Sustainability Management Plan

234 Lygon Street, Brunswick East

08th October 2026

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Melbourne Sustainability Consultants.

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Document History

Version	Date	Status	Author	Approved
0	30/09/2026	First Issue	YL	DM
1	01/10/2026	Updated report as per client' comments	YL	DM
2	08/10/2026	Updated report as per client' comments	YL	DM

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Introduction & Council's Requirements

Melbourne Sustainability Consultants has been commissioned to provide guidance on achieving environmentally Sustainable Development outcomes for the proposed residential development located at 234 Lygon Street, Brunswick East.

The assessment is being carried out in compliance with Merri-bek City Council's sustainability requirements specifically addressing Planning Policy Clause 15.01-2L-02 *Environmentally Sustainable Development*.

Clause 15.01-2L-02 of the policy outlines the key categories that Merri-bek City has identified as crucial to be addressed in the assessment. These categories include Energy Performance, Water Resources, Stormwater Management, Indoor Environment Quality, Construction, Building & Waste Management, Building Materials, Transport, and Urban Ecology.

Stormwater quality management and its impact on the environment have been acknowledged by Merri-bek City Council. As per the requirements of Clause 53.18 *Stormwater Management in Urban Development,* this report presents a solution to address the quality aspect of stormwater management.

Site & Proposed Development Description

The 1275m^2 site is located at 234 Lygon Street, Brunswick East within Merri-bek local authority. The site currently contains building as shown in the image below:



Figure 1: Site location and surroundings sourced from Google Maps.

The proposal consists of the development of the site into a seven-storey mixed-use development, comprising a ground-floor retail tenancy and six storeys of residential apartments.

ESD Assessment Tools

BESS

BESS has been built and is maintained by local governments and is the only dedicated tool in Victoria for assessing sustainable design at the planning permit stage.

BESS evaluates the energy and water efficiency, thermal comfort, and overall environmental sustainability performance of new buildings or modifications. It was created to ensure that new development adheres to sustainability requirements as part of a planning permit application.

A BESS assessment has been conducted for the proposed development, providing a benchmark for the level of sustainability achieved by the project in line with the SDAPP 10 Key Sustainable Building Categories.

Each target area within the BESS tool typically receives a score ranging from 1% to 100%. To meet the energy, water, stormwater, and IEQ requirements, a minimum score of 50% is necessary. An overall project score of 50% represents 'Best Practice,' while a score above 70% represents 'Excellence.

BLUE FACTOR

The BLUE FACTOR calculator is a tool developed by The Department of Energy, Environment and Climate Action (DEECA) and Microburst Software to assist with the design and assessment of stormwater management systems. The calculator enables users to determine the effectiveness of stormwater treatment measures in removing pollutants from stormwater runoff, thereby protecting waterways and aquatic ecosystems. Blue Factor is the successor to STORM and can already be used to replace it as an accepted tool.

The BLUE FACTOR assessment can be found in Appendix 1.

Summary of Initiatives

Category	Requirement
Management	80% of all construction and demolition waste to be diverted from landfill
	Separate utility meter for each unit
Water Efficiency	Minimum WELS rating of fittings and fixtures: 4 Star Toilets / 5 Star Taps / 4 Star (6.0-7.5 L/min) Showerhead and 5 Star Dishwasher
	4,000L tank for the development collecting water from the roof– Water to be used for toilet flushing and laundry in all units and retail tenancy
Energy Efficiency	NCC 2022 section J commitment to meet requirement with 10% increase on minimum floor and ceiling insulation for commercial part
	Illumination power densities to meet NCC 2022 section J7D3 requirements for commercial
	Maximum 4 W/m^2 lighting density within the apartment units
	Sensors (motion, daylight, timers) for external and common area lighting
	Central Electric heat pump hot water system
	Minimum 7.0 Star average NatHERS rating
	HVAC system chosen within one star of the best available product in the range at the time of purchase or 15% most efficient available products if no star rating is available
	6kW Solar PV on the roof
Stormwater	4,000L tank for the development collecting water from the roof– Water to be used for toilet flushing and laundry in all units and retail tenancy
IEQ	Glazing with minimum 60% VLT throughout the apartments and 2.7m ceiling in all bedrooms and living rooms
	Mechanical ventilation to provide fresh air rates 50% higher than minimum from AS1668 or to maintain CO2 level below 800ppm for commercial
	All paint, adhesives, sealants and flooring to be low VOC – refer to Appendix 2 for limits
	All engineered wood will be low formaldehyde with E0 or better certification
Transport	Total 13 bikes spaces for apartment residents
Waste	3-bin system (Rubbish, Recycling, FOGO) + Provision of space for future glass waste
Urban Ecology	Access to tap and floor waste in each Balcony
Materials	Timber framing if used to be certified PEFC, AFS or FSC – No rainforest timber to be used
	Steel to be sourced from steel maker with ISO 14001 facility a member of the World Steel Association's (WSA) Climate Action Program (CAP).
	Carpet and underlay with third-party sustainable certification (GECA, Carpet institute ECS etc.)

Initiatives listed below should be reflected on TP drawings either graphically on the plan (e.g. bike spaces, RWT etc.) or with a clear note. All WSUD initiatives listed in Appendix 1 should be clearly noted on drawings including all areas diverting to the proposed treatment (e.g. RWT, raingarden etc.) – Refer to Appendix 1.

1. Construction and Building Management

Effective construction and building management practices are crucial for sustainable development. By minimizing construction waste and effectively monitoring building performance, these practices can significantly reduce the environmental impact of the development and enhance its long-term sustainability.

Initiative	Description	Reference
Metering and Monitoring	Separate utility meters (water and electricity) will be provided for the apartment and commercial tenancies.	BESS Man 3.2
Construction Waste Management	On-site staff will receive a construction waste management plan during a site orientation session to minimise on-site waste generation and ensure proper disposal. A minimum of 80% of all construction and demolition waste created on-site will be reused or recycled.	N/A
Construction Environmental Management	The builder will identify environmental risks associated with construction and implement management strategies such as effective erosion and sediment control measures throughout construction and operation. They will also ensure that earthworks are staged appropriately to avoid bare earthworks in high-risk areas of the site during periods of dominant rainfall.	Clause 53.18

2. Water Resources

Maximising water efficiency in developments helps conserve water resources, reduces the strain on local water systems, and lower water bills for homeowners, making it an environmentally responsible and economically beneficial choice for developers. Additionally, implementing water-efficient practices and technologies can also contribute to a more sustainable and resilient community.

Initiative	Description	Reference
Fixtures and Fittings	The development will be provided with efficient fittings and fixtures. This will all be for a reduction of potable water use onsite. The following minimum Water Efficiency Labelling Scheme (WELS) star rating will be specified: • 4-Star Toilets • 5-Star Taps (Kitchen and bathrooms) • 4-Star (6.0-7.5 L/min) Showerheads All appliances provided as part of the base building will be chosen within one WELS star of the best available: • 5-Star Dishwasher	BESS Wat 1.1
Rainwater Collection and use	Part of the roof of the development will have rainwater runoff collected and stored in tank with total effective capacity of 4,000L. Rainwater collected will be utilised for toilet flushing and laundry in all units, significantly reducing the development's stormwater impact and aiding in compliance with the BLUE FACTOR calculator (refer to Appendix 1).	BESS Wat 1.1 BESS Storm 1.1

3. Energy Efficiency

Maximizing energy efficiency in developments reduces greenhouse gas emissions and lowers utility costs for homeowners, making it an environmentally responsible and economically beneficial choice for developers. In addition, energy-efficient buildings are often more comfortable and healthier to live in, improving the quality of life for occupants.

Initiative	Description	Reference
NCC Section J Commitment (Commercial)	A section J (NCC 2022) DTS assessment will occur for the development (prior to construction) with the following commitments: • 10% improvement on NCC 2022 floor and ceiling insulation levels (Total R-Value); • Wall insulation and glazing system within NCC 2022 DTS requirements • Heating/cooling system to be chosen within one star of the best available product in the range at the time of purchase or COP/EER chosen within the best 15% of available products if no star rating is available; and • Water heating system to be chosen within one star of the best available product in the range at the time of purchase or the 15% most efficient available products if no star rating is available. Alternatively, an NCC JV3 modelling will be undertaken prior to construction. The JV3 modelling will demonstrate compliance with building fabric requirement when compared to an 'improved reference building' that will include the 10% improvement on NCC 2022 DTS floor and ceiling insulation levels. The JV3 approach described above would produce a lower score under BESS Energy 1.1 than the DTS approach however the BESS assessment submitted would maintain BESS compliance with the slightly decreased score.	BESS Ene 1.2 BESS Ene 2.1 BESS Ene 2.3
NatHERS Commitment – Thermal Performance (residential)	The building approval stage will include the completion of energy ratings, with a commitment to meeting energy efficiency requirements of a minimum **7.0-Star average energy rating.** This will be accomplished by installing appropriate insulation levels in external walls, roofs, and floors, as well as using double-glazed windows in all habitable rooms. 7.0-star average results have been assumed in BESS.	BESS Ene 1.2 BESS Ene 2.1 BESS Ene 2.2 BESS Ene 2.3

Initiative	Description	Reference
Hot water System	A central electric heat pump hot water system will be installed for the development.	BESS Ene 3.2
HVAC System	Heating and cooling in the units or commercial space will be provided with a reverse-cycle air-conditioner. HVAC unit will be chosen within one star of the best available (minimum 3 Star in apartments) in a similar range at the time of purchase or will be chosen with COP/EER within 15% of the best available product if no star rating is available.	BESS Ene 2.3
All Electric Development	The development will be all-electric and will not have a gas connection. This will align the development with Councils and state targets for net zero and reduction of fossil fuel usage.	BESS Ene 2.6
Internal Lighting – Apartment units	LED lighting will be implemented throughout each unit resulting in lower energy consumption for artificial lighting in apartments. Each residential unit will reduce lighting power densities by 20% from the NCC requirement (<4W/m^2). Additionally, the utilisation of light internal colours will enhance daylight penetration, leading to a decreased reliance on artificial lighting.	BESS Ene 3.6 BESS Ene 3.7
Internal Lighting – retail tenancy	LED lighting will be implemented throughout the retail tenancy resulting in lower energy consumption for artificial lighting. The development will commit to meet the maximum illumination power densities from NCC 2022 part J7D3. Additionally, the utilisation of light internal colours will enhance daylight penetration, leading to a decreased reliance on artificial lighting.	BESS Ene 3.7
Lighting Controls and External Lighting	LED lighting will be implemented for all external lighting. External lighting, common areas and spaces used intermittently will be controlled with motion sensors and/or daylight sensors reducing overall use and	BESS Ene 3.6 BESS Ene 3.7

Initiative	Description	Reference
	energy consumption. Ventilation in these areas will also be controlled with these sensors.	
Solar PV System	The development will have a 6kW solar photovoltaic system installed on its roof to generate renewable energy. This measure will reduce energy consumption for the development.	BESS Ene 4.5

4. Stormwater Quality Management

WSUD (Water Sensitive Urban Design) is crucial for developments because it helps manage stormwater runoff, reduces flooding risks, and improves water quality by using natural systems to filter and treat water. Additionally, WSUD can enhance the aesthetic value of a development by incorporating green infrastructure and providing green spaces for occupants to enjoy.

Initiative	Description	Reference
Rainwater Collection and use	Part of the roof of the development will have rainwater runoff collected and stored in tank with total effective capacity of 4,000L. Rainwater collected will be utilised for toilet flushing and laundry in all units, significantly reducing the development's stormwater impact and aiding in compliance with the BLUE FACTOR calculator (refer to Appendix 1).	BESS Wat 1.1 BESS Storm 1.1

5. Indoor Environment Quality

IEQ (Indoor Environmental Quality) is essential for development because it affects the health, comfort, and well-being of occupants by addressing factors such as air quality, temperature, lighting, and noise levels. Providing a high-quality indoor environment can also increase the value and desirability of a development, leading to higher occupancy rates and property values.

Initiative	Description	Reference
Daylight Access - Apartment	Light internal colours will be used for the development which will result in better internal reflection of natural light, enhancing the penetration of daylight through windows or other openings. Large windows will be installed in the living room which will increase natural light access. All bedrooms are provided with external windows. All glazing proposed in the development will have minimum 60% Visible Light Transmittance (VLT) to improve daylight access as well as 2.7m ceiling height throughout habitable rooms. Compliance with best practice daylight amenities has been assessed using the BESS daylight Built-In calculator. Input and results can be found in Appendix 4.	BESS IEQ 1.1 BESS IEQ 1.2 BESS IEQ 1.5
Daylight Access – retail	Light internal colours will be used for the development which will result in better internal reflection of natural light, enhancing the penetration of daylight through windows or other openings. Large windows will be installed in retail which will increase natural light access. Windows will be provided on multiple façades wherever possible and room depth will be limited to improve daylight access even further. The development has achieved best practice requirement as demonstrated in the daylight hand calculation prepared in Appendix 5.	BESS IEQ 1.4
Natural Ventilation - Apartment	All units will be provided with openable windows, allowing for natural ventilation. 100% of apartments will be achieved effective crossflow ventilation with openable windows on different facades. Magnetic door stops and catches will be provided to internal doors in each dwelling to	BESS IEQ 2.2

Initiative	Description	Reference
	help create effective breeze paths through the units wherever possible.	
Mechanical Ventilation	Mechanical ventilation will be provided to the retail tenancy to provide fresh air with a minimum 50% improvement of minimum rates from AS1668. Alternatively, mechanical ventilation will be provided to maintain CO2 levels below 800ppm.	BESS IEQ 2.3
Low VOC and Low Formaldehyde	All paints, adhesives and sealants and flooring should not exceed the limits outlined in Appendix 3. Alternatively, products will be selected with no VOCs. All engineered wood products will have 'low' formaldehyde emissions, certified as E0 or better or with no formaldehyde. Providers such as Polytec and Laminex Australia offer E0 or better products in their range.	Clause 15.01-2L Minimum Requirement

6. Sustainable Transport

Sustainable transport such as cycling and public transport is essential for residential developments as it reduces the environmental impact of commuting while improving air quality and decreasing traffic congestion. Additionally, it promotes healthy lifestyles by encouraging physical activity and reducing sedentary behaviours associated with car dependence.

Initiative	Description	Reference
Bike Parking	The development will be provided with total 13 bicycle parking within the building.	BESS Tran 1.1

7. Operational Waste Management

Effective operational waste management is vital for developments to minimise the amount of waste generated, reduce environmental impacts, and improve sustainability by promoting recycling and composting. Implementing efficient waste management practices can also lower operating costs, increase efficiency, and enhance the overall liveability of the development.

Initiative	Description	Reference
Operational Waste	The development will be provided with a three-bin system including general, recycling and food & organic (FOGO) waste. Additional space will be provided in the waste storage to accommodate the future fourth waste stream for glass waste as per the Victorian recycling policy for 2030. 	BESS Waste 2.1

8. Urban Ecology

Incorporating urban ecology principles into development promotes biodiversity, provides ecological services such as air and water purification, and enhances the overall health and well-being of residents by connecting them with nature. Additionally, creating sustainable and resilient urban ecosystems can also help mitigate the impacts of climate change and support the long-term viability of the development.

Initiative	Description	Reference
Taps and Floor Waste	A tap and floor waste will be provided for each unit within the courtyard/balcony etc.	BESS Eco 2.4

9. Materials

Choosing the right materials for a development is crucial as it impacts the durability, energy efficiency, and overall sustainability of the buildings. Thoughtful material selection can minimize environmental impacts, improve indoor air quality, and contribute to the long-term value and desirability of the development.

Initiative	Description	Reference
Sustainable Timber	No rainforest timber will be used on site. Timber framing (if used on site) will be procured from accredited sources such as Forest Stewardship Council (FSC), Program for the Endorsement of Forest Certification (PEFC) or Australian Forestry Scheme (AFS).	Clause 15.01-2L
Carpet	Wherever used, carpet and carpet underlay will be chosen with as third party certification such as Global GreenTag, GECA or Carpet Institute of Australia Limited, Environmental Certification Scheme (ECS).	Clause 15.01-2L
Steel	Steel for the development (structural and reinforcing) will be procured from a responsible steel maker. A responsible steel maker must have facilities with a currently valid and certified ISO 14001 Environmental Management System (EMS) in place, and be a member of the World Steel Association's (WSA) Climate Action Program (CAP).	Clause 15.01-2L

10. Result & Implementation

The development will comply with the BESS and WSUD requirements by implementing all measures, as stated in this report. All the measures included in this report have demonstrated their efficiency and are easy to upkeep, with any faults promptly noticeable to the development's occupants. This approach ensures the development's sustainability in the long run, as the installed systems will be maintained and functional throughout the building's life cycle.

All initiatives listed in the report will be implemented by the relevant design team member at the relevant stage of the development. An implementation schedule has been prepared as follows – Full detail for each initiative is available in the body of the report (hyperlink):

ESD Implementation Table

Initiative	Responsibility	Stage
Metering and Monitoring	Services Engineer Architect	Design Development
Construction Waste Management Plan – 80% of waste diverted from landfill	Head Contractor	Construction
Construction Environmental Management Plan	Head Contractor	Construction
Water Fixtures and Fitting – Minimum WELS rating	Architect Head Contractor	Design Development
Rainwater Collection and Reuse	Architect Civil Engineer	Design Development
NCC Section J commitment – 10% improvement on floor and ceiling minimum insulation	Section J Consultant	Design Development
NatHERS Commitment – Minimum average 7.0 Star Average	Energy Rater	Design Development
Central electric heat pump hot water system	Services Engineer Architect	Design Development
HVAC System chosen within one star of 15% most efficient	Services Engineer Architect	Design Development
Internal Lighting Power in line with NCC 2022 section J7D3 for retail tenancy	Services Engineer Architect	Design Development
Internal Lighting Power – LED with Max 4W/m^2 for apartment	Services Engineer Architect	Design Development
External and common area Lighting – LED with sensors	Services Engineer	Design Development
Minimum 60% VLT to glazing in units and 2.7m Ceiling height in living/bedroom	Architect	Design Development

Low VOC and Low Formaldehyde Products	Architect Head Contractor	Design Development Construction
6kW Solar PV System	Solar Contractor Architect	Design Development
Mechanical Ventilation – 50% Improvement on AS1668 or CO2 level maintained at 800ppm	Service Engineer	Design Development
Natural Ventilation – Openable windows and door catches	Architect	Design Development
Bike parking – 13 in total	Architect	Design Development
Three-bin system + Allocation for future glass waste	Architect Waste Consultant	Design Development
Taps and floor waste in each unit	Architect	Design Development
Sustainable Timber	Head Contractor	DD & Construction
Carpet with third-party sustainable certification	Head Contractor	DD & Construction
Steel from Responsible Steel Maker	Head Contractor	DD & Construction

Appendix 1 –

WSUD Report

To address Clause 53.18, a Water Sensitive Urban Design (WSUD) assessment of the proposed development must occur.

Under Clause 53.18, WSUD assessment and associated proposed stormwater management system should be designed to:

- Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999). Currently, these water quality performance targets are:
    - Suspended Solids - 80% retention of typical urban annual load.
    - Total Nitrogen - 45% retention of typical urban annual load.
    - Total Phosphorus - 45% retention of typical urban annual load.
    - Litter - 70% reduction of typical urban annual load.
- Minimise the impact of chemical pollutants and other toxicants including by, but not limited to, bunding and covering or roofing of storage, loading and work areas.
- Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.

By identifying the impervious surfaces within the site and implementing treatments to mitigate the impacts of stormwater leaving the site, the proposed development has successfully fulfilled the objectives listed above.

The development was evaluated using the BLUE FACTOR tool, a widely accepted tool in the industry, to verify compliance with the aforementioned best practice targets. To meet the required standards, the development must attain a minimum compliance score of 100%.

1. **Stormwater Quality Management Strategies & Site Demarcation**

To achieve stormwater management objectives, it will be necessary to put in place stormwater treatment measures. The upcoming section outlines the surfaces that necessitate treatment and the specific treatment required. Effective management of stormwater flows in the building area will be crucial for the building's overall performance and its ability to meet stormwater management goals.

The total site area for the WSUD assessment is 307m^2. The following treatment will be implemented on-site:

Surface	Treatment	Area	Description
Roof	Rainwater Tank	160.7m^2	Part of the roof runoff will be diverted into a 4,000L rainwater tank. The rainwater will be used for **toilet flushing and laundry**.
Untreated Impervious Areas	No treatment	146.3m^2	Part of the site will be left untreated before being released at the legal point of discharge.

Surface	Treatment	Area	Description
			This will include unconnected roof areas and untreated lightwell courtyard.

The development has prioritized maximizing permeable areas, resulting in decreased stormwater outflows from the site. Additionally, the proposed development includes vegetated areas, which not only reduces the heat island effect but also improves the local habitat.

2. WSUD Catchment Plan

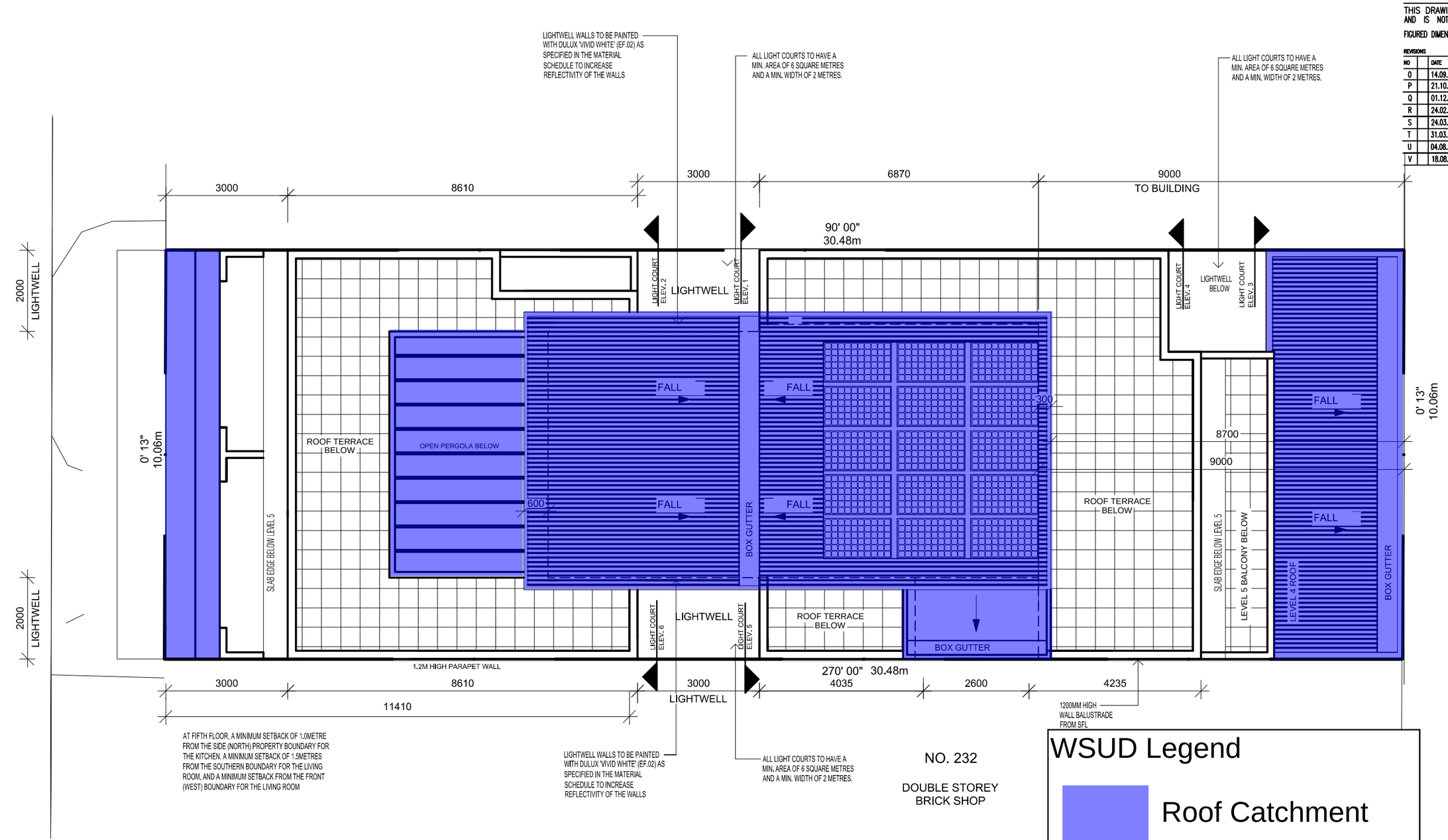
Please refer to the next page for the full WSUD catchment plan including all treatment and areas included above.

THIS DRAWING IS THE COPYRIGHT OF EMINENT DESIGNS AND IS NOT TO BE REPRODUCED WITHOUT WRITTEN APPROVAL.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED, IF IN DOUBT ASK.

REVISIONS

NO		DATE	AMENDMENTS	INIT
O		14.09.22	REV O RAINWATER TANK & BICYCLE RACKS UPDATED	BD
P		21.10.25	REV P AMENDMENT UNDER SECTION 72	BD
Q		01.12.25	REV Q COUNCIL RFI DATED 18/11/25	BD
R		24.02.26	REV R UPDATED PLANS	BD
S		24.03.26	REV S UPDATED PLANS	BD
T		31.03.26	REV T UPDATED PLANS MELB WATER	VC
U		04.08.26	REV U SECONDARY CONSENT AMENDMENT	BD
V		18.08.26	REV V SEC.COND AMENDMENT CLIENT MARK UP	BD



PROPOSED ROOF PLAN

SCALE 1:100

WSUD Legend

Roof Catchment

PROJECT TITLE

PROPOSED MIXED USE DEVELOPMENT
AT:
NO.234 LYGON STREET
BRUNSWICK EAST, VIC 3057

DRAWING TITLE

PROPOSED ROOF PLAN

DRAWN: BD	CAD FILE NO.
SCALE: 1:100	CHECKED: VC
DRAWN DATE: MAY' 25	PLOT DATE / TIME
PROJECT NO.: -----	DRAWING NO.: TP 08 / REVISION: V

Eminent Designs
5/35 HOPE STREET
BRUNSWICK 3056
PH: 9387 8600

3. WSUD Assessment Results

All treatment measures and associated areas described above have been input into the BLUE FACTOR tool and the following results have been achieved:

Please note that mean annual runoff volume infiltrated cannot be achieved in Blue Factor since permeable areas (where water could infiltrate) are not considered in the calculation. Permeable areas are only input in catchment to demonstrated that all areas on site have been accounted for. This was confirmed by blue Factor developer.

Deemed-to-comply score has been achieved. TSS and litter have not achieved full compliance as it is difficult to achieve compliance with these requirements on these types of projects where TSS/Litter pollutant are already low. Reducing significantly the level of something that is already very low is complicated. This is in line with DEECA's position.

Project # EF5BA64C
234 Lygon Street, Brunswick East
Denis Mallet - denis@msconsultants.com.au
234 Lygon St, Brunswick East VIC 3057, Australia
30 September 2026 10:13 a.m.

BLUE FACTOR®

234 Lygon Street, Brunswick East

Nitrogen reduction target has been met, and a small low-risk project is deemed to comply. Higher risk projects need to meet all targets.



Project details

Name	234 Lygon Street, Brunswick East
Project ID	EF5BA64C
Street address	234 Lygon St, Brunswick East VIC 3057, Australia
Municipality	Merri-Bek
Site area	306.62 m^2
Planning Number	

Results

Item	Result	Target
Total suspended solids (%)	46%	>80%
Total phosphorus (%)	45%	>45%
Total nitrogen (%)	45%	>45%
Total gross pollutants (%)	52%	>70%
Mean annual runoff volume harvested or evapotranspired (%)	45%	>27%
Mean annual runoff volume infiltrated or filtered (%)	0%	>9%

For small low-risk sites, Total Nitrogen has been used as a proxy for other pollutants indicating compliance has been adequately met for many years. This has meant that if the Blue Factor score meets 100% based on Nitrogen, the Responsible Authority has the discretion to accept stormwater management design responses that do not meet all the individual pollutant load reduction targets on small low-risk sites.

Larger, high-risk projects, with roads, car parks or activities that may yield higher than typical pollutant loads, must meet all water quality targets fully. All projects should manage flow volume reductions through harvesting and evapotranspiration as well as infiltration to a level that is reasonably practicable.

Additional considerations

Flow and other pollutant load reductions should also be considered. The EPA Urban stormwater management guidelines (EPA - Publication 1739.1) are referenced in the VPPs as a policy document and support compliance with the General Environmental Duty.

You can use the guidelines to help minimise risks from urban stormwater so far as reasonably practicable (epa.vic.gov.au/about-epa/laws ew-laws/what-is-reasonablypracticable). Doing what is reasonably practicable means putting in proportionate controls to minimise the risk of harm to human health and the environment relative to the values being protected and risks presented by the site.

A completed small-scale low risk site with no public roads or external user parking areas will usually generate very little sediment, referred to as total suspended solids (TSS). It is common that the 80% TSS target will not easily be achieved for this type of site.

Other sites may generate significant total suspended solids (TSS) as well as litter, referred to as gross pollutants and should meet all targets.

The generation of sediment and litter during the construction phase is a significant problem and must be addressed effectively for all developments.

You should demonstrate what appropriate controls will be used to ensure the generation of litter and sediment is prevented and controlled during construction to minimise risk of harm.

Blue Factor is designed to support a range of developments of less than 10,000 square metres including small scale residential, apartment developments, small scale commercial and small public use developments which must meet planning requirements including stormwater management quality objectives in the EPA Urban stormwater management guidelines (EPA - Publication 1739.1) It is recommended that MUSIC is used for larger and more complex projects to demonstrate compliance.

Water treatment

Configuration 1



Roof Catchment 160.7m2



Rainwater Tank 1
Rainwater tank retention volume in kilolitres: 4



Building 1 Residential Apartment, 28 bedroom(s)

Catchments



Roof Catchment 160.7m2



Unconnected roof/balcony/lightwell Roof, 145.92m2 Untreated

Treatments



Rainwater Tank 1
Rainwater tank retention volume in kilolitres: 4 **192%**

Buildings & dwellings



Building 1 Residential Apartment, 28 bedroom(s)

Water sources	I want to use the average efficiency for a typical new dwelling or building
Basin taps - Primary water source	Mains water
Showers - Primary water source	Mains water
Clothes Washer - Primary water source	Rainwater
Toilets connected to mains water	0
Toilets connected to rainwater	29
Toilets connected to recycled water	0
Garden water use	Garden water demands are not in use

4. Proposed Treatment Typical Cross-Section

This section will include a typical cross-section of all WSUD treatments proposed in the development.

a. Rainwater Tanks

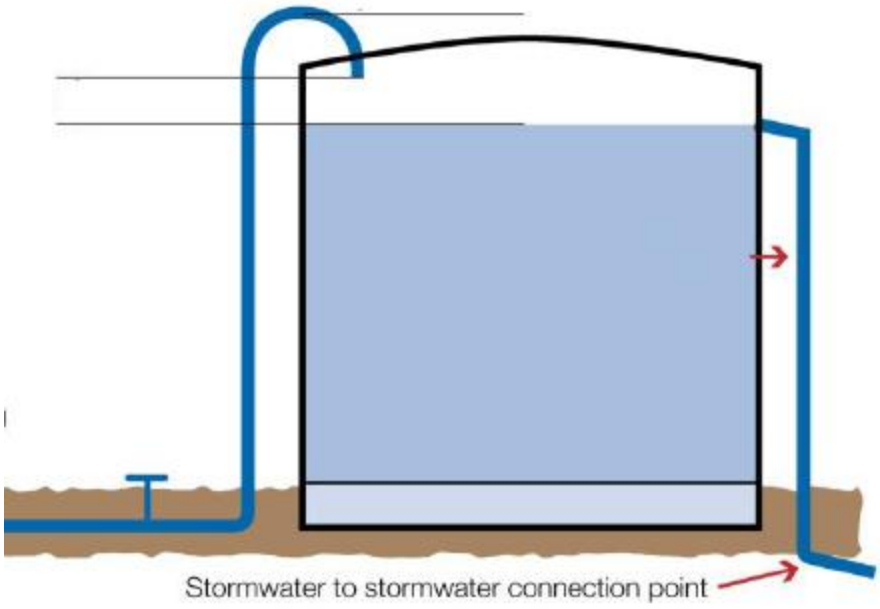
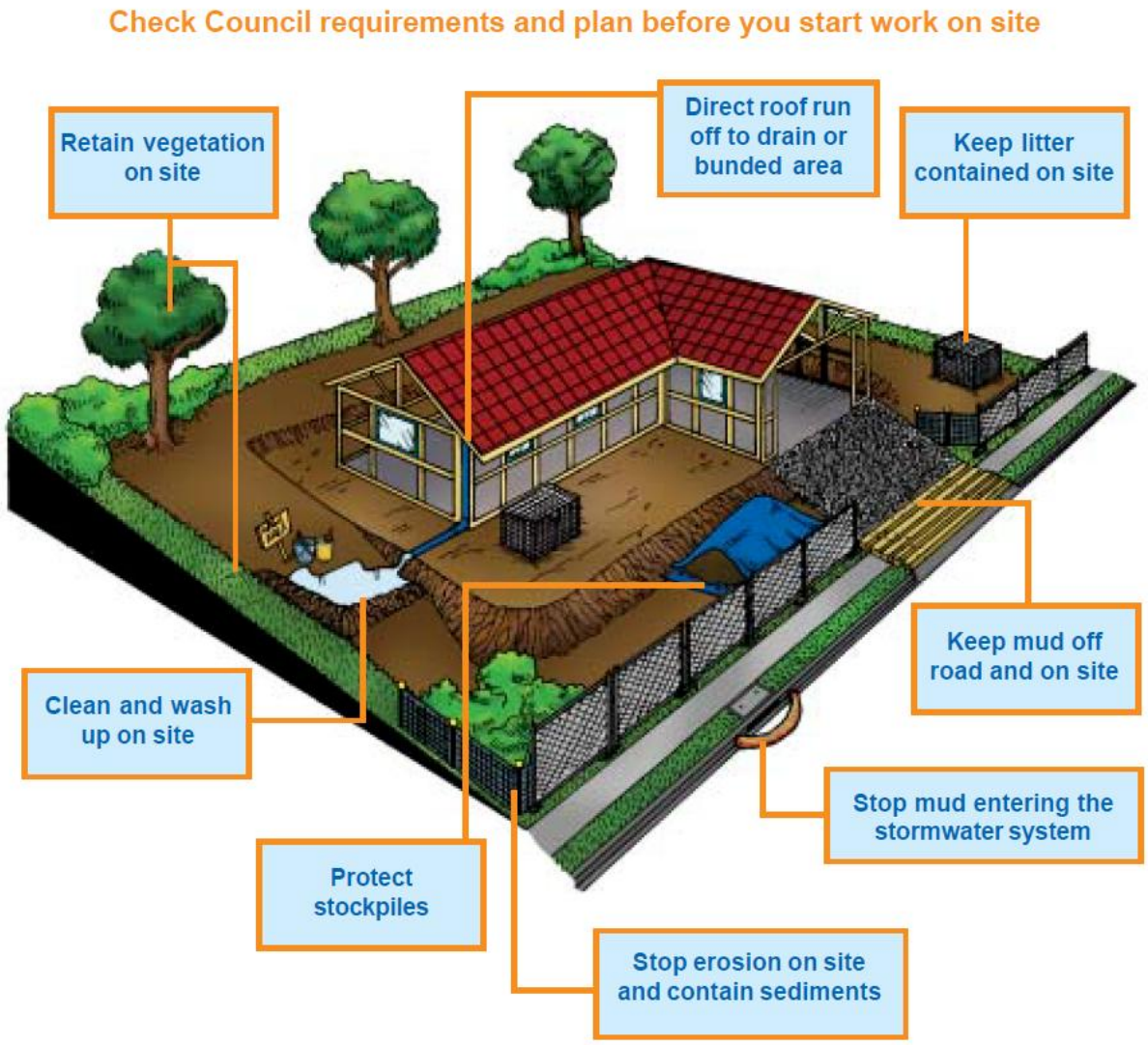


Figure 2: Typical Rainwater tank Cross-Section.

5. Stormwater Management During Construction

To prevent contamination of stormwater discharge and to decrease the speed of flows produced during construction, steps will be taken to manage stormwater. These measures will involve establishing buffer strips and maintaining a clean site by removing loose rubbish. "Keeping Our Stormwater Clean - A Builder's Guide" by Melbourne Water provides additional information. The objectives depicted in the diagram below illustrate ways to minimise the effects of stormwater runoff during the construction phase.



Appendix 2 – WSUD Maintenance Manual

Tips for undertaking maintenance

Things to look for and how to fix them.

Leaf litter / debris in gutters	**Pump not working**
Regularly clear your gutters. Make sure you cover the tank inlet if you're rinsing down the gutters to avoid debris entering the tank.	Check operating instructions for your pump. Check that pumps are kept clear of surface water (flooding), vegetation, and have adequate ventilation. Pumps should be serviced every few years to prolong the pump life.
Blocked downpipe	**Mains backup or pump not working**
If you see water spilling from the edge of the gutters check that the downpipe is not blocked, removing any debris.	Have you heard the pump operating? If the mains backup switching device fails many people do not notice for a long time. Consider a manual system if the switching device is problematic and you don't mind operating it manually.
First flush diverter clogging	**Overflow**
To clean out, unscrew the cap at the base of the diverter and remove the filter. Wash the filter with clean water and the flow restrictor inside the cap.	Check that the overflow is not blocked and that there is a clear path for water to safely spill from the tank through the overflow pipe when full. Check that a clean mesh screen is safely in place to prevent mosquitoes entering the tank.
Debris on the mesh cover over inlets / outlets	**Sediment / debris build-up in tank (more than 20mm thick)**
The fine stainless steel mesh is similar to fly screen mesh. It should be cleaned regularly to ensure it does not become blocked with leaves and other material.	Over time a small amount of fine sediment will collect in the bottom of your tank and this is harmless and natural. It should not be disturbed until it is approx 20 mm thick which may take many years. To clean your tank out simply empty your tank and wash out with a high-pressure washer or hose.
Dirt and debris around the tank base or side.	**Base area**
Keep leaf build-up, sticks, pot plants and other items off the lid of your tank. Use a hose to remove dust and dirt from the outside of the rainwater tank and ensure there is no debris on the base, bottom lip and walls of your tank.	Tanks must be fully supported by a flat and level base. Check for any movement, cracks or damage to the slab or pavers. If damage is observed, empty the tank to remove the weight and have the fault corrected to prevent damage to the tank. There is no warranty from suppliers for damage to a rainwater tank if the base has failed.
Smelly water or mosquitos	**Monitoring the water level**
Rainwater tanks can smell if there is debris in the gutters. Check the gutters and leaf strainers are clean. Mosquitos or wrigglers can make their way into your tank if they are small enough to pass through the inlet strainer. A very small amount of chlorine (approx 4 parts per million) can be put in the tank to kill off mosquitos or the bacteria causing odours. The chlorine will disinfect the water and then evaporate. Chlorine tablets from a pool supplier can be used (but check the recommended dose based on your tank capacity).	A range of devices are available to monitor water level. Some simple float systems can be used effectively.

Acknowledgement: Information from PJT Green Plumbing's 'Maintenance Guide for Your Rainwater Tank' was used to develop this fact sheet.

For more information please visit **www.portphillip.vic.gov.au**
or contact the Sustainability team via:

Phone: 03 9209 6777
email: sustainabledesign@portphillip.vic.gov.au

Maintenance manual

Rainwater tanks



Site address: _____

Planning permit number: _____

Rainwater tank maintenance

This manual lists the key tasks required to maintain a domestic rainwater tank and the recommended frequency of each task. This manual can be submitted with planning permit applications for developments that include the installation of a domestic rainwater tank. Once endorsed, the property owner is responsible for continuous implementation of rainwater tank maintenance, in accordance with the guidance in this manual.

Rainwater tanks are an exceptional tool for environmental protection. They collect and store roofwater for use inside and outside the home. This simultaneously reduces the demand on our precious potable mains water and limits the amount of stormwater pollutants that enter our sensitive Bay.

Maintenance of rainwater tanks is relatively easy however it is important to do the following key tasks to ensure the quality of water is high:

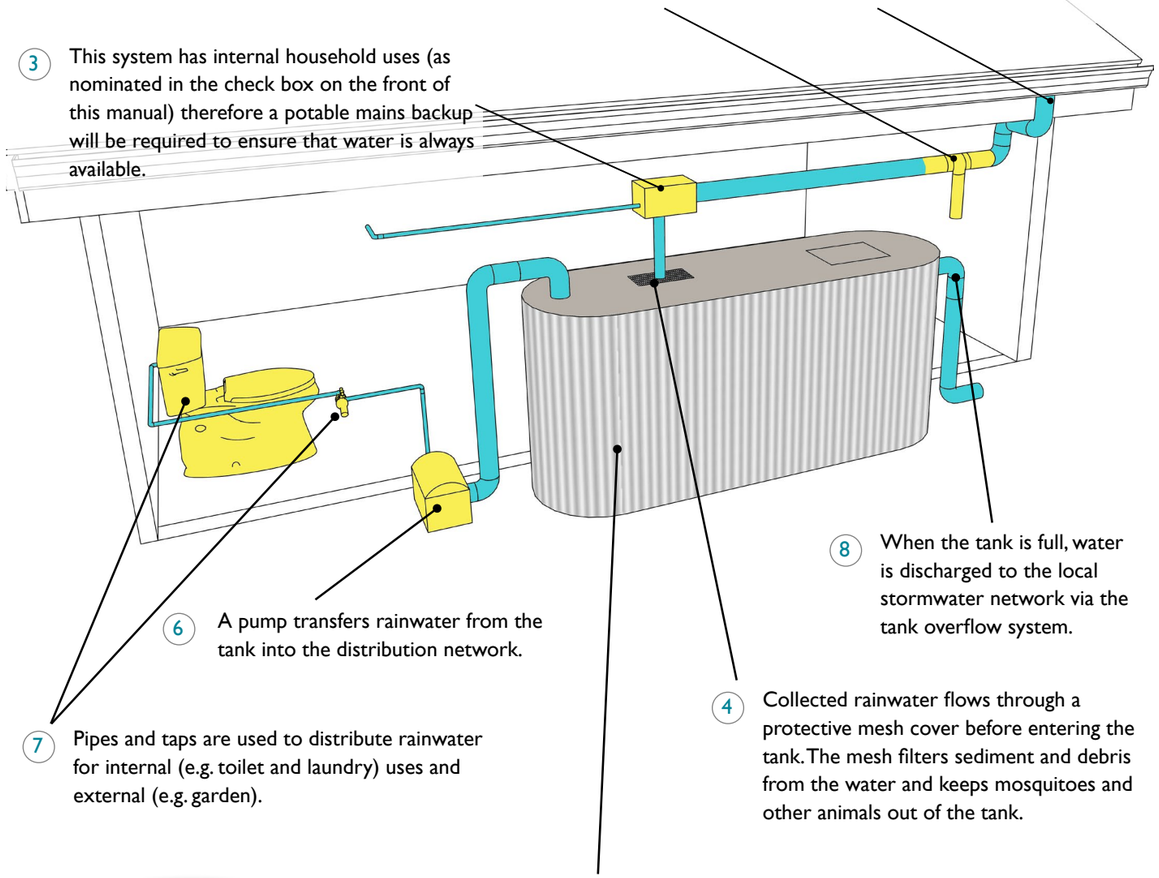
- stop leaf litter and debris entering the tank.
- prevent bird droppings and dust building up in the gutters.
- prevent mosquitos and other animals entering the tank.

Tank connected to	toilet only ☐ toilet & irrigation ☐ toilet & laundry & irrigation ☐ toilet & laundry & hot water & irrigation ☐
Rainwater tank location	
Planning drawing number showing rainwater tank location	
Rainwater tank construction date	
Date of final building inspection	
Tank volume (litres)	
Area or percentage of the roof that is connected to the tank via gutters and downpipes	

Maintenance Overview

Rainwater Tank Maintenance

The following diagram identifies the key items which are important for rainwater tanks and their maintenance.





Maintenance Checklist

The property owner is responsible for checking the maintenance items in this checklist at the recommended frequency at the bottom of the table. The maintenance log at the bottom of the page should be filled in once each maintenance check is complete. Upkeep of this maintenance log should continue throughout the life of the rainwater tank.

Item	Rainwater tank element	Inspection item	Y/N	Likely maintenance task
1	Roof gutters and downpipes	Is there leaf litter or debris in the gutters?		Remove by hand and dispose responsibly.
2	First flush diverter	Is there anything blocking the first flush diverter (leaves etc)?		Remove by hand and dispose responsibly.
3	Potable mains back up device	Is the potable mains back up switch operating correctly?		Repair or replace device. Consider a manual switching device.
4	Mesh cover	Has the mesh cover deteroriated or have any holes in it?		Replace mesh cover.
5	Tank volume	Is there large amounts of sediment or debris sitting in the bottom of the tank, reducing the volume available in the tank to store water?		Remove sediment and dispose responsibly.
6	Pump	Is the pump working effectively? Have you heard it on a regular basis?		Check the potable mains back up is not permanently on. Repair or replace pump.
7	Pipes and taps	Are pipes and taps leaking?		Repair as needed.
8	Overflow	Is the overflow clear and connected to the stormwater network?		Remove blockages and/or restore connections to stormwater network.
9	Supporting base	Are there any cracks or movement of pavers?		Empty the tank to reduce weight then repair any damage to the base.

Maintenance frequency

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All tasks	x			x			x			x		

Regular maintenance will improve the water quality and extend the life of your system. A well maintained tank isn't likely to need to be cleaned out for up to ten years (when there is more than 20mm of accumulated sediment).

Maintenance Log

Maintenance date	Maintenance undertaken

Appendix 3 – Green Star VOC Limits

VOC Limits for Paints, Adhesives and Sealants

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

VOC Limit for Carpets

Test Protocol	Limit (mg/m^2 per hour)
ASTM D5116 – Total VOC Limit	0.5
ASTM D5116 – 4 -PC (4-Phenylcyclohexene)	0.05
ISO 16000 / EN 13419 – TVOC at three days	0.5
ISO 10580 / ISO/TC 219 (Document N238) – TVOC at 24 hours	0.5

Appendix 4 – BESS Daylight Input & Results

Best practice with daylight amenities has been assessed with the BESS daylight built-in calculator for all apartments in the development. This is tool is deemed appropriate to demonstrate compliance with minimum daylight requirements.

BESS has created the following Deemed-To-Satisfy daylight criteria:

- Ceiling heights are 2.7m
- All rooms are less than 8m deep – South facing living areas are less than 5m.
- Glazing to be 60% VLT in habitable rooms.
- External windows are provided for each bedroom.
- Building separation in line with BESS tool notes requirements.

Any habitable rooms (Living or bedroom) which meet all criteria above are deemed to have achieved daylight best practice. All DTS compliant rooms are input as 'Auto-Pass' in the BESS built-in calculator.

A total of 9 living rooms and 9 bedrooms in the development are meeting the full DTS requirement and have been input as 'Auto-Pass'. See mark-up of compliant rooms below:





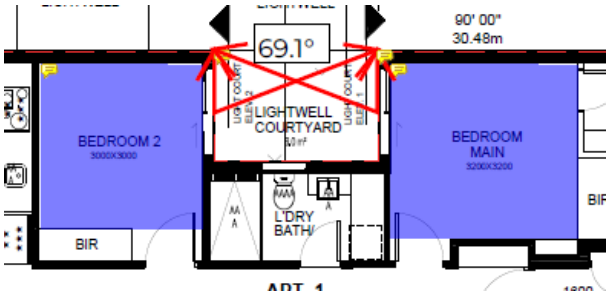
Figure 7: Mark-up of compliant rooms.

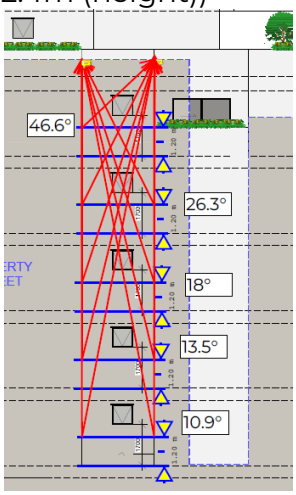
All other rooms (19 bedroom and 4 livings) do not meet the DTS criteria and had to be input manually in the built-in calculator. The calculator requires sky angles,

window sizes, orientation, window area and glass type of each non-compliant room to be included as follows:

Apartment- Apt 1- Bedroom Main & Bedroom 2

1. Floor Area: 8.7m² for Bedroom Main and 10.7m² for Bedroom 2(measured)
2. Vertical Angle: 10.9 ° (measured)
3. Horizontal Angle: 69.1° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))

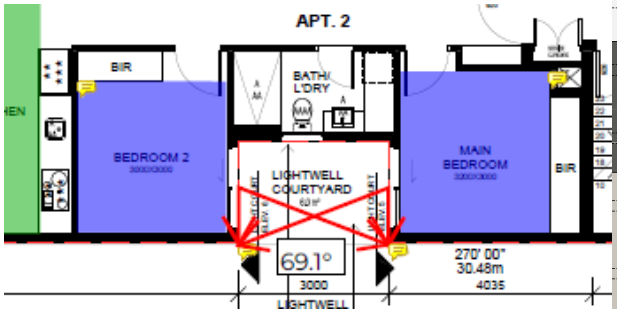


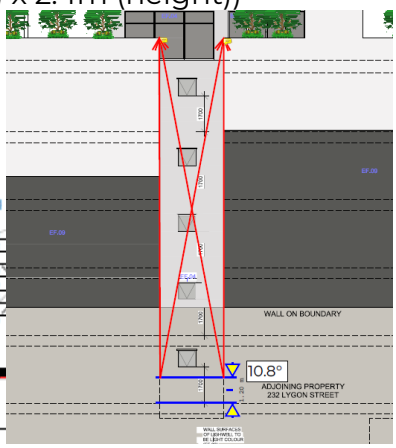


The vertical angle calculations measured within light court shown above was used in a previous project in City of Melbourne in front of a Standing Advisory Committee and the approach was deemed accurate and relevant.

Apartment- Apt 2- Bedroom Main & Bedroom 2

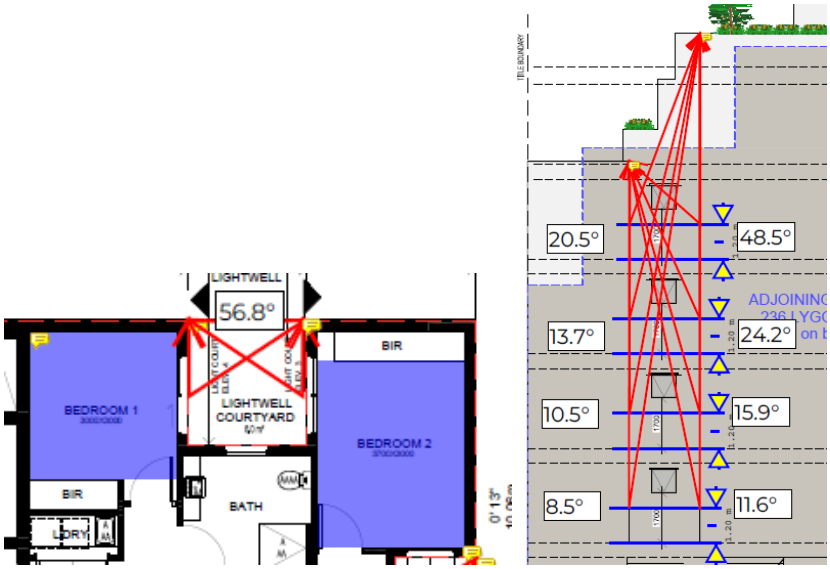
1. Floor Area: 8.7m² for Bedroom Main and 10.7m² for Bedroom 2(measured)
2. Vertical Angle: 10.8 ° (measured)
3. Horizontal Angle: 69.1° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))





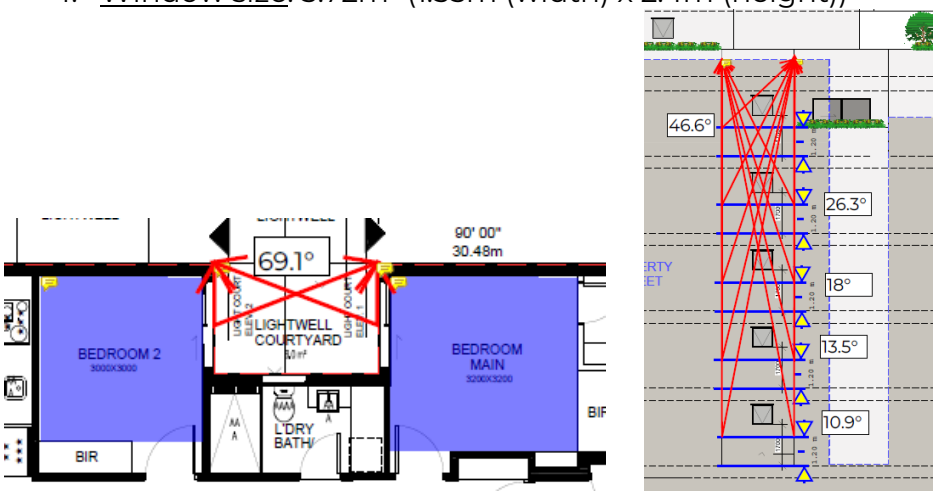
Apartment- Apt 3- Bedroom Main & Bedroom 2

1. Floor Area: 8.6m² for Bedroom Main and 10.8 for Bedroom 2(measured)
2. Vertical Angle: 11.6 ° for Bedroom 1 and 8.5 ° for Bedroom 2 (measured)
3. Horizontal Angle: 56.8° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))



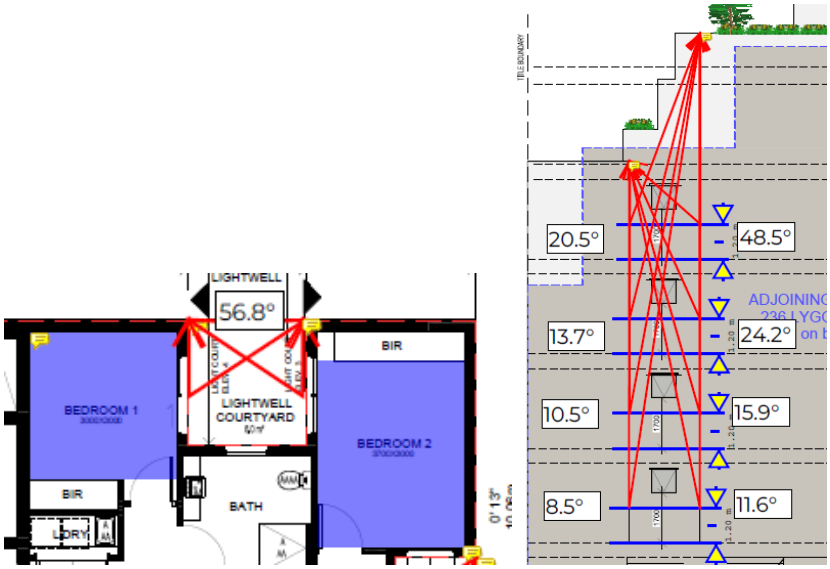
Apartment- Apt 4- Bedroom Main & Bedroom 2

1. Floor Area: 8.7m^2 for Bedroom Main and 10.7m^2 for Bedroom 2(measured)
2. Vertical Angle: 13.5 ° (measured)
3. Horizontal Angle: 69.1° (measured)
4. Window size: 3.72m^2 (1.55m (width) x 2.4m (height))



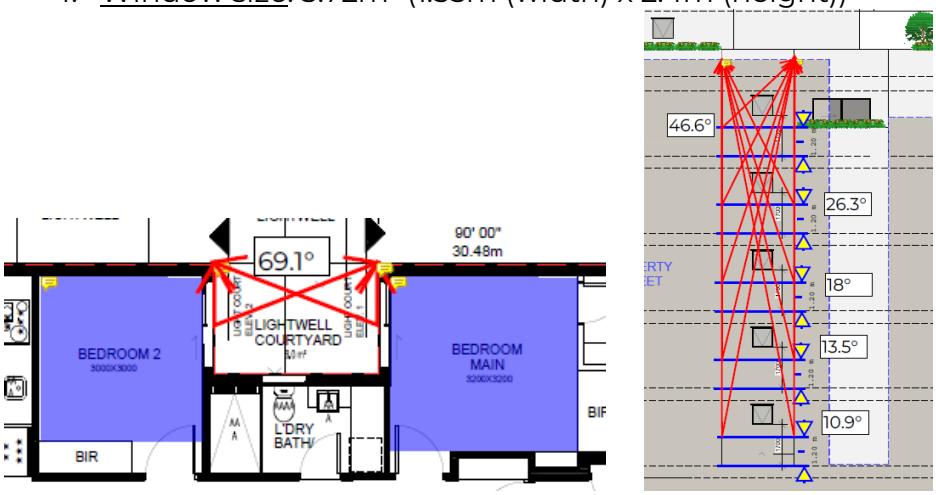
Apartment- Apt 6- Bedroom Main & Bedroom 2

1. Floor Area: 8.6m^2 for Bedroom Main and 10.8 for Bedroom 2(measured)
2. Vertical Angle: 15.9 ° for Bedroom 1 and 10.5 ° for Bedroom 2 (measured)
3. Horizontal Angle: 56.8° (measured)
4. Window size: 3.72m^2 (1.55m (width) x 2.4m (height))



Apartment- Apt 7- Bedroom Main & Bedroom 2

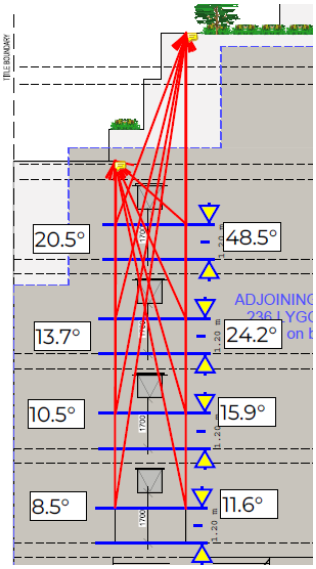
1. Floor Area: 8.7m² for Bedroom Main and 10.7m² for Bedroom 2(measured)
2. Vertical Angle: 18 ° (measured)
3. Horizontal Angle: 69.1° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))



Apartment- Apt 9- Bedroom Main & Bedroom 2

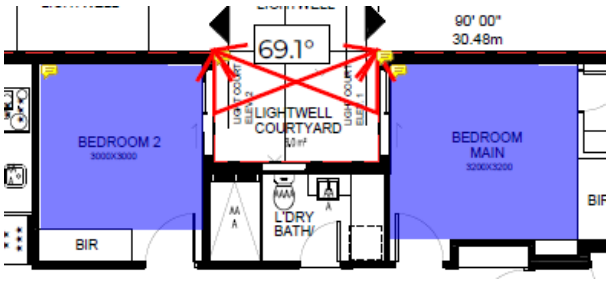
1. Floor Area: 8.6m² for Bedroom Main and 10.8 for Bedroom 2(measured)
2. Vertical Angle: 24.2 ° for Bedroom 1 and 13.7 ° for Bedroom 2 (measured)
3. Horizontal Angle: 56.8° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))

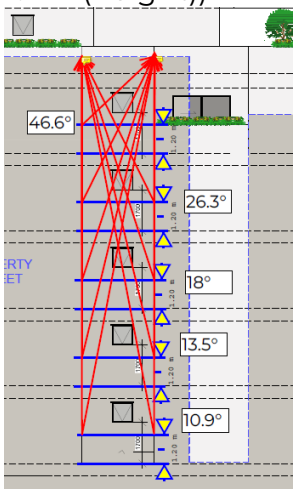




Apartment- Apt 10- Bedroom Main & Bedroom 2

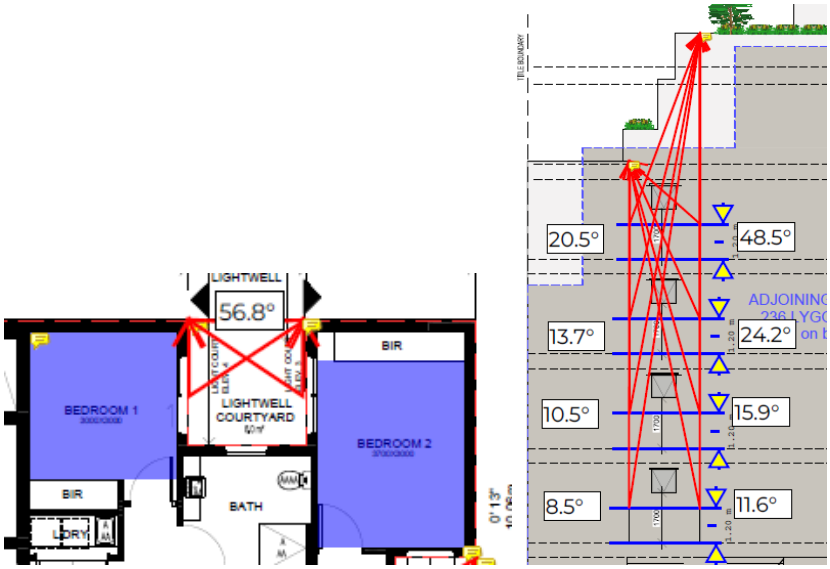
1. Floor Area: 8.7m² for Bedroom Main and 10.7m² for Bedroom 2(measured)
2. Vertical Angle: 26.3 ° (measured)
3. Horizontal Angle: 69.1° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))





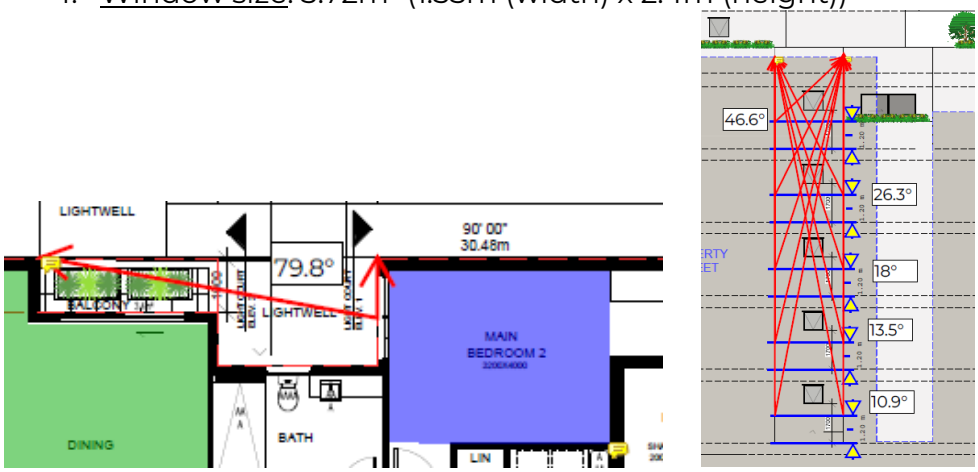
Apartment- Apt 12- Bedroom Main & Bedroom 2

1. Floor Area: 8.6m² for Bedroom Main and 10.8 for Bedroom 2(measured)
2. Vertical Angle: 48.5 ° for Bedroom 1 and 20.5 ° for Bedroom 2 (measured)
3. Horizontal Angle: 56.8° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))



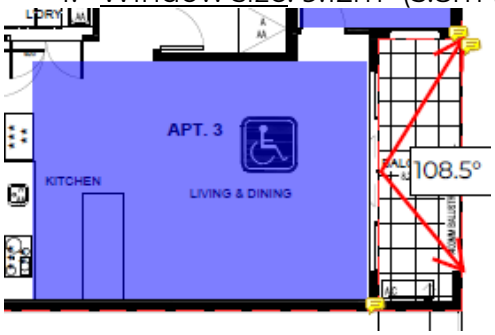
Apartment- Apt 13- Bedroom Main

1. Floor Area: 13.3m² (measured)
2. Vertical Angle: 46.6 ° (measured)
3. Horizontal Angle: 79.8° (measured)
4. Window size: 3.72m² (1.55m (width) x 2.4m (height))



Apartment- Apt 3, 6, 9, 12- Living

1. Floor Area: 30.1m² (measured)
2. Vertical Angle: 46.6° (calculated as inverse of tangent based on projection and window height)
3. Horizontal Angle: 108.5° (measured)
4. Window size: 9.12m² (3.8m (width) x 2.4m (height))



Appendix 5 – Daylight Hand Calculation

Daylight access in the commercial space was assess using the Green Star Daylight Hand Calculation.

The Green Star Daylight Hand Calculation is a simple method to assess how much of a space has achieved the minimum BESS best practice requirement (2% Daylight Factor (DF)). The calculation is based on one simple formula as follows: Zone of compliance = 2 x Height of window above working plane x Width of the window. Windows must have a minimum of 40% VLT to us this hand calculation method.

Working plane is 700mm. See below for a mark-up of nominated areas (blue) and compliant areas (orange):

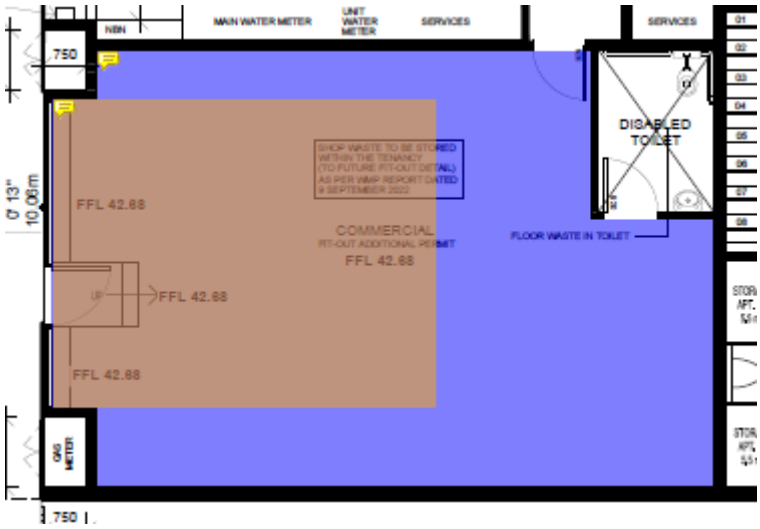


Figure 3: Daylight Hand Calculation mark-up.

Note the below table represents daylight performance outcomes.

Space Type	Nominated Area (m^2)	Floor Area Compliant (m^2)	Compliant Areas (%)
Commercial	77.4	34.9	45%
TOTAL	**77.4**	**34.9**	**45%**

Appendix 6 – BESS Report

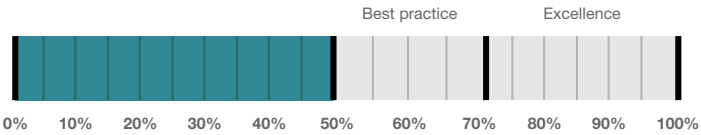
BESS Buildings Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 234 Lygon St Brunswick East Victoria 3057. 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 Merri-bek 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

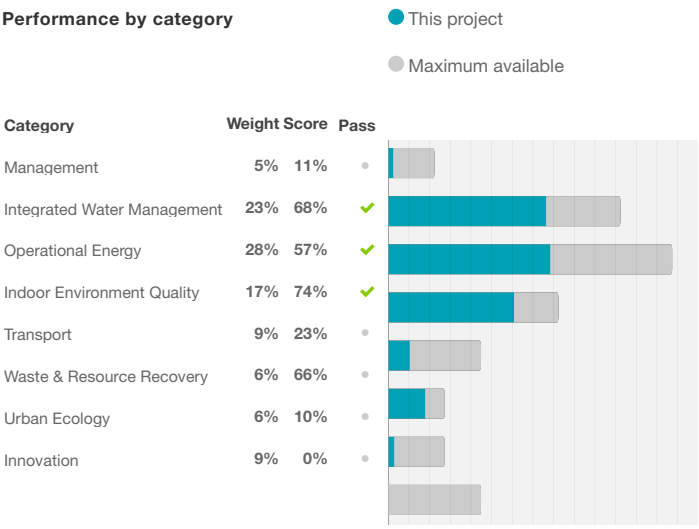


50%

Project details

Name	234 Lygon Street, Brunswick East
Address	234 Lygon St Brunswick East Victoria 3057
Project ID	FBBC1BAD-R4
BESS Version	BESS-10
Date	08 October 2026
Software version	2.3.0-B.656
Site type	Mixed use development
Account	admin@msconsultants.com.au
Application no.	
Site area	307 m²
Building floor area	1,192 m²

Performance by category



Project composition



Buildings

Name	Height	Footprint	% of total footprint
Commercial/apartment	7	307 m²	100%

Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	Building	% of total area
Apartment				
Apt1,4,7,10	4	75.2 m²	Commercial/apartment	25%
Apt3,6,9,12	4	69.5 m²	Commercial/apartment	23%
Apt2,5,8,11	4	69.0 m²	Commercial/apartment	23%
Apt13	1	250 m²	Commercial/apartment	20%
Total	**13**	**1,104 m²**	**92%**	

Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Shop				
Commercial tenancy	1	87.6 m²	Commercial/apartment	7%
Total	**1**	**87 m²**	**7%**	

Supporting Evidence

Shown on Floor Plans

Credit	Requirement	Response	Status
Management 3.1	Annotation: Individual utility meters to be provided to all individual dwellings		-
Integrated Water Management 2.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)		-
Operational Energy 4.2	Location and size of solar photovoltaic system		-
Indoor Environment Quality 2.1	Dwellings meeting the requirements for being 'naturally ventilated'		-
Transport 1.1	Location of residential bicycle parking spaces		-
Waste & Resource Recovery 2.1	Location of food and garden waste facilities		-
Waste & Resource Recovery 2.2	Location of recycling facilities		-
Urban Ecology 2.4	Location of taps and floor waste on balconies / courtyards		-

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 3.6	Average lighting power density and lighting type(s) to be used		-
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 1.1	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 1.2	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 1.4	A short report detailing assumptions used and results achieved.		-
Indoor Environment Quality 2.1	A list of naturally ventilated dwellings		-

Credit summary

Management Overall contribution 4.5%

11%

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

IWM Overall contribution 22.5%

	68%	✔ Pass
1.1 Potable Water Use	40%	✔ Achieved
2.1 Stormwater Treatment	100%	✔ Achieved
3.1 Water Efficient Landscaping	0%	
4.1 Building Systems Water Use	0%	

Operational Energy Overall contribution 27.5%

	Minimum required 50% 57%	✔ Pass
1.1 Thermal Performance Rating - Non-Residential	37%	
1.2 Thermal Performance Rating - Residential	0%	✔ Achieved
2.1 Greenhouse Gas Emissions	4%	
2.2 Peak Demand	100%	
2.6 Electrification	100%	
2.7 Energy consumption	100%	
3.1 Carpark Ventilation	N/A	Scoped Out
		n/a
3.2 Hot Water - Non-Residential	100%	
3.4 Clothes Drying	0%	
3.6 Internal Lighting - Apartments	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	92%	
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%	74%	Pass
1.1 Daylight Access - Living Areas		100%	✔ Achieved
1.2 Daylight Access - Bedrooms		66%	✔ Achieved
1.3 Winter Sunlight		0%	
1.4 Daylight Access - Non-Residential		45%	✔ Achieved
1.5 Daylight Access - Main Living Areas		N/A	Scoped Out
		Spatial daylight autonomy metric not in use	
1.6 Daylight Access - Secondary Habitable Rooms		N/A	Scoped Out
		Spatial daylight autonomy metric not in use	
2.1 Ventilation - Natural - Apartments		100%	
2.3 Ventilation - Non-Residential		33%	✔ Achieved
3.4 Thermal comfort - Shading - Non-Residential		0%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	
4.1 Air Quality - Non-Residential		100%	

Transport Overall contribution 9.0%

	23%
1.1 Bicycle Parking - Residential	100%
1.2 Bicycle Parking - Residential Visitor	0%
1.3 Bicycle Parking - Convenience Residential	0%
1.4 Bicycle Parking - Non-Residential	0%
1.5 Bicycle Parking - Non-Residential Visitor	0%
1.6 End of Trip Facilities - Non-Residential	0% Disabled
	Credit 1.4 must be complete first.
2.1 Electric Vehicle Infrastructure	0%
2.2 Car Share Scheme	N/A Scoped Out
	n/a
2.3 Motorbikes / Mopeds	0%

Waste & Resource Recovery Overall contribution 5.5%

	66%
1.1 Construction Waste - Building Re-Use	0%
2.1 Operational Waste - Food & Garden Waste	100%
2.2 Operational Waste - Convenience of Recycling	100%

Urban Ecology Overall contribution 5.5%

	10%
1.1 Communal Spaces	0%
2.1 Vegetation	0%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
2.4 Balconies, Courtyards & Roof terraces	100%
3.1 Food Production - Residential	0%
3.2 Food Production - Non-Residential	0%

Innovation Overall contribution 9.0%

	0%
1.1 Innovation	0%

Credit breakdown

Management Overall contribution 4.5%

11%

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	
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		0%
Score Contribution	This credit contributes 23.2% towards the category score.	
Criteria	Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?	
Question	Criteria Achieved ?	
Apartment	No	
2.3 Thermal Performance Modelling - Non-Residential		0%
Score Contribution	This credit contributes 1.8% towards the category score.	
Criteria	Has a preliminary facade assessment been undertaken in accordance with NCC2022 Section J4D6?	
Question	Criteria Achieved ?	
Shop	No	
Criteria	Has preliminary modelling been undertaken in accordance with either NCC2022 Section J (Energy Efficiency), NABERS or Green Star?	
Question	Criteria Achieved ?	
Shop	No	
3.1 Metering - Residential		100%
Score Contribution	This credit contributes 11.6% towards the category score.	
Criteria	Have utility meters been provided for all individual dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.2 Metering - Non-Residential		0%
Score Contribution	This credit contributes 0.9% towards the category score.	
Criteria	Have utility meters been provided for all individual commercial tenants?	
Question	Criteria Achieved ?	
Shop	No	
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 ?
Apartment	No
Shop	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%

		68%	✔ 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?:	Blue Factor
Blue Factor score achieved?:	100
Flow:	-
Total Suspended Solids:	-
Total Phosphorus:	-
Total Nitrogen:	-

Rainwater tank profile	
What is the total roof area connected to the rainwater tank?:	
Rainwater Tank 1	161 m²
	-
Tank Size:	
Rainwater Tank 1	4,000 Litres
	-
Irrigation area connected to tank:	
Rainwater Tank 1	-
	-
Is connected irrigation area a water efficient garden?:	
Rainwater Tank 1	No
	-
Other external water demand connected to tank?:	
Rainwater Tank 1	-
	-

Fixtures, fittings & connections profile	
Building: All	Commercial/apartment
Showerhead:	
Apt1,4,7,10 Apt2,5,8,11 Apt3,6,9,12 Apt13	4 Star WELS (>= 6.0 but <= 7.5)
Commercial tenancy	Scope out
Bath: All	Scope out
Kitchen Taps: All	>= 5 Star WELS rating
Bathroom Taps: All	>= 5 Star WELS rating

Dishwashers:	
Apt1,4,7,10 Apt2,5,8,11 Apt3,6,9,12 Apt13	>= 5 Star WELS rating
Commercial tenancy	Scope out
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency:	
Apt1,4,7,10 Apt2,5,8,11 Apt3,6,9,12 Apt13	Occupant to Install
Commercial tenancy	Scope out
Which non-potable water source is the dwelling/space connected to?: All	Rainwater Tank 1
Non-potable water source connected to Toilets: All	Yes
Non-potable water source connected to Laundry (washing machine):	
Apt1,4,7,10 Apt2,5,8,11 Apt3,6,9,12 Apt13	Yes
Commercial tenancy	No
Non-potable water source connected to Hot Water System: All	No

1.1 Potable Water Use 40% ✔ 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	1714 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	1362 kL
Output	Proposed (including rainwater and recycled water use)
Project	1282 kL
Output	% Reduction in Potable Water Consumption
Project	25 %
Output	% of connected demand met by rainwater
Project	16 %
Output	How often does the tank overflow?
Project	Never / Rarely
Output	Opportunity for additional rainwater connection
Project	338 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 Blue Factor Score
Project	100
Output	Blue Factor Score
Project	100

3.1 Water Efficient Landscaping	0%

Score Contribution	This credit contributes 6.2% towards the category score.
Criteria	Will water efficient landscaping be installed?
Question	Criteria Achieved ?
Project	No

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%	57%	✔ 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): Solar Photovoltaic system 1	6.0 kW peak
Orientation (which way is the system facing)?: Solar Photovoltaic system 1	North
Inclination (angle from horizontal): Solar Photovoltaic system 1	20.0 Angle (degrees)
Which Building Class does this apply to?: Solar Photovoltaic system 1	Apartment
Dwellings profile	
Building: All	Commercial/apartment
Below the floor is: All	Another Occupancy
Above the ceiling is:	
Apt1,4,7,10 Apt2,5,8,11 Apt3,6,9,12	Another Occupancy
Apt13	Outside
Exposed sides:	
Apt1,4,7,10 Apt2,5,8,11	2
Apt3,6,9,12	3
Apt13	4
NatHERS Annual Energy Loads - Heat: All	70.0 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	20.0 MJ/sqm
NatHERS star rating: All	7.0
Type of Heating System: All	Reverse cycle space
Heating System Efficiency:	
Apt1,4,7,10	2.5 Stars (2019 MEPS)
Apt2,5,8,11 Apt3,6,9,12 Apt13	3 Stars (2019 MEPS)
Type of Cooling System: All	Refrigerative space
Cooling System Efficiency: All	3 Stars (2019 MEPS)
Type of Hot Water System: All	Electric Heat Pump Band 1
Is the hot water system shared by multiple dwellings?: All	No
% Contribution from solar hot water system: All	0 %
Clothes Line: All	No drying facilities

Clothes Dryer: All	Occupant to install

Non-residential Deemed-to-Satisfy profile

Do all exposed floors and ceilings (forming part of the envelope) demonstrate a minimum 10% improvement in 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 3.6% towards the category score.
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC2022 Section J)?

1.2 Thermal Performance Rating - Residential 0% ✔ Achieved

Score Contribution	This credit contributes 16.9% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Apartment	7.0 Stars

2.1 Greenhouse Gas Emissions 4%

Score Contribution	This credit contributes 17.8% 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)
Apartment	21,463 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Apartment	19,718 kg CO2
Output	% Reduction in GHG Emissions
Apartment	8 %

2.2 Peak Demand 100%

Score Contribution	This credit contributes 0.4% 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 18.3% 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 24.3% towards the category score.
Criteria	What is the % reduction in annual energy consumption against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Apartment	206,627 MJ
Output	Proposed Building with Proposed Services (Actual Building)
Apartment	91,008 MJ
Output	% Reduction in total energy
Apartment	55 %

3.1 Carpark Ventilation N/A Scoped Out

n/a

This credit was scoped out	n/a

3.2 Hot Water - Non-Residential 100%

Score Contribution	This credit contributes 0.4% towards the category score.
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?

3.4 Clothes Drying 0%

Score Contribution	This credit contributes 5.6% 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
Apartment	5,333 kWh
Output	Proposed
Apartment	5,333 kWh
Output	Improvement
Apartment	0 %

3.6 Internal Lighting - Apartments 100%

Score Contribution	This credit contributes 5.6% towards the category score.
Criteria	Is the maximum illumination power density (W/m2) in at least 90% of the relevant building class at least 20% lower than required by clause J7D3(1)(a) and Table J6.2a of the NCC 2022 Vol 1 (Class 2-9)?
Question	Criteria Achieved ?
Apartment	Yes

3.7 Internal Lighting - Non-Residential 100%

Score Contribution	This credit contributes 0.9% 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 ?
Shop	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 92%

Score Contribution	This credit contributes 6.1% 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
Apartment	7,662 kWh
Output	% of Building's Energy
Apartment	30 %

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%	**74%**	✔ **Pass**

What metric do you want to use for daylight to apartments?:	Daylight factor
Daylight Factor: use the BESS Deemed to Satisfy (DtS) method?:	No
Daylight Factor: what calculation approach do you want to use?:	Use the built in calculation tools

Rooms

Room Designation:	
Living -Apt1,2,4,5,7,8,10,11,13 Living Apt 3 Living Apt6 Living Apt9 Living Apt12	Living
Bedroom - Apt 5, 8,13 Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 6 -bed 2 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Apt 2 -bed 2 Apt 2- bed main Apt 12- bed1 Apt 12- bed 2	Bedroom

Quantity:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	9
Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 6 -bed 2 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Living Apt 3 Living Apt6 Living Apt9 Living Apt12 Apt 2 -bed 2 Apt 2- bed main Apt 12- bed1 Apt 12- bed 2	1

Auto-Pass:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	Yes
Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 6 -bed 2 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Living Apt 3 Living Apt6 Living Apt9 Living Apt12 Apt 2 -bed 2 Apt 2- bed main Apt 12- bed1 Apt 12- bed 2	No

Room Floor Area:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	0.0 m²
Apt 1-Bedroom 2 Apt 4 - bed2 Apt 10- bed2 Apt 2 -bed 2	8.7 m²
Apt 1 -Bedroom main Apt 4-bed main Apt 7 - bed2 Apt 7- bed main Apt 10- bed main Apt 2- bed main	10.7 m²
Apt 3 -bed 1 Apt 6- bed 1 Apt 9 -bed 1 Apt 12- bed1	8.6 m²
Apt 3 - bed2 Apt 6 -bed 2 Apt 9 - bed 2 Apt 12- bed 2	10.8 m²
Apt 13 - main bed	13.3 m²
Living Apt 3 Living Apt6 Living Apt9 Living Apt12	30.1 m²

Vertical Angle:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	0.0 Angle (degrees)
Apt 1-Bedroom 2 Apt 1 -Bedroom main	10.9 Angle (degrees)
Apt 3 -bed 1	11.6 Angle (degrees)
Apt 3 - bed2	8.5 Angle (degrees)
Apt 4 - bed2 Apt 4-bed main	13.5 Angle (degrees)
Apt 6- bed 1	15.9 Angle (degrees)
Apt 6 -bed 2	10.5 Angle (degrees)
Apt 7 - bed2 Apt 7- bed main	18.0 Angle (degrees)
Apt 9 -bed 1	24.2 Angle (degrees)
Apt 9 - bed 2	13.7 Angle (degrees)
Apt 10- bed2 Apt 10- bed main	26.3 Angle (degrees)
Apt 13 - main bed	46.6 Angle (degrees)
Living Apt 3 Living Apt6 Living Apt9 Living Apt12	43.1 Angle (degrees)
Apt 2 -bed 2 Apt 2- bed main	10.8 Angle (degrees)
Apt 12- bed1	48.5 Angle (degrees)
Apt 12- bed 2	20.5 Angle (degrees)

Horizontal Angle:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	0.0 Angle (degrees)
Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 4 - bed2 Apt 4-bed main Apt 7 - bed2 Apt 7- bed main Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 2 -bed 2 Apt 2- bed main	69.1 Angle (degrees)
Apt 3 -bed 1 Apt 3 - bed2 Apt 6- bed 1 Apt 6 -bed 2 Apt 9 -bed 1 Apt 12- bed1 Apt 12- bed 2	56.8 Angle (degrees)
Apt 13 - main bed	79.8 Angle (degrees)
Living Apt 3 Living Apt6 Living Apt9 Living Apt12	108 Angle (degrees)

Window Area:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	0.0 m²
Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 6 -bed 2 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Apt 2 -bed 2 Apt 2- bed main Apt 12- bed1 Apt 12- bed 2	3.7 m²
Living Apt 3 Living Apt6 Living Apt9 Living Apt12	9.1 m²

Window Orientation:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	-
Apt 1-Bedroom 2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 7 - bed2 Apt 9 -bed 1 Apt 10- bed2 Living Apt 3 Living Apt9 Living Apt12 Apt 2 -bed 2 Apt 12- bed1	East
Apt 1 -Bedroom main Apt 3 - bed2 Apt 6 -bed 2 Apt 7- bed main Apt 9 - bed 2 Apt 10- bed main Apt 13 - main bed Living Apt6 Apt 2- bed main Apt 12- bed 2	West
Apt 3 -bed 1	South-East

Glass Type:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13	-
Apt 1-Bedroom 2 Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 6 -bed 2 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Living Apt 3 Living Apt6 Living Apt9 Living Apt12 Apt 2 -bed 2 Apt 2- bed main Apt 12- bed1 Apt 12- bed 2	Clear Double (VLT 0.71)
Daylight Criteria Achieved?:	
Living -Apt1,2,4,5,7,8,10,11,13 Bedroom - Apt 5, 8,13 Apt 1-Bedroom 2 Apt 4 - bed2 Apt 4-bed main Apt 6- bed 1 Apt 7 - bed2 Apt 7- bed main Apt 9 -bed 1 Apt 9 - bed 2 Apt 10- bed2 Apt 10- bed main Apt 13 - main bed Living Apt 3 Living Apt6 Living Apt9 Living Apt12 Apt 2 -bed 2 Apt 12- bed1 Apt 12- bed 2	Yes
Apt 1 -Bedroom main Apt 3 -bed 1 Apt 3 - bed2 Apt 6 -bed 2 Apt 2- bed main	No

1.1 Daylight Access - Living Areas		100%	✔ Achieved
Score Contribution	This credit contributes 26.5% towards the category score.		
Criteria	What % of living areas achieve the daylight criteria?		
Output	Calculated percentage		
Apartment	100 %		

1.2 Daylight Access - Bedrooms		66%	✔ Achieved
Score Contribution	This credit contributes 26.5% towards the category score.		
Criteria	What % of bedrooms achieve the daylight criteria?		
Output	Calculated percentage		
Apartment	82 %		

1.3 Winter Sunlight		0%
Score Contribution	This credit contributes 8.8% towards the category score.	
Criteria	Do 70% of dwellings receive at least 3 hours of direct sunlight in all Living areas between 9am and 3pm in mid-winter?	
Question	Criteria Achieved ?	
Apartment	No	

1.4 Daylight Access - Non-Residential		45%	✔ Achieved
Score Contribution	This credit contributes 4.2% towards the category score.		
Criteria	What % of the nominated floor area has at least 2% daylight factor?		
Question	Percentage Achieved?		
Shop	45 %		

1.5 Daylight Access - Main Living Areas		N/A	Scoped Out
			Spatial daylight autonomy metric not in use
This credit was scoped out	Spatial daylight autonomy metric not in use		

1.6 Daylight Access - Secondary Habitable Rooms		N/A	Scoped Out
			Spatial daylight autonomy metric not in use
This credit was scoped out	Spatial daylight autonomy metric not in use		

2.1 Ventilation - Natural - Apartments		100%
Score Contribution	This credit contributes 26.5% towards the category score.	
Criteria	What % of dwellings are effectively naturally ventilated?	
Question	Percentage Achieved?	
Apartment	100 %	

2.3 Ventilation - Non-Residential		33%	✔ Achieved
Score Contribution	This credit contributes 4.2% towards the category score.		
Criteria	What % of the regular use areas are effectively naturally ventilated?		
Question	Percentage Achieved?		
Shop	-		

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?
Shop	50 %

Criteria	What CO2 concentrations are the ventilation systems designed to achieve, to monitor and to maintain?
Question	Value
Shop	-

3.4 Thermal comfort - Shading - Non-Residential	0%

Score Contribution	This credit contributes 2.1% towards the category score.

Criteria	What percentage of east, north and west glazing to regular use areas is effectively shaded?
Question	Percentage Achieved?
Shop	0 %

3.5 Thermal Comfort - Ceiling Fans - Non-Residential	0%

Score Contribution	This credit contributes 0.7% towards the category score.
Criteria	What percentage of regular use areas in tenancies have ceiling fans?
Question	Percentage Achieved?
Shop	-

4.1 Air Quality - Non-Residential	100%

Score Contribution	This credit contributes 0.7% towards the category score.

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

Criteria	Does all carpet meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Shop	Yes

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

Transport Overall contribution 9.0%

		23%

1.1 Bicycle Parking - Residential	100%
Score Contribution	This credit contributes 23.4% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there for residents?
Annotation	Total 8 bike racks provide within the development
Question	Bicycle Spaces Provided ?
Apartment	13
Output	Min Bicycle Spaces Required
Apartment	13

1.2 Bicycle Parking - Residential Visitor	0%
Score Contribution	This credit contributes 23.4% towards the category score.
Criteria	How many secure bicycle spaces are there for visitors?
Question	Visitor Bicycle Spaces Provided ?
Apartment	0

1.3 Bicycle Parking - Convenience Residential	0%
Score Contribution	This credit contributes 11.7% towards the category score.
Criteria	Are bike parking facilities for residents located at ground or entry level?
Question	Criteria Achieved ?
Apartment	No

1.4 Bicycle Parking - Non-Residential	0%
Score Contribution	This credit contributes 1.8% 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 ?
Shop	No
Question	Bicycle Spaces Provided ?
Shop	-

1.5 Bicycle Parking - Non-Residential Visitor	0%
Score Contribution	This credit contributes 0.9% 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 ?
Shop	No
Question	Bicycle Spaces Provided ?
Shop	-

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 25.2% towards the category score.	
Criteria	Are facilities provided for the charging of electric vehicles?	
Question	Criteria Achieved ?	
Project	No	

2.2 Car Share Scheme		N/A Scoped Out
		n/a
This credit was scoped out	n/a	

2.3 Motorbikes / Mopeds		0%
Score Contribution	This credit contributes 12.6% 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%**

66%

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		100%
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	Yes	

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%

	10%

1.1 Communal Spaces		0%
Score Contribution	This credit contributes 11.2% 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	
Apartment	-	
Shop	-	
Output	Minimum Common Space Required	
Apartment	26 m²	
Shop	8 m²	
2.1 Vegetation		0%
Score Contribution	This credit contributes 44.8% 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	-	
2.2 Green Roofs		0%
Score Contribution	This credit contributes 11.2% 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 11.2% towards the category score.	
Criteria	Does the development incorporate a green wall or green façade?	
Question	Criteria Achieved ?	
Project	No	
2.4 Balconies, Courtyards & Roof terraces		100%
Score Contribution	This credit contributes 10.4% towards the category score.	
Criteria	Is there a tap and floor waste on every balcony and courtyard (including any roof terraces)?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.1 Food Production - Residential		0%

Score Contribution	This credit contributes 10.4% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Apartment	-
Output	Min Food Production Area
Apartment	7 m²

3.2 Food Production - Non-Residential	0%

Score Contribution	This credit contributes 0.8% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	Food Production Area
Shop	-
Output	Min Food Production Area
Shop	3 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)?

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