



ESD in the Planning Permit Application Process

Yarra City Council's planning permit application process includes Environmentally Sustainable Development (ESD) considerations. This is now supported by the ESD Local Policy Clause 22.17 of the Yarra Planning Scheme, entitled *Environmentally Sustainable Development*.

The Clause 22.17 requires all eligible applications to demonstrate best practice in ESD, supported by the Built Environment Sustainability Scorecard (BESS) web-based application tool, which is based on the Sustainable Design Assessment in the Planning Process (SDAPP) program.

As detailed in Clause 22.17, this application is a 'large' planning application as it meets the category *Non-residential 1. 1,000m² or greater*.

What is a Sustainable Management Plan (SMP)?

An SMP is a detailed sustainability assessment of a proposed design at the planning stage. An SMP demonstrates best practice in the 10 Key Sustainable Building Categories and;

- Provides a detailed assessment of the development. It may use relevant tools such as BESS and STORM or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identifies achievable environmental performance outcomes having regard to the objectives of Clause 22.17 (as appropriate); and
- Demonstrates that the building has the design potential to achieve the relevant environmental performance outcomes, having regard to the site's opportunities and constraints; and
- Documents the means by which the performance outcomes can be achieved.

An SMP identifies beneficial, easy to implement, best practice initiatives. The nature of larger developments provides the opportunity for increased environmental benefits and the opportunity for major resource savings. Hence, greater rigour in investigation is justified. It may be necessary to engage a sustainability consultant to prepare an SMP.

Assessment Process:

The applicant's town planning drawings provide the basis for Council's ESD assessment. Through the provided drawings and the SMP, Council requires the applicant to demonstrate best practice.



Table of Contents

Assessment Summary:.....	3
1. Indoor Environment Quality (IEQ)	6
2. Energy Efficiency	7
3. Water Efficiency.....	8
4. Stormwater Management	9
5. Building Materials	10
6. Transport	11
7. Waste Management	12
8. Urban Ecology	13
9. Innovation	14
10. Construction and Building Management	15
Applicant Response Guidelines	16



Assessment Summary:

Responsible Planner:	Nish Goonetilleke
ESD Advisor:	Gavin Ashley
Date:	23.07.2020
Subject Site:	PLN20/0037 25 Balmain Street, 128-134 Cubitt Street, Cremorne VIC 3121
Site Area:	Approx. 861 m ²
Project Description:	Construction of a six-storey building comprising of ground floor car parking and commercial space, with four levels of office area and rooftop facilities.
Pre-application meeting(s):	Unknown.
Documents Reviewed:	<ul style="list-style-type: none"> • Sustainable Management Plan (& WSUD Report) [22.05.20], Ark Resources • Daylight Report [17.03.20], ADP Consulting • Architectural Plans [04.03.20], Jackson Clements Burrows

The standard of the ESD does not meet Council's Environmental Sustainable Design (ESD) standards. Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met.

Furthermore, it is recommended that all ESD commitments (1), deficiencies (2) and the outstanding information (3) are addressed in an updated SMP report and are clearly shown on Condition 1 drawings. ESD improvement opportunities (4) have been summarised as a recommendation to the applicant.

(1) Applicant ESD Commitments:

- Equivalent 4-star Green Star Design & As-Built rating; 45.5 points claimed including 4 Innovation points.
- The project is targeting a 5-star NABERS energy rating.
- A comprehensive project-specific environmental management plan to be implemented during construction – with an ISO 14001 head contractor to be appointed.
- Provide floor-by-floor metering; plus, independent metering for all loads >5% of annual building energy use or 100kW; and metering for common water use consuming 10% of development's water use.
- Selection of low VOC and formaldehyde products specified.
- Ventilation systems to comply with ASHRAE 62.1, and pre-cleaned prior to handover.
- 14.5kWp rooftop PV system, with high efficiency 300Wp 60-cell modules used to reduce embodied carbon associated with racking by 20%.
- Electric vehicle charging infrastructure for 100% of car-parking spaces (8 spaces).
- Bicycle parking provided for 28 staff and 4 visitor bikes – with EOT facilities provided.
- A STORM report with a 116% STORM score has been submitted that demonstrates best practice and relies on ~677m² of roof connected to a 10,000-litre rainwater tank connected to toilet flushing and irrigation.
- No increase in stormwater discharge to result from re-development.
- Water efficient fixtures throughout, and sub-soil drip (landscape) irrigation system with moisture sensors and timers.
- Site-wide leak detection system installed to prevent risk of ongoing potable water wastage
- 60% of steel reinforcement manufactured using energy reducing process – concrete mixes to include at least 50% recycled water.
- At least 75% of the total project site area comprises building or landscaping elements that reduce impact of heat island effect – with native planting used on at least 2.5% of the site.



(2) Application ESD Deficiencies:

- The application has heavy reliance on innovation points to reach a 4 star Green Star rating. Recommend increasing contingency to 4 to 5 points above the threshold to ensure that the Green Star rating can be reached.
- Include a target >80% of all demolition and construction waste (by weight) to be reused or recycled into site-specific Environmental Management Plan.
- Include allocations for waste streams including organics in WMP and within basement.
- plans suggest a large portion of black metal cladding which poses a concern for UHI mitigation (although acknowledge that this is not included in the 75%)
- 2 innovation credits rely on 3 credits being claimed for 'Access by Public Transport', however the site is approximately 430m from Church Street (tram) and 750m to the Richmond train station – and as such is not considered 'innovative' in that regard.

(3) Outstanding Information:

- Clarify provision of outdoor air to office spaces on all levels.
- Clarify project-wide specification for hazardous materials (adhesives, sealants, carpets, and timer).
- Confirm, and provide calculations (Section J Analysis) to support improvement on 2019 NCC reference.
- Include details on façade design and performance to support calculations.
- Clarify HWS and consider using a heat pump.
- Clarify HVAC provision and consider 3 pipe VRF.
- Confirm car park ventilation strategy. (whether garage door vented or open to facilitate ventilation).
- Clarify improvement in lighting density over NCC requirements.
- Confirm WELS ratings of dishwashers.
- Confirm strategy for water metering.
- Clarify treatment of stormwater prior to reuse.
- Clarify use of recycled or reused materials
- Clarify certification (FSC or similar), and/or recycled timber to be used within project.
- Confirm extent of strategy for reduced PVC (by weight or cost).
- Confirm, and consider the addition of a shower in the DDA compliant bathroom to allow all users access to EOT facilities.
- Include car share information within Green Travel Plan.
- Provide a Green Travel Plan with performance targets and monitoring and reporting components included.
- Provide an operational Waste Management Plan detailing the sites waste generation and management strategy, including strategy for organic waste.
- Provide Landscape Management Plan and/or planting schedule to confirm native planting strategy.
- Provide documentation to support 75% target for UHI materials and green infrastructure claim.
- Clarify innovative technology includes site-wide leak detection system, and Dematerialisation of PV array and support racking by 20% through use of bifacial modules with high-efficiency cells.
- Confirm extent of building commissioning and tuning strategy.
- Clarify provision of a BUG to support the uptake of sustainable practices by building users.

(4) ESD Improvement Opportunities

- Consider targeting a 5.5 star NABERS rating
- Consider calculating embodied carbon reduced through 'energy reducing manufacturing', and other materials that can be replaced or reused to achieve reductions.
- Consider a small pallet of materials and construction techniques that can assist in disassembly.
- Consider a green roof or wall to improve the ecological value of this site.

Further Recommendations:

The applicant is encouraged to consider the inclusion of ESD recommendations, detailed in this referral report. Further guidance on how to meet individual planning conditions has been provided in

Sustainable Management Plan (SMP)

Referral Response by Yarra City Council



reference to the individual categories. The applicant is also encouraged to seek further advice or clarification from Council on the individual project recommendations.

1. Indoor Environment Quality (IEQ)

Objectives:

- to achieve a healthy indoor environment quality for the wellbeing of building occupants.
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices.

Issues	Applicant's Design Responses	Council Comments	CAR*
Natural Ventilation and Night Purging	While not mentioned in SMP, the plans indicate operable windows to all office levels.	Clarify provision of outdoor air to office spaces on all levels.	3
Daylight & Solar Access	The Daylight Report indicates that 47.3% of the primary floor area achieves a DF>2.0 with a VLT of 50%.	Satisfactory.	1
External Views	No information provided.	Satisfactory. Due to extent of glazing.	1
Hazardous Materials and VOC	The SMP includes specification of low VOC paints, adhesives, sealants and carpets –with 50% of internal paints to be ultra-low VOC type (<5g/litre).	Clarify project-wide specification for hazardous materials (adhesives, sealants, carpets, and timer).	3
Thermal Comfort	Mixed mode ventilation, double glazing and use of terraces (on east façade) as shading element.	Satisfactory.	1

* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [1. Indoor Environment Quality](#)
 Good Environmental Choice Australia Standards www.geca.org.au
 Australian Green Procurement www.greenprocurement.org
 Residential Flat Design Code www.planning.nsw.gov.au
 Your Home www.yourhome.gov.au

2. Energy Efficiency

Objectives:

- to ensure the efficient use of energy
- to reduce total operating greenhouse emissions
- to reduce energy peak demand
- to minimize associated energy costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
NCC Energy Efficiency Requirements Exceeded	No information on NCC requirements, however 5-star NABERS energy targeted.	Confirm, and provide calculations (Section J Analysis) to support improvement on 2019 NCC reference.	3
Thermal Performance	No information has been provided.	Include details on façade design and performance to support calculations.	3
Greenhouse Gas Emissions	PV estimated to reduce GHG by 22.62 tonnes annually (SMP, p. 19).	Consider targeting a 5.5 star NABERS rating	4
Hot Water System	No information is provided.	Clarify HWS and consider using a heat pump.	3
Peak Energy Demand	No information is provided.		
Effective Shading	The proposal includes terraces along the east façade of 1480mm.	Satisfactory.	1
Efficient HVAC system	No information is provided.	Clarify HVAC provision and consider 3 pipe VRF.	3
Car Park Ventilation	No information provided in SMP, however the plans indicate the ground floor car park will be 'open to vent' (TP 2-103).	Confirm car park ventilation strategy. (whether garage door vented or open to facilitate ventilation).	3
Efficient Lighting	Lighting systems designed to meet best practice illuminance levels, and designed for task lighting and brightness control.	Clarify improvement in lighting density over NCC requirements.	3
Electricity Generation	A 14.5kWp rooftop solar system is proposed, estimated to generate 20.3 MWh/year.	Satisfactory.	1
Other	-	-	

* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [2. Energy Efficiency](#)

House Energy Rating www.makeyourhomegreen.vic.gov.au

Building Code Australia www.abcb.gov.au

Window Efficiency Rating Scheme (WERS) www.wers.net

Minimum Energy Performance Standards (MEPS) www.energyrating.gov.au

Energy Efficiency www.resourcesmart.vic.gov.au

3. Water Efficiency

Objectives:

- to ensure the efficient use of water
- to reduce total operating potable water use
- to encourage the collection and reuse of rainwater and stormwater
- to encourage the appropriate use of alternative water sources (e.g. grey water)
- to minimise associated water costs.

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising Amenity Water Demand	Minimum WELS star rating of fixtures: <ul style="list-style-type: none"> • Taps: 5 star • Toilets: 4 star • Showers: 3 star • Dishwashers – 'Water efficient' 	Confirm WELS ratings of dishwashers.	3
Water for Toilet Flushing	677m ² of roof connected to a 10,000-litre rainwater tank connected to toilet flushing and irrigation.	Satisfactory.	1
Water Meter	Floor-by-floor metering, and metering for common use consuming 10% of developments water.	Confirm strategy for water metering.	3
Landscape Irrigation	Water efficient sub-soil drip irrigation system with moisture sensors and timers using reclaimed rainwater.	Satisfactory.	1
Other	-	-	

* Council Assessment Ratings:

- 1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [3. Water Efficiency](#)
 Water Efficient Labelling Scheme (WELS) www.waterrating.gov.au
 Water Services Association of Australia www.wsaa.asn.au
 Water Tank Requirement www.makeyourhomegreen.vic.gov.au
 Melbourne Water STORM calculator www.storm.melbournewater.com.au
 Sustainable Landscaping www.ourwater.vic.gov.au

4. Stormwater Management

Objectives:

- to reduce the impact of stormwater runoff
- to improve the water quality of stormwater runoff
- to achieve best practice stormwater quality outcomes
- to incorporate Water Sensitive Urban Design principles.

Issues	Applicant's Design Responses	Council Comments	CAR*
STORM Rating	A STORM report with a 116% STORM score has been submitted that demonstrates best practice and relies on ~677m ² of roof connected to a 10,000-litre rainwater tank connected to toilet flushing and irrigation.	Satisfactory.	1
Discharge to Sewer	The SMP claims no increase in stormwater discharge to result from re-development.	Satisfactory. (SMP, p. 22)	1
Stormwater Diversion	A total area of 677m ² of rooftop diverted to rainwater storage, in addition to 44 m ² of planter boxes on rooftop terrace.	Satisfactory.	1
Stormwater Detention	A 10,000-litre rainwater tank is located at ground level, in addition to an 8,000-litre detention tank.		-
Stormwater Treatment	No information is provided, beyond specification of detention and rainwater tanks.	Clarify treatment of stormwater prior to reuse.	3
Others	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [4. Stormwater Management](#)
 Melbourne Water STORM calculator www.storm.melbournewater.com.au
 Water Sensitive Urban Design Principles www.melbournewater.com.au
 Environmental Protection Authority Victoria www.epa.vic.gov.au
 Water Services Association of Australia www.wsaa.asn.au
 Sustainable Landscaping www.ourwater.vic.gov.au

5. Building Materials

Objectives:

- to minimise the environmental impact of materials used by encouraging the use of materials with a favourable lifecycle assessment.

Issues	Applicant's Design Responses	Council Comments	CAR*
Reuse of Recycled Materials	No information is provided – beyond claim that concrete mix will use at least 50% reclaimed water.	Clarify use of recycled or reused materials	3
Embodied Energy of Concrete and Steel	No information is provided.	Consider calculating embodied carbon reduced through 'energy reducing manufacturing', and other materials that can be replaced or reused to achieve reductions.	4
Sustainable Timber	No information is provided.	Clarify certification (FSC or similar), and/or recycled timber to be used within project.	3
Design for Disassembly	No information is provided.	Consider a small pallet of materials and construction techniques that can assist in disassembly.	4
PVC	Specification of common use PVC products that meet Best Practice Guidelines for PVC in the Built Environment.	Confirm extent of strategy for reduced PVC (by weight or cost).	3

* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [5. Building Materials](#)

Building Materials, Technical Manuals www.yourhome.gov.au

Embodied Energy Technical Manual www.yourhome.gov.au

Good Environmental Choice Australia Standards www.geca.org.au

Forest Stewardship Council Certification Scheme www.fsc.org

Australian Green Procurement www.greenprocurement.org

6. Transport

Objectives:

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

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising the Provision of Car Parks	Car parking for 18 cars proposed in basement.	Satisfactory	1
Bike Parking Spaces	Bicycle parking provided for 28 staff and 4 visitor bikes.	Satisfactory.	1
End of Trip Facilities	End of trip facilities have been provided. The plans indicate 2x showers and a shared locker-room.	Confirm, and consider the addition of a shower in the DDA compliant bathroom to allow all users access to EOT facilities.	3
Car Share Facilities	No information is provided.	Include car share information within Green Travel Plan.	3
Electric vehicle charging	Electric vehicle charging infrastructure for 100% of car-parking spaces (8 spaces).	Good.	1
Green Travel Plan	A Green Travel plan has not been provided.	Provide a Green Travel Plan with performance targets and monitoring and reporting components included.	3

* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [6. Transport](#)

Off-setting Car Emissions Options www.greenfleet.com.au

Sustainable Transport www.transport.vic.gov.au/doi/internet/icy.nsf

Car share options www.yarracity.vic.gov.au/Parking-roads-and-transport/Transport-Services/Carsharing/

Bicycle Victoria www.bv.com.au

7. Waste Management

Objectives:

- to ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development
- to ensure long term reusability of building materials.
- to meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria.

Issues	Applicant's Design Responses	Council Comments	CAR*
Construction Waste Management	The SMP claims that demolition and construction waste sent to landfill to be less than 10kg per square meter of GFA.	Include a target >80% of all demolition and construction waste (by weight) to be reused or recycled into site-specific Environmental Management Plan.	2
Operational Waste Management	A waste-room is located in the ground floor carpark; however, no operational Waste Management Plan has been provided.	Provide an operational Waste Management Plan detailing the sites waste generation and management strategy, including strategy for organic waste.	3
Storage Spaces for Recycling and Green Waste	A waste-room is located on the ground floor, however no delineation as to recycling or organic waste storage.	Include allocations for waste streams including organics in WMP and within basement.	2
Others	-	-	-

* Council Assessment Ratings:

1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [7. Waste Management](#)

Construction and Waste Management www.sustainability.vic.gov.au

Preparing a WMP www.epa.vic.gov.au

Waste and Recycling www.resourcesmart.vic.gov.au

Better Practice Guide for Waste Management in Multi-Unit Dwellings (2002)

www.environment.nsw.gov.au

Waste reduction in office buildings (2002) www.environment.nsw.gov.au

8. Urban Ecology

Objectives:

- to protect and enhance biodiversity
- to provide sustainable landscaping
- to protect and manage all remnant indigenous plant communities
- to encourage the planting of indigenous vegetation.

Issues	Applicant's Design Responses	Council Comments	CAR*
On Site Topsoil Retention	There is no productive topsoil on this site.	-	N/A
Maintaining / Enhancing Ecological Value	Native planting used on at least 2.5% of the site in the form of planter boxes on eastern façade and rooftop terrace.	Provide Landscape Management Plan and/or planting schedule to confirm native planting strategy.	3
Heat Island Effect	At least 75% of the total project site area comprises building or landscaping elements that reduce impact of heat island effect.	Provide documentation to support 75% target for UHI materials and green infrastructure claim. Additionally, plans suggest a large portion of black metal cladding which poses a concern for UHI mitigation (although acknowledge that this is not included in the 75%)	3 2
Other			
Green wall, roofs, facades	No information has been provided.	Consider a green roof or wall to improve the ecological value of this site.	4

* Council Assessment Ratings:

- 1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [8. Urban Ecology](#)

Department of Sustainability and Environment www.dse.vic.gov.au

Australian Research Centre for Urban Ecology www.arcue.botany.unimelb.edu.au

Greening Australia www.greeningaustralia.org.au

Green Roof Technical Manual www.yourhome.gov.au

9. Innovation

Objective:

- to encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings.

Issues	Applicant's Design Responses	Council Comments	CAR*
Significant Enhancement to the Environmental Performance	The proposal has claimed 2 Green Star credits for 'Innovative Technology or Process', and 2 credits for 'Improving on Green Star Benchmarks'.	Clarify innovative technology includes site-wide leak detection system, and Dematerialisation of PV array and support racking by 20% through use of bifacial modules with high-efficiency cells. The other 2 innovation credits rely on 3 credits being claimed for 'Access by Public Transport', however the site is approximately 430m from Church Street (tram) and 750m to the Richmond train station – and as such is not considered 'innovative' in that regard.	3 2
Innovative Social Improvements	-	-	-
New Technology	-	-	-
New Design Approach	-	-	-
Others	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [9. Innovation](#)

Green Building Council Australia www.gbca.org.au

Victorian Eco Innovation lab www.ecoinnovationlab.com

Business Victoria www.business.vic.gov.au

Environment Design Guide www.environmentdesignguide.com.au

10. Construction and Building Management

Objective:

- to encourage a holistic and integrated design and construction process and ongoing high performance

Issues	Applicant's Design Responses	Council Comments	CAR*
Building Tuning	Building commissioning and tuning are claimed as credits in the Green Star pathway report.	Confirm extent of building commissioning and tuning strategy.	3
Building Users Guide (BUG)	No information is provided.	Clarify provision of a BUG to support the uptake of sustainable practices by building users.	3
Contractor has Valid ISO14001 Accreditation	An ISO 14001 head contractor is included in the SMP.	Satisfactory.	1
Construction Management Plan	The SMP identifies a Comprehensive project-specific environmental management plan is to be implemented during construction	Satisfactory.	1
Others	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is **SATISFACTORY**; 2 – Design Response is **NOT SATISFACTORY**
 3 – **MORE INFORMATION** is required; 4 – **ESD IMPROVEMENT OPPORTUNITIES**

References and useful information:

SDAPP Fact Sheet: [10. Construction and Building Management](#)

ASHRAE and CIBSE Commissioning handbooks

International Organization for standardization – ISO14001 – Environmental Management Systems

Keeping Our Stormwater Clean – A Builder's Guide www.melbournewater.com.au



Applicant Response Guidelines

Project Information:

Applicants should state the property address and the proposed development's use and extent. They should describe neighbouring buildings that impact on or may be impacted by the development. It is required to outline relevant areas, such as site permeability, water capture areas and gross floor area of different building uses. Applicants should describe the development's sustainable design approach and summarise the project's key ESD objectives.

Environmental Categories:

Each criterion is one of the 10 Key Sustainable Building Categories. The applicant is required to address each criterion and demonstrate how the design meets its objectives.

Objectives:

Within this section the general intent, the aims and the purposes of the category are explained.

Issues:

This section comprises a list of topics that might be relevant within the environmental category. As each application responds to different opportunities and constraints, it is not required to address all issues. The list is non-exhaustive and topics can be added to tailor to specific application needs.

Assessment Method Description:

Where applicable, the Applicant needs to explain what standards have been used to assess the applicable issues.

Benchmarks Description:

The applicant is required to briefly explain the benchmark applied as outlined within the chosen standard. A benchmark description is required for each environmental issue that has been identified as relevant.

How does the proposal comply with the benchmarks?

The applicant should show how the proposed design meets the benchmarks of the chosen standard through making references to the design brief, drawings, specifications, consultant reports or other evidence that proves compliance with the chosen benchmark.

ESD Matters on Architectural Drawings:

Architectural drawings should reflect all relevant ESD matters where feasible. As an example, window attributes, sun shading and materials should be noted on elevations and finishes schedules, water tanks and renewable energy devices should be shown on plans. The site's permeability should be clearly noted. It is also recommended to indicate water catchment areas on roof- or site plans to confirm water re-use calculations.