

Mr & Mrs Wakeling

1 Bunyan Close, Gamlingay, SG19 3JD

Front porch and garden room extension

Design, Access and Sustainability Statement

Introduction

Whilst this planning application is not of a scale that demands the preparation of a Design and Access Statement, it is considered by the applicants helpful to provide a short statement regarding the proposals design, access and sustainability.

Design Principles

Front Porch Extension

There is an existing open sided porch structure, with a hipped pitched roof supported on an timber column with a brick base. Approach to the front door is via a path running parallel to the front of the house from the driveway. There is a small step immediately in front of the existing front door.

The home owners wish to adapt and adjust the arrival experience to the house. They also wish to create a dry and secure space for the storage of coats and bags.

The proposal is to remove the existing porch structure and replace it with an enclosed porch structure of 5.9m/sq GIA. A new ground floor slab will be provided and upon this will be placed a glazed timber frame structure with a pitched and valleyed plain tile roof above. A new solid timber front door will be provided to the South West elevation.

By changing the front door orientation, the external path from the drive way will be widened and ramped to the door threshold to create better disabled access to the property.

Rainwater gutters and down pipes will be provided and drain to soakaways in the front garden.

Internally the new porch floor will receive a tiled floor. Space for coats and bag storage will be provided in the internal North East wall.

The existing front door will remain.

The new enclosed porch will receive electrical underfloor heating for frost protection, but is not intended as habitable space.

Rear Garden Room

There is an existing proprietary conservatory structure with polycarbonate roof structure to the rear of the property sitting atop dwarf brick wall structures. The conservatory structure and fabric is reaching the end of its serviceable life and needs replacing. The space is very cold in the winter and unbearably hot in the summer.

The home owners wish to improve the experience of occupying this space.

The proposals is to remove the existing conservatory and replace it with a new garden room of approximately 11.18sq/m GIA. A new ground floor slab will be provided at the same level as the main house. Upon this will be placed a glazed and brick infill timber structure with a pitched plain tile roof above. Glazing folding doors will be provided to the South West elevation and just over half

of the South East elevation. It proposed that brick infills will be proposed to the remaining South East Elevation and North East Elevation.

Internally the garden room will have a tiled/wooden floor, with plaster lined walls to the internal South East (part) Elevation, North East Elevation and North West Elevations. The internal soffit of the space will follow the pitched roof line.

The existing patio door between the main house and conservatory will be replaced with an alternative door, providing acoustic and thermal separation between the two spaces.

The garden room is proposed to be warm habitable space and will be heated via an electrical underfloor heating system.

Design Approach

The existing house is of red brick, with faux timber framing to the North West Elevation. The existing has reclaimed mixed colour plain tiles.

The Porch and Garden Room extension proposed to continue with the Timber Frame vernacular, but in this instance with timber framed structures.

The existing faux timber frame has a tight vertical rhythm/spacing. It is proposed that this is replicated in the gable end of the front Porch extension.

Whilst there is no timber frame expression on the South East elevation, the intention is to carry this design language through the rear of the property with the new Garden Room extension.

External Materials

Materials of the elevations will be the timber frame, expressing its natural colour, with either glass or brick infills. See precedent images below.





The brick infill technique is not a commonly used facing material in the present day, but there is evidence of its use in villages in and around Gamlingay.

The home owners are keen to keep traditional construction techniques and skills alive and consider such a facing material can be successfully deployed in a contemporary setting.

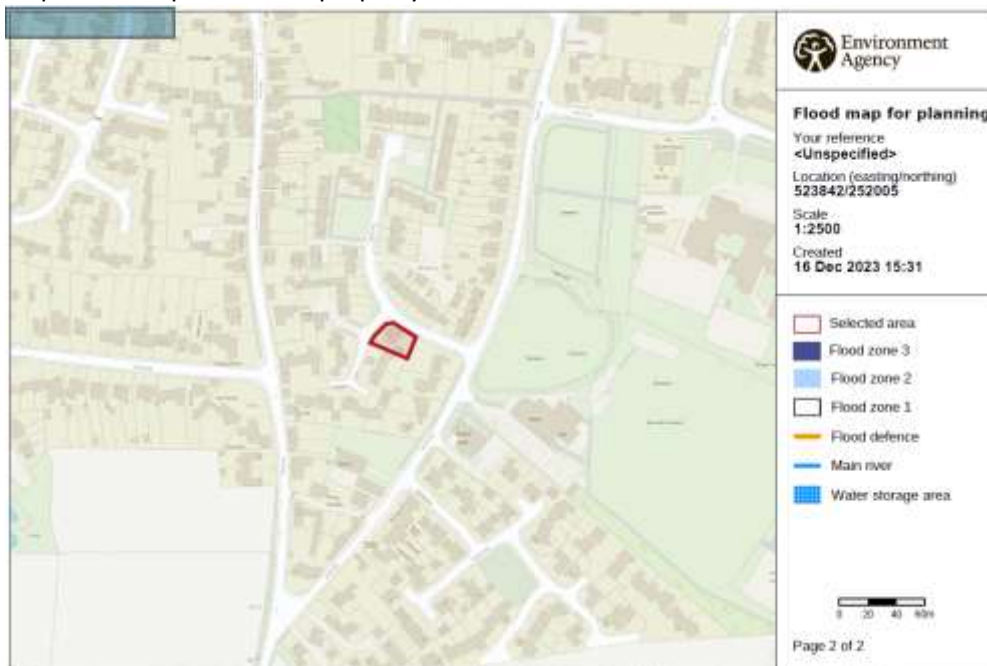
The roofs of both buildings will be with new plain tiles colour matching as closely as possible to the existing.

Proposals Cross section and levels

The property has no significant changes in level. It is therefore considered that cross sectional drawings of the proposals relative to the setting of the property isn't necessary.

Property Flood risk

As per the map below the property is located in flood Zone 1.



Heritage Matters

The property does not have a heritage listing. The Map below details the nearest heritage assets, they are as follows:

BARN AT BLYTHE FARMHOUSE

Heritage Category: Listed Building

Grade: II

List Entry Number: 1128187

BLYTHE FARMHOUSE

Heritage Category: Listed Building

Grade: II

List Entry Number: 1128186



Given the nature of the existing development around these heritage assets it is considered that the proposals at 1 Bunyan Close will have no impact the setting and amenity of these heritage assets

Noise and vibration

The proposals, once complete, will not increase the vehicle and traffic movement to the property therefore there will be no increase to noise and vibration.

No mechanical plant is proposed, again there will be no increase to noise and vibration.

Sustainability

Since purchase of the property in 2013 the present home owners have improved the thermal performance of the property by undertaking the following activities.

- 300mm loft insulation
- New double glazed UPVC doors and window units 24mm in thickness through out
- New high efficiency gas boiler.

In 2022 the home owners installed a 7.7kw solar array supported by 19kw/hr battery system. This is why electrical underfloor heating systems are proposed to the new extensions.

It is the home owner's intention to retain the existing front door to the proposed porch. The new porch space will provide a thermal buffer to the main house thereby limiting heat loss from it in winter months.

Similarly, the home owners wish to replace the existing patio doors to the proposed garden room with a glazed screen and door. Again, the new garden room space will provide a thermal buffer to the main house thereby limiting heat loss from it in winter months.

The proposals will be designed to meet the thermal performance requirements of the current Building Regulations.

Water Management

No internal water systems are proposed.

There is only marginal increase in external roof surfaces. It proposed the front porch roofs will drain to an external soak away. The Garden room will drain to the existing drainage system.

Presently the home owners harvest rain water from the garage roof.

Biodiversity and Ecology

There will be limited loss of lawn to facilitate the construction of the front porch. No other ecological impacts are expected.

Transport

There will be a marginal and short-term increase in transport movements to during the construction of the extensions. Once complete there will be no transport impacts associated with the proposals.

Trees

The proposals are not near any established trees.

Construction Site Waste Management

Existing Front porch

The roof tiles from the existing porch will be taken to the local recycling centre along with the lead flashings. Timber from the roof structure will be carefully disassembled, de-nailed and will be retained for use in other projects or taken to the local recycling centre.

The block paving will be retained for reuse.

It is anticipated that the footings associated with the existing porch will remain in situ.

Existing Conservatory

The lead flashings and polycarbonate roof sheets will be carefully disassembled and taken to the local recycling centre. The conservatory vertical glazing will be carefully disassembled and taken to the local recycling centre.

Timber from the roof glazing structure and will be carefully disassembled, de metaled and will be retained for use in other projects or taken to the local recycling centre.

The masonry dwarf walls will be carefully dissembled and taken to the local recycling centre.

Subject to the findings of the structural engineer and with agreement of Building Control officer the intention is to attempt to reuse the existing ground floor slab and foundations. If this is not possible again this material will be sent for recycling.

Proposed Works

The home owners are considering a timber frame system build solution where the frames for the extensions will be factory pre-fabricated. This form of construction limits both offsite and on site waste.

Timber frame construction has inherent carbon benefits due to carbon sequestration associated with the timber production. The home owners will use timber supplied from sustainable sources.

Given the relatively small quantities of masonry expected the home owners will explore the potential for the use of reclaimed bricks.

Concrete, roof tiles, flashings and glazing will be new.

End