

SUSTAINABILITY STATEMENT:

Supplementary information in support of Application for Full Planning Permission for the Erection of a single storey rear extension; alterations to existing rear outrigger; replacement side windows; installation of air source heat pump in rear garden; erection of timber shed in rear garden for use as bike store and air source heat pump cabinet. (Planning Application Ref: 2021/0732/P)

The proposed refurbishment of the existing flat represent a complete overhaul of the energy efficiency, thermal performance and quality of accommodation through predominantly passive mechanisms in line with the London Borough of Camden aspirations as set out in Policy CC2 Adapting to Climate Change.

Proposed works to the existing building fabric include a well tested natural wood fibre insulation system to the existing timber ventilated floors, interior wall and roof insulation to the existing 2 storey rear outrigger extension, careful overhaul and draught proofing to the existing front elevation timber sash windows and replacement of the existing rear glazing with high performance double glazed windows and doors.

The interior layout is arranged to maximise natural daylighting and ventilation to the main living spaces. The rear elevation glazing forms a strong connection to the garden and allows direct and reflected daylight deep into the floor plan throughout the year.

The existing and proposed rear extensions have insulated concrete floors, which will help maintain passive storage of solar gain and promote stable internal temperatures and natural convection throughout the year.

All new glazing will be double or triple glazed with proprietary Solar Control Coating to reduce the solar gain whilst maximising natural daylighting. All windows have manually operated opening sections for ventilation and roof lights will be fitted with automated opening systems. Bespoke interior blinds will also be fitted to reduce solar gain during the mid summer months.

The proposed rear extension includes super insulated walls, floor and roof, and has been designed to use pile foundations and a thin structural slab to minimise disruption at the construction phase and reduce the volume of concrete required.

A high specification (air to air) air source heat pump (ASHP) will provide cooling and a secondary source of heating, reducing the reliance on gas / mains electricity conventional heating and hot water systems and providing clean energy throughout the year. The condensor unit is located to the rear garden behind the existing raised patio retaining wall within a bespoke timber enclosure fitted with acoustic baffles and attenuation.

A full acoustic analysis for the ASHP condensor unit is included in the attached report compiled by Philip Acoustics Ltd.