

Design, Access & Visual Impact Assessment – Rev B



Proposed New Dwelling, Brook House, Sherborne, Gloucestershire

Prepared by Shen Carter Studio on behalf of Will Hine

29th February 2024

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1. Introduction

This Design, Access & Visual Impact Assessment has been prepared by Shen Carter Studio Ltd on behalf of Will Hine to accompany the planning application for the development of a new self-build dwelling within the garden of Brook House, Sherborne, Gloucestershire. The Design and Access Statement should be read in conjunction with all other associated planning documentation including the Planning Statement by Brodie Planning Associates and the Heritage Statement provided by Jon Lowe Heritage.

The applicant seeks to build a low profile, split level contemporary dwelling that will exceed the current standards of energy efficiency through the application of Passive House principles. By combining a highly insulated and air-tight building envelope with a whole house MVHR system, photovoltaic panels, battery energy storage, and a ground source heat pump, the proposed dwelling will achieve net zero carbon in use. In addition to the energy efficiency measures, the proposed building fabric will be constructed from materials with low levels of embodied carbon, utilising a twin stud timber frame with blown cellulose insulation and locally sourced natural stone cladding.

Given the context of the site, and the feedback received through the pre-application process, very careful consideration has been given to the design of the proposed dwelling such that its form is subservient to the surrounding buildings and that no harm is caused to the historic context.

An integral landscaping scheme is also provided that will help to integrate the proposed new dwelling with the site and provide an improved ecological habitat through the use of native planting and trees. Sustainable drainage will be achieved through the use of green roofs and a rainwater harvesting system, combined with an infiltration system, to attenuate rainwater run-off.



Fig 1. View of the proposed site looking South towards 'The Smithy'

2. Planning

2.1 Planning History

A detailed description of the planning history and relevant policies can be found in the accompanying Planning Statement produced by Brodie Planning Associates. The following is a summary of the planning history relevant to the design of the proposed dwelling and will set out the planning and heritage concerns which will be addressed throughout the remainder of this report.

Application Ref: 21/00801/FUL

Erection of orangery and garden store, and creation of outdoor swimming pool and tennis court. Permitted 01.12.2021

Following the approval of the above application, the proposed orangery has been successfully constructed with the swimming pool and garden store remaining to be built. The current application sits in the location of the approved tennis court which is shown with a dashed red outline on the site plan and section.

Due to the careful design of the proposed dwelling it is our assertion that the proposed house should be considered a significant enhancement over and above the approved tennis court with associated mesh fencing. The proposed boundary walling and native planting would be more consistent with the character and of the existing garden and would provide a continuation of the containment already provided to the Northern and Southern boundaries of the garden of Brook House.

Given the quantity of hard impermeable surfaces associated with a tennis court the proposed new dwelling would also provide more sustainable drainage by attenuating water run-off. Combined with the proposed landscaping scheme, using native species including fruit trees, the proposed dwelling would be an improvement to the current garden, and a significant ecological enhancement in comparison to the approved tennis court.

It is also our understanding that a highly sustainable dwelling, in a sustainable location, would provide significantly more benefit than a tennis court in the garden of Brook House.

Application Ref: CD.5776

Outline application for the erection of a dwelling. Permitted 15.10.1976

Application Ref: CD.5776/A

Outline application for the erection of a dwelling. Permitted 04.12.1981

The above two applications demonstrate that a new dwelling has been considered acceptable on this site in the past, and that this should be given due consideration in the determination of this application.

2.2 Pre-application Advice

Application Ref: 22/04313/PAYPRE

Address: Brook House, Sherborne

Date: 7th March 2023

Pre-application advice was sought in relation to the current application, the following is a summary of the advice given relevant to the development of the design brief and project objectives.

Principle of Development

The pre-app assessment considered Sherborne to be a sustainable settlement. *“It is therefore considered to be a sustainable location and the principle of a single new dwelling house can be supported.”*

Design and Impact on Heritage Assets

Given the proximity to a number of listed buildings, special regard should be given to: *“the preservation of the buildings, their settings and any features of special interest”.*

Due to the location of the site in the Sherborne conservation area, the proposed development should: *“pay special attention to the to the desirability of preserving or enhancing the character and appearance of the area”*

The Conservation Officer provided detailed written feedback which will be dealt with in depth in the accompanying heritage statement, and within the remainder of this report. In summary to their comments they stated that: *“a subservient ancillary development and its massing is not objectionable in principle.”*

And

“Subject to design and ensuring the scheme is low scale in its massing, retaining a subservient and uncluttered character the proposal should be acceptable.”

Impact on the Cotswolds Area of Outstanding natural Beauty

The pre-application advice determined that the application site is in established residential use and, is clearly within the settlement boundaries: *“The propose development would not therefore encroach into open countryside nor otherwise harm the natural beauty of the landscape or the special qualities of the AONB.”*

Impact on Residential Amenity

In relation to the potential negative impact of the proposed development on residential amenity the pre-application advice stated:

“an appropriate design could be achieved that would result in no unacceptable adverse impact on residentially amenity having regard to overbearing impact, loss of privacy or loss of light.”

“Should a separate vehicle access be pursued, consideration should be given to the amenity impacts that may result from an intensification of the of the use of the existing access track and PROW to the West of the site”

Biodiversity

The application should consider providing enhancements for bats and/or nesting birds as part of the proposal

Flood Risk and Drainage

The site is located in Flood Zone 1, which is the lowest designation of flood zone. The pre-application advice determined that: *“the proposed type of development is acceptable in principle in Flood Zone 1.”*

Highways and parking

Should the proposal for a new dwellinghouse be pursued, on site car parking provision should be made in accordance with the Gloucestershire Manual for Streets, along with secure cycle storage and provision of electric vehicle charging points

Impact on Trees

Due to the presence of mature trees on the proposed site, a tree-protection strategy, including works during construction, should be provided to accompany the application.

2.2 Listed Buildings

1. **THE KENNELS** - Grade: II listed
2. **K6 TELEPHONE KIOSK** - Grade: II listed
3. **NOS 14 AND 15 AND FORMER FORGE AT REAR** - Grade: II listed
4. **THE MEAD HOUSE** - Grade: II listed
5. **ELM TREE COTTAGE** - Grade: II listed

The map to the right indicates the nearby listed buildings locations in relation to the proposed site of the application and the remaining garden of Brook House. Although nearby, none of the listed buildings would have an outlook of the proposed development as they are orientated away from the site, in particular The Kennels, No's 14 & 15, and The Mead House all face the road through the village, with the proposed site to their rear and outbuildings and tall garden walls providing permanent visual screening. Elm Tree Cottage faces East from within a large plot, across open fields and away from the proposed site. Given the nature of the development around the site, the containment of garden boundaries with outbuildings, dry stone walls, established hedges and trees, there will little to none visual continuity between the proposed site and the surrounding listed buildings.



Fig.2 Locations of listed buildings in relation to the garden of Brook House

3. Landscape , Settlement & Streets

3.1 Context

Sherborne village stands along the south bank of the Sherborne Brook on Sherborne Lane and is a small rural settlement centred around Sherborne House, a grade II listed former country house that was converted into flats in the early 1980's. The Sherborne conservation area encompasses the 260ha Sherborne Park, a Grade II listed garden, pleasure ground and landscape park of 16th century origins, associated the with Sherborne House.

The village itself is of a linear nature, spread along Sherborne lane with a historic pattern of development spreading outwards from Sherborne House. The Eastern half of the village has a more uniform character typical of an estate village, while the Western half of the village has a mixed character of building styles with 20th century housing evident to the Western side of the crossroads. A strong feature of the pattern of development are the small lanes toward the North of Sherborne Road which give access to clusters, or rows, of individual houses and outbuildings.

The material palette of the village is dominated by Cotswold limestone, with boundary walls, houses, traditional outbuildings, and barns all predominantly constructed from the local stone. Roofing materials vary, with many properties maintaining their Cotswold slate roofs, but with evidence of red clay tiles, concrete plain tiles, slate roofs, and reconstituted Cotswold stone roofs. Plots are typically enclosed by Cotswold dry-stone walls, with estate boundary walls, and tall garden walls a strong feature of the village identity.



Fig.3 View looking North from Sherborne Road at the West of the village



Fig.4 No's 47 & 48 looking North from Sherborne Road to the East of the village

3.2 Public Rights of Way

There are a number of rights of way within the countryside surrounding Sherborne village, most of the local walks however, are within Sherborne Park which is open to the public from dawn till dusk every day throughout the year. The two local footpaths in closest proximity to the proposed site are identified as Sherborne Footpath 14, and Sherborne Footpath 5. These are shown on the map to the right and views along the routes are shown in the following photographs.

USRN : 09403102

Street : SHERBORNE FOOTPATH 14

Number : KSH14

Type : FP

Heading from Sherborne Road, Footpath 14 runs along the access lane to the North of the road, past the garden wall and hedgerow to the Western side of the Garden of Brook House. At the end of the lane is a style into a field, the footpath turns away from Brook House and heads towards the bridge over the Sherborne Brook. Due to the nature of the boundary wall and mature hedging there are no views into the proposed site. There is a solid timber pedestrian gate providing access to the lane from the garden of Brook House which does not afford views into the proposed site.

USRN : 09405108

Street : SHERBORNE FOOTPATH 5

Number : KSH5

Type : FP

To the North of the Sherborne Brook is Footpath 5, this runs behind a tall dry-stone boundary wall then across fields to the North East. Views back towards the village are completely obscured by dense mature trees and there are no potential views into the proposed site.

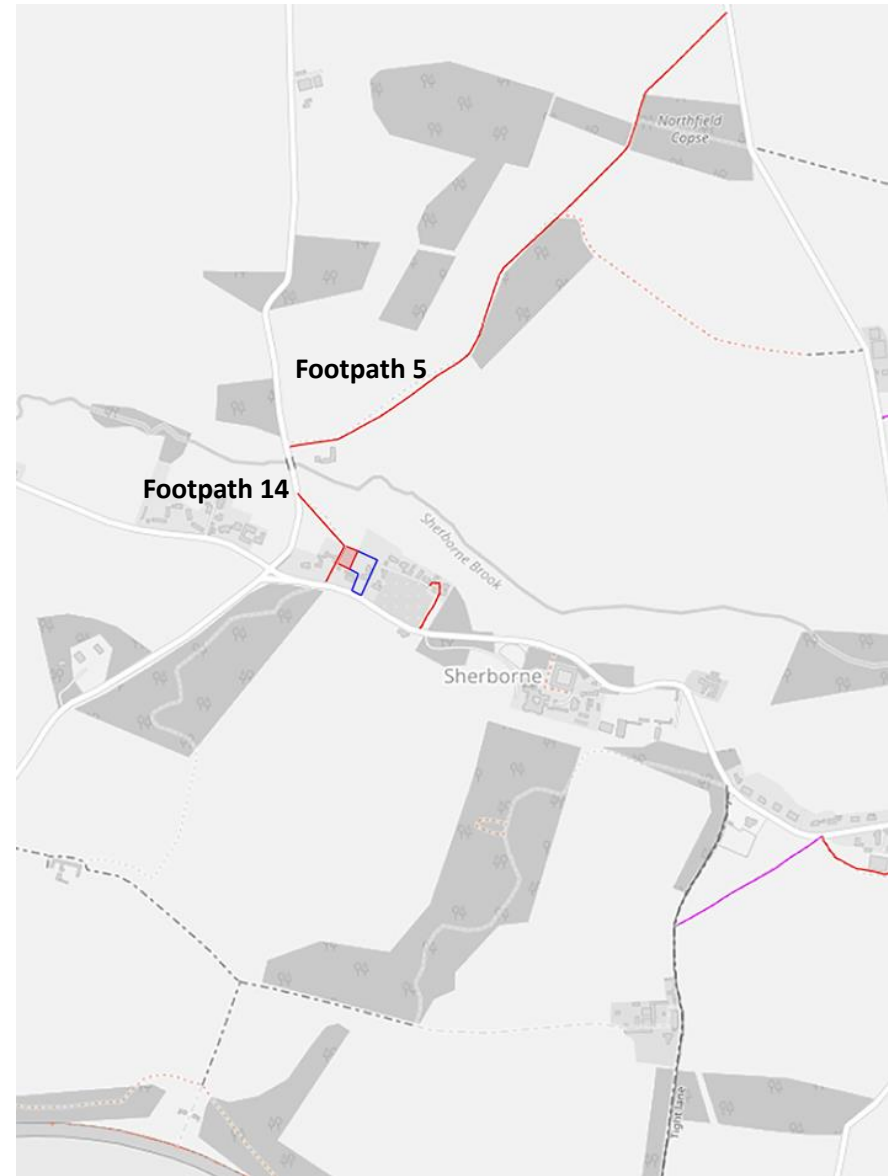


Fig.5 Public Rights of way with site marked in red and remaining garden outlined in blue

Footpath 14



Fig.6 View along footpath 14 from looking North from Sherborne Road



Fig.7 Boundary walls to no's 14 & 15, and tall garden wall in front of 'The Smithy'



Fig.8 Looking towards proposed site showing screening by hedge and boundary wall



Fig.9 Looking towards the proposed site from the stile into the field along footpath 14



Fig.10 Looking back towards the proposed site from open field along footpath 14



Fig.11 View from far corner of field with Elm Tree Cottage visible in the background

Footpath 5



Fig.12 View along footpath 5 of boundary wall to Sherbrook House



Fig.13 View from far side of Sherborne Brook looking back towards proposed site

3.2 Proposed Site

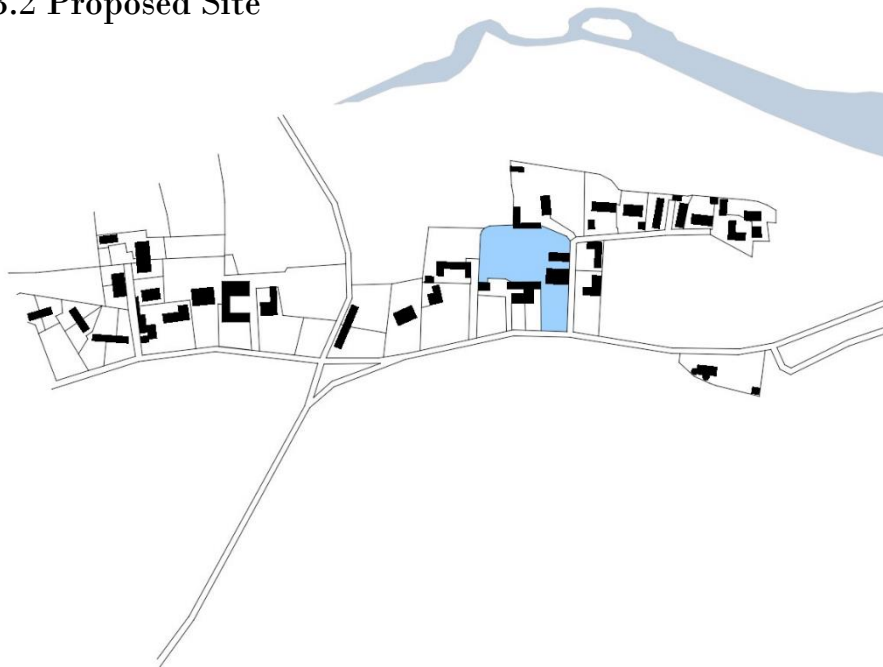


Fig.13 Existing Nolli Plan showing Brook House within the grain of development of the village. Plot boundaries are marked with the garden of Brook House shaded blue.
SOURCE: An overlay of the OS Explorer map available at: <https://explore.osmaps.com>

The above existing and proposed Nolli Plans show Brook House and the proposed new dwelling within the grain of development of the village. Outlining the plot boundaries allows the relative sizes of plots to be compared. As can be clearly seen, Brook House occupies a substantially larger plot than is typical of the village covering an area of approximately 4100 square meters, or just over 1 acre . This is due to the historic combination of the garden surrounding Brook House with a previously separate orchard plot. This is evidenced in detail in the accompanying heritage statement using historic maps to demonstrate the earlier subdivision of the land.

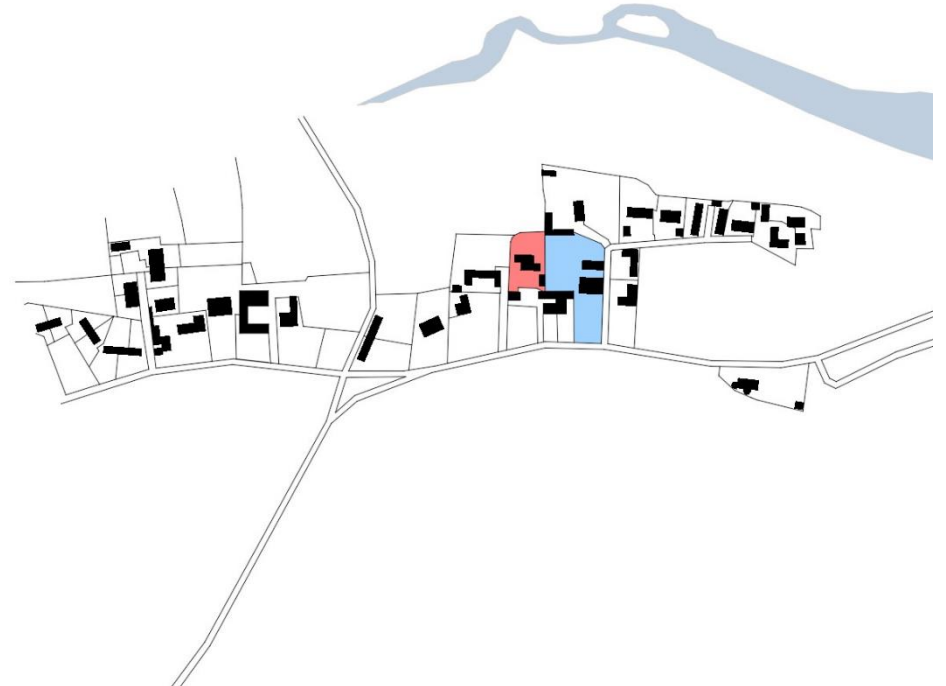


Fig.14 Proposed Nolli Plan showing the proposed new dwelling within the grain of development of the village. The site is shaded red with the remaining garden to Brook House shaded blue.
SOURCE: An overlay of the OS Explorer map available at: <https://explore.osmaps.com>

The proposed Nolli plan demonstrates that the intended subdivision of the garden of Brook House returns the garden to a scale that is more consistent with other plots within the village. The site created for the proposed dwelling is approximately 1200 square meters, with just under 3000 square meters remaining of the plot for Brook House. The proposed development also follows the pattern of development of the village with many houses arranged around lanes that branch perpendicularly to the North of Sherborne Road. Building within the large garden surrounding Brook House should therefore be seen as a continuation of the development of the village, which reinstates the proportion of the plot, and represents sustainable development of a parcel of land in a sustainable village location.

Site Photographs



Fig.16 Looking South towards the Smithy



Fig.17 looking South-East towards the access lane and footpath 14



Fig.18 View across the proposed site looking from North-East to South-West



Fig.19 Looking North along the existing line of pleached lime trees

3.3 Assessment of Visual Impact

As evidenced by the proceeding, photographs, plans & images, a sympathetically designed new dwelling can be located in the garden of Brook House without causing harm to the surrounding conservation area, heritage assets, public rights of way or the Cotswolds AONB. By careful siting, orientation and massing, the proposed new dwelling can be seen to complement the form and character of the settlement and should be considered a sustainable continuation of the historic pattern of development following the principles set out in the Local Plan.

The above assessment of the landscape, settlement, and streets surrounding the proposed development site, together with the accompanying Heritage Report and Planning Statement, establish the principle of development within the garden of Brook House, including the proposed subdivision of the plot. The following section of this report focusses on the design, detailing and materials, of the proposed dwelling such that it will respect the local character of the area and enhance its ecological diversity.

Policy DS3

Small-Scale Residential Development in Non-Principal Settlements states:

- 1. In non-Principal Settlements, small-scale residential development will be permitted provided it:*
 - a. demonstrably supports or enhances the vitality of the local community and the continued availability of services and facilities locally;*
 - b. is of a proportionate scale and maintains and enhances sustainable patterns of development;*
 - c. complements the form and character of the settlement; and*
 - d. does not have an adverse cumulative impact on the settlement having regard to other developments permitted during the Local Plan period.*



Fig.20 Aerial view of the proposed site with the proposed building footprint highlighted white

4. Design

4.1 Design Brief

Having undertaken a thorough investigation of the site, context, and received feedback from the pre-application submission, the following design brief was established working with the client, planning consultant, and heritage consultant:

- A highly energy efficient, contemporary, new dwelling is proposed that will sit sensitively within the site and respond to the character of the local area.
- The proposed dwelling should be subservient in scale, massing and form to the existing house and neighbouring properties.
- Any potential impact on heritage assets should be minimised with respect paid to the surrounding buildings heights and local grain of development.
- Consideration should be made to the residential amenity, in particular, any potential negative impact on the users of the nearby public rights of way should be avoided.
- All site boundary walls and hedgerows should be maintained, with new boundary walls between the proposed site and Brook House to be of sympathetic design with associated planting to provide visual screening and a continuation of the existing enclosed character of the garden of Brook House.
- Green roofs planted with native species are to be used to maintain habitat, provide rainwater attenuation, and integrate the proposed dwelling with the existing site.
- The building will be finished in Cotswold stone, laid dry, to provide a connection with the character of the local landscape and provide a distinctive contemporary aesthetic.

4.2 Methodology

Initial massing models were created using 3D cad software to model the existing site and the local context. Numerous design iterations were explored until it was felt that the optimum siting of the building was achieved in relation to building heights, views into and out of the site, orientation of living spaces, and respect to the local grain of development.

The below image shows that by moving the footprint of the building North, towards the centre of the proposed site, the massing of the building can be made much lower, with the eaves sitting below those of the surrounding buildings. Breaking the building mass into two distinct elements allows the creation of a stepped building profile that follows the natural slope of the site. The width of the two elements is determined by the narrow gable widths typical of the region and evident in the surrounding traditional properties.

The grain of the local village context also influenced the siting of the proposed dwelling. As noted, Brook House sits on a substantial plot, near the centre of the village and the context of the village is typified by large garden curtilages, with buildings centred within plots. The proposed subdivision maintains a large plot around Brook House, providing ample residential amenity for a property of this size in a village centre location. The smaller plot surrounding the proposed dwelling is proportionate to the subservient scale of the dwelling and surrounding building plots. In addition, the proposed subdivision re-establishes the historic arrangement, with the Western portion of the garden to Brook House having been identified as a separate orchard in historical plans.

4.3 Scale and Proportion

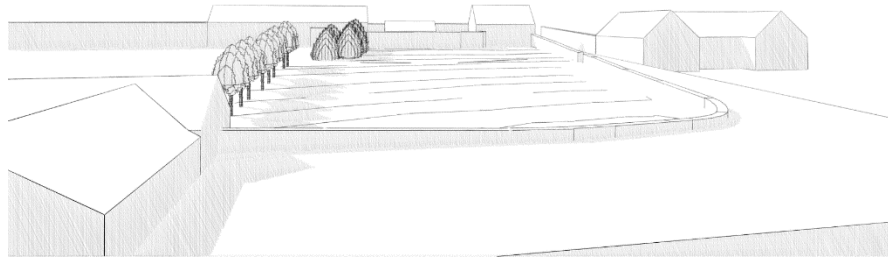


Fig.21 Existing view of proposed site looking South, trees and hedgerows omitted for clarity

The proposed dwelling has a total gross internal floor area of 180 sqm, providing three double bedrooms, an open plan living space, and a snug/home office. This represents a good sized detached home, with flexible living accommodation that remains subservient to Brook House, which itself includes 5 bedrooms, and a total of 438.5 sqm, including detached coach house.

In addition to the proposed new dwelling is a two car garage, of traditional form, that also provides secure cycle storage, and storage for garden tools, and machinery. The scale of the garage is of a kind with the surrounding out buildings, with ridge and eaves heights below those of the adjacent buildings.

The Eastern side of the garage, facing Brook House, forms a section of the proposed boundary wall which represents a continuation of the containment by neighbouring outbuildings that surround the garden at present.

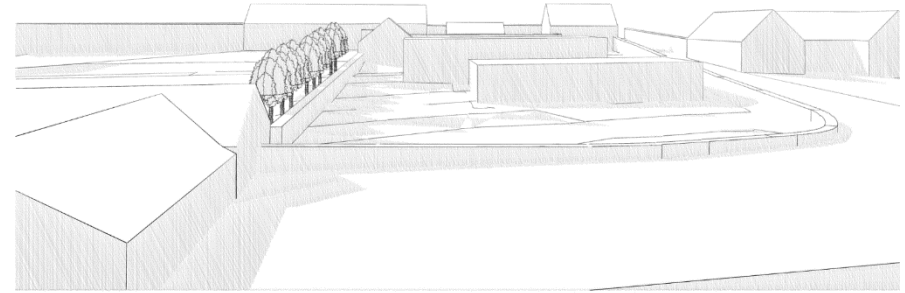


Fig.22 Proposed view of massing model within the context of the site

4.4 Architectural Style, Materials and Detailing

The proposed dwelling is of contemporary style that takes cues from the materials, scale and character of the local area without mimicking or creating a pastiche of the vernacular style. The flat roof, with projecting eaves, helps to reduce the mass and height of the proposed building while providing the opportunity for solar shading of glazed areas, a requirement under the SAP 10 regulations for the energy performance of new dwellings.

This form provides a horizontal, rather than vertical emphasis - as referenced in the Cotswold design Code in relation to narrow town centre plots, but this was felt most appropriate in the context of the site which forms a transitional zone at the edge of a rural settlement. The Cotswold Design code also welcomes original and innovative design proposals that maintain the architectural distinctiveness of the area, and reinforce a sense of place.



Fig.23 Cotswold Dry-Stone finish using locally sourced limestone and skilled craftsmen



Fig.24 Green roof planted with native species to improve habitat and contribute to sustainable drainage strategy



Fig.25 Energy efficient glazing carefully recessed into stonework

- The South Elevation, facing towards The Smithy, has limited fenestration characterised by tall, slender windows which help to protect the privacy and amenity of the adjoining property.
- The East elevation facing towards Brook House, provides a stone façade with projecting eaves over, set behind the proposed boundary wall. There is therefore no potential overlooking of the garden of Brook House.
- The West elevation, facing the access road, again has limited fenestration to protect the amenity of the public right of way. However it should be noted that the boundary walling and established hedge provide a very solid visual screen from views into the site from West.
- The Northern Elevation has larger areas of glazing, with a horizontal emphasis, typical of modernist architectural design, and which will provide light, open living spaces that connect with the garden and wider landscape setting. All glazing is to be of energy efficient design with high u-values and air tightness. Trickle ventilation will not be used a whole house MVHR system with heat recovery will be provided.
- Cotswold dry-stone cladding completes the remainder of all of elevations, providing a consistent material language that has a strong reference to the distinctive character of the village and surrounding landscape. The use of stone helps provide a connection with the surrounding buildings, with the dry-stone method providing a distinctive contemporary character.

Architectural References



Fig.25 Contemporary dry-stone addition to traditional Cotswold property – Found Associates



Fig.26 Projecting eaves to accessible modern house with green roof – Arkle Boyce Architects

Architectural Style—Contemporary

D.29 Original and innovative proposals that reinforce a sense of place and help raise the standard of design generally are welcomed. A contemporary design should make strong local references and respect elements of the Cotswold vernacular, in order to maintain the architectural distinctiveness of the area.

D.30 On many listed buildings, in some prominent locations, or within consistently historic and traditional village and town street scenes, a contemporary building may appear too starkly out-of-keeping. This is more often the case in an area such as the Cotswolds, which has such a strong vernacular. But there are many opportunities to explore a less conventional design approach, and this is encouraged.

D.31 The massing and the elevations of contemporary buildings should usually be broken, especially in historic settings, to avoid overly horizontal proportions and a monolithic or brutal appearance. The scale, modulation and architectural lines of contemporary buildings should respond to their context, for example with vertical articulation reflecting the narrower plots within town centres.

D.32 The use of traditional local materials, most notably natural stone, appropriate proportions, and a high standard of workmanship will help to ensure that contemporary developments are harmonious with their surroundings. There should be an emphasis on simplicity of design, with detailing neatly resolved and of the highest quality.

D.33 In some instances the use of modern, non-local materials may contribute towards a successful contemporary design. This might include the use of more extensive areas of glazing, zinc or copper roofs, or timber cladding. However, obvious local references should still be made.

D.34 Modern design may also facilitate the incorporation of sustainable features more readily than when following a traditional design approach. Key points that relate specifically to the Cotswold context include the use of locally-sourced materials, and the incorporation of heating and energy generation that utilises local resources, for example, woodland products.

-THE COTSWOLD DESIGN CODE, Cotswold District Council

5. Access

5.1 Proposed Driveway

The pre application guidance received in relation to the proposed new dwelling suggested that the principle of development could be supported, although the creation of a new access should be avoided due to the impact on both designated and non-designated heritage assets. Having thoroughly investigated the site and its relationship to Brook House together with the surrounding listed buildings and the nature of development within the village, we propose that widening the existing pedestrian access gate from the access lane to the West, and creating a driveway associated with the new dwelling, would cause the least potential impact to Brook House, to No's 14 & 15, and follows the pattern of development found elsewhere within the village.

The proposed use of the existing driveway of Brook House would have a greater impact on the amenity of the existing house due to the only access being through a small gateway adjoining the house and passing in front of the windows of the main living spaces. The existing driveway also neighbours the adjacent listed buildings, therefore any intensification of use, or extension of the driveway to create better parking or turning spaces, would impact upon those properties. By widening the existing pedestrian gate onto the access lane to the West, any vehicles approaching the new dwelling would avoid the designated and non-designated heritage assets and discretely enter the site from an established access lane to the rear of the neighbouring properties that is well screened by outbuildings, garden walls, and vegetation.

The suggested use of the existing driveway to Brook House would also require an approach on foot of 70m, from the existing drive to the proposed dwelling. Creating a new driveway and vehicular access greatly increases the accessibility of the proposed new dwelling, following the principles set out in the Lifetime Homes Standards, and therefore provides a more inclusive property suitable for a wider range of users.

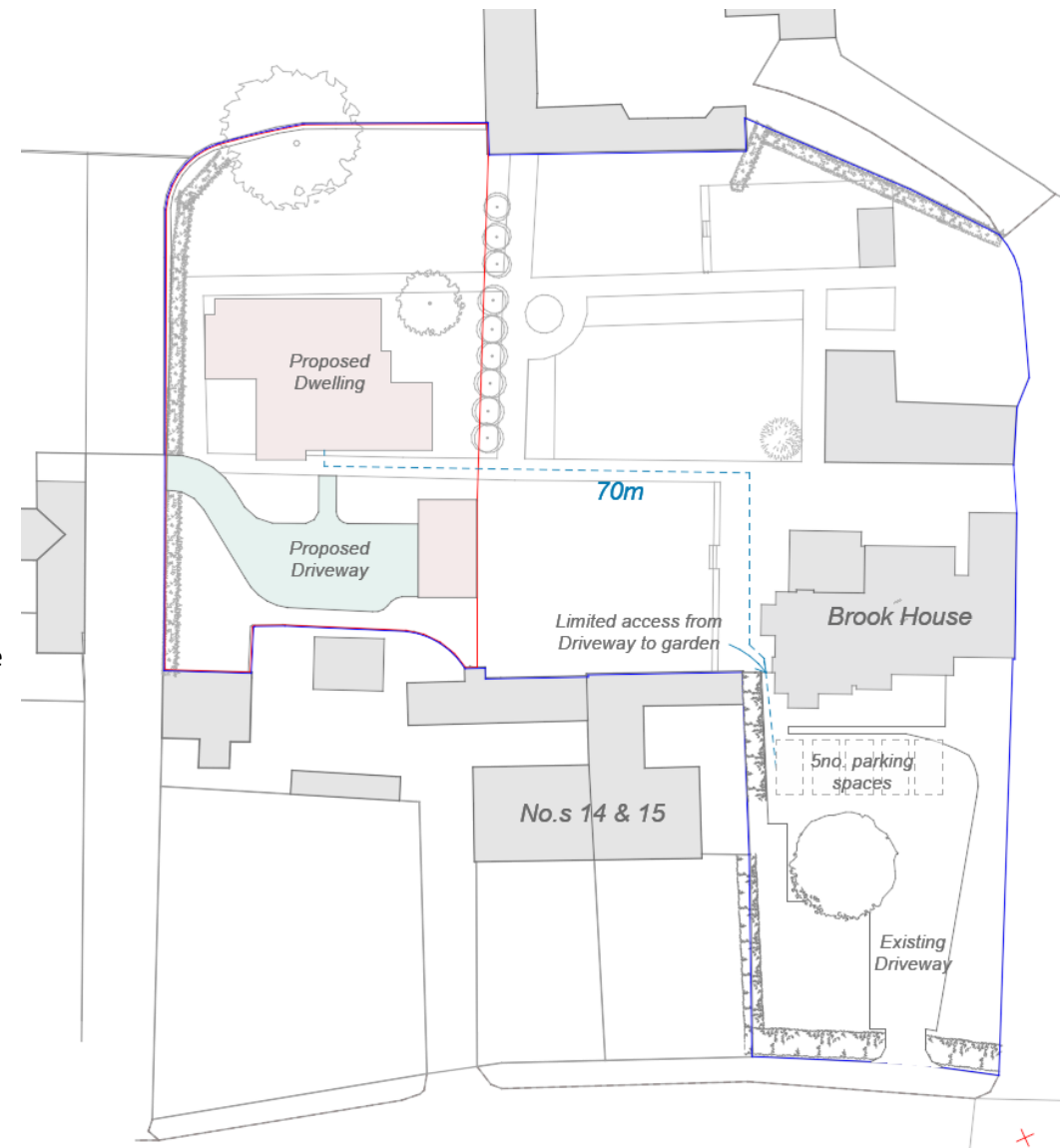


Fig.27 Proposed new access relative to use of existing driveway to Brook House

LIFETIME HOME STANDARDS Criterion 2 - Approach to dwelling from parking (distance, gradients and widths)

The distance from the car parking space of Criterion 1 to the dwelling entrance (or relevant block entrance or lift core), should be kept to a minimum and be level or gently sloping. The distance from visitors parking to relevant entrances should be as short as practicable and be level or gently sloping.

5.2 Layout

The proposed new dwelling has a stepped profile with two separate elements following the contours of the existing garden. The lower section contains the main living accommodation, and includes an open plan living area, snug, utility, and w.c. There is an accessible side entrance via the utility room, and the large sliding doors have a level threshold leading onto the paved garden area. The main entrance, from the proposed driveway, is on the upper level which contains the bedrooms, family bathroom and entrance hall. Although the stepped building arrangement makes locating a potential future lift difficult, the height difference between the two floors is under 2m, and is accessed by a wide shallow stair that would suit the installation of a stair-lift, should this be required.

5.3 Highways

The proposed access lane to the west of the site is understood to be an unadopted road over which the residents of Brook House have a right of access. The surface is of loose stone chippings up to the existing pedestrian gateway, opposite which is a small turning head/parking bay associated with the neighbouring property. The proposed entrance is therefore at the end of an unadopted road that has no-through traffic and would cause no impact on the local highways. The Southern end of the access lane opens onto Sherborne Road via an established entrance with wide visibility splays as evidenced in fig 6.

6. Biodiversity Enhancements

The accompanying landscape plan details the proposed planting scheme which includes a variety of native species of plants, shrubs, and fruit trees. These enhancements alone would provide a significant improvement over the existing garden which largely includes rough grass and areas of bare soil. In addition to these measures, it is proposed to include:

- Bird boxes suitable for a range of species with the potential for a barn-owl box in the mature tree to the North of the site facing over open fields
- Habitat boxes offering protection for a variety of invertebrate species
- Bat boxes in sheltered locations that are exposed to the sun, suitable for common pipistrelle brown long-eared and noctule bats

In comparison to the approved tennis court in this location, the proposed dwelling with associated landscaping and the biodiversity enhancements described above, would considerably improve the ecology and biodiversity of the site.



Fig.27 & 28 Bat box and Barn owl box for enhancement of Biodiversity within the site

7. Flood Risk

The proposed site is in Flood Zone 1, the lowest designation of flood zone, the proposed type of development is considered acceptable in Flood Zone 1. The accompanying sustainability statement details the sustainable surface water drainage strategy using infiltration and water storage in full accordance with SuDs principles.

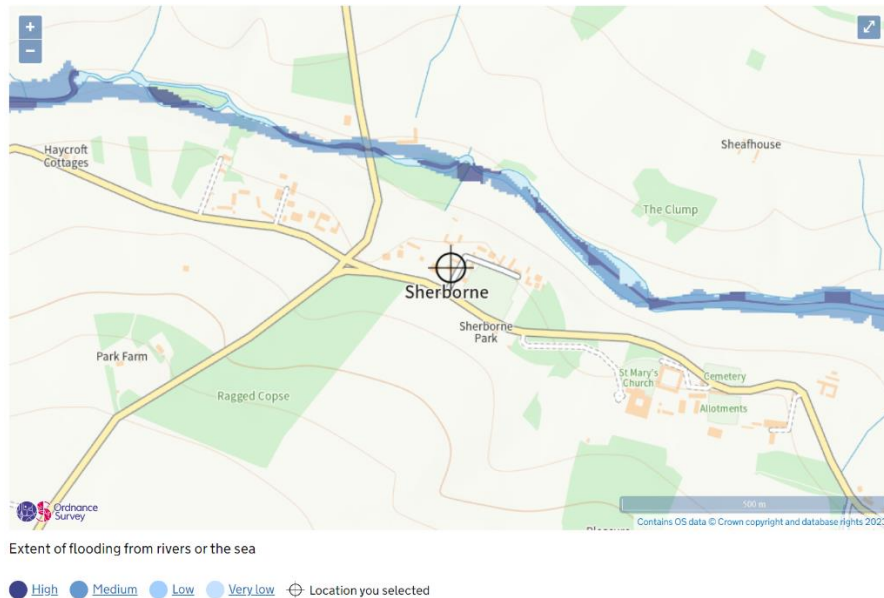


Fig.30 Flood Zone map demonstrating suitability of site for proposed type of development

8. Sustainability Statement

The proposed dwelling has been conceived from the outset to meet the highest sustainability measures. Following Passive House principles, a fabric first design method has been employed to combine a highly energy efficient building, with high levels of thermal comfort. The following sets out the measures followed to ensure the proposed dwelling attains these goals:

Net zero carbon

1. To meet Passive House standards, the space heating and cooling demand cannot exceed 15 kWh per square meter annually. This will be achieved through the form factor of the proposed dwelling having a low surface area to volume ratio and the building envelope having high levels of continuous thermal insulation and air-tightness, combined with energy efficient glazing oriented to reduce solar gains.
2. Within the Passive House standard, thermal comfort is achieved by keeping surface temperatures to a minimum of 17°C. This ensures a draught free living space during colder months. In warmer months, cross ventilation is provided by openable windows in opposing elevations, with solar shading to southerly orientated glazing in accordance with the requirements of Part O of the Building Regulations.
3. Space heating and cooling will be provided through a ground source heat pump connected to a mechanical heat and ventilation system with heat recovery. This ensures the highest levels of energy efficiency and thermal comfort throughout the year with no use of fossil fuels on site.
4. Renewable energy will be provided by a roof mounted solar array combined with a battery energy storage system to ensure that energy created at times of peak production can be stored for use at times of peak demand.

5. Embodied carbon within the building fabric will be minimised by the use of timber frame construction for the walls and roof with blown fibre cellulose insulation. Locally sourced limestone finishes the exterior of the building which also provides thermal mass to the timber frame reducing temperature fluctuations within the proposed dwelling. Foundations will be of Passive Slab construction, providing high levels of thermal insulation, reducing cold-bridging, and reducing the use of concrete compared to trench fill foundations.
6. Further energy efficiency measures include the use of low energy LED light fittings, and the use of low energy appliances.

Travel

1. Home working is supported through the provision of a dedicated snug/study along with a flexible open plan living space.
2. Active travel is supported through the provision of cycle storage within the proposed garage building. Sherbourne Village is served by the 'V12 - Stow - Bourton - Barrington - Burford - Wychwood - Chipping Norton' bus service stopping at the Sherborne Farm bus stop within walking or cycling distance of the proposed dwelling.
3. Electric car charging points will be provided within the proposed garage building.

Water

1. Water consumption will be reduced by the use of low flow fittings such as taps and showers with limited flow rates, dual flush WC's, and water efficient appliances.
2. Showers will utilise waste-water heat recovery to reduce energy consumption.
3. Potable water consumption for use within the proposed garden will be reduced through the use of rainwater harvesting butts.
4. Sustainable drainage principles are followed through the use of permeable surfaces and soak aways to mitigate surface water run-off

5. Foul water drainage will be connected to the existing public drainage system in the adjacent field.

Waste

1. Construction waste will be minimised by the implementation of a Site Waste Management Plan that will be followed and targets set for construction waste recycling and disposal.
2. Facilities for household waste recycling including sorting and storage will be provided with the proposed utility room, with wheelie bins, recycling and food waste boxes in the proposed garage.

Voluntary standards

1. The proposed dwelling is intended to follow Passive House principles in terms of energy consumption and fabric efficiency. Further to this, the selection of low-embodied carbon materials will reduce the carbon emissions related to the building fabric.

Heritage Value

1. The sustainability measures have been implemented in a manner that takes into consideration the historic context, including the neighbouring heritage assets and the wider context of the Cotswold's AONB and village conservation area, as set out in the accompanying Heritage Statement, and Planning Statement.
2. The resulting design should therefore be considered both sustainable and considerate of its context while being appropriate to modern standards of living in a sustainable location.

9. Conclusions

The proposed dwelling has been sensitively designed taking into account the historic context, including neighbouring heritage assets, the character of the village conservation area, and the wider context of the Cotswold AONB. The design takes inspiration from the character of the local area, including vernacular architecture and the prominence of tall garden walls, and estate boundary walls within the village of Sherborne. Finished in dry-stone walling using locally sourced stone and high levels of craftsmanship, the materials palette is of a kind with the local context, while the massing and form allow the design sit subserviently in relationship to the surrounding buildings, and provide a sense of transition to the open countryside to the north of the proposed site.

The proposed subdivision of the plot re-establishes the historic subdivision of the land surrounding Brook House as evidenced in the historic maps within the accompanying heritage report. The scale of the garden of Brook House is therefore returned to a scale proportionate to the other garden plots within the village, reduced from it's current size of approximately 1 acre. The proposed widening of the existing pedestrian access to the West of the site has been shown to provide the least impact on the amenity of Brook House, and reduces the impact on the neighbouring listed buildings, while also providing a more accessible approach to the proposed new dwelling.

The associated landscaping proposals, and proposed biodiversity enhancements, represent an improvement over the existing garden, and a significant improvement over the approved tennis court plans. The design of the proposed new dwelling is highly sustainable, using a highly insulated building envelope with high levels of air-tightness and an MVHR system with heat recovery, following Passive House principles. The building will be zero carbon in use, and will use low embodied carbon building materials in its construction.

We therefore suggest that the design of the proposed new dwelling follows a sustainable pattern of development that is respectful of the historic context and can be safely granted planning permission.

