

# South Dublin Green Space Factor Guidance Note



**South Dublin** 2022-2028  
County Development Plan

3<sup>rd</sup> August 2022

### Green Space Factor Guidance Note

The quantity and quality of green infrastructure provided by new development will be improved by the enforcement of a Green Space Factor (GSF) for South Dublin. A greening factor is a measurement that describes the quantity and quality of landscaping and GI across a defined spatial area. This measurement comprises a ratio that compares amount of green space to the amount of impermeable 'grey' space in a subject site. As a planning tool, this ratio can be used to assess both the existing green cover within a site and the impact of new development, based on the quantity and quality of new green space provided.

New residential and commercial development comprising 2 or more residential units and / or 1,000 sq.metres of commercial floor space are required to reach the minimum green factor score established by their land use zoning. New residential and commercial development comprising 2 or more residential units and / or 1,000 sq.metres of commercial floor space are required to reach the minimum green factor score established by their land use zoning. Minimum required scores for different land use zonings are included in Table 1 below.

Table 1: Minimum Green Space Factor Scores for Land Use Zonings.

Zoning	Minimum Score
Res	0.5
RES-N	0.5
SDZ	0.5
REGEN	0.5
TC	0.5
DC	0.5
VC	0.5
MRC	0.5
LC	0.5
EE	0.5
RW	0.5
HA-DM	0.7
HA-LV	0.7
HA-DV	0.7
OS	0.7
RU	0.7

Developers can improve their green factor score by retaining existing landscape features and incorporating new landscape features and GI interventions. A number of landscape and GI surface types and interventions have been assigned a 'weighting', based on their contribution to ecosystem services. Factors with a higher weighting will make a higher contribution to the overall score of a proposed development.

The GSF score for a proposed development is calculated using the following equation:

$$\text{GSF} = \frac{(\text{factor A} \times \text{area A}) + (\text{Factor B} \times \text{area B}) + (\text{factor C} \times \text{area C}) + \text{etc...}}{\text{Site Area}}$$

The weighting for each factor included in Table 2 below. To calculate the GSF score for a proposed development, multiply the proposed quantum of each factor by its weighting to get the value for that factor. Then add together the cumulative value of each factor and divide by the overall site area to determine the overall GSF score.

Table 2: Greening Factors with Weightings.

Factor	Weighting
<b>1. Short Lawn</b> – short mown lawn or grassland	0.3
<b>2. Tall Lawn</b> – taller lawn or grassland that is not mown and generally left to natural succession	0.5
<b>3. Permeable Paving</b> – paving types that allow for the flow of surface water through the paved surface	0.2
<b>4. Vegetation</b> – shrubs, perennials and hedgerow	
a. Shrubs of a height below 3cm	0.4
b. Shrub / Hedgerow of a height above 3cm	0.5
c. Pollinator-friendly perennial planting	0.5
d. Preserved hedgerow	1.2
<b>5. Trees</b>	
a. New trees – the measurement for proposed new trees is based on the stem girth for each tree	0.6
b. Preserved trees – the measurement used for preserved trees is based on the area of their canopy.	1.2
<b>6. Natural SuDS intervention</b> – e.g. rain gardens, bioswales, detentions basins, wetlands. Does not include attenuation tanks or other 'grey' SuDS interventions.	0.6
<b>7. Green Roofs</b>	
a. Intensive green roof – green roofs with a substrate depth of 1m or greater	0.7
b. Extensive green roof – green roofs with substrate depth less than 1m	0.6
<b>8. Green wall</b> – a vertical surface fitted with an appropriate substrate structure to support the growth of vegetation	0.4
<b>9. Retained Open Water</b>	2

<b>10. New Open Water Feature</b> – artificial pond or lake, or unculverting section of an existing waterway.	1.5
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To facilitate the evaluation of the Green Space Factor score for proposed development, the Council provide a Green Factor Worksheet to applicants (Figure 1 below). This worksheet allows developers to input the land use zoning for a site and measurements for the overall site area and the surface areas of proposed greening factors to calculate the green factor score for a proposed development. Where required, a completed worksheet should be submitted to SDCC with the Green Infrastructure Plan and Landscape Plan for a proposed development.

Green Space Factor Tool  
South Dublin County Council



User input indicated by Orange fields

User Input	
Zoning lookup	Minimum GI Score
HA-DM	0.7

1. Enter Development Site Area m <sup>2</sup> <span style="color: orange;">HERE ▶</span>			
Surface Type (see tab for detailed descriptions)	Factor	Proposed Surface Area m <sup>2</sup>	Factor x Area
1. Short Lawn	0.3	0	0
2. Tall Lawn (wild, not mown)	0.5	0	0
Permeable Paving	0.3	0	0
Vegetation		0	0
4a. Vegetation-Shrub below 3cm	0.4	0	0
4b. Vegetation-Shrub / Hedgerow above 3cm	0.5	0	0
4c. Vegetation-Pollinator friendly perennial planting	0.5	0	0
4d. Vegetation-Preserved hedgerow	1.2	0	0
Trees		0	0
5a. New trees	0.6	0	0
5b. Preserved trees	1.2	0	0
7. SuDS intervention (rain garden, biopswle)	0.6	0	0
Green Roof		0	0
9a. Green Roofs- Intensive green roof (substrate is 1 metre or greater in depth)	0.7	0	0
9b. Green Roofs - Extensive green roof (less than 1 metre in depth)	0.6	0	0
10. Green wall	0.4	0	0
11. Retained Open Water	2	0	0
12. New open water	1.5	0	0
<b>Total Equivalent Surface Area of Greening Factors</b>		<b>0.00</b>	

<b>Green Factor Numerator</b>	<b>0.00</b>
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Minimum Required GI score	Final GI score	Result
0.7	#DIV/0!	#DIV/0!

Figure 1: Green Space Factor Worksheet.

As provided in the South Dublin County Development Plan, in cases where a developer faces particular difficulties in meeting the required minimum score due to site specific constraints, the Council will engage with an applicant to help determine an alternative GI solution for the subject site. A developer may be permitted to provide alternative site-specific GI interventions or other contributions to make up for a shortcoming. The following comprises a non-exhaustive list of interventions that developers can implement in order to enhance GI of site:

- The use of natural features such as woodlands, hedgerows, trees, water courses, ponds and grasslands or other natural methods to strengthen GI assets and provide connections to the wider GI network.
- The incorporation of nature-based solutions such as SuDS schemes, permeable paving, green and blue roofs, green walls, swales, SuDS tree pits, raingardens, ponds to support local biodiversity and mitigate potentially harmful effects of development.
- The provision of new native tree and plant species as well as pollinator friendly species within developments, consistent with National Pollinator Plan.
- Where possible, no net loss of existing trees/hedgerows on site.
- The provision of bird boxes (as building façades for nesting sparrows or swift bricks), bat boxes, hedgehog passes, and other wildlife interventions as required in landscape settings.
- The provision of bee bricks in new development.
- The retention of heritage features such as old walls, bridges etc. that have habitat value.
- The provision of allotments/orchards for residents to grow fruits and vegetables.
- Use of recycled/upcycled or locally sourced natural materials within the development.
- GI management/maintenance plans to be included as part of the landscape plans submitted for the Planning process. May include hedgerow/ tree and grassland management plans.
- The provision of environmentally sensitive recreation and connectivity between GI areas.

Those GI measures ultimately chosen will be dictated by the site-specific context and will be subject to agreement with Council.

Further, where a subject site is considered to be particularly sensitive or valuable from a GI perspective, developers will be required to engage with Council to determine those GI interventions that may be required to ensure integrity of site. This will primarily apply to sites located within or adjacent to primary and secondary GI corridors (see Figure 4.4). In such cases, specific consideration will be required to ensure that development does not fracture existing GI network and preserves or enhances connectivity. Further, such sites may require the implementation of additional site-specific interventions, of the type described above, to reflect their value. GI infrastructure will be dictated by both site context and their place in county-wide network of GI corridors and will be subject to agreement with Council.

Enter Development Site Area m<sup>2</sup> **HERE ▶** 3116m<sup>2</sup>

Surface Type (see tab for detailed descriptions)	Factor	Proposed Surface Area m <sup>2</sup>
	0.3	1010
(, not mown)	0.5	30
g	0.3	306
		0
shrub below 3cm	0.4	156
shrub / Hedgerow above 3cm	0.5	134
pollinator friendly perennial planting	0.5	0
reserved hedgerow	1.2	43
		0
	0.6	440
es	1.2	695
tion (rain garden, bioswale)	0.6	30
		0
Intensive green roof (substrate is 1 metre or greater in depth)	0.7	0
Extensive green roof (less than 1 metre in depth)	0.6	0
	0.4	0
Open Water	2	0
Water	1.5	0
<b>Equivalent Surface Area of Greening Factors</b>		<b>2814 m<sup>2</sup></b>

<b>Green Factor Numerator</b>	<b>0.50</b>
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