SOUTHWICK NURSERY, 15 ROMAN WAY, SOUTHWICK, BN42 4TN

DEMOLITION OF NURSERY GREENHOUSES AND OFFICE BUILDINGS, ERECTION OF 4-BED DWELLING HOUSE, AND PARKING

AWDM/1805/22

SUSTAINABILITY STATEMENT

1ST FEBRUARY 2023

The proposed dwelling has been designed to reduce energy and fuel demand.

A ground source heat pump (GSHP) will be incorporated into the dwelling to provide space heating. A GSHP is 400% more efficient than standard space heating technology. The GSHP will result in CO savings of 2,800 CO2 kg/year compared to a standard gas boiler.

The build will conform to the 2022 Buildings Regulations Part L – Conservation of Fuel and Power, and Part F - Ventilation. Part L increases minimum U-values across new building fabric:

This table shows the limiting U-Value standards for new building elements:

Building Element	**Part L1 2013 U-Value (W/m^2K)**	**Part L1 2022 U-Value (W/m^2K)**
Wall	0.30	0.26
Floor	0.25	0.18
Roof(s)	0.18 – All Roof Types	0.16 – All Roof Types
Glazing	1.60 – Windows 2.20 – Rooflights	1.60 – Windows 2.20 – Rooflights
Doors	1.80	1.60 – incl. glazed doors

Compliance with 2022 Part L leads to a 31% reduction in emissions when compared to the standards in the previous regulations.

Triple glazed windows will be used throughout.

Appliances will be 'A' rated.

Low energy LED lighting will be used throughout.