Sustainability Statement

in support of:

Proposed New Build Dwelling –
North View,
Violets Lane,
Furneux Pelham,
Herts

THE PLANNING CONSULTANCY LTD.

THE STUDIO,
2 BRADBURY FARM BARNS,
HARE STREET,
BUNTINGFORD,
HERTS SG9 0DX

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Sustainability Statement

Introduction

The design of the new building will look to minimise energy and water use along with the carbon emissions. This is to comply with the National Planning Policy Framework, adopted policies in the District Plan, and the guidance in the Sustainability SPD.

Reduction of Energy and CO_2

The design will look to implement the following:

- Increased insulation in the walls, roof, floor, windows and/or doors.
- Improved air tightness to reduce the infiltration of cold air from outside.
- Installing mechanical ventilation systems that can recover heat from outgoing air.
- Using building detail that minimises 'thermal bridging' (i.e. ensuring potential shortcuts for heat in the building envelope are insulated).
- Using best practice heating controls (separately controlled heating zones, weather compensation).
- Installing low carbon technologies such as:
- Solar PV Panels
- Air Source Heat Pumps
- Heat Reclaim Units
- Installation of locally sourced materials.

Climate Change & Adaptation

The following passive design features will be adopted:

- The building and its glazing have been orientated to the south to maximise winter solar gain.
- Living spaces are located within the dwelling to benefit from natural warmth and light.
- All trees and planting are to be retained and enhanced to provide natural shelter from the prevailing wind.
- A narrow/complicated building shapes that increase the ratio of surface area to volume enclosed has been avoided.

The following passive cooling strategies are proposed:

- Providing external solar shading in summer, especially to glazing (e.g. Deciduous trees, climbing plants, internal shutters, generous eaves overhangs).
- Allowing 'cross ventilation' by providing opening windows and internal layout such that air can flow freely through the building from one side to the other.
- Including 'thermal mass' within the dwelling (e.g. a masonry internal wall) to reduce temperature variations.
- Providing drying space (so tumble driers are not used)
- Providing energy efficient lighting (both internally and externally)
- Providing cycle storage
- Providing a room that can easily be set up as a home office.

Reduction of Water Consumption

Policy requires that dwellings are designed so average water consumption is of 110 litres or less per head per day. To achieve this standard the following measures will be included:

- 6/4 litre dual flush WCs.
- Flow reducing/aerating spray taps throughout.
- 6 - 9 litres per minute showerhead(s)
- A smaller, shaped bath.
- 18 litre maximum volume dishwasher.
- 60 litre maximum volume washing machine.
- Rainwater harvesting via Water butts.
- Grey water recycling

Waste

- The dwelling will have a site waste management plan in place during construction (Please refer to attached document).
- Adequate waste storage areas will be provided when completed.
- For the construction, locally sourced materials with a long lifespan will be used where possible.
- The design allows for the separation and storage of waste and recycling, both inside and outside the house.
- External storage for waste and recycling bins would be presented at the access at the appropriate time for kerbside collections.

Surface water management

The dwellings will minimise/delay surface water run off to drains and waterways by the following measures:

- Provision of soakaways.
- Paved surfaces to be permeable.
- Rainwater harvesting.

Air Quality

The Proposal will be minimizing the impact on air quality by the following:

- Reduction of demand for energy by use of renewable energy resources such as solar panels, Heat Reclaim units and Air source Heat Pumps.
- Promoting the sites' sustainable location within short walking distance to the village including the local school, church and bus stops to nearby towns.
- Promoting walking cycling to reach the pub, shop, post office, village hall and doctor's surgery. In neighbouring villages contributing to reduction in air pollution and improvement to air quality.
- EV charging points provided at the site reducing car emissions when car travel is required.
- Secure cycle storage is provided.

Sustainable Travel

- The site is located close to facilities and services in the village, as noted above by public footpaths or country lanes, with walking and cycling genuine options/alternatives to car travel.
- The site does have access to public transport networks such as the Dial a ride facility and Bus Networks to larger settlements such as Bishop's Stortford with mainline trains to London and Cambridge.

Light Pollution

- Minimum external lighting is proposed (refer to Bio Enhancement Drawing).
- Light pollution avoided by the installation of a low number of low Lux Level lighting externally.

Biodiversity

- The attached Bio-Enhancement Plan indicates the opportunities to enhance the habitats of: Bats, amphibians, reptiles, birds, badgers and hedgehogs within the development.