GLOBAL INSIGHT

DEEP RETROFITTING: TRANSFORMING EXISTING COMMERCIAL STOCK TO MEET SUSTAINABLE DEVELOPMENT GOALS

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Commercial developers and tenants are now, more than ever, focused on attaining rigorous ESG targets, to meet sustainable development goals. The extent of "older stock" in the market in prime locations is presenting a significant opportunity for deep retrofitting when commercially viable.

Linesight's Su Zen Kong considers the growing trend for deep retrofits of commercial buildings, and how these complex projects can be successfully managed.

Across the UK and Ireland, there is a growing recognition among commercial developers that the most attractive opportunities may be right under their noses: in the form of deep retrofits of their existing assets.

Older offices are often in prime, sought-after locations. Some may have long-term tenants already in place. Some may offer the opportunity to expand the overall floor space of the building, subject to structural capacity, that can enable the addition of extra floors. The opportunities are now beginning to come to the fore in this space.

For instance, by highlighting that a deep retrofit is on the cards for a particular building in a well-known attractive location, it might encourage those in the market for a new premises to engage with building owners early on in the process. This would allow the 'new' tenant to then feed into the design and implementation of the upgrade. In essence it could assist in securing what may be an otherwise elusive tenant in this troubled market.

Why retrofit?

Until relatively recently, demolition was the default option for office buildings that were no longer fit for purpose. Now, developers are much more likely to at least consider the potential of a deep retrofit, which typically means retaining the existing structure, while significantly upgrading elements such as building services, internal finishes and sometimes facades to renew the building and bring it up to the latest standards and stakeholders' expectations and requirements.

Undertaking a retrofit brings about commercial and environmental benefits. Developers can help to avert possible declines in asset and rental values, and in some instances even increase said values of their property and rents. A building that has undergone deep retrofit will also be more attractive to potential tenants.

The key environmental selling point of a deep retrofit is that the embodied carbon is substantially lower than an equivalent new-build, because the most carbon-intensive elements – the structure and foundations – are retained. The push for deep retrofits is driven partly by tightening building regulations on energy performance, and partly by the growing focus on ESG among property companies, and their investors and customers. As sustainability rises up the regulatory and corporate agenda, there is a swath of existing commercial buildings that will need to be upgraded to meet higher energy efficiency standards, and to remain attractive to tenants.

Linesight is involved in a number of projects in the UK and Ireland where clients have chosen to carry out deep retrofits to their existing portfolio. A good example is the redevlopment of the ESB's head office on the Georgian mile in Dublin. This project encompasses the renovation and preservation of a Georgian heritage building, enhanced with a modern office development. This project represents contemporary building structures and features while simultaneously retaining historical charm and significance.

Understanding the costs of retrofitting

Deep retrofits do present considerable opportunities, but they also come with a range of additional factors to consider, including enhanced cost, regulation, project and risk management. As a result, they are unlikely to be driven purely by commercial considerations.

It is, however, important to understand where the cost considerations may lie, as these may be very different to a newbuild project. While these projects may involve spending less on groundworks and structure costs, this may not translate directly into lower overall project costs.

For example, a retrofit may involve more upfront costs such as extensive surveys and feasibility studies to ensure the suitability of the existing building for a deep retrofit. There is also likely to be an increased need for temporary works such as temporary propping throughout the floor plates. There may be extensive works required to overcome issues with the existing building or to bring the building up to the latest standards. Standards such as modifying the cores and escape routes to adhere to latest BCAR, DAC and Fire Regulations; punching holes through the slabs to create lightwells to meet natural lighting requirements; and any other modifications that may be required. Many older commercial buildings also typically face the issue of reduced floor- to-ceiling heights compared to new builds, although many offices now omit suspended ceilings, making this less of an issue. While these issues can be resolved, it is important to have an understanding of potential pitfalls and the cost implications to address same.

Deep retrofits can also present imporved funding opportunities, with the availablity new green financing. This can be in the form of lending, bonds, loans, and other funding initiatives. With the conversations around ESG and sustainability gaining pace, it is likely that more financial institutions will get involved and provide incentives as part of their product offerings to the market.

When to retrofit

A retrofit can be suddenly triggered by a buildings systems failure, loss of tenant or major damage to the building causing it to be uninhabitable. However, the latter cases are less common and are also not ideal as it may put pressure on the owner to retrofit the building quickly to bring the building back onto the market, while sacrificing the time to actually plan and execute a deep retrofit that is truly successful.

The ideal time to plan for a deep retrofit is generally ahead of the end of a building's natural lifecycle, such as when the building systems are due for replacement, or at a point where it makes commercial sense such as at the end of a lease, commonly at 15-to-20-year leasing cycles. This can be seen as a crucial pre-emptive investment where urgent works are planned. Deep retrofits tend to work best when planned in advance rather than being triggered by a systems failure, where disruption is likely to be much greater.

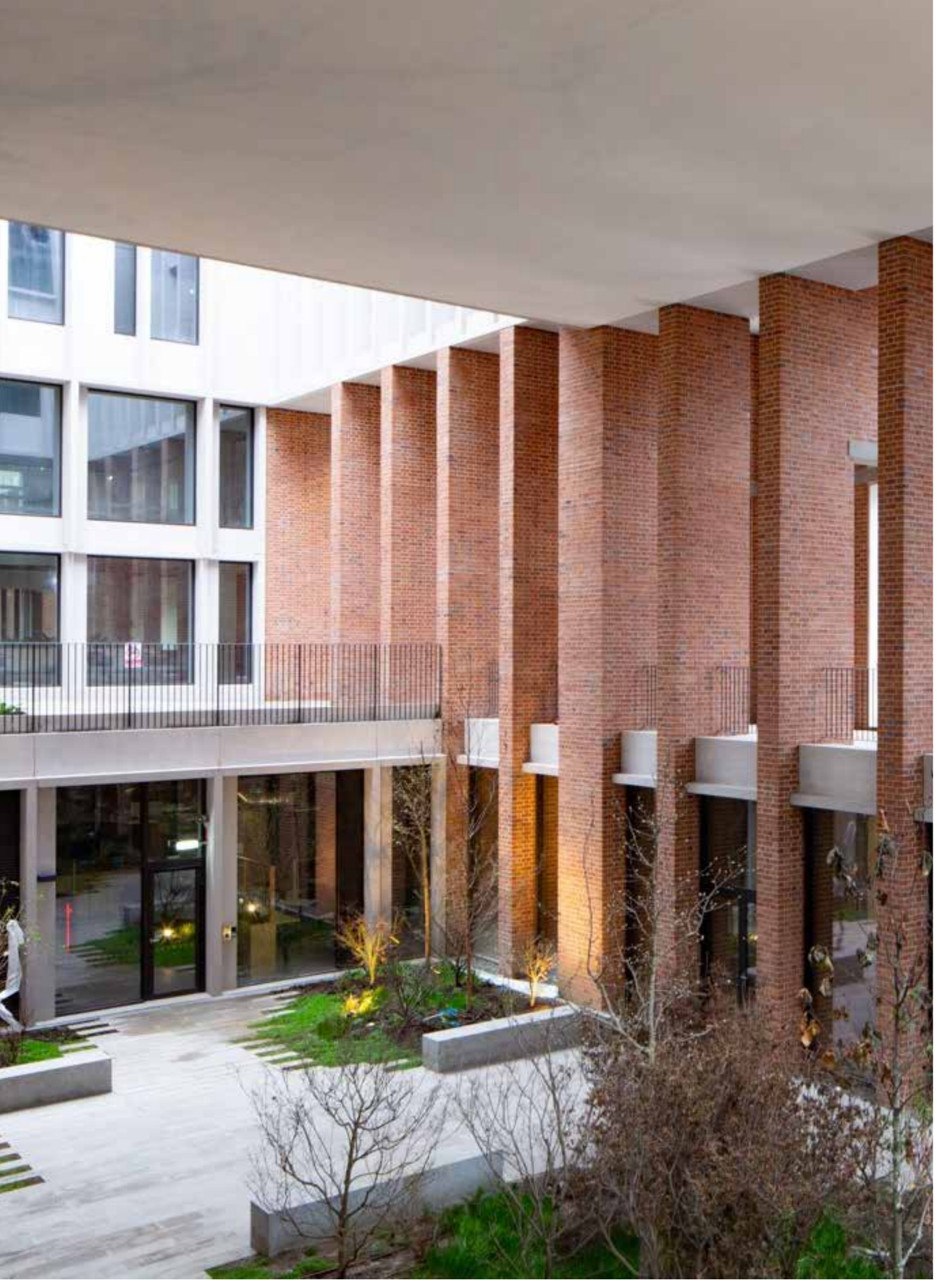
Deep retrofits also provide an opportunity to gain sustainability certificates, such as LEED, BREEAM, WiredScore, NZEB and GRESB. A deep retrofit also presents the possibility of improving the whole-life carbon rating of a building, rather than just the operational carbon rating.

Live tenancy considerations

When a tenant is in place during a deep retrofit, there can be significant challenges.

Swing spaces are an obvious solution, however this may not be possible or suitable at times due to budget constraints, availability of a suitable swing space, or unwillingness of tenants to relocate to a temporary location.

In these instances, alternative solutions such as phased retrofits with guaranteed quiet floors or quiet hours could be an option. Another option might be tenants implementing a more flexible working location policy, with more emphasis on working from home over the duration of the retrofit. Offering reduced rents may be another alternative solution. Stakeholder engagement is crucial during live deep retrofit environments, to ensure minimum disruption to tenants.



Choosing the right team

A deep retrofit differs from a traditional build in a variety of ways, the chief among them being the design. The design team is challenged to design around an existing structure and layout, which throws up various buildability and regulatory issues. An extra complexity is added as designers need to understand the issues of the existing building, so that they are resolved in the new building. For example, deep retrofits are a chance to address problems such as solar glare, draughts, lack of sunlight, lack of sustainable practices, awkward floor layouts, and much more. It is important to include occupiers of the building in early discussions, in order to address these issues.

Another common issue can be the availability of historic building design information. Original designs may be incomplete or missing, particularly if a building has changed hands. Where possible, access to the original design team can be invaluable in gaining an understanding of the builing complexities and nuances. Where this is not feasible, access to the original drawings and employing a design team with the right expertise to understand these challenges is important.

Managing risk

Effective risk management is crucial for a retrofit.

Deep retrofits can include partially removing floors, modifying structural cores or foundations or replacing the fabric of the building. The extent of the issues involve may only emerge once opening works commence. Therefore a risk register and robust risk management strategy, with clear stakeholder communication process is critical for project success.

Early investment in surveys and assessments may also be a good investment to minimise risks posed by a deep retrofit.

Main contractor or fit-out specialist?

From a procurement point of view, deep retrofits blur the lines between projects typically undertaken by main contractors and those by fit-out specialists. Fit-out specialists may present a wider pool within the supply chain as many fit-out specialists can be included in the procurement process. A prequalification questionnaire can be useful to help identify the most appropriate supplier. The eventual decision is a subjective one: some clients are still opting to engage a main contractor for what may be more akin to a very intensive fit-out, but others are choosing a fit-out contractor to undertake even major structural works such as adding new floors.

Conclusion

Linesight has extensive experience working on deep retrofits as both stand alone projects or as part of a retrofit/new build mix.

The trend for deep retrofits is only set to grow – with momentum driven both by the potential for increased asset values, and the corporate and regulatory push for a more sustainable built environment. These projects do present additional challenges that must be managed – but these are by no means insurmountable, with foresight, robust risk management, and the right expertise on board from an early stage.

From a commercial perspective it should be noted that in some instances it makes sense to demolish a building and undertake a new build. Major factors such as maximising plot ratio, revised planning and zoning, condition and design of existing building come into play.

Linesight is well positioned to provide advice on the various options available.