Design and Access Statement

For 4 new dwellings

at Bremeridge Farm, Dilton Marsh, BA134ED

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Introduction

The purpose of this Design and Access Statement is to help gain full planning approval for the demolition of 2 existing barns and development of 4 new 3-bed dwellings at Bremeridge Farm, Dilton Marsh, BA13 4ED. The existing barns have Prior Approval Under Class Q of GPDO 2015 (as amended), for Change of Use of Agricultural Buildings into 5 Residential Dwellings (Class C3), Including 3 x Larger Dwellings and 2 x Smaller Dwellings, with Associated Operational Development. This statement should be read alongside the planning statement and planning drawings.

Site Appraisal

Context

The site sits less than 1km north of the village of Dilton Marsh and less than 2.5km west of the town of Westbury which provides easy access to the local amenities and employment. The site is surrounded by farmland, with a large barn to the south and a small collection of dwellings, originally assumed to be part of one farmstead which has been altered over the years and divided up into private dwellings. Neighbouring properties include the Grade 2 listed Bremeridge Manor and Bramble Cottages which are considered to be curtilage listed buildings.

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Images of the existing site

A.



B.



C.

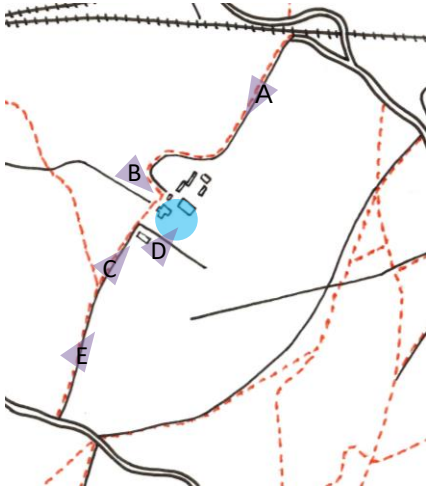


D.



E.





Design

Use

The existing barns were last used for agricultural use however should the recent prior approval applicaiton be implemented the use would be classed as residential. Therefore the principal of the site being acceptable for residential use has been established.

This application seeks to retain the use as residential to provide 4no. three bed dwellings along with more suitable and sustainable accommodation for modern family living.

Layout

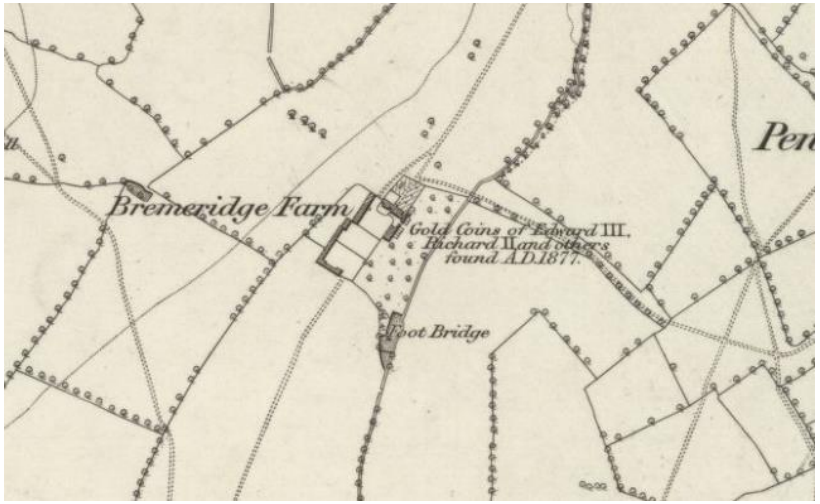
The existing layout of the barns have been arranged in an L shape form however historical maps and aerial photographs show how the site has been changed over the years. The new dwellings are positioned so that they are sympathetic to the footprint of the old barns. They are arranged around a central courtyard, with a staggered layout to prevent each property overlooking each other.

The buildings are focussed towards the centre of the site which makes the development appear smaller and minimizes the visual impact on the wider countryside. Each plot has a large private garden located towards the edge of the site providing a green buffer along the boundary edge.

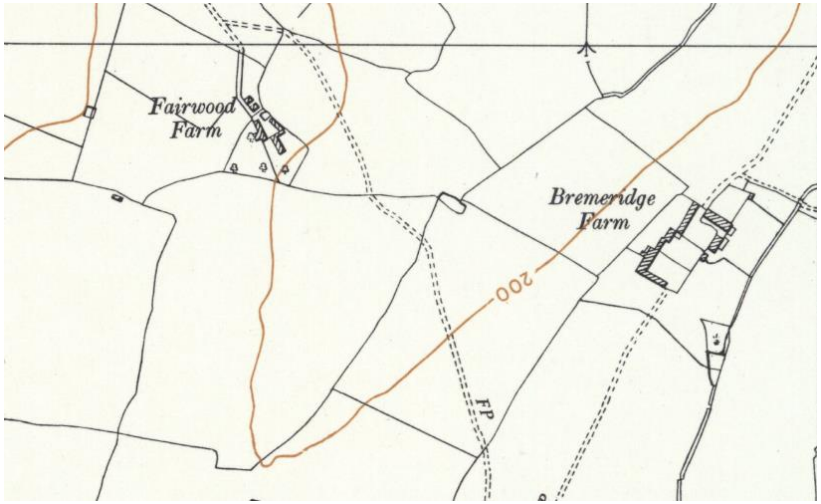
The previous Prior Approval layouts had a deep floor plan with minimal outlook and natural light into the dwellings which is not ideal for residential use. Plots, 1, 2 and 4 have a L shaped plan, which enables every room in the dwelling to receive natural daylight and ventilation. Plot 3 has a linear shaped plan and all floor plans encompasses an open plan kitchen/dining/living area with a separate study. The main living areas have been kept to the opposite side of each dwelling as the bedrooms/bathrooms, creating a public/private divide and allowing views of the countryside. Privacy has also been maintained by the high-level windows facing into the courtyard.

Historic Maps

1884 – showing L shape development to the south



1960





1945



2001



2005



2016



2022 - current

By looking at old maps and photographs of the site, it is evident the site has changed over the years and there was previous development on the site. Firstly a there is a distinctive L-shape form which links to the original farmstead (which was present pre-1960) and then a linear organisation was added to the centre of the development site which has recently been demolished.

Amount

The approved prior approval application provided 5 residential dwellings with a total floor area of 638m2. This application seeks to provide 4 dwellings with a total floor area of 616m2 so the amount of development is less than the previously approved proposals. The amount should therefore be deemed appropriate for the site.

Scale

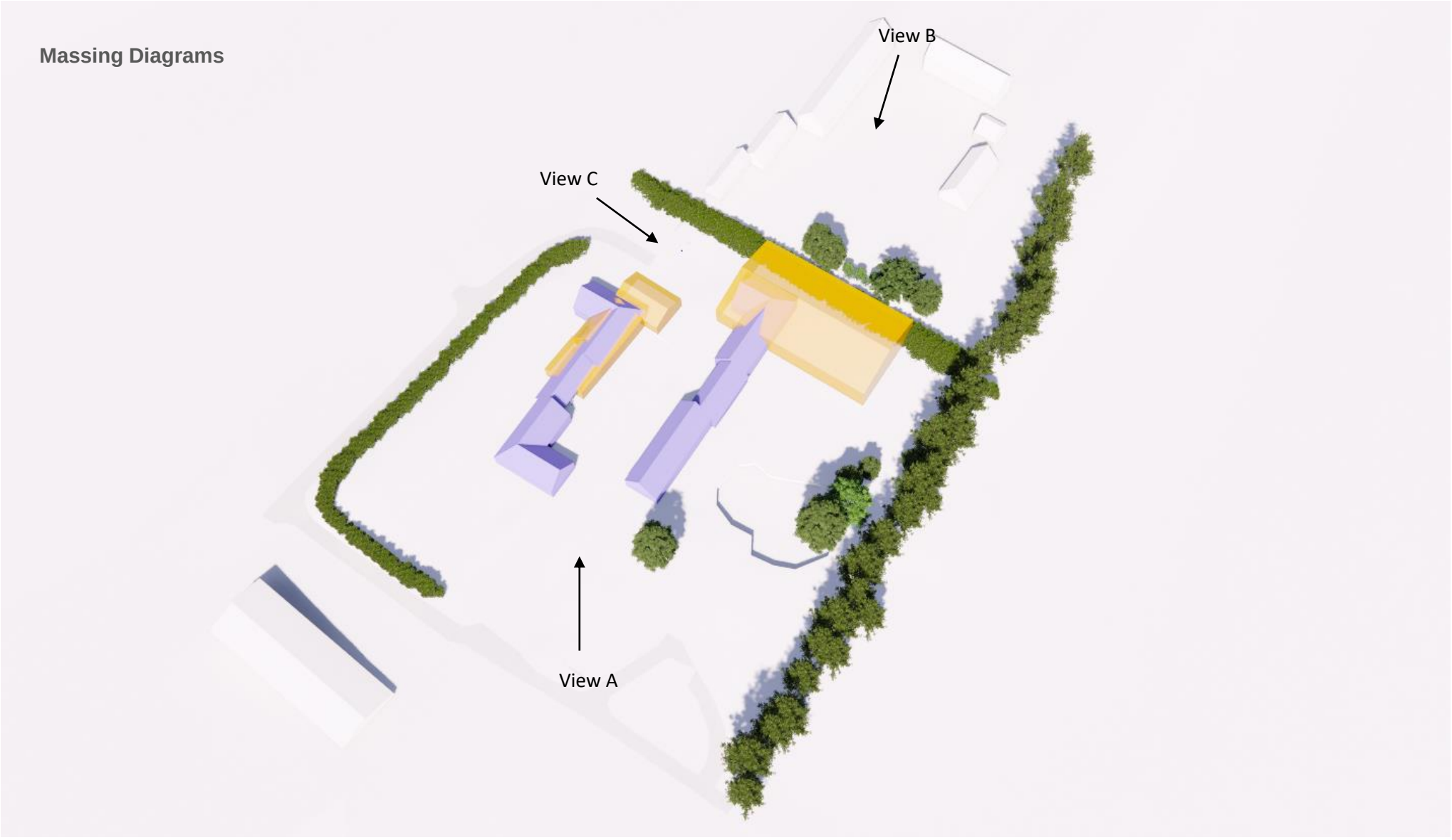
The dwellings will all be single storey with ridge heights of approximately 6.5 meters. The existing barns have a maximum ridge height of 8.5m so the proposed dwellings will be smaller in scale than the largest of the barns onsite. The floor area for the existing barns is 1093m^2 and the combined floor area for the proposed dwellings is much less than this at only 616m^2 . Therefore the overall scale and mass of the proposed dwellings will be much less than the existing barns and will minimize their visual impact on the neighboring buildings and the wider countryside. (see massing diagrams on following pages for further details)

Appearance

The new dwelling will be constructed using materials sympathetic to the local surroundings. All materials have been selected to reflect the character of the local buildings and to ensure the building holds architectural merit. Natural stone and clay pantiles reflect materials local to the area whilst the timber panels, shutters and doors make the openings look proportionally correct on the facade.

The proposed bungalows have been designed to maintain an agricultural appearance with large barn-like openings to fully integrate into its surroundings and reduce visual impact on the wider landscape. These large openings also bring in a large amount of natural light into the dwellings ang creates a light, modern and airy interior. Window and door openings have been introduced in locations to maximise the views and natural lighting internally while remaining in the agricultural style.

Massing Diagrams



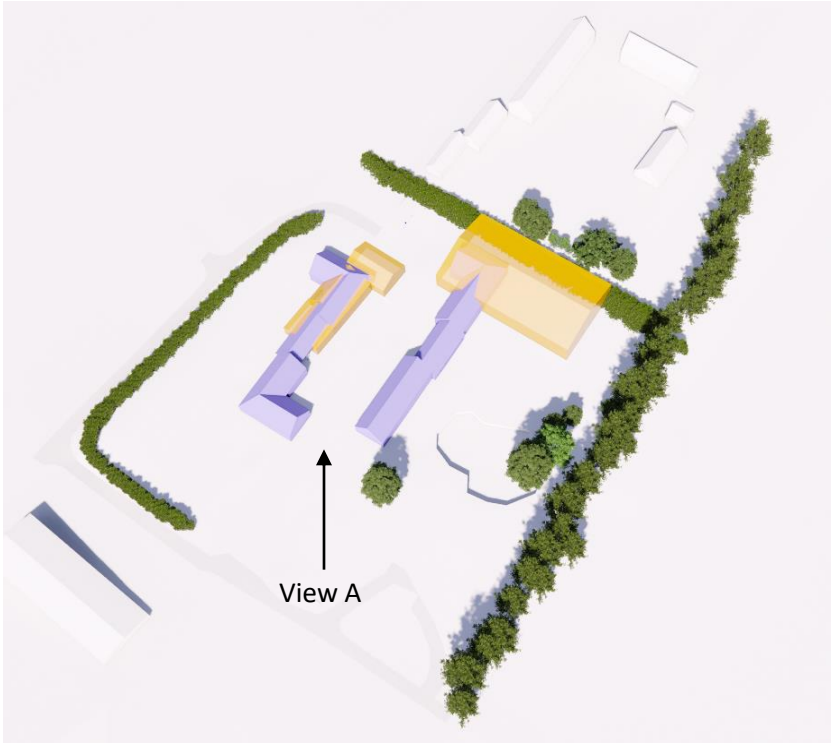
Proposed

Existing

Aerial view of site, showing difference in massing between the proposed and existing

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View A



Aerial View



Existing



Proposed

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View B



Aerial View



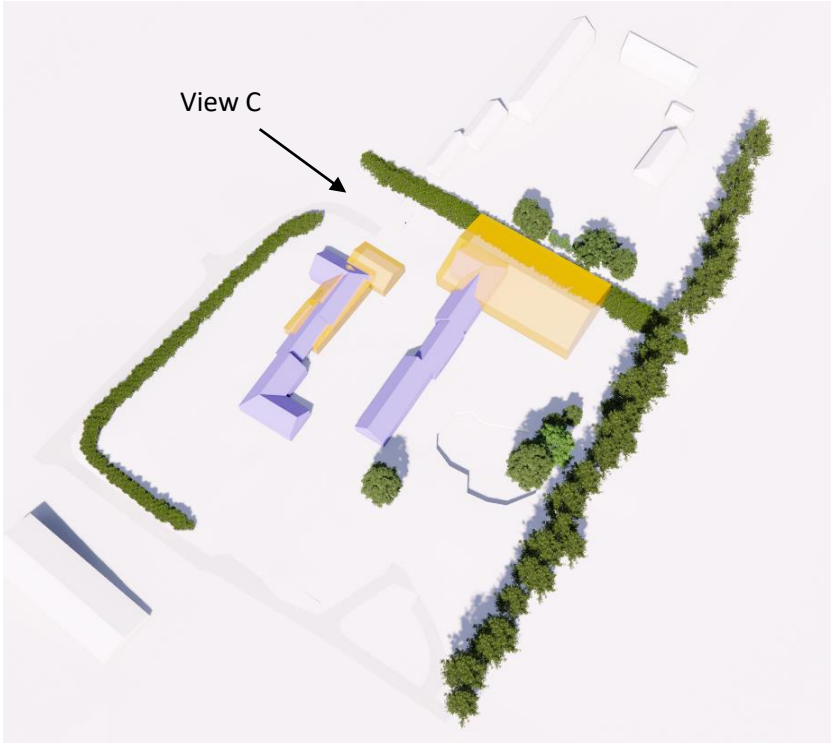
Existing



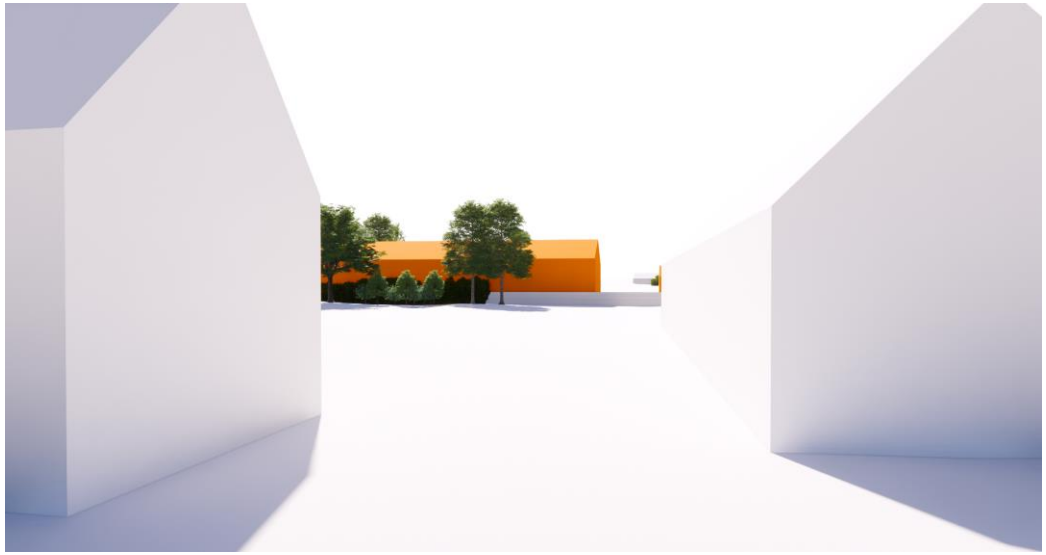
Proposed

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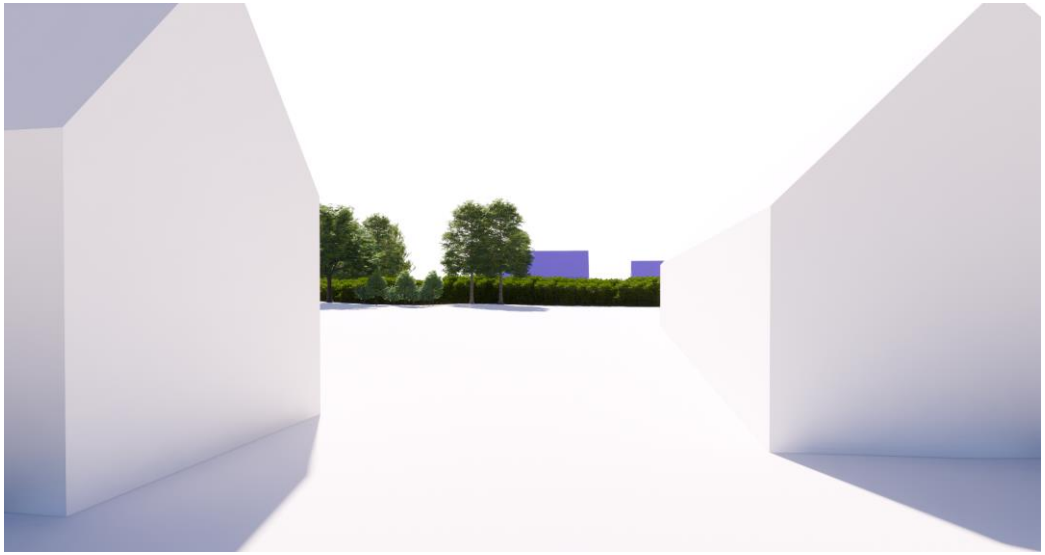
View C



Aerial View



Existing



Proposed

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Materials



View from North of the site



View from South of the site



Clay roof tiles



Natural stone



Timber panelling / shutters

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Sustainability

While the existing barns are suitable for conversion, there would be a practical limit to the improvements which can be provided to upgrade the thermal elements to new build standard. Due to the construction technique required to insulate the existing building to bring it up to habitable standards, a high performance insulation would need to be used, which would most likely need to be PIR insulation, as the depths would need to be kept to a minimum to work within the existing structure. PIR insulation is a petrochemical-based product which requires a considerable amount of embodied energy to produce. It is also completely unrecyclable and has a very low thermal mass, which can cause overheating.

At Orme, we believe that a “fabric first” approach is best practice, concentrating on high levels of insulation, thermal mass and air tightness, which collectively provide comfortable and controllable environment for the user, with minimal energy use (and therefore running costs). Taking this approach reduces the need for the energy to be used in the first place. Any heating that is then required, will be generated from using a renewable energy, either air source or ground source to run a heat pump and system. Hot water will be provided from solar thermal panels, located on the roof.

If a new build structure were provided, there would be an opportunity to improve the efficiency of the thermal elements. The majority of new one-off houses we design are timber frame structure, and most use the twin stud method, which allows for a good thickness of recycled newspaper insulation to be blown in, which itself provides a high level of thermal mass, an important factor in providing comfortable living environments. This will help keep the building cool in the summer, and warmer when the temperature drops in the winter and can be used with a stone external skin. This construction method also provides a very air-tight structure, which prevents wasted energy. An airtight house does require controllable ventilation, however this will be provided by a mechanical ventilation system which recovers the heat from the warm air (from rooms such as kitchens and bathrooms) and then pre-heats the cool, fresh air coming in, to minimise energy use. The windows and doors will be aluminium clad timber, which provides a good thermal break to prevent cold bridging and will achieve at least 1.1W/m^2K if they are double glazed, and 0.9W/m^2K if they are triple glazed. As mentioned earlier in the document, the dwellings have been designed to maximise daylighting, minimising the requirements for artificial light during daylight hours.

It has been demonstrated here that the proposed new-build has the potential to be more environmentally sustainable than the conversion, by having a better thermal performance with higher levels of insulation, good thermal mass, minimal cold bridging and an air tight construction.

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Landscape

In order to maintain as much of the character and appearance of the site as possible the existing hedgerow surrounding the site will be maintained and strengthened, as it holds important ecological and visual value. There will be additional planting to strengthen the existing hedgerow to the north-east boundary as to obscure plot 4 from the neighboring properties. This, along with a significant reduction in size to the existing/demolished barn will be a considerable visual improvement to the neighboring cottages. An ecological enhancement area and bat mitigation roost will also be included in the proposal.

Access

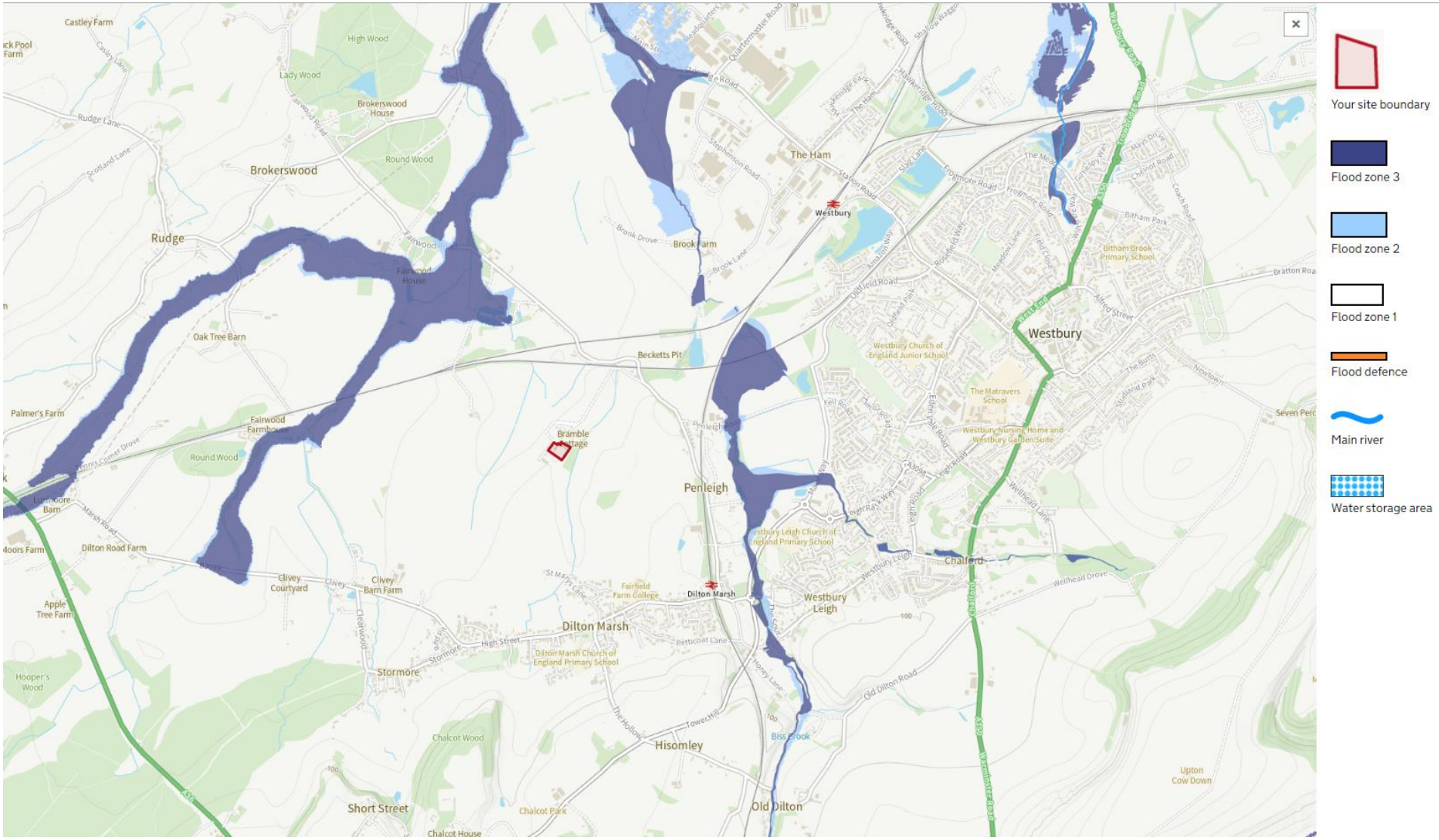
The existing vehicle access and track to the site, has been in regular use for some time and was previously deemed acceptable in planning terms through the prior approval and will be retained for this application. Sufficient parking has been provided for each dwelling on site, within their own defined spaces including two spaces in an open fronted carport (to encourage parking and not storage) and then two spaces in front of each carport. This allows for sufficient visitor parking and will prevents any on-street parking. Sufficient turning space has also been provided within the courtyard style development.

All dwellings are single storey to accommodate flexible accommodation with ground floor sleeping and living, suitable for everyone. The replacement dwellings will provide level access from the parking space to the entrance of the house to assist with wheelchair access and comply with Part M of the building regulations.

Conclusion

- Prior Approval under Class Q for the proposed conversion and change of use of agricultural buildings into 5 dwelling houses (C3 use class) and associate operational development was approved in November 2022 (Ref PL/2022/07278) the principle of residential use on this site has therefore been established as a fall-back position.
- This application seeks to replace the extant permission with 4 new build dwellings, instead of the compromising fall-back option of the barn conversions.
- The proposed combined floor area for the new dwellings is less than the proposed floor area for the approved fall-back permission.
- The proposed massing and ridge heights of the new build dwellings is less than the approved fall-back permission.
- It has been demonstrated in this document that the design and positioning of the new dwellings provides a real and positive enhancement to both the local context of the direct neighbours, as well as the visual impact on the wider landscape area and is a significant improvement on the approved fall-back position.
- The replacement dwellings will have a better thermal performance with higher levels of insulation, thermal mass, minimal cold bridging and an air tight construction which will be an improvement over what can be achieved with the fall-back position of the conversion.
- Overall the proposed new dwellings will provide a better alternative to the approved fall-back position without causing any significant or demonstrable harm to the locality and should therefore be approved.

Appendix: Flood Risk Map



The building lies within flood risk zone 1, and the proposed development is therefore not at risk of flooding.

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