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#### SCHEDULE 73 TO CLAUSE 43.02 DESIGN AND DEVELOPMENT OVERLAY

Shown on the planning scheme map as **DDO73**.

#### SUSTAINABLE BUILDING DESIGN

#### 1.0

# **Design objectives**

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- To ensure buildings are energy efficient and align with the City of Melbourne's target of zero emissions by 2040.
- To increase the quantity, quality and distribution of green cover to improve urban cooling and biodiversity outcomes.
- To support opportunities for precinct scale environmentally sustainable design outcomes, including the transition to a circular economy.
- To ensure the design, construction and operation of buildings addresses climate change impacts, including water shortages and the urban heat island effect, and minimises impacts on the local environment, including through waste management and resource recovery.

#### 2.0

### **Buildings and works**

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#### 2.1 Definitions

For the purpose of this schedule:

- **Green cover** includes trees, shrubs, grasses, climbers, living green roofs and walls, other vegetation and lawn, and excludes non-plantable surfaces (hard non-permeable and permeable).
- **Green Factor Tool** refers to the City of Melbourne's tool for measuring the green infrastructure credentials of a development (or any replacement tool).
- Green Factor Scorecard means the document output from a completed Green Factor Tool
  assessment which provides relevant project information including the overall Green Factor
  score, area calculations and ecosystem outcomes.
- Green infrastructure means infrastructure that directly provides ecosystem services or supports
  the provision of these services including green cover, stormwater and rainwater harvesting
  interventions, permeable surfaces, waterways and wetlands.
- Ecosystem services means services (such as water filtration, noise reduction and climate regulation) that are provided by natural elements of the environment (including natural elements that have been constructed by humans such as green infrastructure) and that contribute directly or indirectly to human wellbeing.
- Equivalent to the identified tool means an assessment method developed by a reputable organisation which provides an evidence-based framework for assessing compliance with the relevant standard in this schedule. The assessment methodology must be comparable or better than the relevant tool identified in this schedule with the results able to be easily reviewed and assessed as accurate by the responsible authority.
- Hardscaping means landscape elements (including paving) other than green cover.

#### 2.2 Buildings and works for which no permit is required

A permit is not required to construct a building or construct or carry out works, other than:

- The construction of a new building for the purposes of Accommodation, Retail, Office, Education centre, Research and development centre or Place of assembly.
- Buildings and works which result in more than 1000 sqm additional gross floor area for the purposes listed above.

#### 2.3 Requirements

An application to construct a building or to construct or carry out works is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

A permit cannot be granted to vary a requirement expressed with the term 'must' or a requirement that relates to a minimum (mandatory) standard of this schedule. This does not apply to the requirement at Table 6 where it can be demonstrated to the satisfaction of the responsible authority:

- That the use of the Green Factor Tool is not practical.
- At least 40% of the total site area will be provided as green cover, which must satisfy all of the following elements:
  - A minimum of 65% of the required green cover as canopy planting and a minimum of 35% understorey planting. Canopy planting and understorey planting may overlap.
  - A planting scheme comprising of native vegetation species which provide habitat for native fauna.
  - Green cover which is located to provide maximum benefit in relation to cooling of the adjoining public realm to the satisfaction of the responsible authority. Green walls or facades under this alternate delivery must directly abut the public realm and be on the lower levels of the building.

In the case of an amendment to a permit, a requirement expressed with the term 'must' or a requirement that relates to a minimum (*mandatory*) standard of this schedule may be varied only if the amendment does not increase the extent of the non-compliance.

Where this schedule identifies use of a specific tool external to this planning scheme, applicants must use the most current version of the specified tool or may use an alternative tool, provided it is demonstrated to be equivalent to the identified tool and results in comparable outcomes, to the satisfaction of the responsible authority.

#### Environmentally sustainable design

Development should meet the preferred standard in **Table 1**, unless it is demonstrated to the satisfaction of the responsible authority that the delivery of the preferred standard is not technically achievable.

If the preferred standard is not met, the minimum (mandatory) standard must be met.

The requirement to meet the standard means:

- In relation to the Green Star Buildings standards:
  - The development must be designed to be able to achieve certification to the applicable Green Star Buildings rating.
  - The development must be constructed so as to be able to be certified to the applicable Green Star Buildings rating.
  - Within 12 months of occupation of the building, the development must be certified as achieving the applicable Green Star Buildings rating with the Green Building Council of Australia.
- In relation to the Built Environment Sustainability Scorecard (BESS) standards:
  - The development must be designed to be able to achieve the applicable score.
  - The development must be constructed to achieve the applicable score.

Table 1

Type of development	Stan	dard
	Minimum ( <i>mandatory</i> )	Preferred
New buildings of more than 5000 sqm gross floor area	5 Star Green Star Buildings	6 Star Green Star Buildings
Buildings and work which result in more than 5000 sqm additional gross floor area		
New buildings of equal to or less than 5000 sqm gross floor area	A minimum 50% BESS score	A minimum 70% BESS score
Buildings and works which result in between 1000 and 5000 sqm additional gross floor area		

#### **Energy efficiency and renewables**

Development should meet the preferred standard in **Table 2** unless it is demonstrated to the satisfaction of the responsible authority that the delivery of the preferred standard is not technically achievable or economically feasible.

If the preferred standard is not met the minimum (mandatory) standard must be met.

The requirement to meet the standard means:

- In relation to the Nationwide House Energy Rating Scheme (NatHERS) and the National Australian Built Environment Rating System (NABERS) standards:
  - The development must be designed to be able to achieve certification to the applicable NatHERS or NABERS star rating.
  - The development must be constructed so as to be able to become certified to the applicable NABERS star rating.
  - The development must be constructed to achieve the applicable NatHERS star rating.
  - Within 24 months of occupation of the building, the development must be certified as achieving the applicable NABERS star rating.
- In relation to the BESS standards:
  - The development must be designed to be able to achieve the applicable score.
  - The development must be constructed to achieve the applicable score.

Table 2

Type of development	Standard	
	Minimum ( <i>mandatory</i> )	Preferred
New buildings of more than 5000 sqm gross floor area  Buildings and works which result in more than 5000 sqm additional gross floor area	For residential - An average of at least 7.5 star NatHERS rating across multiple dwellings, and a minimum of 6.5 star NatHERS rating for each dwelling  For non-residential - A minimum 5.5 star NABERS Energy rating	For residential - none specified For non-residential - A minimum 6 Star NABERS Energy rating
New buildings of equal to or less than 5000 sqm gross floor area	For all, including residential - A minimum 60% score in the BESS Energy category	A minimum 70% score in the BESS energy category.

Type of development	Stan	dard
Buildings and works which result in between 1000 and 5000 sqm additional gross floor area	For residential - An average of at least 7.5 star NatHERS rating across multiple dwellings, and a minimum of 6.5 star NatHERS rating for each dwelling.	

# Table 3

Type of development	Requirement
All development	Should incorporate on-site renewable energy generation
	Should not incorporate connections to gas services or other non-renewable energy.

# Waste and resource recovery

# Table 4

Type of development	Requirement
All development	<ul> <li>Must provide waste and resource recovery facilities that meet the requirements of the City of Melbourne's Guidelines for Waste Management Plans.</li> </ul>
	Must meet the requirements of a precinct waste management plan, if there is one in place.
	Should manage construction waste to minimise landfill and maximise resource recovery.

# Urban heat island response

# Table 5

Type of development	Requirement
All development	• Must provide the equivalent of at least 75% of the development's total site area as building or landscape elements that reduce the impact of the urban heat island effect. These elements include:
	- Green infrastructure
	<ul> <li>Roof or facade materials with a minimum Solar Reflectance Index (SRI) of 0.65</li> </ul>
	<ul> <li>Solar panels</li> </ul>
	<ul> <li>Shading structures</li> </ul>
	<ul> <li>Hardscaping materials with a minimum SRI of 0.65</li> </ul>
	Should ensure non-glazed facade materials exposed to summer sun have a minimum SRI of 0.65.
	<ul> <li>Should use passive cooling and heating techniques to reduce reliance on artificial heating and cooling.</li> </ul>
	<ul> <li>Should utilise paving treatments which assist in cooling, such as permeable paving or light coloured aggregates, where applicable.</li> </ul>

# **Urban ecology**

# Table 6

Type of development	Requirement
New buildings	Must be designed and constructed to achieve a minimum Green Factor score of 0.55 using City of Melbourne's <i>Green Factor Tool</i> .
Buildings and works which result in more than 1000 sqm additional gross floor area	Should be designed and constructed to achieve a minimum Green Factor score of 0.55 using City of Melbourne's <i>Green Factor Tool</i> .
All development	Should ensure green cover proposed:
	<ul> <li>Supports the creation of complex and biodiverse ecosystems.</li> </ul>
	<ul> <li>Provides a layered approach, incorporating both understorey and canopy planting.</li> </ul>
	<ul> <li>Provides native, indigenous or climate change resilient exotic plants that provide resources for native fauna.</li> </ul>
	<ul> <li>Supports the creation of vegetation links between areas of high biodiversity through planting selection and design where applicable.</li> </ul>
	<ul> <li>Retains existing mature canopy trees or vegetation which contributes to habitat for native fauna.</li> </ul>
	<ul> <li>Uses species selected drawn from the City of Melbourne's preferred species list.</li> </ul>

# Integrated water management

# Table 7

Type of development	Requirement
All development	<ul> <li>Must achieve the best practice water quality performance objectives set out in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO, 1999 (or as amended).</li> </ul>
	Should use alternative water for all non-potable uses on-site where technically achievable.
New buildings	Must connect to a precinct scale recycled water source if available.
Buildings and works which result in more than 5000 sqm additional gross floor area	<ul> <li>Unless connected to a recycled water source, must install a rainwater tank to support on-site green cover or supply a minimum of 10% of internal water demand.</li> </ul>
Buildings and works which result in between 1000 sqm and 5000 sqm additional gross floor area	Should connect to a precinct scale recycled water source if available.
	<ul> <li>Unless connected to a recycled water source, should install a rainwater tank to support on-site green cover or supply a minimum of 10% of internal water demand.</li> </ul>

# Table 8

Development should meet the standard in Table 8.

The requirement to meet the standard means:

- The development must be designed to be able to achieve the applicable standard.
- The development must be constructed to achieve compliance with the relevant rating.

#### Table 8

Type of development	Standard
New buildings of more than 5000 sqm gross floor area	For residential - the relevant Water credit under 5 Star Green Star Buildings.
Buildings and works which result in more than 5000 sqm additional gross floor area	For non-residential - a minimum 4 Star NABERS Water rating.
New buildings of equal to or less than 5000 sqm gross floor area	A minimum 50% score in BESS Water category.
Buildings and works which result in between 1000 sqm and 5000 sqm additional gross floor area	

#### 3.0 Subdivision

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None specified.

### 4.0 Signs

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None specified.

# 5.0 Application requirements

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The following application requirements apply to an application for a permit under Clause 43.02, in addition to those specified elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A response to the Decision Guidelines outlined at Section 6.0 where not addressed by other application requirements.
- If a 'preferred' standard will not be met by the development, the following must be provided:
- A detailed analysis of the site context and its impact on the delivery of the preferred standard.
  - A report from a suitably qualified person that provides a justification for why delivery of the preferred standard is not technically achievable or economically feasible.
- Documentation of how relevant requirements and standards will be delivered as identified in Table 9 below.

#### Table 9

Type of development	Requirement
New buildings of more than 5000 sqm gross floor area  Buildings and works which result in more than 5000 sqm additional gross floor area	Evidence to the satisfaction of the responsible authority that demonstrates the project has been registered to seek the applicable Green Star Buildings rating with the Green Building Council of Australia.
	A Sustainability Management Plan (SMP) that is prepared by a suitably qualified person, contains a detailed assessment of the development and includes:
	<ul> <li>Details of how the development meets each of the applicable requirements and standards in this schedule.</li> </ul>
	<ul><li>In relation to the standards in Table 1 and Table</li><li>2:</li></ul>

Type of development	Requirement
	<ul> <li>An assessment that demonstrates that the development meets (or, where relating to construction or occupation, has the potential to meet) the applicable requirements and standards.</li> </ul>
	<ul> <li>The steps that will be taken to ensure that the development is constructed to achieve the relevant requirements or standards, including by obtaining certification under the relevant ratings tool (if applicable).</li> </ul>
	Plans submitted with the application must detail the content of the SMP where relevant.
New buildings equal to or less than 5000 sqm gross floor area	A Sustainable Design Assessment (SDA) that includes:
Buildings and works which result in between 1000 sqm and 5000 sqm additional gross floor area	<ul> <li>Details of how the development meets each of the applicable requirements and standards in this schedule.</li> </ul>
	<ul><li>In relation to the standards in Table 1 and Table 2:</li></ul>
	<ul> <li>An assessment from a suitably qualified person or a report created using the relevant ratings tool (as applicable), which demonstrates that the development meets (or, where relating to construction or occupation, has the potential to meet) the requirements and standards.</li> </ul>
	<ul> <li>The steps that will be taken to ensure that the development as constructed achieves the relevant standard, including by obtaining certification under the relevant ratings tool (if applicable).</li> </ul>
	Plans submitted with the application must detail the content of the SDA where relevant.
All developments (other than single dwellings)	A landscape package comprising a landscape maintenance plan, Green Factor Scorecard (if applicable) and associated landscape plan/s, including species lists and construction details (if relevant).
Single dwellings	A Green Factor Scorecard and landscape plan, as applicable.
All development	A Waste Management Plan prepared in accordance with the City of Melbourne's <i>Guidelines for Waste Management Plans</i> .

# 6.0 Decision guidelines

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The following decision guidelines apply to an application for a permit under Clause 43.02, in addition to those specified in Clause 43.02 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- In respect of the preferred standards in **Table 1** and **Table 2**, the justification for any variation on the basis of technical feasibility or economic viability.
- How the development aligns with the City of Melbourne's target for zero carbon emissions by 2040.
- The merits of providing on-site renewable energy infrastructure having regard to the contribution the energy generated would make to reducing greenhouse gas emissions.
- The site context.

- The contribution the development makes to mitigation of the urban heat island effect.
- The maintenance plan for the proposed green cover.
- The ability of the integrated water management approach to reintegrate stormwater into the landscape.
- How additional water requirements to support on-site green cover are aligned with integrated water management on the site.
- The impact of the removal of any mature canopy trees or vegetation which contribute to the City's natural ecosystems, and the measures proposed to mitigate these impacts.