be dampened to limit dust generation.

Vehicle Access and Wheel Washing:
Designated entry and exit points will be provided for construction vehicles. A crushed rock pad or rumble grid will be installed to reduce the tracking of mud and debris onto public roads. Wheel wash facilities will be used as needed.

Litter and Waste Management:
Covered bins will be provided on site to manage construction waste, with separate bins for recyclables. All general litter will be collected and removed daily. Waste disposal will follow local regulations and contractor agreements.

Material Storage and Chemical Handling:
Hazardous materials such as paints, fuels, and chemicals will be stored in bunded areas, under cover, and away from drainage systems. Spill kits will be readily available and all workers trained in their use.

Concrete Waste and Washout Areas:
Designated washout areas will be established for concrete trucks and mortar equipment. These areas will be located away from drains and will not allow wash water to enter the stormwater system. Hardened waste will be collected and disposed of appropriately.

Site Signage and Awareness:
Signage will be posted at the site entry to indicate the responsibilities of contractors, emergency contacts, and environmental management procedures. All site personnel will be briefed on environmental protection obligations prior to commencing work.

Compliance and Monitoring:
This plan follows best practice guidelines as outlined in “Keeping Our Stormwater Clean – A Builder’s Guide” by Melbourne Water and EPA Victoria. The site manager is responsible for the daily implementation and monitoring of these measures. Any incidents of non-compliance will be rectified immediately, and council will be notified if required.

Appendix C: BESS Report

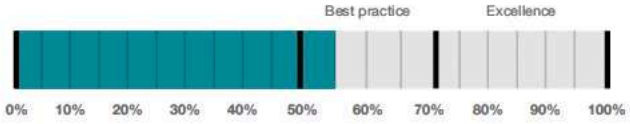
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 7 Keith St Maidstone Victoria 3012. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Maribyrnong City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

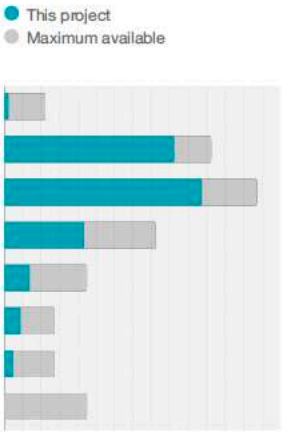


55%

Project details

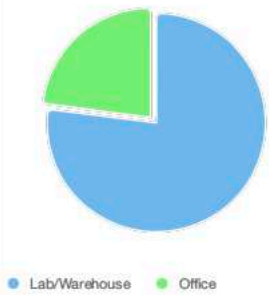
Name	7 Keith Street, Maidstone VIC, Australia
Address	7 Keith St Maidstone Victoria 3012
Project ID	D3A7449A-R1
BESS Version	BESS-9
Site type	Non-residential development
Account	patrick@clovisapp.com.au
Application no.	
Site area	1,812 m²
Building floor area	1,479 m²
Date	22 May 2025
Software version	2.1.0-B.596

Performance by category



Category	Weight	Score	Pass
Management	5%	12%	
Integrated Water Management	23%	82%	✔
Operational Energy	28%	78%	✔
Indoor Environment Quality	17%	53%	✔
Transport	9%	31%	
Waste & Resource Recovery	6%	33%	
Urban Ecology	6%	18%	
Innovation	9%	0%	

Project composition



Buildings

Name	Height	Footprint	% of total footprint
Warehouses/Offices	8400	1,302 m²	100%

Dwellings & Non Res Spaces

Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Office				
Warehouse 4	1	85.6 m²	Warehouses/Offices	5%
Warehouse 3	1	84.6 m²	Warehouses/Offices	5%
Warehouse 2	1	84.6 m²	Warehouses/Offices	5%
Warehouse 1	1	85.6 m²	Warehouses/Offices	5%
Total	**4**	**340 m²**	**23%**	
Lab/Warehouse				
Unconditioned Warehouse/Factory 4	1	286 m²	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 3	1	284 m²	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 2	1	284 m²	Warehouses/Offices	19%
Unconditioned Warehouse/Factory 1	1	286 m²	Warehouses/Offices	19%
Total	**4**	**1,138 m²**	**76%**	

Supporting Evidence

Shown on Floor Plans

Credit	Requirement	Response	Status
Management 3.2	Annotation: Individual utility meters to be provided to all individual commercial tenancies		-
Integrated Water Management 2.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)		-
Integrated Water Management 3.1	Annotation: Water efficient garden details		-
Operational Energy 3.1	Carpark with natural ventilation or CO monitoring system		-
Operational Energy 4.2	Location and size of solar photovoltaic system		-
Transport 1.4	Location of non-residential bicycle parking spaces		-
Transport 2.2	Location of car share parking space(s)		-
Waste & Resource Recovery 2.2	Location of recycling facilities		-
Urban Ecology 1.1	Location and size of communal spaces		-
Urban Ecology 2.1	Location and size of vegetated areas		-
Urban Ecology 3.2	Location of food production areas		-

Supporting Documentation

Credit	Requirement	Response	Status
Integrated Water Management 2.1	STORM report or MUSIC model		-
Operational Energy 1.1	Energy Report showing calculations of reference case and proposed buildings		-
Operational Energy 3.1	Details of either the fully natural carpark ventilation or CO monitoring system proposed		-
Operational Energy 3.7	Average lighting power density and lighting type(s) to be used		-
Operational Energy 4.2	Specifications of the solar photovoltaic system(s)		-
Indoor Environment Quality 1.4	A short report detailing assumptions used and results achieved.		-

Credit summary

Management Overall contribution 4.5%

	12%	
1.1 Pre-Application Meeting	0%	
2.3 Thermal Performance Modelling - Non-Residential	0%	
3.2 Metering - Non-Residential	100%	
3.3 Metering - Common Areas	0%	
4.1 Building Users Guide	0%	

IWM Overall contribution 22.5%

	82%	✔ Pass
1.1 Potable Water Use	64%	✔ Achieved
2.1 Stormwater Treatment	100%	✔ Achieved
3.1 Water Efficient Landscaping	100%	
4.1 Building Systems Water Use	0%	

Operational Energy Overall contribution 27.5%

	Minimum required 50%	78%	✔ Pass
1.1 Thermal Performance Rating - Non-Residential		37%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		100%	
2.6 Electrification		100%	
2.7 Energy consumption		100%	
3.1 Carpark Ventilation		100%	
3.2 Hot Water - Non-Residential		100%	
3.7 Internal Lighting - Non-Residential		100%	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A	✧ Scoped Out
		No cogeneration or trigeneration system in use.	
4.2 Renewable Energy Systems - Solar		100%	
4.4 Renewable Energy Systems - Other		N/A	✧ Scoped Out
		No other (non-solar PV) renewable energy is in use.	

IEQ Overall contribution 16.5%

	Minimum required 50%	53%	✔ Pass
1.4 Daylight Access - Non-Residential		81%	✔ Achieved
2.3 Ventilation - Non-Residential		46%	✔ Achieved
3.4 Thermal comfort - Shading - Non-Residential		15%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	
4.1 Air Quality - Non-Residential		100%	

Transport Overall contribution 9.0%

	31%	
1.4 Bicycle Parking - Non-Residential	76%	
1.5 Bicycle Parking - Non-Residential Visitor	0%	
1.6 End of Trip Facilities - Non-Residential	0%	⊘ Disabled
	Credit 1.4 must be complete first.	
2.1 Electric Vehicle Infrastructure	0%	
2.2 Car Share Scheme	100%	
2.3 Motorbikes / Mopeds	0%	

Waste & Resource Recovery **Overall contribution 5.5%**

	33%
1.1 Construction Waste - Building Re-Use	0%
2.1 Operational Waste - Food & Garden Waste	0%
2.2 Operational Waste - Convenience of Recycling	100%

Urban Ecology **Overall contribution 5.5%**

	18%
1.1 Communal Spaces	23%
2.1 Vegetation	25%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
3.2 Food Production - Non-Residential	23%

Innovation **Overall contribution 9.0%**

	0%
1.1 Innovation	0%

Credit breakdown

Management Overall contribution 4.5%

1.1 Pre-Application Meeting		0%
Score Contribution	This credit contributes 37.5% towards the category score.	
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?	
Question	Criteria Achieved ?	
Project	No	
2.3 Thermal Performance Modelling - Non-Residential		0%
Score Contribution	This credit contributes 25% towards the category score.	
Criteria	Has a preliminary facade assessment been undertaken in accordance with NCC2022 Section J4D6?	
Question	Criteria Achieved ?	
Office	No	
Lab/Warehouse	No	
Criteria	Has preliminary modelling been undertaken in accordance with either NCC2022 Section J (Energy Efficiency), NABERS or Green Star?	
Question	Criteria Achieved ?	
Office	No	
Lab/Warehouse	No	
3.2 Metering - Non-Residential		100%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Have utility meters been provided for all individual commercial tenants?	
Question	Criteria Achieved ?	
Office	Yes	
Lab/Warehouse	Yes	
3.3 Metering - Common Areas		0%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Have all major common area services been separately submetered?	
Question	Criteria Achieved ?	
Office	No	
Lab/Warehouse	No	
4.1 Building Users Guide		0%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Will a building users guide be produced and issued to occupants?
Question	Criteria Achieved ?
Project	No

IWM Overall contribution 22.5%

82% ✔ Pass

Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No
Stormwater profile	
Which stormwater modelling software are you using?:	Melbourne Water STORM tool
STORM score achieved:	121
Flow:	-
Total Suspended Solids:	-
Total Phosphorus:	-
Total Nitrogen:	-
Rainwater tank profile	
What is the total roof area connected to the rainwater tank?: Warehouse 1-4 Rainwater Tank	505 m²
Tank Size: Warehouse 1-4 Rainwater Tank	8,000 Litres
Irrigation area connected to tank: Warehouse 1-4 Rainwater Tank	-
Is connected irrigation area a water efficient garden?: Warehouse 1-4 Rainwater Tank	No
Other external water demand connected to tank?: Warehouse 1-4 Rainwater Tank	-
Fixtures, fittings & connections profile	
Building: All	Warehouses/Offices
Showerhead: All	Scope out
Bath: All	Scope out
Kitchen Taps: All	>= 5 Star WELS rating
Bathroom Taps: All	>= 5 Star WELS rating
Dishwashers: All	>= 5 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Scope out
Which non-potable water source is the dwelling/space connected to?: All	Warehouse 1-4 Rainwater Tank
Non-potable water source connected to Toilets: All	Yes
Non-potable water source connected to Laundry (washing machine): All	No
Non-potable water source connected to Hot Water System: All	No
1.1 Potable Water Use	64% ✔ Achieved

Score Contribution	This credit contributes 31.2% towards the category score.
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.
Output	Reference
Project	1534 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	1121 kL
Output	Proposed (including rainwater and recycled water use)
Project	872 kL
Output	% Reduction in Potable Water Consumption
Project	43 %
Output	% of connected demand met by rainwater
Project	49 %
Output	How often does the tank overflow?
Project	Never / Rarely
Output	Opportunity for additional rainwater connection
Project	165 kL

2.1 Stormwater Treatment	100% ✔ Achieved
Score Contribution	This credit contributes 56.2% towards the category score.
Criteria	Has best practice stormwater management been demonstrated?
Output	Min STORM Score
Project	100
Output	STORM Score
Project	121

3.1 Water Efficient Landscaping	100%
Score Contribution	This credit contributes 6.2% towards the category score.
Criteria	Will water efficient landscaping be installed?
Question	Criteria Achieved ?
Project	Yes

4.1 Building Systems Water Use	0%
Score Contribution	This credit contributes 6.2% towards the category score.
Criteria	Where applicable, have measures been taken to reduce potable water consumption by >80% in the buildings air-conditioning chillers and when testing fire safety systems?
Question	Criteria Achieved ?
Project	No

Operational Energy Overall contribution 27.5%

	Minimum required 50%	78%	✔ Pass

Project profile	
Use the BESS Deem to Satisfy (DtS) method for Non-residential spaces?:	Yes
Are you installing any renewable energy system(s) (other than solar photovoltaic)?:	No
Energy Supply:	All-electric
Solar Photovoltaic system profile	
System Size (lesser of inverter and panel capacity):	
SPVs (ALL WHs)	8.0 kW peak
SPVs (ALL OFFICES)	8.0 kW peak
Orientation (which way is the system facing)?:	
SPVs (ALL WHs)	North-East
SPVs (ALL OFFICES)	North-East
Inclination (angle from horizontal):	
SPVs (ALL WHs)	2.0 Angle (degrees)
SPVs (ALL OFFICES)	2.0 Angle (degrees)
Which Building Class does this apply to?:	
SPVs (ALL WHs)	Office
SPVs (ALL OFFICES)	Lab/Warehouse
Non-residential Deemed-to-Satisfy profile	
Do all exposed floors and ceilings (forming part of the envelope) demonstrate meeting the required NCC2022 insulation levels (total R-value upwards and downwards)?:	Yes
Does all wall and glazing demonstrate meeting the required NCC2022 facade calculator (or better than the total allowance)?:	Yes
Are heating and cooling systems within one Star of the most efficient equivalent capacity unit available, or Coefficient of Performance (CoP) & Energy Efficiency Ratios (EER) not less than 85% of the CoP & EER of the most efficient equivalent capacity unit available?:	Yes
Are water heating systems within one star of the best available, or 85% or better than the most efficient equivalent capacity unit?:	Yes

1.1 Thermal Performance Rating - Non-Residential		37%
Score Contribution	This credit contributes 34.8% towards the category score.	
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC2022 Section J)?	

2.1 Greenhouse Gas Emissions		100%
Score Contribution	This credit contributes 8.7% towards the category score.	
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?	

2.2 Peak Demand		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?	
2.6 Electrification		100%
Score Contribution	This credit contributes 13% towards the category score.	
Criteria	Is the development all-electric?	
Question	Criteria Achieved?	
Project	Yes	
2.7 Energy consumption		100%
Score Contribution	This credit contributes 17.4% towards the category score.	
Criteria	What is the % reduction in annual energy consumption against the benchmark?	
3.1 Carpark Ventilation		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	If you have an enclosed carpark, is it: (a) fully naturally ventilated (no mechanical ventilation system) or (b) 40 car spaces or less with Carbon Monoxide monitoring to control the operation and speed of the ventilation fans?	
Question	Criteria Achieved ?	
Project	Yes	
3.2 Hot Water - Non-Residential		100%
Score Contribution	This credit contributes 4.3% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?	
3.7 Internal Lighting - Non-Residential		100%
Score Contribution	This credit contributes 8.7% towards the category score.	
Criteria	Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J7D3a of the NCC 2022 Vol 1?	
Question	Criteria Achieved ?	
Office	Yes	
Lab/Warehouse	Yes	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A ◈ Scoped Out
		No cogeneration or trigeneration system in use.
This credit was scoped out	No cogeneration or trigeneration system in use.	
4.2 Renewable Energy Systems - Solar		100%

Score Contribution	This credit contributes 4.3% towards the category score.
Criteria	What % of the estimated energy consumption of the building class it supplies does the solar power system provide?
Output	Solar Power - Energy Generation per year
Office	9,059 kWh
Lab/Warehouse	9,059 kWh
Output	% of Building's Energy
Office	85 %
Lab/Warehouse	25 %

4.4 Renewable Energy Systems - Other N/A ◈ Scoped Out

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

This credit was scoped out	No other (non-solar PV) renewable energy is in use.

IEQ Overall contribution 16.5%

Minimum required 50%	53%	✔ Pass

1.4 Daylight Access - Non-Residential		81%	✔ Achieved
Score Contribution	This credit contributes 35.3% towards the category score.		
Criteria	What % of the nominated floor area has at least 2% daylight factor?		
Question	Percentage Achieved?		
Office	36 %		
Lab/Warehouse	95 %		
2.3 Ventilation - Non-Residential		46%	✔ Achieved
Score Contribution	This credit contributes 35.3% towards the category score.		
Criteria	What % of the regular use areas are effectively naturally ventilated?		
Question	Percentage Achieved?		
Office	0 %		
Lab/Warehouse	100 %		
Criteria	What increase in outdoor air is available to regular use areas compared to the minimum required by AS 1668.2:2012?		
Question	Percentage Achieved?		
Office	50 %		
Lab/Warehouse	-		
Criteria	What CO2 concentrations are the ventilation systems designed to achieve, to monitor and to maintain?		
Question	Value		
Office	-		
Lab/Warehouse	-		
3.4 Thermal comfort - Shading - Non-Residential		15%	
Score Contribution	This credit contributes 17.6% towards the category score.		
Criteria	What percentage of east, north and west glazing to regular use areas is effectively shaded?		
Question	Percentage Achieved?		
Office	50 %		
Lab/Warehouse	-		
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	

Score Contribution	This credit contributes 5.9% towards the category score.
Criteria	What percentage of regular use areas in tenancies have ceiling fans?
Question	Percentage Achieved?
Office	-
Lab/Warehouse	-

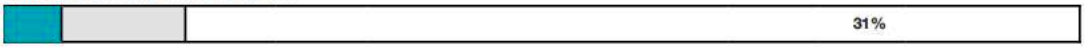
4.1 Air Quality - Non-Residential	100%
Score Contribution	This credit contributes 5.9% towards the category score.

Criteria	Do all paints, sealants and adhesives meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

Criteria	Does all carpet meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

Criteria	Does all engineered wood meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Office	Yes
Lab/Warehouse	Yes

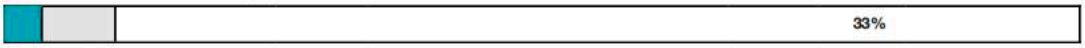
Transport Overall contribution 9.0%



1.4 Bicycle Parking - Non-Residential		76%
Score Contribution	This credit contributes 25% towards the category score.	
Criteria	Have the planning scheme requirements for employee bicycle parking been exceeded by at least 50% (or a minimum of 2 where there is no planning scheme requirement)?	
Question	Criteria Achieved ?	
Office	No	
Lab/Warehouse	Yes	
Question	Bicycle Spaces Provided ?	
Office	-	
Lab/Warehouse	8	
1.5 Bicycle Parking - Non-Residential Visitor		0%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Have the planning scheme requirements for visitor bicycle parking been exceeded by at least 50% (or a minimum of 1 where there is no planning scheme requirement)?	
Question	Criteria Achieved ?	
Office	No	
Lab/Warehouse	No	
Question	Bicycle Spaces Provided ?	
Office	-	
Lab/Warehouse	0	
1.6 End of Trip Facilities - Non-Residential		0% ⊘ Disabled
		Credit 1.4 must be complete first.
This credit is disabled	Credit 1.4 must be complete first.	
2.1 Electric Vehicle Infrastructure		0%
Score Contribution	This credit contributes 25% towards the category score.	
Criteria	Are facilities provided for the charging of electric vehicles?	
Question	Criteria Achieved ?	
Project	No	
2.2 Car Share Scheme		100%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Has a formal car sharing scheme been integrated into the development?	
Question	Criteria Achieved ?	
Project	Yes	
2.3 Motorbikes / Mopeds		0%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Are a minimum of 5% of vehicle parking spaces designed and labelled for motorbikes (must be at least 5 motorbike spaces)?
Question	Criteria Achieved ?
Project	No

Waste & Resource Recovery **Overall contribution 5.5%**



1.1 Construction Waste - Building Re-Use	0%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 Operational Waste - Food & Garden Waste	0%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	No

2.2 Operational Waste - Convenience of Recycling	100%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are the recycling facilities at least as convenient for occupants as facilities for general waste?
Question	Criteria Achieved ?
Project	Yes

Urban Ecology Overall contribution 5.5%

1.1 Communal Spaces	23%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Is there at least the following amount of common space measured in square meters : * 1m² for each of the first 50 occupants * Additional 0.5m² for each occupant between 51 and 250 * Additional 0.25m² for each occupant above 251?
Question	Common space provided
Office	36.0 m²
Lab/Warehouse	20.0 m²
Output	Minimum Common Space Required
Office	27 m²
Lab/Warehouse	53 m²

2.1 Vegetation	25%
Score Contribution	This credit contributes 50% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?
Question	Percentage Achieved ?
Project	5 %

2.2 Green Roofs	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No

2.3 Green Walls and Facades	0%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No

3.2 Food Production - Non-Residential	23%
Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	Food Production Area
Office	10.0 m²
Lab/Warehouse	6.0 m²
Output	Min Food Production Area
Office	7 m²
Lab/Warehouse	15 m²

Innovation **Overall contribution 9.0%**

	0%

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

Disclaimer

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