

Design & Access Statement

19 New Road, Woodstock

Client : Mr & Mrs Bernardini

November 2023

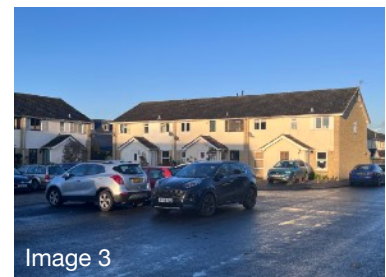
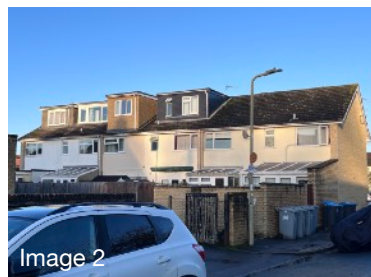


1.0 Introduction

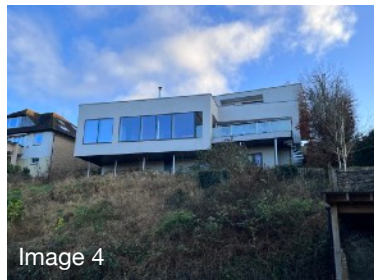
- 1.1 This statement is submitted on behalf of Jake and Amy Bernardini in support of the application for planning permission pertaining to the development at 19 New Road, Woodstock, OX20 1PZ.
- 1.2 Planning permission is sought for the demolition of the existing 3 bedroom semi-detached dwelling which is to be replaced by a 4 bedroom detached house which has an in-depth focus on sustainability, energy efficiency, and a high level of design and detail throughout the build.
- 1.3 This application should be read in conjunction with the application form and supporting drawings, as follows:
- Existing Elevations PA_1208_101
 - Existing Layouts PA_1208_102
 - Proposed Elevations PA_1208_103
 - Proposed Layouts PA_1208_104
 - Site/Block/Location Plan PA_1208_105
 - Street Scene PA_1208_106
 - CIL Additional Information - 19 New Road
 - Sustainability Statement - 19 New Road

2.0 Site Description

- 2.1 19 New Road is a medium sized, semi-detached, two-storey house located towards the centre of Woodstock. New Road is a quiet no-through road which benefits from the low level of traffic passing through. There is pedestrian access to the west end of New Road creating good links to the town centre within 7 minutes walk of the site address. The Blenheim Estate is also easily accessible via foot.
- 2.2 Local amenities such as the Woodstock Community Hall and a nearby children's play park can be found on New Road. Woodstock C of E Primary school is a 4 minute walk to the east of the site with the Marlborough C of E Comprehensive school a further 3 minute walk.
- 2.3 There is a vast assortment of property types and styles along New Road. Various extensions throughout the years have also contributed to the uniqueness of the street style. This can range from terrace housing, to semi-detached dwellings. Larger detached properties can also be found (see image 1,2,3).



2.4 The surrounding area comprises of similar suburban streets developed in the late 20th century which also have a varied assortment of property types, albeit with more sense of a design conformity between the dwellings along the streets. There are also a lot of examples of modern design within the area that has also incorporated the local character and charm (see image 4,5,6).



2.5 The dwelling at 19 New Road is situated among a row of semi-detached properties which have been extended in the past. These are in the form of front, side, and rear extensions. This has removed any conformity between the semi-detached dwellings as each has a different frontage in the form of various sized porches.

2.6 The existing building has a simple architectural style with pebble dash render. It also has plain concrete roof tiles which are commonly found among the properties on the street. The building is in need of modernising both internally and externally (see images 7,8,9).



2.7 Part of the driveway and the side access is tarmac, with a concrete paving slab front garden and some foliage which is in need of repair/overgrown.

2.8 The old aluminium windows are in need of repair as the seals are broken in places causing air to leak in and out of the building.

2.9 A small porch creates the feature of interest on the front elevation which is small in size compared with porch extensions that have been carried out throughout the street. This is evident on the neighbouring property to the west of the site (see image 9).

2.10 19 New Road is located within Flood Zone 1 which has a low probability of flooding from rivers and sea. Also, the risk from surface water is stated as a low risk of surface flooding between 0.1% and 1% each year.

- 2.11 To the rear of the property is the recreation ground which backs onto the boundary. A row of trees obscures the property from sight of the recreation ground. The garden space is neglected and overgrown with a mixture of large bushes and paving slabs that create walkways through the vastly shingled garden to the rear. Two sheds are located at the rear of the site, with a potting shed set 5 metres back from the main house. A rear patio is present made from paving slabs.
- 2.12 The rear elevation features a flat roof projection from the main house which comprises the utility and WC area with a rear access door (see image 11). Pebble dash continues to finish the property. The use of more rear windows would aid the aesthetics of the building and also add more light to the bathroom area. A few old aerials are secured to the fascia board.



- 2.13 The neighbouring property located to the West (see image 10) has been extended with a large two storey extension creating a fourth bedroom and extended kitchen/dining area on the GF. The side access has been covered with various lean-to roofs for storage onto a high fence.
- 2.14 The neighbouring property to the East (see image 12) is yet to undergo any extension works and has the same footprint as the development property. White UPVC doors/windows have been fitted. A tall fence separates the plots at the boundary.

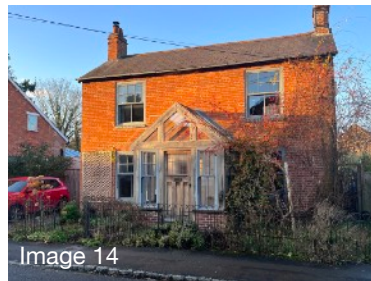
3.0 **Proposed Development**

- 3.1 The proposed development consists of the erection of a 4 bedroom detached new build house to replace the existing property. The new dwelling will have an emphasis on sustainability and energy efficiency via the use of the materials and installation methods being utilised to create the fabric of the dwelling, and also the air sourced heating system, solar PV system, water management system, and mechanical ventilation heat recovery (MVHR) systems to be installed.
- 3.2 The house is intended for family use whilst also promoting sustainable living in a desirable location of Woodstock. The proposal is for the existing dwelling to be demolished and the neighbouring semi-detached building be modified to turn the current party wall into an external wall. The new dwelling would sit independently from the neighbouring property leaving both of the dwellings detached. This will improve both dwellings as sound transfer between the two will be negated leaving both properties more desirable. As the development will involve the demolition of 19 New Road, it is therefore reasonable to separate the properties at this stage to also minimise the noise pollution to the neighbour during the construction process.

4.0 Design Ethos

The design adheres to the architectural character of the surrounding area and has been thoughtfully integrated into the local context. The front elevation of the design has been sympathetic to the neighbouring properties by maintaining the same ridge line, roof pitch and eaves detail so that the design blends seamlessly within the street scene. At the same time the design shows indications of the modern aspects that are throughout the build especially to the rear.

- 4.1 A front feature oak frame has been incorporated into the centre of the design which has taken influence from adjacent and nearby properties to both complement these houses, and also create a sense of continuity between the buildings on the street (see image 13,14,15). It has been designed to have subtle influences of the modern architecture being incorporated, but also create a warm and cottage feel that is present across the road from the site and adjacent properties (see image 14)



- 4.2 Aluminium windows will be installed which is another feature of the street that is starting to occur. The intention is to use neutral and pastel colours for these subject to local planning advice to mirror the colour schemes that have started to appear on the street in nearby dwellings. The approach is to lean towards a modern design but also maintain a comfortable and warm feel so as not to stand out from the rest of the street.
- 4.3 Two off-street parking spaces will be allowed for to the front elevation of the property which is the same as it is currently. This is ample for a project of this size and is an appropriate amount considering the proximity to the town centre.
- 4.4 The rear of the property will have a modern aesthetic in the form of cantilevered eaves overhangs, vertical cladding, a green lower roof, and large windows for improved light within the property, but also a very functional design that reduces solar gain in the summer months to create a comfortable internal space that is cool and not prone to over-heating.
- 4.5 The rear elevation has incorporated curves to the corners of the build. Curves in architectural design can add visual interest, break monotony and create a sense of fluidity. They often soften the harsh lines of traditional structures, promoting a more organic and dynamic aesthetic. Additionally, curves can enhance spatial experiences, facilitating better flow and connectivity within a building (see image 18,19).

- 4.6 The rear cladding will create an architectural aesthetic in the form of the vertical lines, but also softened with the natural texture that wood cladding brings, helping to blend the transition of the natural green roof surface and the structured rendered finish (see image 17,18).



- 4.7 The green roof system that has been designed into the lower roof is a crucial element for aiding the aesthetics of the build, and also water management due to stormwater and heavy downpours that are becoming more frequent in Spring and Autumn months.
- 4.8 Green roof systems can reduce the flow of stormwater from a roof by up to 75% and delay the flow rate by up to four hours. The upper rear roof will also drain onto the lower roof and through the green roof system to maximise the effect of this and the impact excessive storm water can have on the sewage network (see image 16).
- 4.9 The green roof system has also been included to aid the architectural aesthetics and charm of the building by creating a softer focus that compliments the more precise elements of the vertical cladding and eaves overhangs. The natural surface will visibly change the roof space by covering the dark coloured membrane that would typically be used here which will visually aid both the building itself, and also the sight lines from neighbouring properties from the first floor windows.
- 4.10 Textured render will be used on all elevations of the build. This texture has been chosen to compliment the surrounding buildings which are currently pebble dashed. Some recent renovations on New Road have incorporated a textured/smooth render as the predominant finish which provides a more refined and cleaner finish than pebble dash.
- 4.11 The textured render will flow down the west elevation which is to be broken up by the inclusion of the side doors/windows, and also the vertical timber cladding on first floor level which is a continuation of the rear aesthetic.
- 4.12 The textured render will be less prominent to the rear elevation due to the use of the vertical timber cladding here, but will still be present to segment the ground floor with the first floor and also to highlight the eaves overhangs (see image 18).

- 4.13 The design features side access to the ground floor between the front and rear elevations of the property. A recess has been designed into the side of the build to allow for the covered storage of waste bins. Also, the storage of bikes for access into the centre of Woodstock, local travel routes via public transport, and recreational travel to the surrounding areas. Keeping the waste bins visually away from the front elevation will also enhance the street scene and benefit the area.
- 4.14 All of the porch/front elevation lighting will have a maximum kelvin of 2700k to add to the warm and welcoming lighting that is seen throughout Woodstock and the town centre.
- 4.15 Provision for electric vehicle charging will be included within the design to encourage sustainable transportation. This will also be supported by the Solar PV panels that will be installed to the rear south facing roof when the system is not being utilised to accompany the air source heat pump.

5.0 **High Standard and Quality Build**

- 5.1 The build will focus on high quality and a thorough and thought out design to create a building that is heavily influenced by architecture and high quality design. This can be seen throughout Woodstock where renovations and new builds have focused on architectural design which blend an charming and historical style that is evident throughout Woodstock.
- 5.2 Paramount emphasis has been placed on achieving an unparalleled standard of installation. The design brief prioritises not only aesthetics but a meticulous commitment to quality construction. The foundation of this project rests upon utilising premium materials and employing skilled craftsmanship to ensure a residence of enduring excellence.
- 5.3 Each aspect of the house, from structural elements to finishing touches, will adhere to the highest industry standards, reflecting the dedication to creating a home that stands out in terms of both design and construction quality.
- 5.4 The meticulous attention to detail extends beyond visual appeal, aiming to provide future residents with a home that exemplifies longevity, functionality, and an overall superior living experience. This commitment to high-quality installation serves as the cornerstone of our endeavour, promising a new build house that is not just a dwelling but a testament to uncompromising standards in construction and design.

6.0 Energy Efficiency

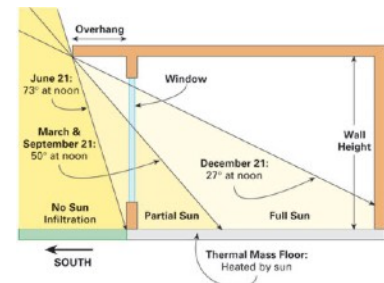
- 6.1 There will be a commitment to energy efficiency and sustainability. Central to our design brief is the use of a timber frame structure which is a sustainable building approach that vastly reduces the use of cements and other chemicals. The use of timber frame as the primary structure means that the insulation within the structure can be increased with a higher degree of detail and installation accuracy. Timber frame is also a perfect substrate to allow the use of air-tight membranes that can create a cocoon around the structure, vastly minimising the amount of air that transfer in and out of the building.
- 6.2 Low U-values in our insulation materials contribute to superior thermal performance, minimising heat loss and reinforcing our dedication to energy conservation.
- 6.3 A meticulous focus on air tightness complements our strategy, preventing unwanted draughts and maintaining a stable internal environment. Wind washing reduces the thermal performance of a home by pushing unconditioned air through insulation and into intervening spaces causing unwanted heat loss or heat gain. A fabric first approach will greatly minimise the amount of energy lost via air transfer through the outer structure and into the external environment.
- 6.4 An air source heat pump will be seamlessly integrated to harness renewable energy from the surroundings, providing efficient heating and hot water for the house with minimal environmental impact. Solar PV panels will crown the roof, harnessing solar energy to generate clean, sustainable electricity (see image 19).
- 6.5 There will be no gas supply present in the property due to the air source heat pump, induction hobs, and electric ovens not requiring the use of mains gas.
- 6.6 Incorporation of MVHR will ensure a continuous supply of fresh air whilst reclaiming heat from the exhaust, optimising energy usage and enhancing indoor air quality via filtration.
- 6.7 All lighting throughout the project will be low energy LED to ensure as little energy is consumed to align with the design brief of a sustainable and energy efficient house.
- 6.8 Solar gain refers to the increase in internal temperatures within a dwelling caused by the sun's radiant energy. In our design approach, we have implemented strategic measures to mitigate solar gain, ensuring a comfortable living environment throughout the year. Adequate shading elements, such as carefully positioned architectural features and even trees/plants, play a crucial role in minimising direct sunlight exposure to windows and external walls. This holistic approach to energy efficiency not only aligns with sustainable practices but also positions the new dwelling as a beacon of responsible and forward-thinking residential design in the UK.



6.9 The property has a SSW facing garden which means that the rear of the property will be faced with direct sunlight throughout the day and even into the evening due to the slight westerly orientation. Eaves overhangs have been thoughtfully incorporated to shield the house from intense sunlight, preventing overheating during warmer months. The orientation of the house, particularly avoiding exposed and non shaded south and southwest-facing openings, helps regulate the amount of solar radiation penetrating the interior.

6.10 Recognising the angle of the sun during different seasons, our design capitalises on the lower winter sun to allow for increased natural warmth as the eaves overhangs incorporated into the design are less effective at shading the sun as they would be during summer. Solar gain is increased during the winter months so that the heating system is less relied upon to heat the building. This not only contributes to energy efficiency but also ensures a cozy atmosphere during colder months (see diagram).

6.11 In essence, our approach to solar gain reduction balances the need for natural light with the importance of preventing excessive heat buildup, promoting a harmonious and thermally efficient living space which is adaptive to the seasons throughout the year. It has been the driving force that has created the proposed rear architectural design.



7.0 Water Management

7.1 Effective water management is integral to the design for the new dwelling. Rainwater harvesting systems will be incorporated to capture all surface water from the roof. The stored water can be used to maintain a healthy wild garden throughout the summer months which promotes biodiversity in the area without the need to use water from the mains water supply that is increasingly scarce through the summer droughts. This promotes sustainability by reducing the reliance on external water sources and relieves the pressure on the water sewerage system which has been deemed to be going through a state of 'water stress' through the next 10 years as per the local 2031 plan.

8.0 Impact on Neighbouring Properties

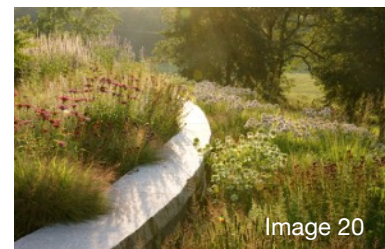
8.1 There is a strong emphasis on minimising impact on neighbouring properties. The front elevation has maintained the same shape and profile as the existing and also neighbouring properties to create some continuity along the street scene. The front feature oak frame has been designed with a hipped roof above to soften the impact to the roof design by not creating a dominant structure.

8.2 Respecting the right to light is a paramount consideration in our design approach. We have carefully analysed and positioned windows and structures to ensure that neighbouring properties continue to receive adequate natural light, acknowledging the importance of maintaining a balanced and harmonious neighbourhood environment.

- 8.3 The incorporation of curved walls in the design serves a dual purpose; not only do they contribute to an aesthetically pleasing architectural form, but they also play a crucial role in reducing the visual impact on neighbouring residences. They increase the sight lines and therefore the light to the neighbouring properties and soften the design by creating some flow and fluidity as opposed to traditional sharp corners and edges.
- 8.4 The eaves overhangs have also been designed to cantilever without the aid of external corner support on the east side of the building where the impact to neighbouring light is greatest due to the close proximity of the boundary line. The first floor layout also steps back dramatically here to accommodate the nearest neighbouring property and its position in relation to the proposed design.
- 8.5 In addition, the development will included thoughtful landscaping and vegetation, serving as a natural buffer to enhance privacy and minimise any potential visual intrusion. These measures collectively illustrate our commitment to creating a build that seamlessly integrates with its surroundings, prioritising the well-being and visual harmony of the entire neighbourhood.
- 8.6 The west elevation windows have been kept to a minimum on the first floor level to minimise any windows that are overlooking the neighbour on this side. Additionally these windows have been designated with obscure glazing to negate any concerns. The high level fence that is currently present on the site along the west boundary line will also be maintained.

9.0 Biodiversity

- 9.1 There is a central focus on fostering biodiversity through extensive wild planting. The landscape design incorporates diverse native flora to create a habitat that supports local wildlife and enhances the overall ecological balance. A substantial green roof has been integrated into the architectural plan, not only serving as an eco-friendly feature but also promoting biodiversity by providing a habitat for plants and insects.



- 9.2 To minimise the ecological footprint, our design will deliberately incorporate minimal patio areas, allowing for more green space and a natural environment that encourages biodiversity. The emphasis on promoting diversity extends beyond plant life, encompassing a thoughtful approach to creating a community that embraces various aspects of sustainable living.
- 9.3 Our commitment to the surroundings is evident in the design's conscientious efforts to soften visual impact. The green roof in particular is intended to be an aesthetically pleasing element that seamlessly integrates with the natural landscape, enhancing the overall appeal of the property whilst contributing to a more sustainable and pleasant environment for both residents and the surrounding ecosystem.

10.0 Local Planning Policy Considerations

10.1 The West Oxfordshire Local Plan 2031 has been used as a guide towards the final design and ethos of this project to ensure that it is aligned with the future plans of the town and the West Oxfordshire area as a whole. Some examples of these are below.

- 4.3. National policy emphasises that Local Plans and planning decision making should be underpinned by a presumption in favour of sustainable development, in other words development that is sustainable should go ahead, without delay.
- 4.2. The historic town of Woodstock has a relatively good range of services and facilities and good accessibility to Oxford. It can accommodate a reasonable scale of development, whilst protecting its important historic character and the setting of Blenheim Palace.
- 4.25. As a planet we are living beyond our means, consuming natural resources at a faster rate than they can be replenished. It is essential that we reduce our consumption of natural resources and planning has a key role to play in this regard.
- 4.27. The starting point is to minimise energy use (for example, through energy efficiency improvements to buildings such as loft and cavity wall insulation). In this section we address the first step of the energy hierarchy - sustainable design and construction.
- 4.28. There is increasing recognition that constructing buildings using sustainable techniques is essential in addressing climate change.
- 4.31. West Oxfordshire falls with an area of demonstrable 'water stress' and a planned growth and other pressures are forecast to lead to a supply demand deficit in the next ten years. There is a strong justification for West Oxfordshire to have a water efficiency policy in line with the Building Regulations optional requirement of 110l/h/d.
- Policy OS1. Presumption in favour of sustainable development
- Policy OS3. Prudent use of natural resources
- Policy OS4. High Quality Design

11.0 Conclusions

- Development to demolish existing structure and replace with newly built detached property
- New property will be energy efficient with a fabric first approach to its thermal efficiency
- Renewable energy systems employed
- A focus on architecture and thorough detailing of materials
- A design that compliments the existing street scene
- A design that is aligned with the modern architecture that can be found throughout Woodstock
- Low impact to neighbouring properties
- High standard of build quality
- Timber frame structure used for sustainability and flexibility of insulation/air tightness installation to the building fabric
- MVHR systems to improve air quality and thermal efficiency
- Air source heat pump as primary heating system
- Induction hobs and air source heat pumps incorporated so that mains gas supply can be removed
- Solar PV to compliment the electrical systems in the house
- Green roofs to the rear to create a natural aesthetic but also to manage heavy rain falls and stormwater
- Green roofs, small patio areas and wild flower planting to promote biodiversity
- Overall design is in keeping with the West Oxfordshire local plan 2031