

ATLAS

PLANNING GROUP

SUSTAINABILITY STATEMENT

Mulberry House, 1A Eldon Road, Reading, RG1 4DJ

APRIL 2021

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INTRODUCTION

- 1.1 This statement is provided in support of the full planning application for residential development at Mulberry House, 1A Eldon Road, Reading.
- 1.2 This statement seeks to demonstrate how the proposed development meets national and local sustainability objectives. This statement has also been informed by the Sustainable Design Checklist included within Reading Borough Council's Sustainable Design and Construction Supplementary Planning Document (2019).

ACHIEVING SUSTAINABLE DEVELOPMENT

ENERGY EFFICIENCY, LAYOUT & DESIGN

- 1.3 The proposed development aims to provide a sustainable, high quality building which is energy efficient and incorporates measures to minimise the impacts of Climate Change.
- 1.4 Building Regulations, specifically Approved Document Part L, Conservation of Fuel and Power is the primary tool for reducing carbon emissions in new buildings. As such, these national regulations will inform and drive the energy efficiency and carbon reductions in the new building.
- 1.5 To limit heat loss, the building fabric will be designed to target the minimum requirements as established by Reading Borough Council Policy CC2: *'Sustainable Construction and Design and Construction'* and Policy H5 *'Standards for New Housing'*.
- 1.6 Solar photovoltaic panels are considered the most appropriate technology for the site and 15 panels will be located on the flat roof of the building.
- 1.7 It is envisaged that the superstructure will be formed of a precast concrete frame at ground floor with a lightweight steel or timber structure above; the decks of the building will act as thermal massing as well as providing a good quality acoustic construction when combined with other technologies.

NATURAL DAYLIGHTING

- 1.8 The proposed building has been developed from the principles of the London Design Guide. This guidance makes it clear that for a comfortable and efficient apartment that is not benefitted from mechanical ventilation

that suitable cross-ventilation is provided. All apartments have been designed as either dual or triple aspect to facilitate the use of natural ventilation.

- 1.9 The glazing strategy has been designed to maximise daylight whilst controlling excessive solar gains. Glazing will incorporate low emissivity coatings to limit overheating without compromising light transmittance.
- 1.10 The application is also supported by a Daylight, Sunlight and Overshadowing Impact Assessment prepared by Hawkins Environmental Ltd.

MATERIALS

- 1.11 There has been a considerable amount of research and consideration into the materiality of the proposal and all materials will be sustainable sourced. It is proposed to use a high-quality brickwork (both durable, with high thermal mass and sustainable) to clad the proposals where two variations in tone have been selected with one applied to each block. It is proposed that the tone of the brickwork is soft and light in colour to sit seamlessly in context. The ground floor is lined with rows of alternating project brickwork to reinforce this as a separate element.
- 1.12 Stone is used to emphasise different portions of the façade including ornamenting the windows and creating panels alongside the window openings. This material contrasts well with the use of brickwork and is also highly in keeping with the existing materials used in the conservation area.
- 1.13 For the areas of recessed stone panels and lintels it is proposed to use a natural stone veneer rainscreen supported from a lightweight steel frame. The stone cladding is recyclable and extremely durable/ long lasting as a material.
- 1.14 Windows are envisioned as aluminium (durable and recyclable with thermal transmittance complying with Part L Requirements) and will be polyester powdercoated to a bronze metallic finish. All windows to flats will be openable to allow natural ventilation and double glazed. Louvered panels will be inserted in the bin stores and plant areas.
- 1.15 Doors will be polyester powder coated to a bronze metallic finish, in some cases to the flats these are fully glazed. External doors will be PAS 24 as per the Secure by Design Requirements with access control.

SUSTAINABLE TRANSPORTATION

CYCLE STORAGE

- 1.16 The proposal is located in a highly sustainable location, adjacent to the boundary of the Reading Central Area. Whilst the site is within easy walking distance to a range of services, facilities and public transport modes, in respect to cycling, there are also various National Cycle Routes in close proximity of the site. As such, cycle storage is integral to the scheme.
- 1.17 A total of 9 cycle spaces have been provided within the basement of the building in a secure area. The development is adjacent to the boundary of the Reading Central Area and benefits from local transport infrastructure where connections via cycle encourage a reduction in car use.

WATER EFFICIENCY

- 1.18 The development will aim to reduce water use and increase water efficiency through the incorporation of the use of water efficient fittings and equipment. The applicant will determine sanitary fixtures and maximum flow/rates of each fixture to determine water use per apartment and ensure it meets the requirement of 105 liters pp/pd.

FLOODING & THE ENVIRONMENT

- 1.19 According to the Environment Agency's Flood Map for Planning the site is located in Flood Zone 1 where there is a low risk of flooding.
- 1.20 The proposal retains a large amount of green landscape, and additional pathways are to be permeable due to the overlapping in areas of tree RPA's and to limit surface run-off.

SUSTAINABLE CONSTRUCTION

WASTE

- 1.21 The development will aim to reduce waste during the construction of new building. Recycling will also be encouraged.
- 1.22 Construction waste will be disposed of in accordance with statutory regulations and in a way required by the manufacturers. Any material waste or surplus will be subject to recycling.

- 1.23 As part of the development, it is envisaged that the main superstructure will be a precast concrete frame at ground floor with a lightweight steel or timber structure on the floors above.
- 1.24 The floors will either be pre-cast concrete or on site poured concrete slabs reducing any potential for onsite waste generation other than constructing the formwork.
- 1.25 Through use, communal recycle bins will be provided in accordance with Reading Borough Council's requirements. Separate intermediate stores will be located in the kitchen of each apartment with split recyclable and waste in accordance with Reading Borough Council's policy guidelines.

POLLUTION

AIR AND NOISE

- 1.26 The application is supported and informed by an Air Quality Assessment which concludes there is no specific requirement for mitigation on this site, however the inclusion of cycle storage and EV charging points will reduce emissions arising from the development.
- 1.27 The application is also supported by a Noise Impact Assessment to ensure pollution is reduced to a minimum. The report concludes that the development can demonstrate compliance with the NPPF and the Noise Policy Statement for England (2010), and that with regard to sound, planning permission can be granted with appropriately worded noise conditions.

HEALTH & WELL-BEING

- 1.28 The proposed development aims to provide high quality accommodation, which is comfortable and functional. To reduce the likelihood of noise complaints and to provide private outdoor space, terrace sizes are typically integral to the apartments limiting overlooking and keeping noise well contained.
- 1.29 The apartments have been designed as dual or triple aspect to provide for near day round exposure to natural daylighting.
- 1.30 Party walls / floors will be designed to a minimum standard expected from the Building Regulations and incorporate suitable measures to prevent flanking noise.

SAFETY & SECURITY

- 1.31 From a security perspective, the proposal benefits from being constrained by trees, adjacent buildings and the dimensions of the site. This has led to a development with clear site lines to and from the main entry points of the development, in both occasions leading to a highway to the west and south.
- 1.32 The cycle and refuse storage areas are within the building.

ECOLOGY

- 1.33 The site comprises an area of hardstanding and green space, with several trees either within the site or on adjoining boundaries.
- 1.34 It is proposed to retain all trees. Further information is set out within the Tree Report prepared by Hellis Solutions Limited.
- 1.35 The landscaping strategy is very similar to the approved scheme and provides a courtyard area to the front of the building. The proposed landscaping not only provide some screening for the occupants of the low-level flats to Hanover House's house but also act as a feature in the landscape guiding path users to the main entrance of the proposed building.
- 1.36 Ground level planting beds are proposed as part of the soft-touch landscape strategy that will improve the biodiversity of the site from its current state.
- 1.37 A new hedgerow is also proposed, mimicking the typical Georgian style of threshold in the area, to the front of the plot along Eldon Road. Over time this will contribute to enhancing the ecological value of the site, playing host to birds and other wildlife.