

Sustainable Management Plan (SMP)

for planning applications being considered by Yarra Council



ESD in the Planning Permit Application Process:

Yarra City Council's planning permit application process includes Environmentally Sustainable Design (ESD) considerations. The Sustainable Design Assessment in the Planning Process (SDAPP) program is:

- A practical approach to assessing sustainable development matters during the planning permit application process.
- The consistent inclusion of key environmental performance considerations into the planning approvals process.
- Your guide to achieving more sustainable building outcomes for the long-term benefit of the wider community.

As part of the SDAPP program, all **Large** planning permit applications with Yarra City Council are required to include a Sustainable Management Plan (SMP). Your application is a 'Large' planning application if it meets one of the following categories:

- Residential – ten or more residential dwellings
- Non-residential - 1000m² or more of non-residential Gross Floor Area (GFA).

Please refer to the Sustainable Design Assessment (SDA) information for building sizes below these benchmarks. All information on the SDAPP program can be obtained on our webpage:

www.yarracity.vic.gov.au/Planning--Building/Environmentally-Sustainable-Design

What is a Sustainable Management Plan (SMP)?

An SMP is a detailed sustainability assessment of a proposed design at the planning stage. An SMP addresses the 10 Key Sustainable Building Categories and demonstrates that a holistic ESD review has been undertaken during a project's early design stages. It identifies beneficial, easy to implement and 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.

This reference document is designed to provide guidance on how to prepare an SMP report. The document outlines objectives, ESD issues, response guidelines and references for all 10 Key Sustainable Building Categories:

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Response Guidelines

Project Information

The applicant should state the property address and the proposed development's use and extent. He 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. The applicant 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

The Applicant needs to explain what standards have been used to assess the applicable issues. For a list of potential standards, please refer to the section 'Relevant Standards' under each Key Sustainable Building Category

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.

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:

Topics to be addressed may include:

- Thermal Comfort
- Natural Ventilation
- Daylight
- External Views
- Glare Prevention
- Hazardous Materials and VOC
- Electric Lighting Levels
- Acoustics
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Good Environmental Choice Australia Standards
- Australian Green Procurement
- BCA provisions provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

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

Australian Green Procurement www.greenprocurement.org

Residential Flat Design 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 reduce associated energy costs.

Issues:

Topics to be addressed may include:

- Operating Energy
- Energy Sub-Metering
- Lighting Power Density
- Lighting Zoning
- Peak Energy Demand Reduction
- Air leakage minimised
- Efficient Shading
- Building Fabric enhanced over minimum BCA requirements
- HVAC zoning
- Efficient HVAC system
- Efficient onsite generation of electricity
- Allowance for efficient fans and pumps (e.g. VSD)
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Window Efficiency Rating Scheme (WERS) compares summer and winter performance
- Minimum Energy Performance Standards (MEPS) Regulations in Australia
- Energy Ratings are available for various appliances, incl. air-conditioning
- BCA provisions provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

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

First Rate www.sustainability.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 stormwater.
- To encourage the appropriate use of alternative water sources (e.g. grey water).
- To minimize associated water costs.

Issues:

Topics to be addressed may include:

- Minimising Amenity Water Demand
- Water Meter
- Landscape irrigation
- Heat Rejection Water
- Fire Systems Check Water Consumption
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Water Efficient Labelling Scheme (WELS) provides information on appliances and fittings; highest available ratings are recommended
- Water Services Association of Australia, The national Water Conservation Rating and Labelling Scheme
- BCA provisions provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

Water Efficient Labelling Scheme (WELS) www.waterrating.gov.au
Water Services Association of Australia www.wsaa.asn.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 run-off.
- To improve the water quality of stormwater run-off.
- To achieve best practice stormwater quality outcomes.
- To incorporate water sensitive urban design principles.

Issues:

Topics to be addressed may include:

- STORM rating
- MUSIC modelling
- Discharge to Sewer
- Watercourse Pollution
- Stormwater caption
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- STORM rating, minimum 100% is required
- Meeting Victoria's best practice storm water targets is strongly recommended
- Green Star, BREEAM and LEED provide benchmarks for relevant Issues
- Water Sensitive Urban Design
- Environmental Protection Authority Victoria
- Water Services Association of Australia, The national Water Conservation Rating and Labelling Scheme
- BCA provisions and the Building regulations provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

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.wsa.asn.au
Sustainable Landscaping www.ourwater.vic.gov.au

5. Building Materials

Objectives:

To minimise the environmental impacts materials used by encouraging the use of materials with a favourable lifecycle assessment based on the following factors:

- Fate of material
- Recycling/Reuse
- Embodied energy
- Biodiversity
- Human health
- Environmental toxicity
- Environmental responsibility.

Issues:

Topics to be addressed may include:

- Storage for Recycling Waste
- Reuse of Materials and other Recycled Materials
- Embodied Energy of Concrete
- Embodied Energy of Steel
- Sustainable Timber
- Design for Disassembly
- Environmental toxicity
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant Issues
- Forest Stewardship Council Certification Scheme
- BCA provisions provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

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:

Topics to be addressed may include:

- Minimising the provision of car parks for conventional vehicles
- Providing bike storage
- Providing Access to Showers
- Car sharing
- Green Travel Plan
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Council Legislation

References and useful information:

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:

Topics to be addressed may include:

- Construction Waste Management Plan
- Construction Environmental Management Plan
- Operation Waste Management Plan
- Operation Environmental Management Plan
- Storage spaces for recycling and green waste
- Contractor has valid ISO14001 accreditation
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Section 3 / 4 of the NSW Environmental Management Systems Guidelines 1998 or 2007
- ISO14001 Environmental Management System (EMS)

References and useful information:

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) and

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:

Topics to be addressed may include:

- On site topsoil retention
- Reuse of already developed land
- Maintaining / Enhancing Ecological Value
- Reclaiming contaminated land
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues
- Council Legislation

References and useful information:

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:

Topics to be addressed may include:

- Significant enhancements to the environmental performance
- Innovative social improvements
- New technology
- Good passive design approach
- Responding to local climate conditions
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant Issues
- Exceeding typical performance benchmarks or enhancing typical building processes
- BCA provisions provide minimum standards; improvements on these minimum requirements are strongly encouraged

References and useful information:

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:

Topics to be addressed may include:

- Construction Environmental Management Plan
- Contractor has valid ISO14001 accreditation
- Operation Environmental Management Plan
- Building Tuning
- Building User's Guide
- Other

Applicant Responses:

The applicant is required to address the above applicable criteria and demonstrate how the design meets the intent. The response should include the following:

- Assessment Method Description
- Benchmarks Description
- How does the proposal comply with the benchmarks?

Relevant Standards:

- Green Star, BREEAM and LEED provide benchmarks for relevant issues

References and useful information:

- ASHRAE and CIBSE Commissioning handbooks
- International Organization for standardization – ISO14001 – Environmental Management Systems