Subject: Re: Basements: Further Sustainability Issues
Date: 27 February 2013 19:29:58

I'm afraid the technicalities of BREEAM etc (and what was already covered versus what Michael B proposed were necesssary) were beyond me.

But I certainly agree that all these energy and CO2 emissions considerations should really be taken into account, and therefore included in the assessment of acceptability of new basement proposals. And, as a gesture and small contribution to improving the energy efficiency of old housing stock, why not at least include as a condition of a basement permission that the energy efficiency of the whole house should be upgraded? Anyone who can afford to build a basement under an old house should be able to make this small contribution for the sake of the planet.

Clive Wilson
Norland Conservation Society
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Dear Penelope

Thank you for your patience and hard work earlier today.

The point was well made that for Britain as a whole, with a huge stock of old houses, uprating the energy efficiency of older property must be a top priority. It follows that applicants to add basements (though such basements may themselves, when completed, be relatively energy efficient) should be obliged to allocate resources to uprating the houses above. Given that heat rises, and that warmth created in a basement could rise up and vanish from a badly-insulated building above, such a policy would be logical as well as practical.

This leaves the question of the energy efficiency of basements in isolation. As you said today, the excavating, piling, cement-making, cement-mixing, cement pouring and other aspects of basement construction are very energy demanding. It follows that, on sustainability grounds alone, limiting the scale and amount of excavation would be a benefit.

Is there any way in which this point can be incorporated in policy? Would it be possible to require applicants to provide calculations of a) the energy that would be embedded in a proposed excavation and b) in the annual operation of the completed underground rooms and their equipment –

pools, lifts, saunas etc. etc.? This would soon enable the Council to build up a useful index of the energy-demand of this type of development.

If the Council could make such calculations a requirement, it would assist Development Control to assess the energy implications of proposals and, if the Council was to make clear that it would be looking for high-efficiency buildings, this would push developers to low energy techniques in construction and in operation. Ideally policy should be saying that the Council will be looking for low energy excavation (embedded and in use) and that applicants would need to demonstrate this in their proposals. Very high energy requirements would be grounds for refusal.

I appreciate that BREEAM is designed to move things in the same direction but, if I understood the meeting correctly, something more than BREEAM is needed to give a real push to energy efficiency in basement construction and use. Can we find a way?

Regards

Terence

Terence Bendixson
Hon. Sec. Planning
The Chelsea Society

Can you, and others involved in this exercise, see ways to

Sent: Tuesday, February 26, 2013 4:05 PM

Subject: Basements: Sustainability Issues

Dear Penelope,

I understand that tomorrow's basements workshop will cover wider sustainability issues. The current paper does not deal with this issue, although the Kensington Society has raised this issue in the consultation. I attach an extract from our consultation response below:

Whilst we welcomed the original proposal to use Eco-homes assessments, we have been increasingly concerned about the degree to which it misses the much larger sustainability issues that are covered in the London Plan. Although the London Plan is part of the development plan, it seems to have been ignored in assessing basement proposals. At this stage we consider that a headline policy is needed to cover a range of these issues, which may need to be fitted into the Respecting Environmental Limits chapter to provide the hooks for fuller treatment in the Basements SPD

I hope this is useful for tomorrow's discussion. I have copied it to those people who I recognised at last week's workshop.

Michael

Sustainability

The Society is concerned that the current eco-homes system which relies on compliance by the occupant in the form of the performance of washing machines or provision of clothes lines is meaningless with regard to the wider and lifetime sustainability of the building.

The Society is also concerned that the enormous energy consumption involved in the excavation, carting away and recycling of demolition and excavated material, combined with the intense energy consumption associated with concrete basement construction and the scale of heating, cooling and ventilation is not taken fully into account. See more detailed response under 34.3.73

34.3.73 The current use of the BREEAM standards used for assessing basement projects only tackles the retrofitting of the building to which the basement is being added and does not address the broader sustainability issues of:

- excavation of large quantities of soil and its removal along with large quantities of demolition waste,
- the use of large quantities of concrete with huge embodied energy,
- energy use in operation, such as for heating swimming pools, saunas, etc, cooling and mechanical ventilation, and
- where it involves swimming pools, water use.

The London Plan contains policies dealing with these issues, and since they are part of the development plan, need to covered in passing in the revised plan

policy and spelled out in the proposed SPD. None of these issues – essential to assessing basement projects, especially the larger ones - are dealt with in the Core Strategy or the existing SPD

Whilst the London Plan is an integral part of the development plan for Kensington and Chelsea, the London Plan polices in Section 5 of the 2011 London Plan seem not to be taken into account:

- in the coverage of the Core Strategy; nor
- in making decisions.

In particular, for basements, as identified in para 1.2.25 of the Mayor's Housing SPG, the following London Plan policies are highly relevant:

- 5.3: sustainable design and construction
- 5.4: retrofitting
- 5.9: overheating and cooling
- 5.12: flood risk from surface water flooding
- 5.13: sustainable drainage
- 5.15: water use and supplies
- 5.18: construction, excavation and demolition waste
- 7.12: trees
- 7.18/19: biodiversity

This would require at the very least a listing of the relevant policies or, better, to add additional material and policies to Chapter 36 with regard to:

- excavation and demolition waste
- total energy use – including demolition and construction
- energy and water use in operation

We understand that the GLA propose to publish a draft SPG on Sustainable Design and Construction in the spring and suggest that this should be recognised in the development of RBKC policy either in policies now being considered or in the SPD to be produced.