****

**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.

All **Medium** planning permit applications with Yarra City Council are now required to include a Sustainable Design Assessment (SDA), as detailed in the ESD Local Policy Clause 22.17. Your application is a ‘Medium’ planning application if it meets one of the following categories:

* Residential - two to nine residential dwellings
* Non-residential - 100m2 to 1000m2 of non-residential Gross Floor Area (GFA).

Please refer to the Sustainable Management Plan (SMP) information for building sizes exceeding these categories. 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 Design Assessment (SDA)?**

|  |
| --- |
| An SDA addresses 10 Key Sustainable Building Categories (also refer to Table of Content on the next page). You can use free web-based tools, such as BESS to help prepare an SDA report by following this template. By using these free resources, you can easily demonstrate that your project meets Yarra’s best practice standards.This template is designed to provide guidance how to prepare an SDA report. The document outlines objectives, ESD issues and references for all 10 Key Sustainable Building Categories. You can either prepare your own SDA report or use this document by inserting your responses in the grey shaded table cells. Please also make sure that your architectural drawings 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. It might also be useful to indicate water catchment areas and a site’s permeability on roof- or site plans to confirm water re-use calculations. |



Table of Contents:

[Project Information 3](#_Toc284247123)

[1. Indoor Environment Quality (IEQ) 4](#_Toc284247124)

[2. Energy Efficiency 5](#_Toc284247125)

[3. Water Resources 6](#_Toc284247126)

[4. Stormwater Management 7](#_Toc284247127)

[5. Building Materials 8](#_Toc284247128)

[6. Transport 9](#_Toc284247129)

[7. Waste Management 10](#_Toc284247130)

[8. Urban Ecology 11](#_Toc284247131)

[9. Innovation 12](#_Toc284247132)

[10. Ongoing Building and Site Management 13](#_Toc284247133)

# Project Information

|  |
| --- |
| Planning Permit Applicant: |

.

|  |
| --- |
| Project Description:  |

.

|  |
| --- |
| Property Address:  |

.

|  |
| --- |
| Site Area: |

.

|  |
| --- |
| Site Coverage (building and hard landscaping areas): |

.

|  |
| --- |
| Proposed Building Areas (GFA m2):  |

.

|  |
| --- |
| The sustainable design approach of your building project and its key ESD objectives: |

.

# 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 | Design Responses |
| Daylight | *Describe how habitable rooms receive enough daylight throughout the day. Show glazing colour on elevation drawings.* |
| Ventilation | *Describe how rooms can be sufficiently ventilated (preferably naturally but where this is impractical, mechanically) and provide occupants with quality fresh air. Show window openings on elevation drawings.* |
| Thermal Comfort | *Describe how habitable rooms sufficiently insulated, shaded and conditioned to ensure comfortable temperatures throughout the year.*  |
| Product Choice | *Describe commitment to choose building materials and finishes with low levels of Volatile Organic Compounds (VOC) and other hazardous components.* |
| Others |  |

**More information can be found in the** [**Indoor Environment Quality fact sheet**](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6247)

#

# 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 | Design Responses |
| BCA EnergyEfficiency requirementsexceeded  | *Provide preliminary energy ratings NatHERS for residential (inlcuding Firstrate, Accurate and BERS Pro) and for non-residential NABERS Energy, or provide information on how energy efficiency requirements will be achieved. Enclose preliminary energy rating.* |
| Hot Water System | *Describe hot water system type (eg gas instantaneous) and efficiency rating.* *Indicate plant location and size on plans.* |
| Efficient Shading  | *Provide description and show shading elements on plans, finishes schedule and elevations.* |
| Efficient heating and cooling system  | *Describe commitment to choose heating and cooling options with high efficiency ratings. Indicate plant location and size on plans.* |
| Efficient Lighting | *Provide description and list the main habitable areas considering fluorescent, compact fluorescent, or LED lighting indicating how min. standards are being exceeded (eg residential living areas 5w/m2)* |
| Electricity Generation | *Describe on-site electricity generation including size (eg solar PV) Indicate plant location and size on plans.* |
| Others |  |

#

# More information can be found in the [Energy Efficiency fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6244)

# 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 | Design Responses |
| Minimising Amenity Water Demand  | *Provide efficiency of water appliances including shower heads, taps and toilet cisterns.* |
| Water for Toilet Flushing | *Describe water source for toilet flushing. Indicate rain water tank’s location and size on plans if applicable.* |
| Water Meter | *Provide information on how any multiple unit developments will be metered.* |
| Landscape Irrigation | *Provide description and water source for landscape irrigation. Show irrigation source on relevant floor/roof/site plan drawing or landscape plan if submitted* |
| Other |  |

#

# More information can be found in the [Water Efficiency fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6246)

# 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 | Design Responses |
| Site permeability | *Provide details of permeable and impermeable surfaces within the site area.* |
| Rainwater tanks | *Provide details of any water tanks including area of roof run-off, size of tank and proposed water uses (eg. toilet flushing, garden).* *Indicate rain water tank’s location and size on plans (if applicable).* |
| Porous paving | *Provide details of any porous paving including land area and type. Indicate details on plans (if applicable).* |
| Rain gardens or swales | *Provide details of any rain gardens or swales including size of feature and area of run-off. Indicate rain garden or swale location and size on plans (if applicable).* |
| Other |  |

# More information can be found in the [Stormwater Management fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6245)

# 5. Building Materials

**Objectives:**

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

|  |  |
| --- | --- |
| Issues | Design Responses |
| Retention of existing structure and materials | *Provide a description of the intended re-use of existing structures and /or materials within the proposed design. Show on relevant floor/site/demolition plans and elevations/sections.* |
| Reusability and recyclability of materials | *Provide a description of intended materials to be used that have already been recycled and/or their potential to be recycled and or disassembled once they have finished their purpose for this design. Show on relevant floor/site/demolition plans and elevations/sections.* |
| Embodied Energy  | *Provide a description of intended materials to be used that have sustainable production processes (including low embodied energy etc)* |
| Sustainable Timber | *Provide a description of intended sustainable timber use and list their independent sources of verification (eg. forest stewardship council accredited).* |
| Other |  |

#

# More information can be found in the [Building Materials fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6242)

# 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 | Design Responses |
| Minimising the Provision of Car Parks for ConventionalVehicles | *Provide a description of any parking dispensation being sought and provide details for consideration.* |
| Providing Bike Storage | *Provide the total number of bike storage facilities and ratio to the total number of building users and guests. Show on relevant floor/site plans* |
| End of trip facilities  | *Provide a description of how the design provides end of trip change facilities for bike users and ratio to the total number of on-site bicycle storage spaces* |
| Car Sharing | *Provide a description of any on or off site car share service and show on relevant site plans* |
| Other |  |

**More information can be found in the** [**Transport fact sheet**](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6248)

# 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 | Design Responses |
| Storage Spaces for Recycling and Green Waste | *Provide details of separation of waste streams including recycling, green waste and food waste. Indicate space allocation for waste streams on plans.* |
| Construction Waste Management Plan (WMP) | *Provide description of how construction waste will be managed through the construction process including material sorting, disposal and targeted recycling rates* |
| Operation Waste Management Plan | *Provide description of how operational waste will be managed through the occupied life of the building* |
| Others |  |

#

# More information can be found in the [Waste Management fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6249)

# 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 | Design Responses |
| Landscaped areas to be designated | *Provide a description of all new, existing retained and existing demolished landscaped areas and indicate how the design has enhanced the sites biodiversity. Show on relevant site/floor/landscape plans.* |
| Native vegetation  | *Provide a description of how the design has retained native vegetation and allowed for drought tolerant native vegetation. Show on relevant site/floor/landscape plans.* |
| Season heat control | *Provide a description of how the design has used vegetation to control seasonal heat gain or glare and ventilation. Show on relevant site/floor/landscape plans.* |
| Others |  |

# More information can be found in the [Urban Ecology fact sheet](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6252)

#

# 9. Innovation

**Objective:**

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

|  |  |
| --- | --- |
| Issues | Design Responses |
| Significant Enhancement to the Environmental Performance | *Provide a description of how design exceeds best practice standards in one or more of the other 9 categories* |
| Innovative Social Improvements | *Provide a description of how the design has helped implement innovative social improvements (eg. shared composting and communal garden areas)* |
| New Technology  | *Provide a description of how the design implements unique/new methods and strategies to enhance design outcomes.* |
| New DesignApproach | *Provide a description of how the design implements an innovative new design approach.* |
| Others |  |

**More information can be found in the** [**Innovation fact sheet**](http://www.yarracity.vic.gov.au/DownloadDocument.ashx?DocumentID=6251)

# 10. Construction and Building Management

**Objective:**

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

|  |  |
| --- | --- |
| Issues | Design Responses |
| Building Tuning  | *Provide a description of how the designs building systems are managed to ensure optimal efficiency (where fitted)* |
| Building Users’ Guide  | *Provide a description of intent to provide building occupants with a user’s guide that explains the ESD principles of the building*  |
| Environmental credentials of project team | *Provide a description of any environmental credentials that the project team may have (ie Contractor has valied ISO14001 environmental management accreditation, Green Star Accredited Professional, Certified Green Plumber etc.* |
| Environmental Management Plan; Construction and Operation | *Provide a description of any Environmental Management Plans that intend to be implemented during operation phase* |

**More information can be found in the** [**Construction and Building Management fact sheet**](https://www.yarracity.vic.gov.au/-/media/files/ycc/services/planning-and-development/environmentally-sustainable-design/construction-building-management-factsheet.pdf?la=en)