

# Housing regeneration – the only way is up?

**There is a huge debate in housing circles looking at how to solve the housing supply crisis; do we build up, do we build out onto the green belt, how much affordable housing is required and what is genuinely affordable? Nicolas Maari, Head of Architecture at Pellings, explores further.**

Over time, subsequent Governments and mayors have sought to deal with the housing crisis in different ways and, so far, all have largely failed. This issue has only progressively worsened and therefore we are now having to look at creative ways to deal with it. The key point being, we are not building enough homes.

Green belt development is highly emotive and subject to nimbyism so building up in existing urban areas has, on the face of it, great appeal. After all, adding to the housing supply where there is already transport infrastructure and amenity in terms of schools, shops and healthcare, seems to make perfect sense.

So it is no surprise that many local authorities and registered providers are looking at the possibility of adding floors to existing social housing stock. Also, there is another possible benefit with dwellings that can be sold in the open market or let at market rents in order to help finance the capital cost of improving the interior or exterior of the existing housing stock.

Many post-war housing estates are deteriorating and a way of funding repairs and regeneration can be to build units on top for sale or rent in the open market.

Where an upgrade with apartments on top to help finance the capital cost, or increase housing supply, is being planned, the following needs to be considered:

- The first consideration is whether the additional units to be built will create enough value to cover the cost of the upgrade of the existing blocks. This is more likely to apply in London and the South East where residential values are substantial and where a premium may be attached for penthouse properties.
- However, the next hurdle to be overcome is whether the additional housing can be classified as a 'minor' or 'major' development. While the rules are contentious and subject to legal opinion, any development of nine units or over can be considered as 'major' and will then have to include an element of affordable housing.
- In London, Mayor Sadiq Khan has set the London plan which would need to be considered if it is a 'major' development. This would mean significantly more investment in amenity areas and ancillary spaces. This would affect parking standards, play space for children, cycle provision and refuse strategies, among other design considerations which could include the need of an additional lift. In addition, there may also be the need to consider carbon emissions and renewables, which can often be seen as an 'on cost' to developers and often difficult to recover.
- Because upgrades/refurbishments are to take place with existing occupiers in situ, there is a need for in-depth and sensitive consultation with tenants and

leaseholders.

- Once all the above hurdles have been tackled there is also the issue of buildability. When refurbishing and building over tower blocks, the operational and maintenance manuals are crucial. Unfortunately due to the length of time that has passed since these were built much of this information may have disappeared requiring full assessment of all mechanical, electrical and structural load capacities.
- The structural load capacity of the tower would determine whether the building can cope with both vertical and horizontal wind loads. In London, it is likely that many of the foundations of these buildings were piled and therefore, without access to the as-built structural design information, in-depth analysis would need to be undertaken to investigate the existing foundations. Typically, any load greater than 10% of the existing loads would be unacceptable; therefore lightweight construction would need to be considered.
- A modular type of system that can be bolted on is usually the best way to do this as it avoids putting anything too heavy, such as masonry or wet construction methodology, onto the existing infrastructure.
- Many of the older towers may have had pirate radio stations or even police control towers on their roofs and in more recent years this space has often been leased to telecoms companies for mobile aerials. Where this has occurred, legal advice should be sought and termination notices served.

Where apartments are being created on upper floors for sale or letting at market rent then consideration may need to be given to upgrading circulation space throughout the whole of the building, including lobby space, so existing residents benefit from the rebranding of towers and marketability of the new units.

- Consideration also needs to be given to fire safety. Adding floors would require a fire escape route and new fire-resistant materials might be required on these routes throughout the building adding to the cost.

Depending on the type of project and number of units required, there may be the need to improve the mechanical and electrical engineering services with upgrades to plant rooms. If even more power is required, perhaps building a new substation in or around the building with direct access to the statutory authority.

- And after considering all the above, does the building owner have the requisite skills to undertake projects of this magnitude. If not, a joint venture with a private sector developer or bringing in consultants may be necessary which will all have to be taken into account in the development appraisal.

It is to be applauded that there are a growing number of ways of financing upgrades to existing stock and of increasing the housing supply in urban areas, but they come at a price and these all need to be considered at the development appraisal stage.