

Network UGF

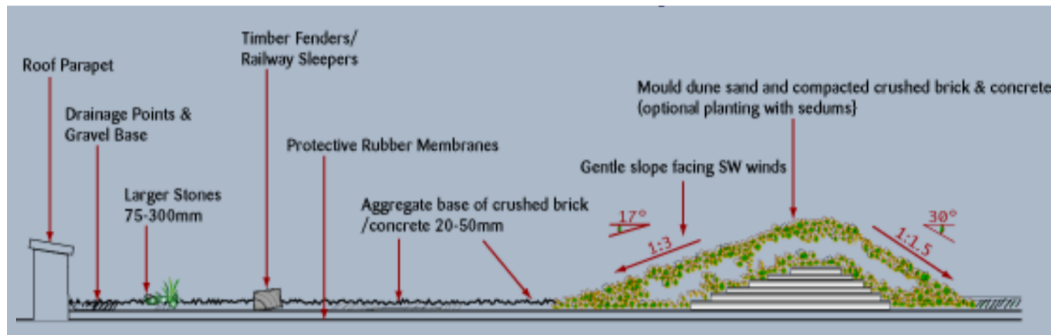
30 April 2021 at 12:29

TFT Comments
30 April 2021

	Extensive green roof – 80mm	Intensive green roof 150mm	Intensive green roof 300mm	Rain garden/planting	Gavin's Comments/Queries	Design team responses – 30.04.2021																																													
Roof terrace	145sqm	0	208	0	<p>I presume this is actually the Roof Level (above level 7 of the life-science and level 8 of the office)?</p> <p>I calculate Intensive Green Roof as 208sqm (Office) and 215 (life-science)</p> <p>I calculate Extensive Green Roof as 146sqm (office) and 158 (life-science)</p>	<p>A 145sqm extensive green roof (min 80mm) and 208sqm intensive green roof (300mm) are the minimum areas proposed for both the office and lab science reserved matters applications. Whilst there is no UGF benefit of specifying 300mm substrate depths over 150mm (both are valued at 0.8 within the UGF methodology) the team considered 300mm to provide a greater opportunity for ecological biodiversity and a wider range of planting including tall shrubs and coppices and small trees. This aligns with Derwent's corporate sustainability objectives to deliver biodiversity net gain across their developments.</p> <p>There is further opportunity for green roof provision for the life science building where there is no publicly accessible terrace and additional measures can be incorporated to align this reserve matters application closer with the 0.3 UGF target (as below). Note we have removed ground floor planting and resized the site footprint accordingly which we've explained further in the commentary below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Extensive Green Roof - 80mm</th> <th>Intensive Green Roof - 150mm</th> <th>Intensive Green Roof - 300mm</th> <th>Rain Garden / Soft Planting</th> </tr> </thead> <tbody> <tr> <td>UGF (Urban Greening Factor)</td> <td style="text-align: center;">0.7</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">0.7</td> </tr> <tr> <td>Roof terrace</td> <td style="text-align: center;">512.6m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">219.5.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Level 08</td> <td style="text-align: center;">147.1m²</td> <td style="text-align: center;">19.3m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Level GRD</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Totals (with UGF applied)</td> <td style="text-align: center;">461.8</td> <td style="text-align: center;">15.4</td> <td style="text-align: center;">175.6</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> <p>UGF = 652.8 / 2,073 = 0.315</p>		Extensive Green Roof - 80mm	Intensive Green Roof - 150mm	Intensive Green Roof - 300mm	Rain Garden / Soft Planting	UGF (Urban Greening Factor)	0.7	0.8	0.8	0.7	Roof terrace	512.6m ²	.m ²	219.5.m ²	.m ²	Level 08	147.1m ²	19.3m ²	.m ²	.m ²	Level GRD	.m ²	.m ²	.m ²	.m ²	Totals (with UGF applied)	461.8	15.4	175.6	0															
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Level 08	147.1sqm	19.3	0	0	<p>Is this the green area on the sides of the top floor of accommodation?</p> <p>Can this not be provided as Intensive Green roof or GreenBlue roof – seeing as how it is not limited by considerations of LVMF height and will need to be contained by a parapet buildup.</p>	<p>Following review the team have confirmed that a 150mm substrate at level 8 can be accommodated without significant structural alterations which would improve the UGF category of this area from 0.7 to 0.8 and result in an overall UGF improvement of 0.005.</p>																																													
Ground floor	0	0	0	270	<p>This is off-site – I don't see how this can count towards the UGF – there is also no certainty of its delivery at this stage.</p>	<p>Following clarification with the BRE on areas of assessment as part of calculating ecological improvements in contribution to BREEAM LE04 ecology criteria this area had been included within calculations for the UGF. Derwent are committed to contributing to the enhancement of the ground floor public realm however noting the uncertainty in timeline for delivery we have provided updated UGF calculations without this area. Please be advised the UGF is calculated using the assessed site footprint, by removing the ground floor from the scope of the calculation the footprint must also be updated, which we've highlighted in the table below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Apr-21</th> </tr> <tr> <th></th> <th>Extensive Green Roof - 80mm</th> <th>Intensive Green Roof - 150mm</th> <th>Intensive Green Roof - 300mm</th> <th>Rain Garden / Soft Planting</th> </tr> </thead> <tbody> <tr> <td>UGF (Urban Greening Factor)</td> <td style="text-align: center;">0.7</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">0.7</td> </tr> <tr> <td>Roof terrace</td> <td style="text-align: center;">145.m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">208.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Level 08</td> <td style="text-align: center;">147.1m²</td> <td style="text-align: center;">19.3m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Level GRD</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> <td style="text-align: center;">.m²</td> </tr> <tr> <td>Totals</td> <td style="text-align: center;">292.1</td> <td style="text-align: center;">19.3</td> <td style="text-align: center;">208</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Building Footprint (excluding pavement)</td> <td colspan="4" style="text-align: center;">2073</td> </tr> <tr> <td>UGF</td> <td colspan="4" style="text-align: center;">0.19</td> </tr> </tbody> </table>	Apr-21						Extensive Green Roof - 80mm	Intensive Green Roof - 150mm	Intensive Green Roof - 300mm	Rain Garden / Soft Planting	UGF (Urban Greening Factor)	0.7	0.8	0.8	0.7	Roof terrace	145.m ²	.m ²	208.m ²	.m ²	Level 08	147.1m ²	19.3m ²	.m ²	.m ²	Level GRD	.m ²	.m ²	.m ²	.m ²	Totals	292.1	19.3	208	0	Building Footprint (excluding pavement)	2073				UGF	0.19			
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UGF contribution	0.079	0.006	0.065	0.074																																															
Total	0.15				The baseline UGF is looking very poor when the off-site planting is not included.	The above calculation confirms an UGF of 0.19, above the 0.15 suggested in your previous clarification email which referred to a 2,566sqm site footprint which includes ground floor public realm.																																													

There is very little information provided in the submitted Outline and RM documents (Design & Access Statements / Sustainability statements) about the type of living roofs to be provided (species, habitat types etc) – other than the depth of the substrate. The Ecology report presented with the Outline provides recommendations – and states that the living roof specifications should be drawn up by a company with a proven track record in delivering these features in London. This doesn't seem to have been developed any further and the Ecology Report recommendations are not referenced in the RM applications. – As the project is at a concept design stage a preliminary ecological assessment has informed the available areas for green roofs and recommendations to be developed further during the developed design. The intensive green roof provision provides flexibility for the team to develop an appropriate ecological strategy and we will follow the recommendation within the report to work with a landscape architect (to be appointed) and the suitably qualified ecologist during spatial coordination and technical design stages to draw up living roof specifications.

While we can leave confirmation of species, maintenance, confirmation of build-up etc to a detailed condition, it is important that we have greater clarity about the scope/specification of the living roofs and whether they will be multi-functional (biodiverse/biosolar/green-blue) or more benign (sedum). Camden's CPG (Energy Efficiency and adaption – chapter 10) is clear that our preference is for developments to incorporate biodiverse green roofs rather than sedum roofs, as sedum roofs provide limited biodiversity value. Overall the scheme seems to provide quite limited contribution to biodiversity. All green roofs proposed would be biodiverse, GRO Code 2014 compliant (min 80mm substrate) allowing for a greater variety of herbaceous plants, and habitat creation (an example illustration provided below) over a sedum blanket which is recognised as offering limited ecological value. This is reflected in the UGF methodology attributing a value of 0.3 to extensive sedum blankets. We have not included any of these roofs within our proposals as seen in the UGF calculations with proposed substrate depths allowing for a wide variety of ecological features to enhance on-site biodiversity.



Please refer to Piercy & Co's email for response on the following points

With the ongoing work by Piercy & Co looking at the top level of accommodation now is the time to re-examine the potential of the site to deliver a greater contribution to biodiversity and to significantly improve the SUDs performance of the site as raised below, without needing recourse to a basement attenuation tank.

The explanation presented in the feedback to the GLA (row 15 of "schedule of responses to comments received 1/4/21") about the green roof being constrained by structure of the top floor accommodation and the LVMF breach need re-visiting:

- It strikes me that the notional extensive green roof at level 7/8 along the edges could be reconfigured as more biodiverse and potentially used to extend the blue roof area (in a combined blue/green system).
- The top floor accommodation is only about 3% of the total accommodation in the building – so it strikes me that arguments about the carbon cost of the structural implications needed to support a more biodiverse living roof are pretty marginal.
- The issue about LVMF breach could be remedied by dropping floor-ceiling heights throughout the building by an almost imperceptible 10mm, as mentioned below. This would bring the added advantage of addressing HEs and the GLAs concerns about the LVMF.
- Adding more depth to the roof structure would also allow scope for more visually interesting and biodiverse planting for the upper office roof terrace – which would mean that the terrace could have a much greener character without the need to resort to planters (which raise further issues with LVMF). The limited visual biodiversity benefits achievable from sedum on the 80mm substrate on this level and the indication of only 20sqm of planters on the roof terrace below seem a bit behind the curve on the contemporary emphasis on adding biophilia and greening to commercial amenity spaces for the wellbeing benefits of employees and occupants.

We need to see a more holistic approach to addressing these issues – before final decisions are made about the upper floor designs.

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Gavin
Principal Planning Officer

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