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20-24 WOOD ST, MANCHESTER – ECOHOMES PRE-ASSESSMENT

Introduction

The Code for Sustainable Homes is the national environmental assessment standard for rating and certifying the performance of new homes, and is based on the EcoHomes scheme. However, EcoHomes remains the appropriate method for assessing major residential refurbishment project including conversion and change of use. An EcoHomes Pre-assessment has therefore been undertaken to assess the anticipated sustainability performance of the proposed refurbishment of 20-24 Wood Street, Manchester, to form three five-storey houses.

Approach

The EcoHomes Pre-assessment has drawn from available project information (e.g. plans and elevations), a desk-based review of the site and its surroundings, and also a meeting with Jonathan Davidson of Total Architecture.

EcoHomes Pre-assessment Findings

The EcoHomes Pre-assessment findings for 20-24 Wood St, Manchester are summarised below for each EcoHomes issue category, and the full EcoHomes Pre-assessment Estimator report (v1.2) is enclosed.

Energy

The proposals represent major refurbishment, and the energy and CO_2 emissions performance of the existing building envelope (e.g. thermal efficiency, air tightness etc) is not known at this stage. For this reason, a conservative assumption has been made that no credits will be achieved for credits *Ene 1 Dwelling Emission Rate* or *Ene 2 Building Envelope Performance*. There is an aspiration to improve this performance as the project develops and decisions are made on building services etc. Full marks are anticipated for remaining credits in this category which relate to drying space, eco labelled white goods, and internal and external lighting.

Transport

Full marks are anticipated for all credits in this category owing to the projects' central Manchester location. Salford Central railway station is within 450m walking distance, a range of local amenities are present within the locality, and provision will be made for both cycle storage and home working.

Pollution

A good score is also anticipated in relation to pollution. The specification of insulation materials with low or zero global warming potential (GWP) and ozone depleting potential (ODP) is anticipated, as are high efficiency gas condensing boilers with low NOx emissions. The site is understood to be located within an area of low risk of flood, however it is not considered feasible to reduce surface water run-off given it is a refurbishment rather than new build development. No on-site renewable energy technologies are proposed, partly due to the relatively constrained and over-shaded nature of the site.

Materials

Because it is a refurbishment project that will re-use extensive existing building elements and materials, and because low impact materials will be specified where possible for the new construction work, a high score is anticipated for this section. New construction materials, both basic building elements and finishing elements, will be procured from responsible sources wherever possible. Appropriate space for the internal storage of recyclable waste will be provided.

Water

Efficient fixtures and fittings are proposed to ensure to provide a sustainable level of internal potable water consumption, whilst the absence of external areas requiring irrigation will further promote sustainable water use.

Land Use & Ecology

The site is considered likely to be of low ecological value, therefore ecological protection is unlikely to be required and the refurbishment project is not anticipated to affect the number of species on site (i.e. a neutral species change is anticipated). The houses comprise five storeys and therefore have an efficient building footprint in terms of minimising land take.

Health & Wellbeing

Due to the over-shaded nature of the existing buildings to be refurbished, no daylighting credits have been assumed. However, pre-completion acoustic testing is anticipated to help ensure Building Regulations sound insulation performance standards are achieved.

Management

It is considered difficult for the developer to respond to the requirements of the Considerate Constructors Scheme or to monitor Construction Site Impacts, and therefore no credits have been assumed for these issues. However, a Home User Guide will be prepared and full marks are anticipated in relation to security.

EcoHomes Score

An EcoHomes score of **50.32%** is anticipated, which equates to an EcoHomes **'Good'** rating (for which the minimum score is 48%). This estimated score is considered conservative in that no score is currently assumed in relation to energy / CO_2 performance.

Conclusions

The EcoHomes Pre-assessment carried out for the proposed refurbishment and return to residential use of 20-24 Wood St, Manchester, concludes that an EcoHomes rating of 'Good' is achievable. It should be noted that, compared to a fully new build project, this refurbishment will result in wider sustainability benefits that are not covered by EcoHomes, including:

- meeting local housing demand;
- protecting brownfield and greenfield development sites;
- re-using a vacant existing building; and
- securing the future of an attractive existing building/

Overall, therefore, the proposals are considered to make a good contribution to the sustainable development agenda.

Yours sincerely,
On behalf of RSK Environment Ltd



James Blake
Associate Director
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Enc. 20-24 Wood Street EcoHomes Pre-assessment Estimator Report (v1.2)