Environmentally Sustainable Design Assessment (ESD)

Address

133 Gower Street, Preston, VIC 3072

Project

Proposed Multi-Unit development

Responsible authority

Council: Darebin Council

Planning Reference: Not provided

Prepared by

CIVIKONS Consulting-

Mahesh Kapukotuwa (Bsc - Built Env, Dip - Building Design)

Date – 11/06/2024

Reference – ESD_VPG_R2334.

Version -1

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CONTENTS

1. INTRODUCTION

This Environmentally Sustainable Design Assessment (ESD) was prepared for the proposed multi-unit development at 133 Gower Street, Preston, VIC 3072, by considering the requirements of Sustainable Design Assessment in the Planning Process (SDAPP).

The base structure of the report is to document the Environmentally Sustainable design strategies, goals and key performance Benchmarks by using recommended tools to demonstrate the best practice as a part of the Town planning application based on supplied drawing.

2. REPORT SPECIFICATIONS AND LIMITATIONS

This report has been prepared for town planning approval purposes only and performance benchmarks and requirments are to be fully detailed during the design & construction stage.

The following requirements, and tools, with some fundamentals and assumptions, have been taken into account to demonstrate the relevant performance scores for key ESD components.

- Built Environment Sustainability Scorecard (BESS).
- Melbourne Water's STORM or InSite Water Calculator.
- Energy assessment to identify the thermal performance
- National Construction Code (NCC) Part 3.12 V2

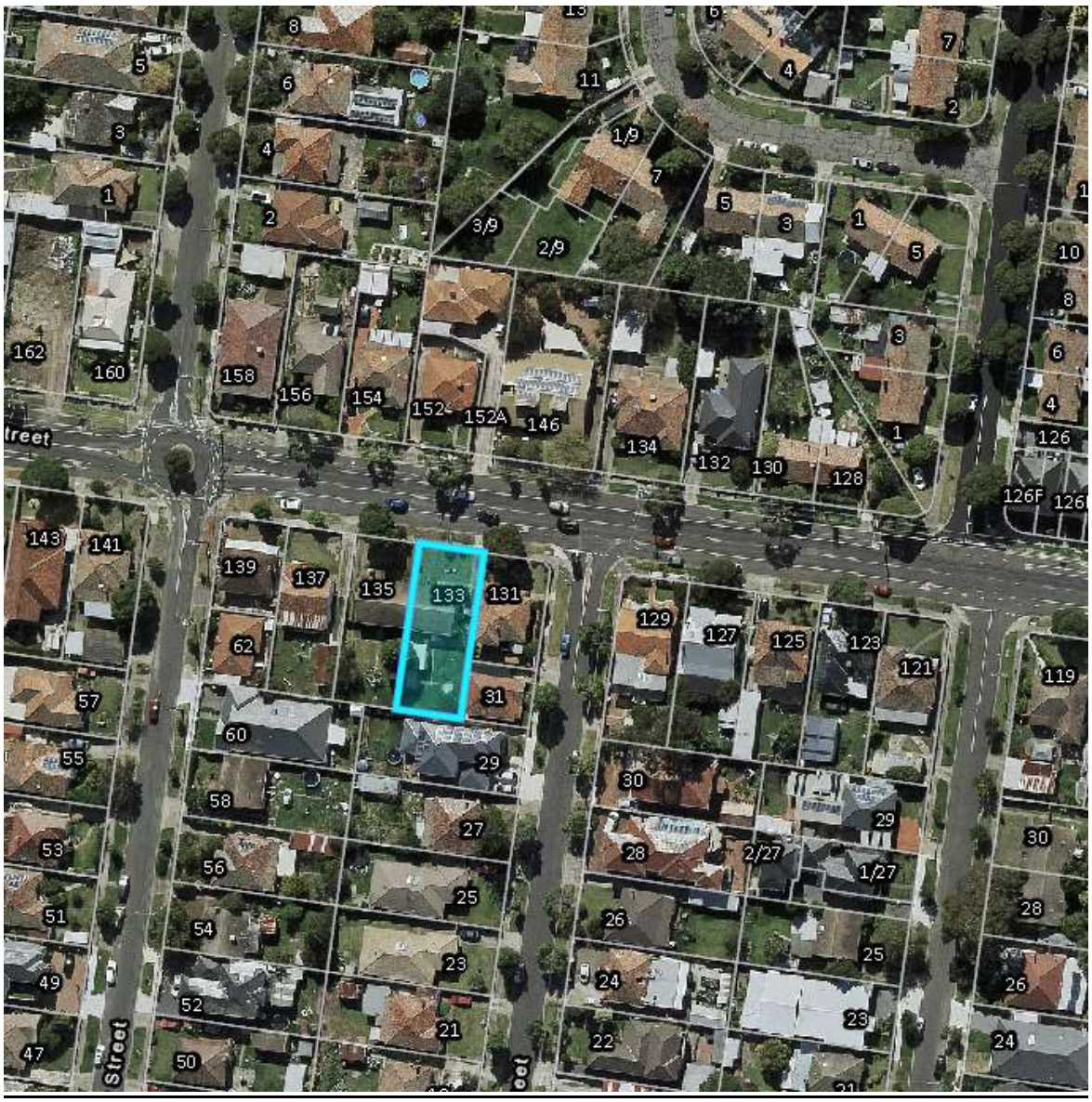
3. PROJECT & CONTEXT

The proposed development consists of 2 proposed dwellings with relevant infrastructure and other facilities.

The project has been designed with council planning scheme (Rescode) requirements to comply with standard energy efficiency and thermal comfort. however, the initiatives provided with the ESD report are always to emphasise ethos elements and or to introduce new or improved methods to comply with council ESD design criteria.

Site location and context

The proposed development site is located in Preston, and as per the Australian Building Codes Board (ABCB) Climate Zone Map, the site is within climate zone 6



MapshareVic - mapshare.vic.gov.au

4. KEY " ESD" FEATURES AND CONSIDERATIONS

MANAGEMENT

ESD professionals advise collaborating on the design for a better outcome, and preliminary thermal modelling introduces to enhance Key ESD initiatives as well as relevant ESD better practice guides to be implemented for the final design for sustainable development.

WATER

Aim to encourage reduction the potable water consumption by introducing water-efficient methods and also the fittings and fixtures.

- **Rainwater tank**

  Min 2,000L Rainwater tank connected to reusing water for gardening and toilet flushing.

- **Water-efficient fixtures & fittings**
  The proposed development includes the following water-efficient fitting and fixtures. details outlined in the BESS report.
  - Showerhead - 4 star
  - All taps -4 star
  - WC – 4 star
  - Dishwashers- 4 star
  - Washing Machine – 4 star

- **Water Efficient Landscaping**

All dwellings consist of a good -size backyard provided with a garden tap and recycled water tap to encourage residents to landscape by using less portable water.
All landscaping plants to be drought resistance plant species and less or local indigenous grass for proposed landscaping.

ENERGY

- **Thermal performance**
  All Dwellings are to achieve a minimum NatHERS 6.5-star energy rating. The following will be adopted during design development.

  Floor construction: Concrete slab
  Wall construction: Brick Veneer & lightweight cladding + Insulation
  Roof construction: Metal roof + Insulation

Window frame type: Aluminium **Glazing/min requirements: -** U-Value 4.3 & SHGC 0.53 (*U value to be similar or better & SHGC can be within 5%)*

Air leakage: Exhaust fans to be sealed / Windows and sliding doors are to be fitted with weather seals / External doors to be weather-stripped /Gaps & cracks around doors, windows and service penetrations are sealed

- **HVAC**
  All dwellings are to be fitted with air-conditioning units installed on site are within 1 star of the best system available on the market. for the requirement of report calculation 4-star energy rated units are allocated.
- **LIGHTING**
  High-efficient internal lighting with a maximum illumination power density of 4W/sqm or less, throughout the development will be used
- **HOT WATER**
  Heat pump hot water system. Units installed on site are within 1 star of the best system available on the market.
- **CLOTHES DRYER**
  All Dwellings are provided with a private outdoor cloth line

STORMWATER

The STORM calculation result of 100has been achieved for the overall development Refer to the WSUD summary for details.

INDOOR ENVIRONMENT QUALITY (IEQ)

The proposed development will be considered to contain a good level of thermal mass to improve occupant comfort and promote low allergenic and healthy internal building environments.

- Cross Flow Ventilation – all habitable rooms are achieve natural cross flow ventilation

- Throughout the development, all external glazing selections will be subject to final energy report recommendations.

- Low VOC material will use to improve the IEQ and the following considered
  Paint - below 30g/L VOC
  Flooring Materials -Total VOC < 0.5 mg/m2/hr
  Engineered timber - E1or less formaldehyde emission class
  Adhesive and sealant – Max, VOC content of 5%

TRANSPORT.

The proposed multi-unit development aims to encourage the occupants with alternative transport methods such as bicycles and adequate bicycle parking with relevant facilities has been provided within each dwelling. All garages are provided with an Electric car charging (Min 15 Amp outlet) facility to encourage the use of electric cars to minimise the greenhouse gas emissions

WASTE

A dedicated bin and storage area is provided on-site for each dwelling and dedicated day bins are to be placed on the curbside for council pick up.

No Credits were claimed for the overall score

URBAN ECOLOGY.

The proposed development consists of approximately 33% vegetation (garden area) and development plans demonstrate the required facility's potential for gardening.

INNOVATION

No Credits were claimed for the overall score

5. (WSUD)- WATER SENSITIVE URBAN DESIGN RESPONSE & "STORM Calculator" REPORT SUMMARY

construction and post-construction stages to full fill the planning requirements Both the Local Planning Policy Clause 22.02, and Clause 53.18 for best practice in stormwater management.

Stormwater objectives

- Protect and improve water quality in the urban landscape
- Protect Erosion of soil, gravel and pollutant entering the stormwater system
- Prevent litter from entering the stormwater system
- Prevent chemical and hazardous materials from entering the stormwater system
- Provide the best opportunities for stormwater to be reused

STORM Rating

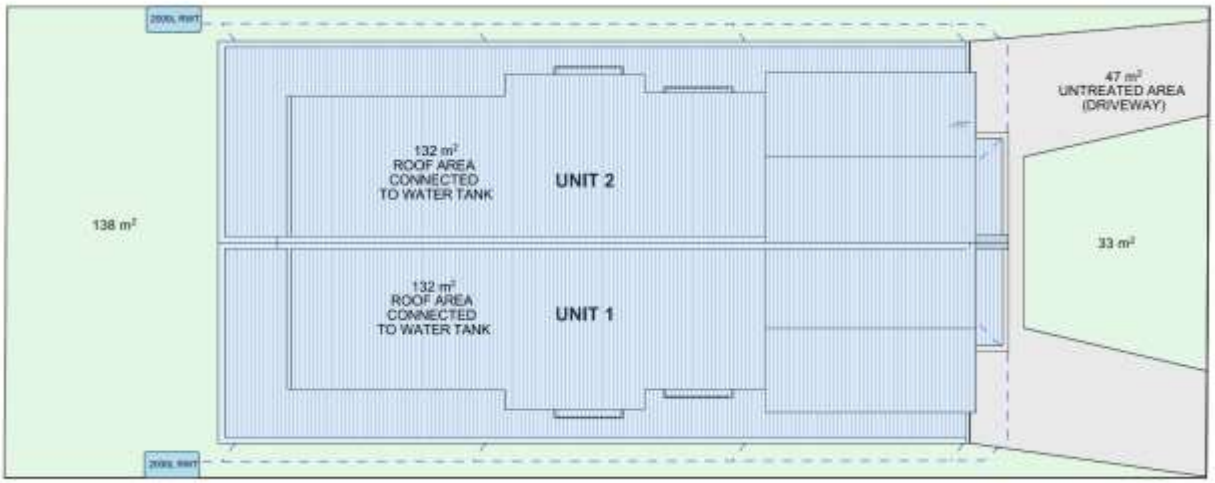
The total subject site area is 481m^2 and a total of 2 dwellings, with the overall STORM Rating of 100% achieved. The following methods and specifications are to be considered detailing the construction drawings as well as to be included in the project compliance.

Melbourne Water **STORM Rating Report**

TransactionID:	0
Municipality:	DAREBIN
Rainfall Station:	DAREBIN
Address:	133 Gower Street
	Preston
	VIC 3072
Assessor:	Mahesh Kapukotuwa
Development Type:	Residential - Multiunit
Allotment Site (m2):	481.00
STORM Rating %:	100

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Unit 1	132.00	Rainwater Tank	2,000.00	4	117.60	83.00
Unit 2	132.00	Rainwater Tank	2,000.00	4	117.60	83.00
Driveway Combined	47.00	None	0.00	0	0.00	0.00

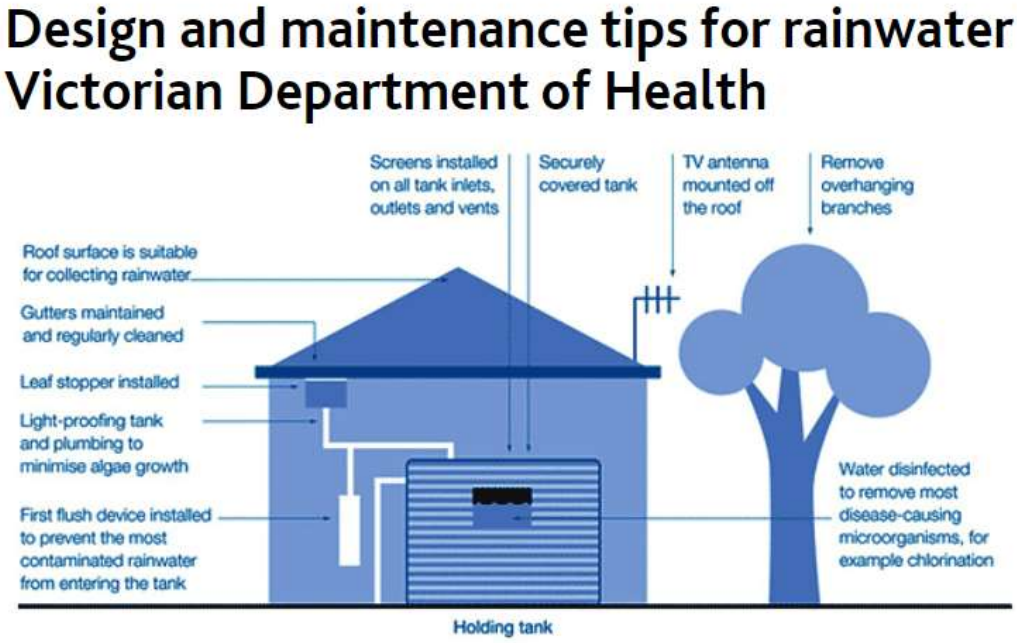
6. SITE PLAN LAYOUT - STORMWATER MANAGEMENT- APPENDIX (A)



TREATMENT TYPES

Rainwater Tanks

All possible roof runoffs are to be connected to provide each dwelling with rainwater tanks and collected water to be reused for gardening laundry and toilet flushing. The excess water will be directed to the responsible authority's legal point of disengage (LPD).

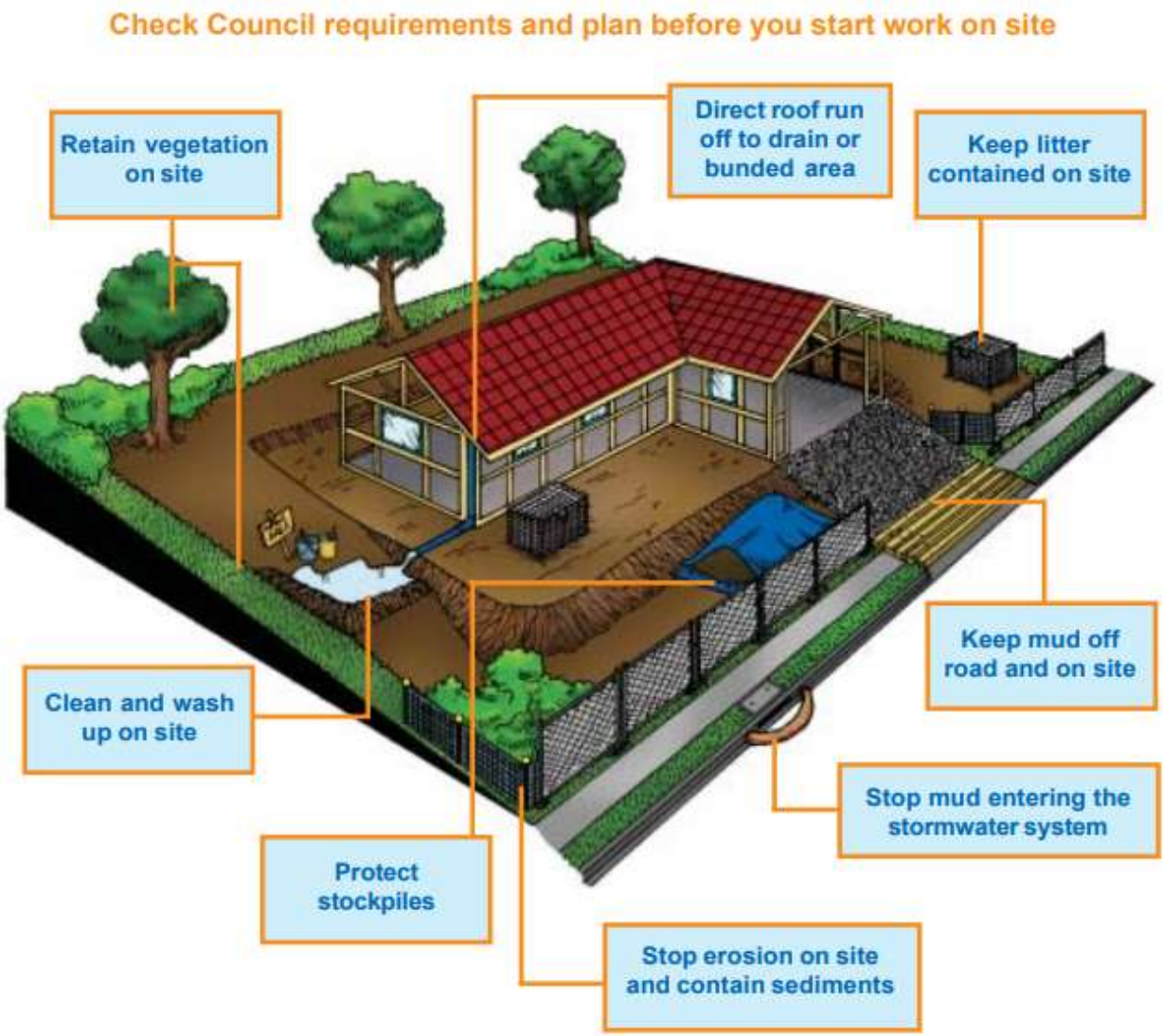


Basic Rainwater tank maintenance tops

- Check all gutters, screens and downpipe
- Check and clean the first flush device
- Check and clean the tank inlet screen
- Check and clean filters
- Check and maintain the pump in a good working order

Stormwater management during construction

There will be several steps to be taken in a construction site for stormwater management before and during construction. The following (Melbourn Water – Keep our Stormwater Clean)provides the details of best practice guidelines for stormwater management.



https://ntepa.nt.gov.au/__data/assets/pdf_file/0006/284676/guideline_keeping_stormwater_clean_builders_guide.pdf

Stormwater management rules

- Check council requirements before starting work on the site
- Stop erosion onsite and contain sediments
- Protect stockpile
- Keep mud off-road and on-site
- Keep litter contained on site
- Clean and washup on site

7. CONCLUSION

This report provides the details of ESD initiatives including WSUD management principles that need to be reflected in the proposed design/development. There will be some requirments to be carried out in both the design and construction stages. There are some assumptions and principles considered when preparing the report. This report is to be read in conjunction with the latest town planning drawings which reflect the initiatives outlined in this report.

The attached BESS report (Appendix C) will provide the key requirement under each ESD initiative.

ESD Notes included in the plans and documents

- Cooling system - Min to be 4-star energy rated appliance to be used
- Dishwasher and washing machine Min to be 4-star energy-rated appliance to be used
- All roof drains are connected to the rainwater tank. (Refer to WSUD plan)
- All driveway water is to be diverted to the selected treatment option if specified. (Refer to WSUD plan)
- Clothes Dryer – Outdoor cloth line as a part of the built contract
- landscaping - water-efficient landscaping methods and plants to be used.
- Vegetation area to be provided for each dwelling.
- Garden taps are to be provided in each dwelling.
- All Toilet, Bath, Shower and Kitchen taps to be minimum 4 Star WELS rating.
- Rainwater tank to be concerted to each dwelling toilet flushing and garden taps.
- An electrical outlet is to be provided in all garages for E-vehicle charging.
- All external lighting is to be controlled by a motion detector
- Bicycle parking is to be provided within or in proximity to each dwelling.

8. REFERENCE AND RESOURCES

- Environmentally Sustainable Development Policy -Local council
- Tools Note - BESS
- Your Home, Australia's most comprehensive guide to environmentally sustainable homes -https://www.yourhome.gov.au/water/outdoor-water-use
- Water data and education – Melbourne water
- How to Conserve Water in a Garden - https://www.wateringmygarden.com/
- Green home guide – Low VOC Building Materials
- Sustainability Victoria – Sustainable building material
- https://soe.environment.gov.au/ - Volatile Organic Compounds
- EPA Victoria – Low Emission strategy

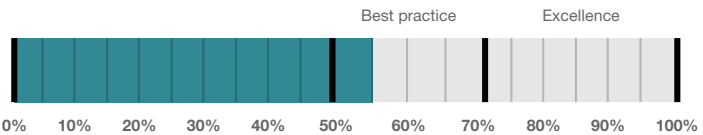
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 133 Gower Street, Preston, VIC 3072 Preston Victoria 3072. 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 Darebin 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

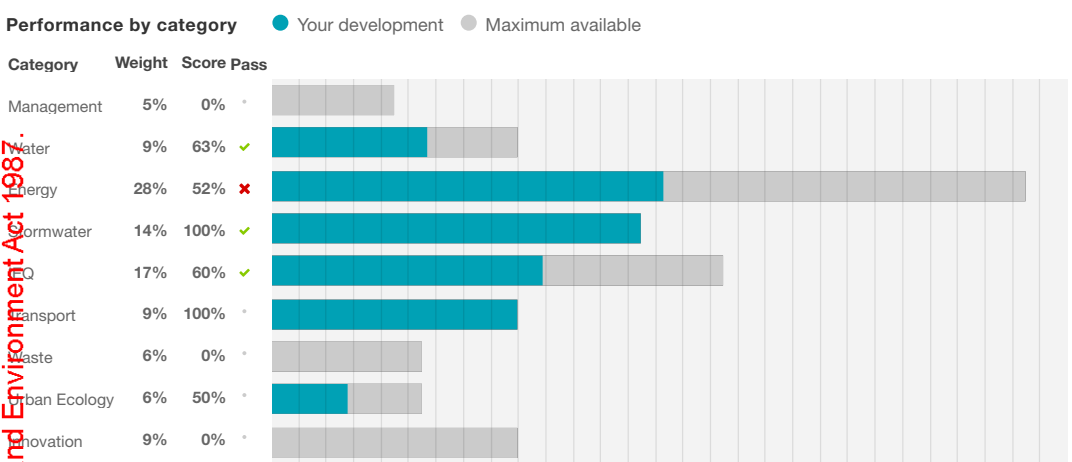


55%

Project details

Address	133 Gower Street, Preston, VIC 3072 Preston Victoria 3072
Project no	995E631C-R1
BESS Version	BESS-8
Site type	Multi dwelling (dual occupancy, townhouse, villa unit etc)
Account	civikonsaus@gmail.com
Application no.	P226/2023
Site area	481.00 m²
Building floor area	476.00 m²
Date	12 June 2024
Software version	1.8.1-B.407

Performance by category



Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	% of total area
Townhouse			
Unit 2	1	238 m²	50%
Unit 1	1	238 m²	50%
Total	**2**	**476 m²**	**100%**

Supporting information

Floorplans & elevation notes

Credit	Requirement	Response	Status
Water 3.1	Annotation: Water efficient garden details	To be printed ESD notes - Development plan	✔
Energy 3.3	Annotation: External lighting controlled by motion sensors	To be printed ESD notes - Development plan	✔
Energy 3.4	Location of clothes line (if proposed)	To be printed Development plan	✔
Stormwater 1.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)	To be printed Development plan	✔
IEQ 2.2	Annotation: Dwellings designed for 'natural cross flow ventilation' (If not all dwellings, include a list of compliant dwellings)		-
IEQ 3.1	Annotation: Glazing specification (U-value, SHGC)	To be printed ESD report	✔
Transport 1.1	Location of residential bicycle parking spaces	To be printed Development plan	✔
Transport 2.1	Location of electric vehicle charging infrastructure	To be printed Development plan	✔
Urban Ecology 2.1	Location and size of vegetated areas	To be printed Development plan	✔

Supporting evidence

Credit	Requirement	Response	Status
Energy 3.5	Average lighting power density and lighting type(s) to be used	To be printed ESD Report ESD Report	✔
Stormwater 1.1	STORM report or MUSIC model	To be printed ESD Report ESD Report	✔
IEQ 2.2	A list of dwellings with natural cross flow ventilation	To be printed Floor plan .	✔
IEQ 3.1	Reference to floor plans or energy modelling showing the glazing specification (U-value and Solar Heat Gain Coefficient, SHGC)	To be printed ESD Report ESD Report	✔

Credit summary

Management Overall contribution 4.5%

		0%
1.1 Pre-Application Meeting		0%
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		0%
4.1 Building Users Guide		0%

Water Overall contribution 9.0%

	Minimum required 50%	63%	✔ Pass
1.1 Potable Water Use Reduction		55%	
3.1 Water Efficient Landscaping		100%	

Energy Overall contribution 27.5%

	Minimum required 50%	52%	✔ Pass
1.2 Thermal Performance Rating - Residential		0%	✖ Not Achieved
2.1 Greenhouse Gas Emissions		0%	
2.6 Electrification		100%	
2.7 Energy consumption		100%	
3.3 External Lighting		100%	
3.4 Clothes Drying		100%	
3.5 Internal Lighting - Houses and Townhouses		100%	
4.4 Renewable Energy Systems - Other		N/A	⟡ Scoped Out
		No other (non-solar PV) renewable energy is in use.	
4.5 Solar PV - Houses and Townhouses		0%	⊘ Disabled
		No solar PV renewable energy is in use.	

Stormwater Overall contribution 13.5%

	Minimum required 100%	100%	✔ Pass
1.1 Stormwater Treatment		100%	

IEQ Overall contribution 16.5%

	Minimum required 50%	60%	✔ Pass
2.2 Cross Flow Ventilation		100%	
3.1 Thermal comfort - Double Glazing		100%	
3.2 Thermal Comfort - External Shading		0%	
3.3 Thermal Comfort - Orientation		0%	

Transport Overall contribution 9.0%

		100%
1.1 Bicycle Parking - Residential		100%
1.2 Bicycle Parking - Residential Visitor		N/A Scoped Out
		No reason provided
2.1 Electric Vehicle Infrastructure		100%

Waste Overall contribution 5.5%

		0%
1.1 - Construction Waste - Building Re-Use		0%
2.1 - Operational Waste - Food & Garden Waste		0%

Urban Ecology Overall contribution 5.5%

		50%
2.1 Vegetation		100%
2.2 Green Roofs		0%
2.3 Green Walls and Facades		0%
2.4 Private Open Space - Balcony / Courtyard Ecology		0%
3.1 Food Production - Residential		0%

Innovation Overall contribution 9.0%

		0%
1.1 Innovation		0%

Credit breakdown

Management Overall contribution 0%

1.1 Pre-Application Meeting		0%
Score Contribution	This credit contributes 50.0% 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	
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		0%
Score Contribution	This credit contributes 33.3% towards the category score.	
Criteria	Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?	
Question	Criteria Achieved ?	
Townhouse	No	
4.1 Building Users Guide		0%
Score Contribution	This credit contributes 16.7% towards the category score.	
Criteria	Will a building users guide be produced and issued to occupants?	
Question	Criteria Achieved ?	
Project	No	

Water

Overall contribution 6% Minimum required 50%

Water Approach	
What approach do you want to use for Water?:	Use the built in calculation tools
Project Water Profile Question	
Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No
Are you installing a rainwater tank?:	Yes
Water fixtures, fittings and connections	
Showerhead: All	4 Star WELS (>= 4.5 but <= 6.0)
Bath: All	Medium Sized Contemporary Bath
Kitchen Taps: All	>= 4 Star WELS rating
Bathroom Taps: All	>= 4 Star WELS rating
Dishwashers: All	>= 4 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Occupant to Install
Which non-potable water source is the dwelling/space connected to?:	
Unit 1	Unit 1
Unit 2	Unit 2
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
Rainwater Tanks	
What is the total roof area connected to the rainwater tank?:	
Unit 1	132 m²
Unit 2	132 m²
Tank Size:	
Unit 1	2,000 Litres
Unit 2	2,000 Litres
Irrigation area connected to tank:	
Unit 1	42.0 m²
Unit 2	43.0 m²
Is connected irrigation area a water efficient garden?:	
Unit 1	Yes
Unit 2	Yes
Other external water demand connected to tank?:	
Unit 1	100 Litres/Day
Unit 2	100 Litres/Day

1.1 Potable Water Use Reduction		55%
Score Contribution	This credit contributes 83.3% towards the category score.	
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.	
Output	Reference	
Project	610 kL	
Output	Proposed (excluding rainwater and recycled water use)	
Project	524 kL	
Output	Proposed (including rainwater and recycled water use)	
Project	384 kL	
Output	% Reduction in Potable Water Consumption	
Project	36 %	
Output	% of connected demand met by rainwater	
Project	100 %	
Output	How often does the tank overflow?	
Project	Very Often	
Output	Opportunity for additional rainwater connection	
Project	185 kL	

3.1 Water Efficient Landscaping		100%
Score Contribution	This credit contributes 16.7% towards the category score.	
Criteria	Will water efficient landscaping be installed?	
Question	Criteria Achieved ?	
Project	Yes	

Energy

Overall contribution 15% Minimum required 50%

Dwellings Energy Approach	
What approach do you want to use for Energy?:	Use the built in calculation tools

Project Energy Profile Question	
Are you installing any solar photovoltaic (PV) system(s)?:	No
Are you installing any other renewable energy system(s)?:	No
Energy Supply:	All-electric

Dwelling Energy Profiles	
Below the floor is: All	Ground or Carpark
Above the ceiling is: All	Outside
Exposed sides: All	3
NatHERS Annual Energy Loads - Heat: All	94.0 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	20.9 MJ/sqm
NatHERS star rating: All	6.5
Type of Heating System: All	Reverse cycle space
Heating System Efficiency: All	4 Stars (2011 MEPS)
Type of Cooling System: All	Refrigerative ducted
Cooling System Efficiency: All	Current Default / MEPS
Type of Hot Water System: All	Electric Heat Pump Band 4
% Contribution from solar hot water system: All	0 %
Clothes Line: All	Private outdoor clothesline
Clothes Dryer: All	No clothes dryer

1.2 Thermal Performance Rating - Residential — 0% ✖ Not Achieved

Score Contribution	This credit contributes 17.6% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Townhouse	6.5 Stars

2.1 Greenhouse Gas Emissions — 0%

Score Contribution	This credit contributes 17.6% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Townhouse	7,032 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Townhouse	6,464 kg CO2
Output	% Reduction in GHG Emissions
Townhouse	8 %

2.6 Electrification — 100%

Score Contribution	This credit contributes 17.6% towards the category score.
Criteria	Is the development all-electric?
Question	Criteria Achieved?
Project	Yes

2.7 Energy consumption		100%	
Score Contribution	This credit contributes 23.5% towards the category score.		
Criteria	What is the % reduction in annual energy consumption against the benchmark?		
Output	Reference Building with Reference Services (BCA only)		
Townhouse	63,452 MJ		
Output	Proposed Building with Proposed Services (Actual Building)		
Townhouse	27,377 MJ		
Output	% Reduction in total energy		
Townhouse	56 %		
3.3 External Lighting		100%	
Score Contribution	This credit contributes 2.9% towards the category score.		
Criteria	Is the external lighting controlled by a motion detector?		
Question	Criteria Achieved ?		
Townhouse	Yes		
3.4 Clothes Drying		100%	
Score Contribution	This credit contributes 5.9% towards the category score.		
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?		
Output	Reference		
Townhouse	1,369 kWh		
Output	Proposed		
Townhouse	274 kWh		
Output	Improvement		
Townhouse	79 %		
3.5 Internal Lighting - Houses and Townhouses		100%	
Score Contribution	This credit contributes 2.9% towards the category score.		
Criteria	Does the development achieve a maximum illumination power density of 4W/sqm or less?		
Question	Criteria Achieved?		
Townhouse	Yes		
4.4 Renewable Energy Systems - Other		N/A	✧ Scoped Out
This credit was scoped out	No other (non-solar PV) renewable energy is in use.		
4.5 Solar PV - Houses and Townhouses		0%	⊘ Disabled
This credit is disabled	No solar PV renewable energy is in use.		

Stormwater

Overall contribution 14% Minimum required 100%

Which stormwater modelling software are you using?:	Melbourne Water STORM tool
1.1 Stormwater Treatment	100%
Score Contribution	This credit contributes 100.0% towards the category score.
Criteria	Has best practice stormwater management been demonstrated?
Annotation	InSite Water – Integrated Water Management - tool Used
Question	STORM score achieved
Project	100
Output	Min STORM Score
Project	100

IEQ

Overall contribution 10% Minimum required 50%

2.2 Cross Flow Ventilation	100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are all habitable rooms designed to achieve natural cross flow ventilation?
Question	Criteria Achieved ?
Townhouse	Yes
3.1 Thermal comfort - Double Glazing	100%
Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Is double glazing (or better) used to all habitable areas?
Question	Criteria Achieved ?
Townhouse	Yes
3.2 Thermal Comfort - External Shading	0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Is appropriate external shading provided to east, west and north facing glazing?
Question	Criteria Achieved ?
Townhouse	No
3.3 Thermal Comfort - Orientation	0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are at least 50% of living areas orientated to the north?
Question	Criteria Achieved ?
Townhouse	No

Transport

Overall contribution 9%

1.1 Bicycle Parking - Residential		100%
Score Contribution	This credit contributes 50.0% towards the category score.	
Criteria	How many secure and undercover bicycle spaces are there for residents?	
Question	Bicycle Spaces Provided ?	
Townhouse	2	
Output	Min Bicycle Spaces Required	
Townhouse	2	

1.2 Bicycle Parking - Residential Visitor		N/A	Scoped Out
This credit was scoped out	None		

2.1 Electric Vehicle Infrastructure		100%
Score Contribution	This credit contributes 50.0% towards the category score.	
Criteria	Are facilities provided for the charging of electric vehicles?	
Question	Criteria Achieved ?	
Project	Yes	

Waste

Overall contribution 0%

1.1 - Construction Waste - Building Re-Use		0%
Score Contribution	This credit contributes 50.0% 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 50.0% towards the category score.	
Criteria	Are facilities provided for on-site management of food and garden waste?	
Question	Criteria Achieved ?	
Project	No	

Urban Ecology Overall contribution 3%

2.1 Vegetation		100%
Score Contribution	This credit contributes 50.0% 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	33 %	

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	

2.4 Private Open Space - Balcony / Courtyard Ecology		0%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	Is there a tap and floor waste on every balcony and courtyard (including any roof terraces)?	
Question	Criteria Achieved ?	
Townhouse	No	

3.1 Food Production - Residential		0%
Score Contribution	This credit contributes 12.5% towards the category score.	
Criteria	What area of space per resident is dedicated to food production?	
Question	Food Production Area	
Townhouse	0.0 m²	
Output	Min Food Production Area	
Townhouse	2 m²	

Innovation Overall contribution 0%

1.1 Innovation		0%
Score Contribution	This credit contributes 100.0% towards the category score.	
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?	