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SUSTAINABILITY STATEMENT

33 BEDFORD ROAD
READING
RG1 7EX

FOR AF JONES LIMITED

January 2019

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3.00	SUMMARY

1.00 INTRODUCTION

- 1.01 This Sustainability Statement is based upon Reading Borough Council Revised Sustainable Design and Construction Supplementary Planning Document, Adopted 11 July 2011
- 1.02 The SPD provides a basis to ensure design compliance with policy CS1: Sustainable Construction and Design and CS2: Waste Minimisation of the adopted Core Strategy.
- 1.03 As a minor development the required level of Code of standard for Sustainable Homes [2010] is CfSH Level 3 [Table 3.2], which require compliance with Building Regulations Part L only.

2.00 SUSTAINABLE DESIGN CHECKLIST

Energy/CO₂

Aim: To conserve energy, in particular carbon dioxide emissions and maximise the use of energy efficiency techniques.

- 2.01 *How has the development been designed to optimise the use of the energy from the sun and limit heat losses?*

The main facades of the building faces south and the orientation of the dwellings and use of natural light has been used to optimise the sun's energy and also to improve the thermal characteristics of the units and limit overheating.

- 2.02 *How has the development been designed to optimise natural daylighting, energy efficient lighting, external lighting and natural ventilation?*

All habitable rooms have large openable windows that will optimise natural light and ventilation throughout the day. Having openable windows on more than two facades will aid natural ventilation. As required by Building Regulations all external and internal lighting will be energy efficient.

- 2.03 *How will the design of the building make efficient use of energy? (e.g. use of thermally massive materials, levels of insulation, energy efficient white goods and use of green/ brown roofs etc).*

The proposed buildings will be designed to meet current Building Regulations and therefore have a high level of insulation and energy efficiency. The construction method is to be traditional with highly insulated walls, floor, roofs, doors and windows. Energy efficient white goods are proposed.

2.04 *Has local energy generation from renewables been considered as part of the scheme?*

We have used the approach of a highly thermally efficient building that will help reduce the lifetime energy usage of the dwellings and occupants. No renewables are being considered as part of this application.

2.05 *How have cycle storage facilities been considered?*

Cycle storage has been provided in accordance with reading BC requirements.

Water

Aim: To improve efficiency in the use of water, conserve water resources and minimise vulnerability to flooding.

2.06 *How will the development incorporate the use of water saving devices to achieve a maximum consumption of 105 litres per person per day?*

Low water fittings, restrictors and appliances will be used

2.07 *How will the development incorporate recycling rainwater and reduce the use of potable water?*

Not applicable.

2.08 *Has the collection, treatment and re-use of grey water been considered? If so, how will these facilities be incorporated within the development?*

Not applicable.

Materials

Aim: To retain local character and promote the use of materials with a low environmental impact.

- 2.09 *How will the selected materials help retain local character, ensure long life and ensure a low environmental impact?*

The proposed materials are similar to the surrounding area and are a combination of natural terracotta brick, natural stone and slate roof. The proposed materials are genererally A or A+ in accordance with the BRE Green Guide.

Surface Water Run-off

Aim: To reduce flooding, pollution and other environmental damage.

- 2.10 *How has the development considered flooding and pollution?*

The Environment Agency confirms the site to be within flood zone 1, an area of low probability of flooding. Currently the whole site is hardstanding and it is our client's intention to reduce the amount of hardstanding through the provision of garden areas.

- 2.11 *Has the design considered the use of sustainable drainage systems (SUDS) and how will they be incorporated within the development?*

A SUDS drainage system will be provided prior to construction on site.

Waste

Aim: To minimise the production of waste and maximise re-use and recycling.

- 2.12 *How will the development minimise waste sent to landfill?*
- 2.13 *How will the development make the maximum use of construction and demolition waste?*
- 2.14 *How will the development make maximum use of re-used and recycled materials?*

Appropriate measures will be set out prior to construction by the chosen contractor for the works within the Site Waste Management Plan.

- 2.15 *How will provision be made for the storage and recycling of waste for all users of the site?*

Internal recycling storage and external bin storage areas for local authority collection will be provided. The site plan includes an external bin storage area that meets LA requirements.

Pollution

Aim: To minimise damage to the environment through air, ground/surface water, land, noise or light pollution.

- 2.16 *What measures have been incorporated to ensure that noise and light pollution will be minimised throughout the development?*

The extent of external lights will be controlled to ensure required level of light, but with the minimal number of energy efficient fittings.

- 2.17 *What measures have been incorporated to reduce nitrogen oxide emissions and reduce the global warming potential of insulants?*

Gas boilers are to be provided in accordance with HM Government Domestic Building Services Guide 2013 and will be Class 5 or higher. Proposed insulation will be zero ozone depleting, EcoTherm or similar.

2.18 *What measures have been incorporated to reduce the release of pollution into the atmosphere?*

Other than the boiler flues there are no other pollution producing appliances.

Health & Well Being

Aim: To improve the quality of life in homes through good daylighting, improved sound insulation, provision of outdoor space with good accessibility.

2.19 *How has the development been designed to maximise natural lighting, reduce the likelihood of noise complaints, incorporate private outdoor space and ensure the layout of the development can be easily adapted to meet the needs of future occupants?*

The proposals makes best use of natural light with all units having facades with different orientations to pick up the movement of natural light through-out the day. Party walls and floors will be designed in accordance with Robust Details.

Management

Aim: To manage the site in an environmentally and socially considerate manner.

2.20 *What measures have been taken to ensure the construction of the site is managed in an environmentally and socially considerate manner, mitigating environmental impacts?*

The contractor will ensure that the site works are in accordance with Considerate Contractors Scheme and that measures will be taken on site to ensure targets, monitoring for on-site pollution and energy use.

2.21 *How has the development been designed to ensure people feel safe and secure?*

The proposals will comply with the requirements of 'Secure by Design'.

Ecology

Aim: To retain, protect and enhance wildlife habitats and natural features.

2.22 *How have the wildlife habitats and natural features on and adjacent to the site been considered and how will they be retained, protected and enhanced?*

The site is completely built upon and has wildlife habitats or natural features. The proposed works will introduce limited garden areas to the

3.00 SUMMARY

- 3.01 Our client's intention is to provide a high quality residential development that meets the requirements of CfSH Level 3 with regards energy efficiency.
- 3.02 Compared to the existing buildings; through considered design the development will utilise natural lighting and ventilation wherever possible and through the use of high efficiency and low environmental impact materials will minimise its impact upon the environment.