

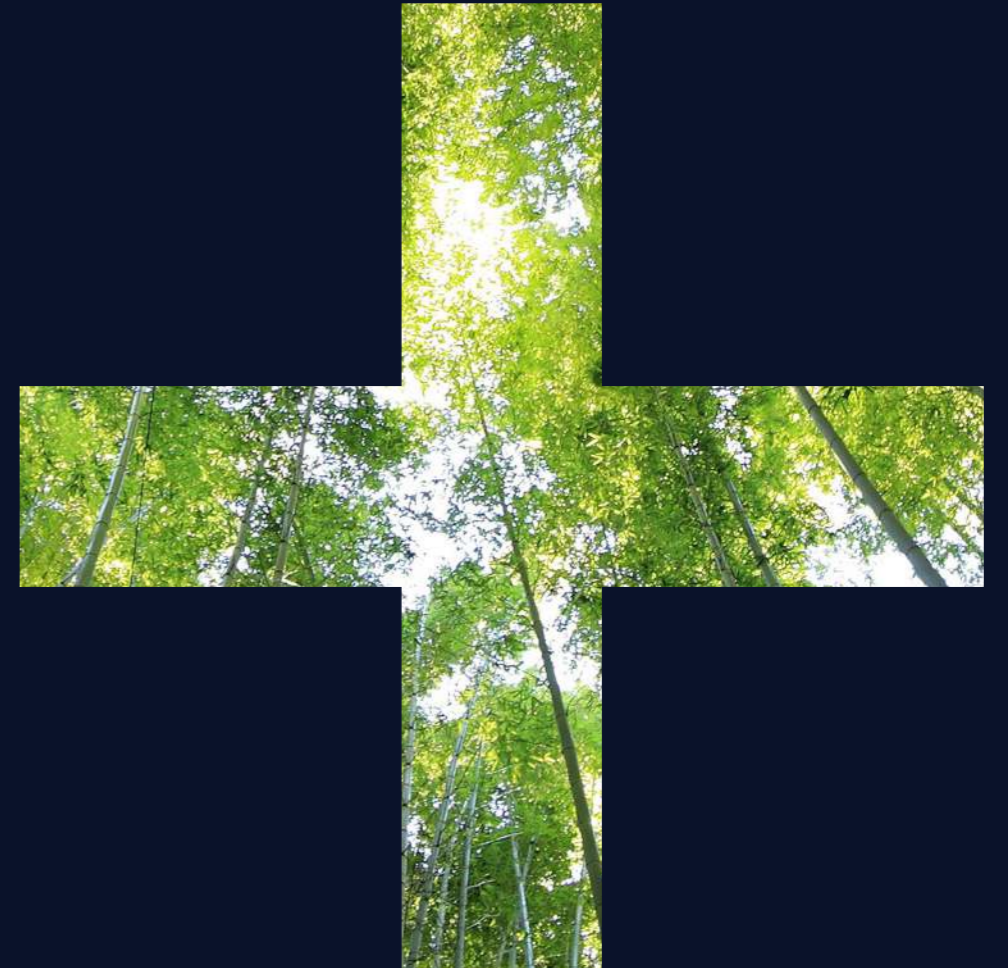
Mrs Nagel

HA23006

16 Knossington Road
Braunston in Rutland

December 2023

REV A



HABITAT+
architects

RIBA 
Chartered Practice

AECB

Passivhaus
Trust MEMBER
The UK Passive House Organisation

DESIGNER
CERTIFIED
PASSIVE HOUSE
DESIGNER

INTRODUCTION

This Design and Access Statement has been prepared by Habitat+ Architects Ltd to describe the proposals for a replacement dwelling at 16 Knossington Road, Braunston and to support a full planning application.

The proposals illustrate the principal of replacing the existing bungalow with a new Passive House standard home. The design has been developed to respond to the context of the site and the wider context of the village utilising local vernacular materials and architectural forms to create a building that sits comfortably within its context whilst offering the client a carefully designed modern low energy, healthy home.

We have received pre-application advice (ref: 2023/0657/PEC dated 16th August 2023) which is set out and considered within this document.





BRIEF

The Nagels have owned a property in Braunston for many years and know the area well. They wish to create a new home that will be low energy and compliment the village aesthetic.

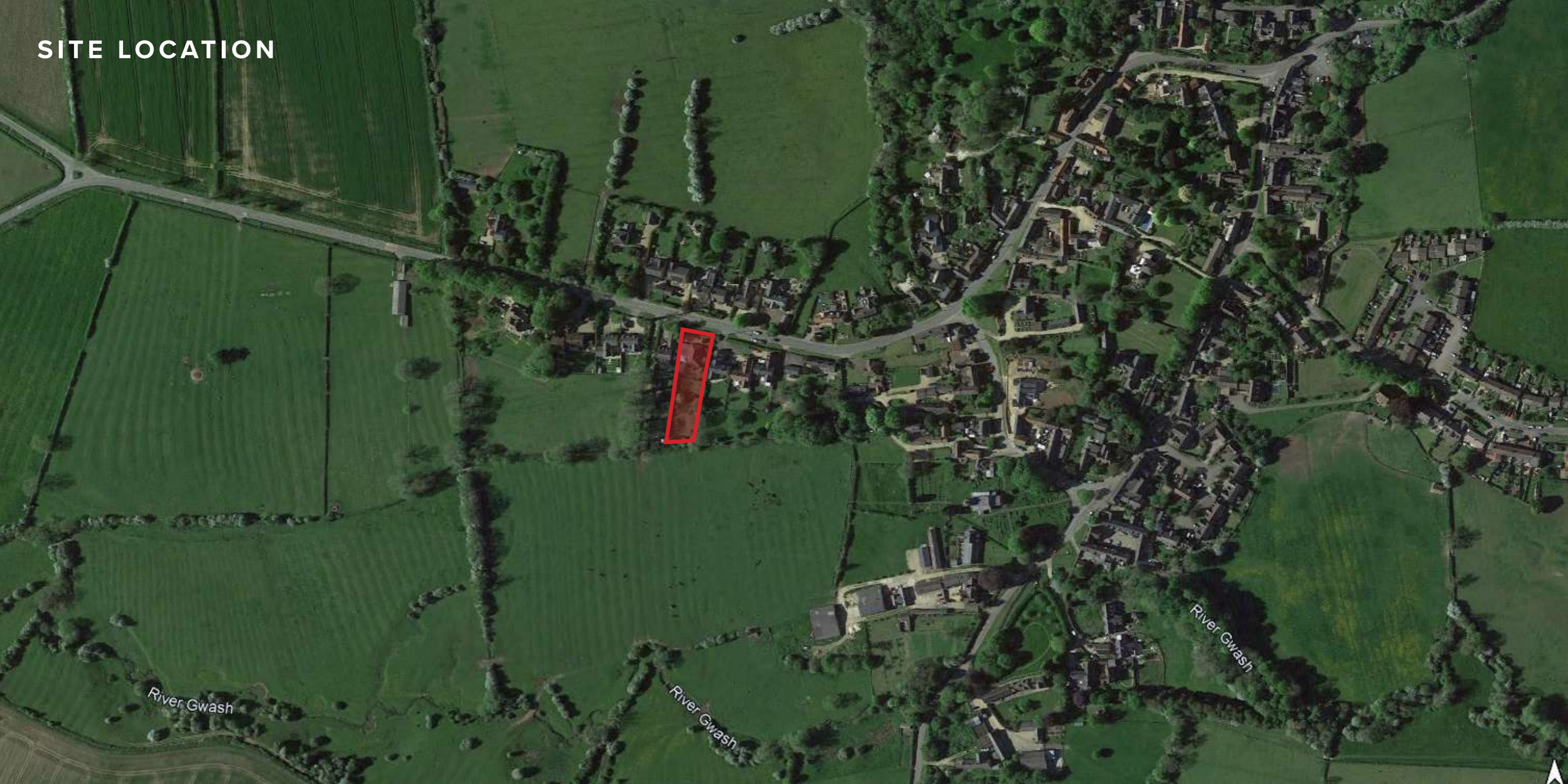
Mr & Mrs Nagel approached Habitat+ Architects Ltd with the following brief:

- We would like to replace the existing bungalow with a carefully designed PassivHaus standard home. The existing bungalow does not provide high quality internal spaces, the construction is poor and the external appearance of the house is of low quality that does not enhance the setting or the wider village and Conservation Area.
- The building was built at a time when heat loss and thermal insulation was, at best, nothing more than a minor consideration. The house was also built at a time when spaces were compartmentalised with specific designated and fixed uses, not designed as flexible, free flowing spaces.
- Home study, home working, future ease of access from a mobility point of view, and free flowing indoor/outdoor interchangeable living spaces are all modern family living requirements that are restricted by the existing building.
- We want the house to be designed around our changing needs, we don't want our home to be a place that further burdens quality of life just because of failing health or mobility.

- To open up the south facing side of house to gain better sunlight, passive solar gain and maximise the borrowed views.
- Maximise the stunning views to the south
- Connect the front to the back, creating a strong visual connection to the views.
- To create a better connection to the garden and outside space with softer less defined thresholds between indoor and outdoor areas.
- To provide more usable storage areas.
- To provide separate areas for a variety of activities for each member of the family, ie spaces to be noisy while others need quiet time, spaces that allow independence but close to others.
- To provide a welcoming space for guests and socialising.
- To provide a carbon responsible home, ensuring new materials and construction techniques are as carbon light as practical.
- To provide spaces that are cost effective to heat and convenient to maintain comfortable temperatures – in summer as well as in winter.
- To create a new covered car parking space
- To do all we can that is practical in providing a home and environment that helps support wildlife.
- To provide a home which leaves a positive legacy and adaptability for future generations.

In no particular order, we would like:

SITE LOCATION



SITE ANALYSIS

VIEWS AND ORIENTATION

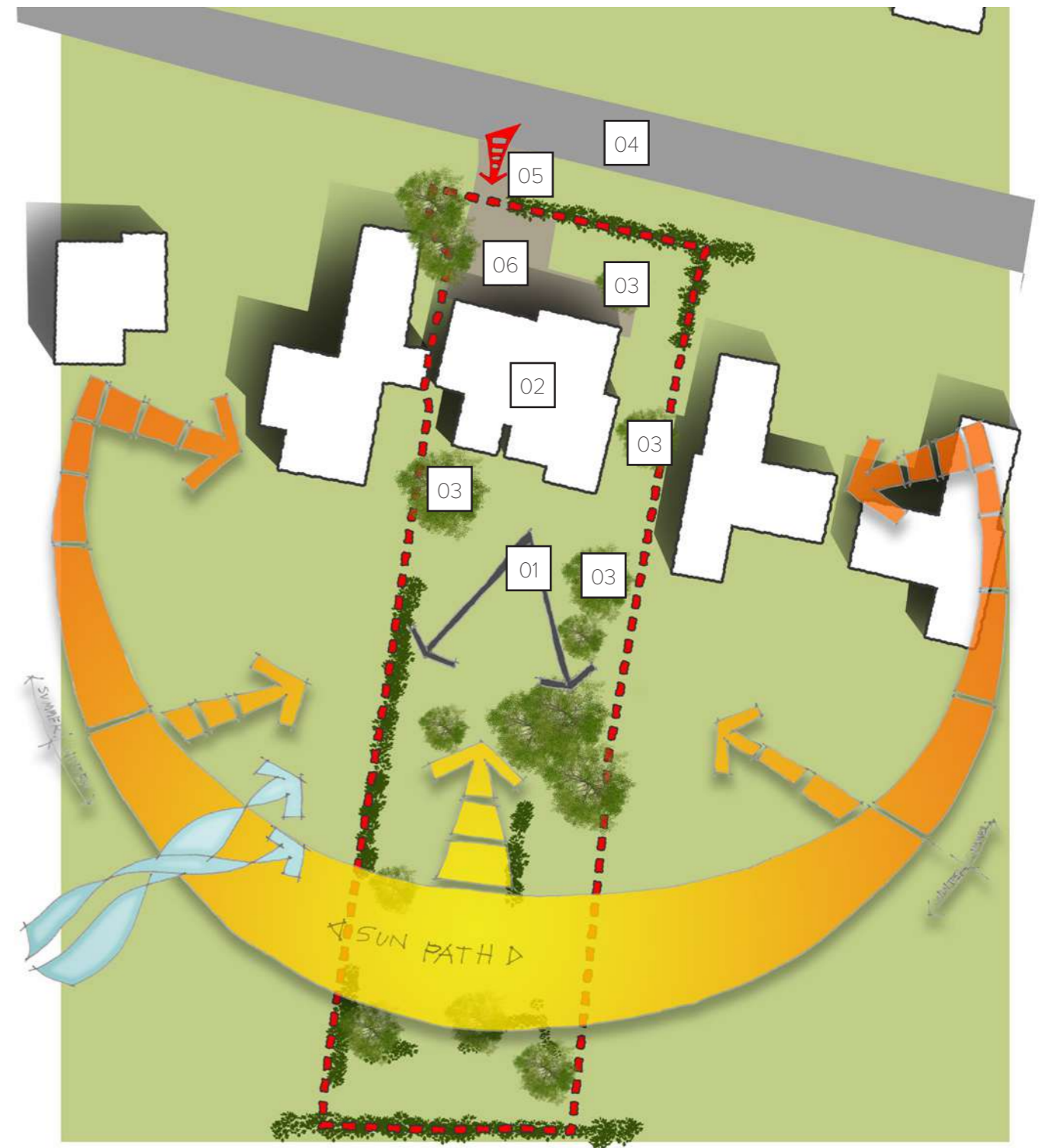


View to south



View of existing house

01. Stunning south facing views across large garden
02. Existing bungalow
03. Existing trees present potential constraints but also offer visual screening from neighbours and shading
04. Knossington Road
05. Main vehicular entrance
06. Existing parking and turning area limited



SITE ANALYSIS

VISUAL ASSESSMENT

The existing bungalow is set in a linear development pattern along Knossington Road, leading out to the west of the village. Although the existing house sits within the Conservation area, the context of the site is varied with a mix of architectural elements, scales, and materiality. The overall quality of the built form along Knossington Road is inferior to the Conservation Area at the heart of the village.

Knossington Road has a grass verge along the majority of the south side which runs [past the proposal site. The majority of the houses along the street are screened by hedges at the back of the verge or footpath. There is also a large amount of mature trees and planting providing further screening to the properties.

The existing bungalow is relatively screened from the road by the existing evergreen hedge and mature trees, particularly on the boundary to the west. This means that very little of the property can be seen when approaching from the west (image 1) until you are close (image 2). When approaching from the east, the neighbouring property and the existing trees screen the property further, minimising its visual presence on the street.

Street views courtesy Google © 2023



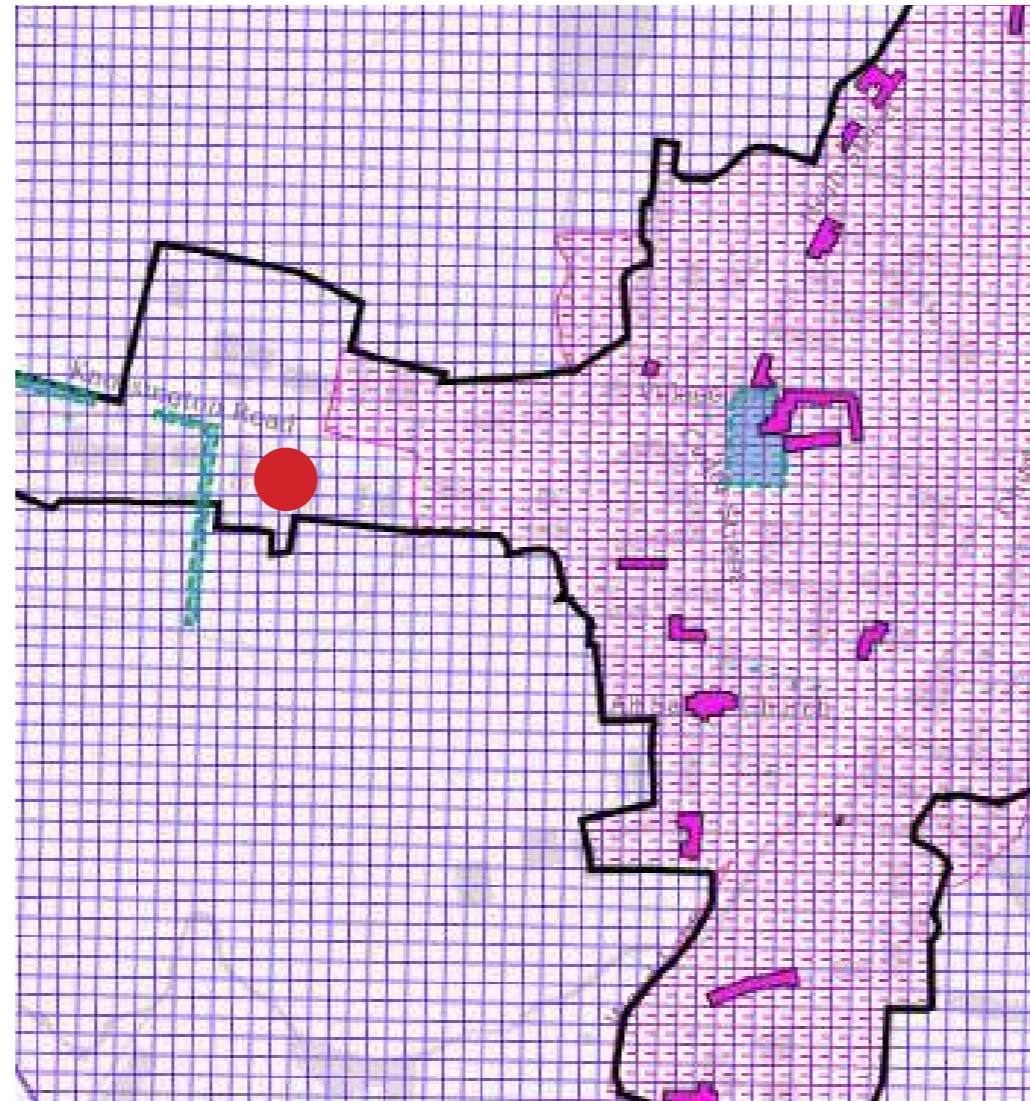
SITE ANALYSIS

CONSERVATION AREA & LISTED BUILDINGS

As mentioned the site sits within the wider Conservation Area but outside of the Article 4 Designation area.

The quality of the immediate architectural context of the site is mixed and noticeably lower than the heart of the village.

There are no listed buildings in proximity of the proposal site.



Braunston Conservation Area



Braunston Listed Buildings

SITE ANALYSIS

CONSERVATION AREA CHARACTER

The architectural context of the village centre provides a mix of beautiful traditional buildings. Predominant building materials in the areas include stone and brick with a mix of tiled and thatched roofs.

There is a mix of scales and roof forms, giving a varied and rich character to the village.

This is in contrast to Knossington Road.



SITE ANALYSIS

IMMEDIATE CONTEXT

In contrast to the village centre, Knossington Road has a varied mix of houses spanning a broader age range, predominantly more modern housing stock.

The main construction materials found along the road are red brick, with some stone, some render and some timber cladding. Roofs are generally tiled. There is a mix of two storey, 1 1/2 storey and bungalows along the road with a number of expressed gables and 'out riggers' projecting towards the street.

Properties on both sides of the road are set back with have generous front gardens with driveway parking and are screened from the road by hedgerows and mature trees. There are a number of car ports and garages to the front of the existing properties.



THE EXISTING HOUSE CONDITION AND LIMITATIONS

The existing building appears to have been built in 1960's, and appears to have been extended over time. The form factor and quality of construction means that the house is poorly insulated and ventilated with a high energy demand. Poor thermal bridging and construction have resulted in damp, mouldy spaces internally which do not offer a healthy home.

Visually, the existing house offers little visual appeal and doesn't provide a positive contribution to the street scape.

The existing access leads to a drive which provides parking and access to the double garage.

The existing house faces almost directly south and is afforded stunning view of the surrounding landscape.

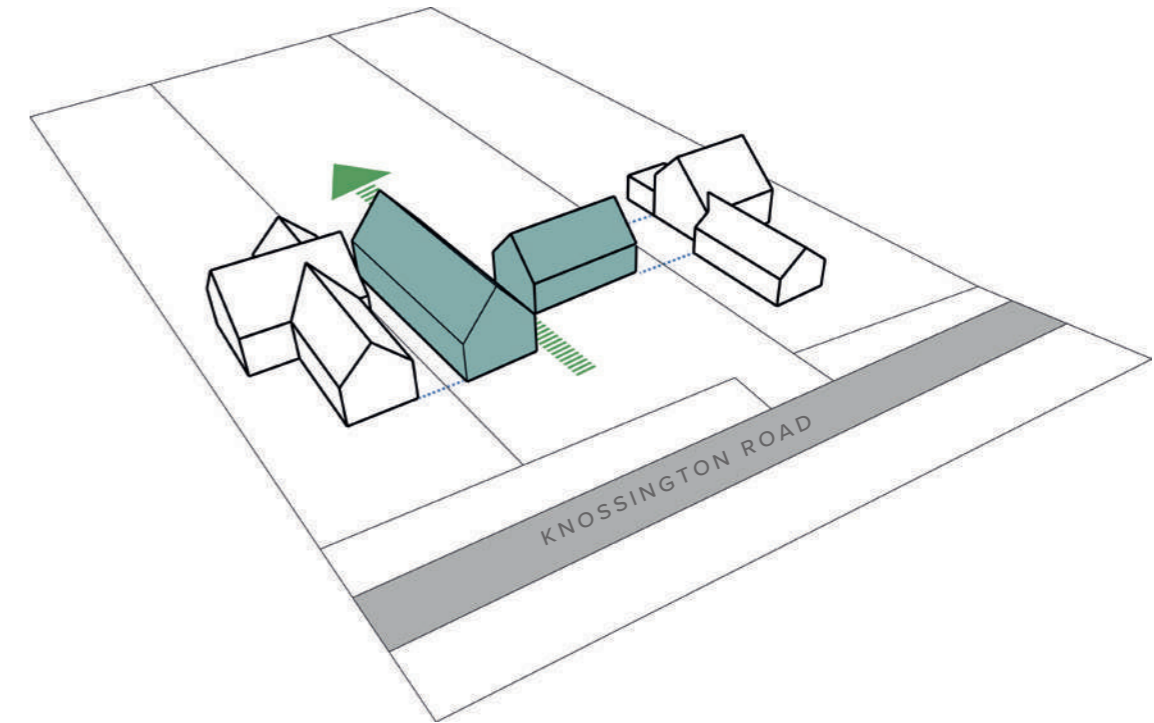
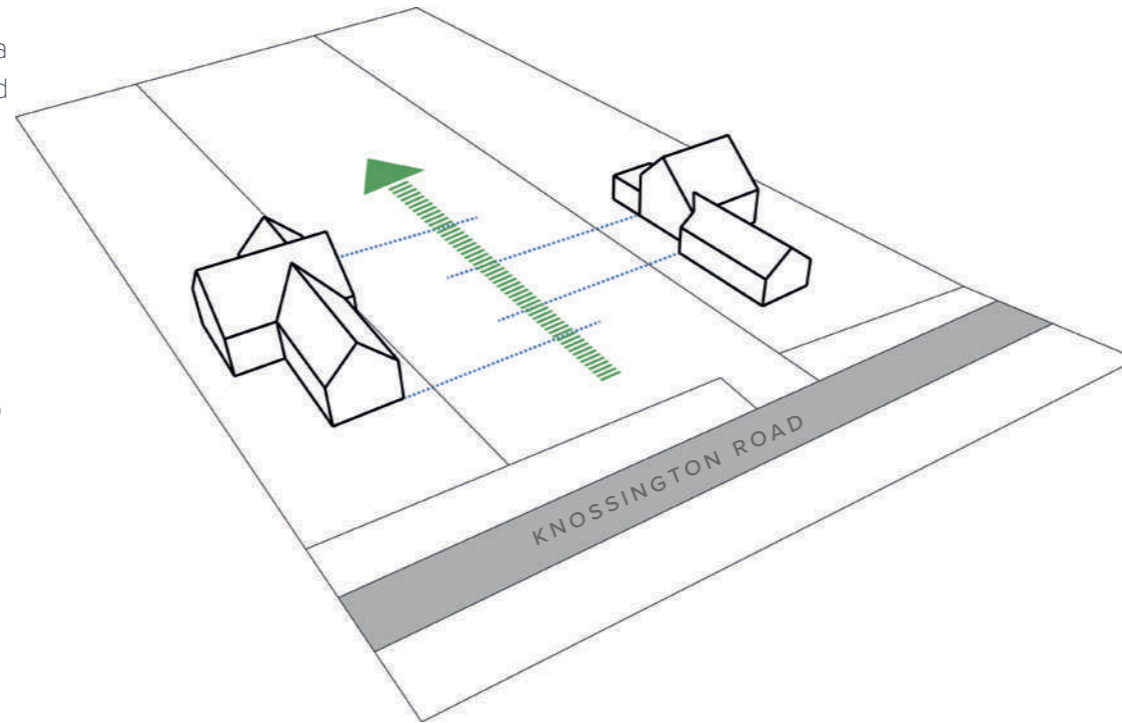


FORM

RESPONDING TO CONTEXT

The concept for the replacement dwelling at 16 Knossington Road is a direct response to the neighbouring built form and the desire to create a strong connection with the views to the south. The proposed massing has been based on the scale and form of the neighbouring houses so that the proposals sit comfortably on the site and do not have a detrimental impact on the neighbouring properties, and ultimately enhanced and preserves the Conservation Area..

The property to the east has three windows (two of which are to non-habitable rooms, one of which is screened by the existing fence) that face into the proposal site. The proposed design looks to minimise the height relative to the roof and orientate the roof so any impact to the light in these rooms is minimal.



DESIGN DEVELOPMENT

The proposed design solution for the property has been developed carefully alongside the client to make sure that it meets their requirements but also responds to the immediate and wider context.

Materials choices have been carefully considered to create a new addition to the street that fits in and feels comfortable within the street scape.

The client's brief included integrating a covered parking area which has been carefully considered to minimise any visual impact this may have, with the final design matching the scale and position of adjacent properties.



DESIGN DEVELOPMENT

PRE-APPLICATION ADVICE

Feedback from our pre-application advice was received on the 16th August 2023. The reference was 2023/0657/PEC and the case officer was Andrew Waskett-Burt. The design has undergone further development since the feedback was received and the following section looks at the relevant feedback received and illustrates where the proposals have responded where necessary.

Pre-App Response

I note the design intention of a passive house (which is commendable), and the overall appearance of a barn conversion, however this would need to be balanced against the character and appearance of the street scene and conservation area. To that end, the Conservation Officer has advised that it would more appropriate in terms of the character and appearance of the Conservation Area to have a design in keeping with the surrounding dwellings. This could include the provision of small dormer windows on the street facing elevation (similar to those on neighbouring dwellings). I note that this is currently shown as a single storey, and therefore may require some internal changes to the layout. Any rooflights should be true conservation style rooflights (and not Velux's versions of the conservation rooflights – details to be included please (or conditioned)).

As discussed previously, it is worth stating that the part of the Conservation Area which the site is located does not have a unifying architectural style through material, form or massing.

Many of the newer buildings in this area have little historic reference or architectural merit and do not contribute in a positive way to the Conservation Area. We have provided our own analysis of the Conservation Area to support this view (page 9). In addition, we are unaware of any Conservation Design Guide to which the design should respond to.



Examples of houses in immediate vicinity with minimal architectural value (©Google)

The design has been carefully designed to be in keeping with the Conservation Area, specifically referencing local materials and forms.



Iron stone, parapet gable ends, expressed gables and simple tiled roofs are common in the conservation area.

DESIGN DEVELOPMENT

PRE-APPLICATION ADVICE

Scale is a key factor within the street scene and the design has been carefully developed to provide the level of accommodation required by our client whilst ensuring the overall heights of the new dwelling do not exceed the neighbouring buildings.



The proposals are designed to respond to the scale of the neighbouring buildings.

The design does not reference a barn conversion, instead the design purposely uses form, materials and scale of the context and creates a contemporary building that harmonises with its surroundings. The design utilises two elements to break up the overall massing. The 'L' Shaped building form is common within the context creating an expressed gable – common across the village including the three dwellings directly adjacent to the site to the east.

Although dormer windows are common place in the area, they are not a defining feature and we feel that this would be an inappropriate form for the overall design aesthetic. We

are keen to maintain the design integrity as this will create a better building. We note your point regarding the Conservation rooflights. As you may be aware, Passive House design requires an enhanced high-performance specification for all elements, particularly windows, which have to triple glazed. We are unaware of a triple glazed conservation rooflight on the market. However, we have specified an alternative low profile rooflight that has been acceptable in other similar situations, and we would hope there would be an acceptable product that meets the requirements for the Conservation Area but also meets the stringent standards required to achieve Passive House (encouraged by the Local Plan).



The Conservation Officer has also requested that the linear gable element be pulled more into the site through the removal of the glazed link, to retain more of the separation between the neighbouring dwelling to the east. The inclusion of the flat roofed car port would also not be an appropriate structure at the front of the development, and should be removed from the proposals.

With regards to the separation with the neighbouring property, from a light perspective, the neighbouring house only has three windows on that façade (two of which are to non-habitable rooms and one is screened by the existing fence). The proposed new house is circa 5 metres from the neighbouring property and minimises its impact by limiting the roof height and orientation of the roof pitch. Locating the new dwelling closer to the boundary to allows for a more efficient footprint and limit the overall height of the building, and avoids the design appearing 'squashed'.

The flat roof car-port has been removed from the proposals as requested. The client has a requirement for a covered area to house their cars and so we have included a timber framed open sided structure with a tiled pitched roof. The form of this building is in keeping with the context and several similar examples can be found in the immediate context.

DESIGN DEVELOPMENT

PRE-APPLICATION ADVICE

Materials

Policy SP15 of the Site Allocations and Policies Development Plan Document (2014) requires high quality materials to be used. The material palette of Braunston is a mix of ironstone/red brick and slate roofs, with this part of the village is predominantly red brick. I note the use of timber cladding as a secondary material in the sketch – this isn't really characteristic of the village and if a secondary material is desired then ironstone would be more appropriate.

We have noted your comments regarding the materials. Although not as common as brick and ironstone, there are several examples of timber throughout the village. The design development has now utilised the use of stone as the primary material, creating a robust and beautiful exterior that is in keeping with the context.

We have retained the timber feature panels as these offer small areas that create a visual break in the facade adding interest and definition which being a complimentary material to the stonework. Ultimately this small diversity of material palette enhances the design, which in turn enhances the Conservation Area. The use of timber also ties the scheme together with the proposed covered parking area and makes reference to the other oak and timber features found on buildings within the immediate context.



A LIFETIME HOME

A key motivation is to create a home to meet their current lifestyle and family requirements and be flexibly designed to enable adaptation for their family's changing needs as the family as a whole grows older. Equally, the ambition is to secure a design to enable flexibility for adaptation to meet future generation's needs.

The design is based around the Lifetime Homes Criteria, which are listed and annotated on the next page. The design seeks to go beyond the requirements of Approved Document M of the Building Regulations to create a truly adaptable home, suitable for multi generational living.. Although superseded by the government, the LTH criteria still have a strong foundations and proper application of the 16 principles will guarantee adaptability and ensure the building meets the owner's long term requirements.

The existing building is limited in accommodating the basic mobility principles, and hence its lifespan as a dwelling in its current form has reached an end.



A LIFETIME HOME (CONTINUED)

Lifetime Homes 16 Criterion

01. Parking (width or widening capability)

Provide, or enable by cost effective adaptation, parking that makes getting into and out of the vehicle as convenient as possible for the widest range of people.

02. Approach to dwelling from parking

Enable convenient movement between the vehicle and dwelling for the widest range of people, including those with reduced mobility and/or those carrying children or shopping.

03. Approach to all entrances

Enable convenient movement along other approach routes to dwellings incorporating gentle slopes only.

04. Entrances

Enable ease of use of all entrances for the widest range of people.

05. Communal stairs and lifts (not applicable)

06. Internal doorways and hallways

Enable convenient movement in hallways and through doorways.

07. Circulation space

Enable convenient movement in rooms for as many people as possible.

08. Entrance level living space

Provide accessible socialising space for visitors less able to use stairs, with larger spaces to allow easy use of a wheelchair.

09. Potential for entrance level bed-space

Provide space for a member of the household to sleep on the entrance level if they are temporarily unable to use stairs.

10. Entrance level WC (and shower drainage)

Provide an accessible WC and potential showering facilities for visitors unable to use stairs.

11. WC and bathroom walls

Ensure future provision of grab rails is possible, to assist with independent use of WC and bathroom facilities.

12. Stairs and potential lift in dwelling

Enable access to storeys above the entrance level for the widest range of households.

13. Potential for fitting of hoists

Bedroom / Bathroom Assist with independent living by enabling convenient movement between bedroom and bathroom facilities for a wide range of people.

14. Bathrooms

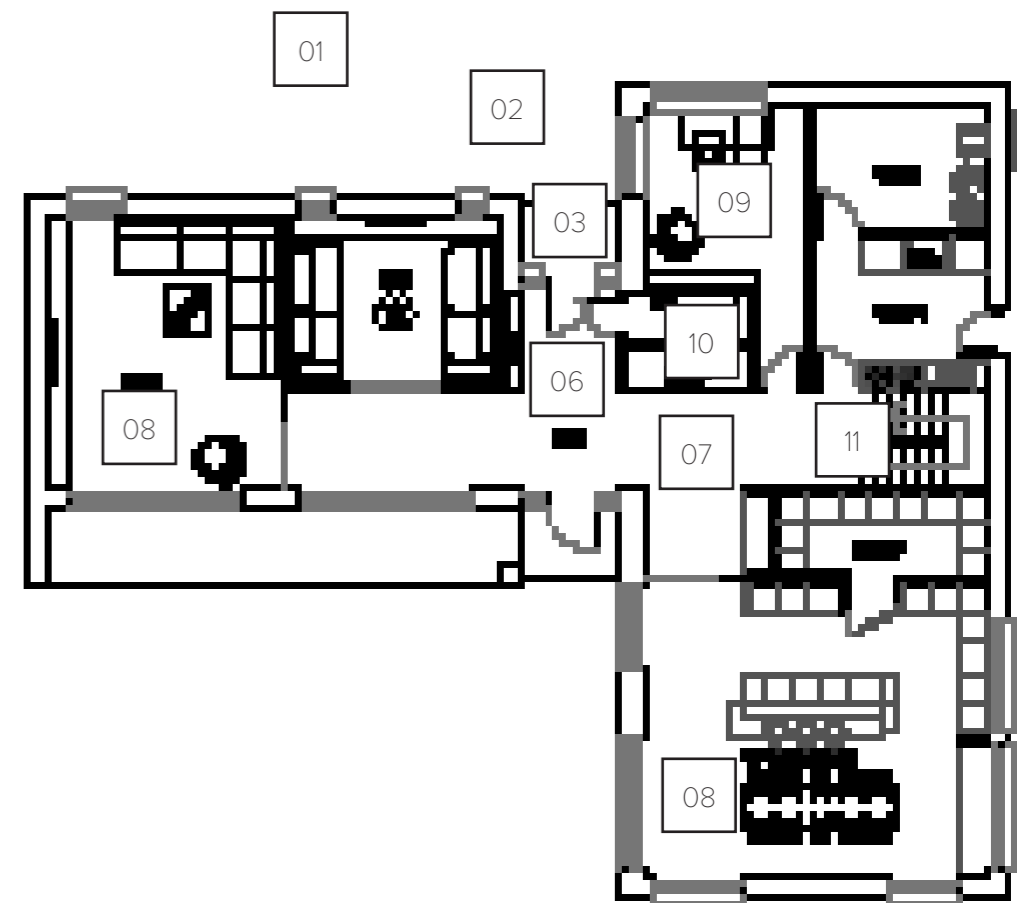
Provide an accessible bathroom that has ease of access to its facilities from the outset and potential for simple adaptation to provide for different needs in the future.

15. Glazing and window handle heights

Enable people to have a reasonable line of sight from a seated position in the living room and to use at least one window for ventilation in each room.

16. Location of service controls

Locate regularly used service controls, or those needed in an emergency, so that they are usable by a wide range of household members.



RESPONDING TO THE CLIMATE EMERGENCY

As set out within our Clients' brief, responding to the climate emergency we face has been a key driver of the design process.

SETTING

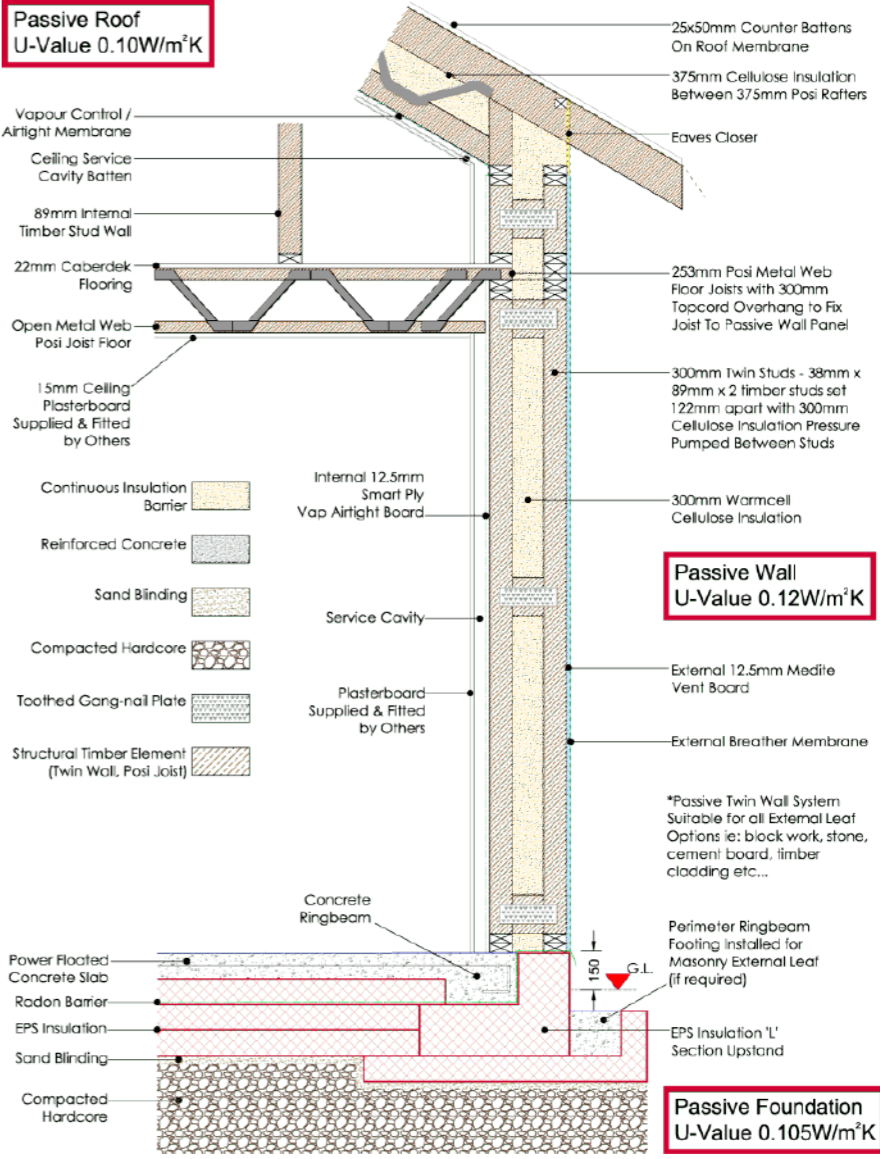
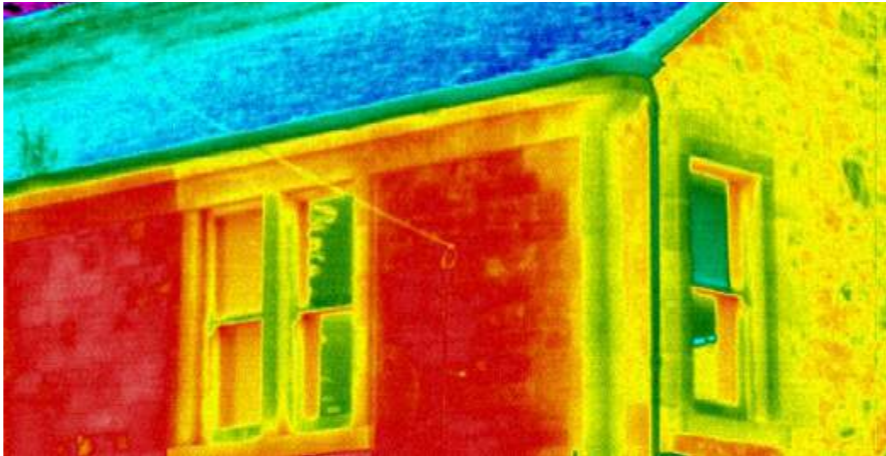
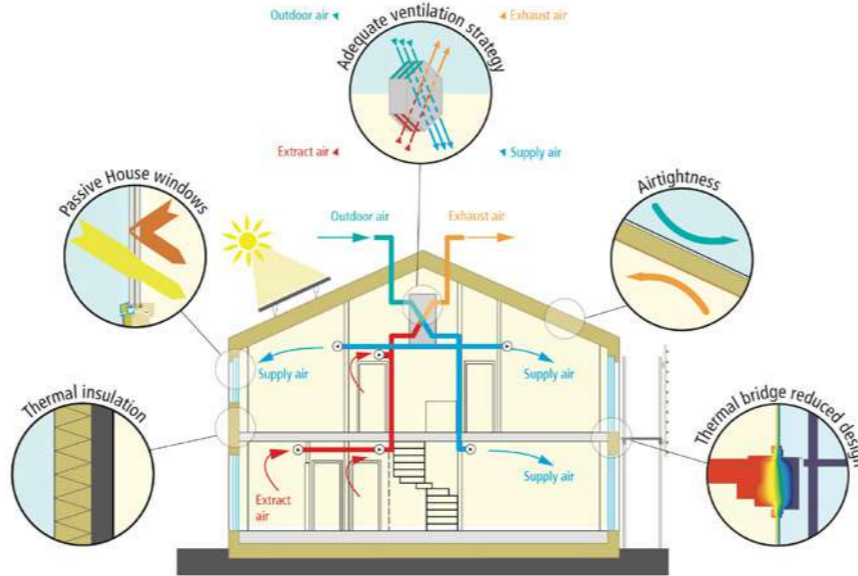
The proposed new home is designed to take full advantage of a southerly orientation for the principal habitable rooms, utilising as much as possible the advantage of natural solar gain.

Carefully thought has been given to the window openings size and positions to allow natural light to fill the centre of the building so artificial lighting can be minimized, and solar heat can be captured, balanced with avoiding overheating.

MATERIALS

The proposed house would use a timber frame approach to help carbon capture and reduced embodied carbon. Likewise the choice of external cladding materials has been informed using a low embodied energy approach that will be both durable and long-lasting. Where possible, local suppliers will be used to limit transport emissions. All timber will be sustainably sourced from either the UK or Europe.

Where practical the use of concrete will be limited during construction. Any requirement for new concrete will incorporate high recycled content mixes used where possible to reduce the embodied carbon in the building fabric.





RESPONDING TO THE CLIMATE EMERGENCY (CONTINUED)

WIDER LANDSCAPE

An important part of the brief set by our clients is their ambition for the proposed works and wider property to enhance biodiversity.

THERMAL EFFICIENCY / CARBON FOOTPRINT

A fundamental commissioning decision from our clients has been to target Passivhaus Standards with the new construction. This approach targets the energy efficiency and in-use carbon impact of the development.

In line with the Passivhaus principles, the design will take a fabric-first approach, with insulation, high levels of air tightness, triple glazed windows, and MVHR. This far exceeds standards set out in Part L of the Building Regulations. This will ensure the whole house is of a ultra-low energy standard, providing a healthy and comfortable internal environment.

GREEN ENERGY

The design would require a vastly reduced energy and heat demand, which would be supplemented by using low-energy systems such as an air source heat pump to provide a fossil fuel free heating systems for the house.

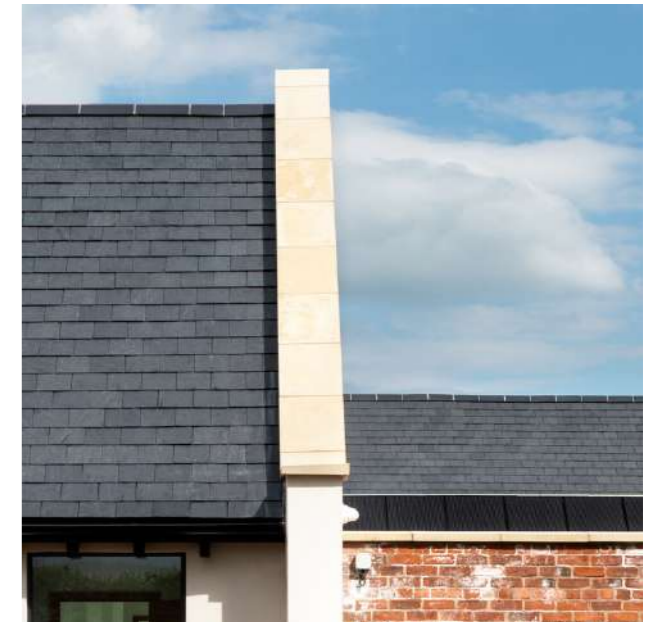
A new solar array is to be located on the southern side of the roof. This will be used to run the heat pump, electric car charging and, as technology improves, a battery storage unit.

DESIGN PRECEDENTS



MATERIALITY

- Use local & sustainable materials
- Reference local vernacular
- Utilise natural stone as direct reference to common building material in the area.
- Timber cladding provides interest and variation.
- The link utilises glass and a standing seam roof to provide clear visual separation between to elements of the house.



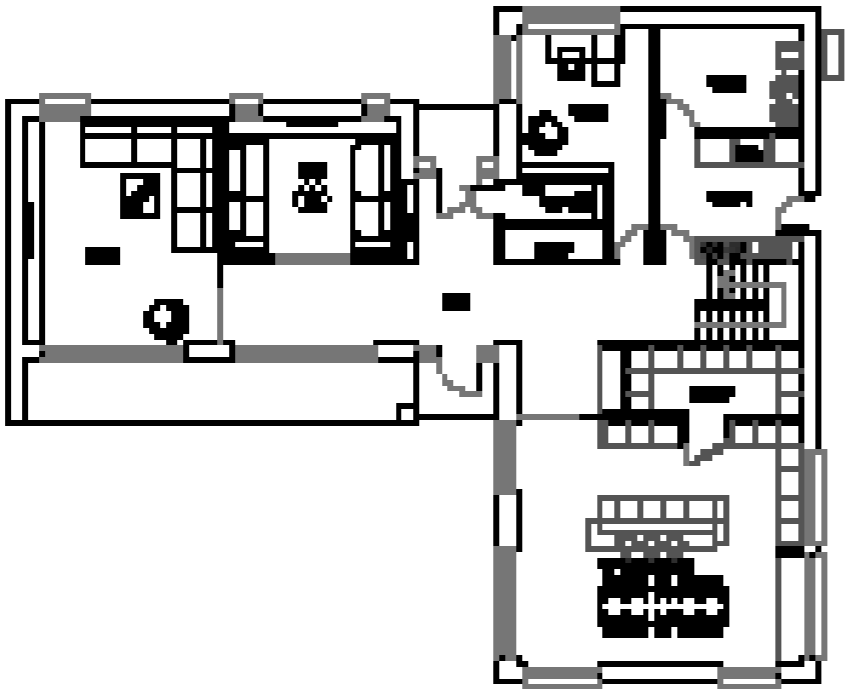
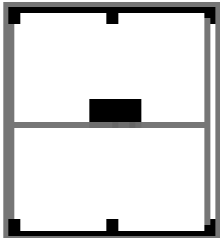
DESIGN RATIONALE

As set out in the preceding pages, the layout, appearance and massing of the proposals have been born out of a response to the context, relevant planning policy and the client brief. But most importantly as designers we pride ourselves on creating buildings and spaces which will enhance their setting. The key drivers of this design are:

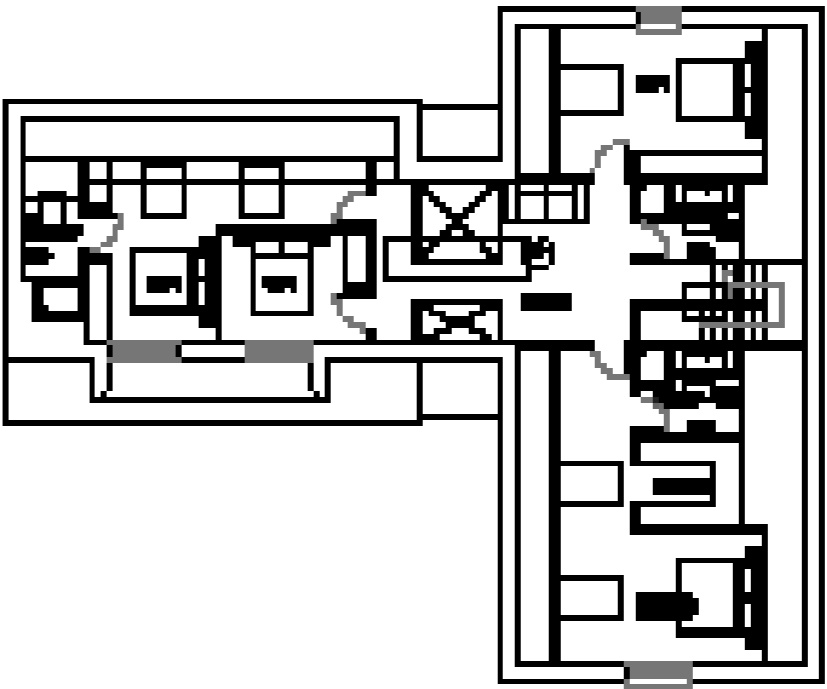
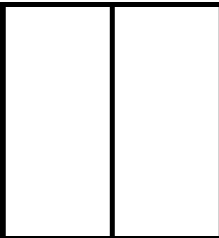
- Removing in-congruent and low quality existing dwelling.
- Utilise materials of the surrounding context.
- Minimise the massing and scale of the proposals through careful consideration of the roof form and heights.
- Creating a complementary palette of materials for the proposals which are fitting for the setting.
- Reflecting that with contemporary materials come contemporary design responses which avoid pastiches or confusing design which detracts from the original and the setting, lowering the quality of the built environment.
- Linking the components using a contrasting link which will separate the massing and create visual interest.



PROPOSED FLOOR PLANS



Ground Floor Plan



First Floor Plan

PROPOSED SITE PLAN

The positioning of the new home has been carefully considered to minimise the impact on the neighbouring properties whilst providing the maximum benefits to the client.

The new house has been set further back from the street providing a better area for parking and turning.

The 'L-shaped floor plan minimises the impact on the neighbour's amenity and maximises the south facing aspect and the views. A visually contrasting link provides a clearly legible entrance and a visual connection from the front of the house to the landscape beyond.

The overall footprint of the proposed dwelling is designed to maximise the efficiency of the site and maintain an overall massing that responds to the urban grain of the context.



PHOTO MONTAGE FROM KNOSSINGTON ROAD



EXISTING



PROPOSED

PHOTO MONTAGE FROM KNOSSINGTON ROAD



RESPONDING TO THE BIODIVERSITY EMERGENCY

An important part of our Clients' brief is for the project to have a positive impact and enhancement on biodiversity in this time of emergency. Some of the measures which the design proposes are:

1. The majority of the existing mature trees and hedgerows to be retained. Some trees will require removal to facilitate the construction of the new building. The loss of the tree will be offset through new tree planting. The details of this are set out within the PEA which accompanies the application.
2. Thorough investigation of the exciting biodiversity of the site has been undertaken and the results and recommendations are set out in the PEA. This will include the integration of the following recommendations:
 - The establishment of an area of more diverse grassland habitat, to the benefit of the invertebrate assemblage;
 - The introduction of species currently not recorded on Site;
 - The planting of more trees, to offset the losses driven by the development and achieve a net increase in canopy cover;
 - Supporting a wider range of invertebrate communities by increasing the habitat mix. This will in turn attract a variety of species that feed on invertebrates, including amphibians, bats and birds.
 - The delivery of ready-made habitat features to encourage species to use the site (i.e. bat, bird, bug boxes)
3. External lighting will be implemented in line with 'Bats and Artificial Lighting in the UK' Guidance Note GN 08 23 by incorporating features such as PIR lights, lights with low frequency wave lengths, and lights with hoods/cowls, and by avoiding the illumination of boundary habitats.



PLANNING CONTEXT AND CONSIDERATIONS

Background

The application property comprises an existing planning unit forming a single dwelling house. It is located within the Braunston Conservation Area but outside of the Article 4 directive. The existing house has little to no architectural value and has no positive impact on the Conservation Area. There are no listed buildings within the immediate context. The property is not located at, or adjacent to, any designated sites of special biodiversity value.

The property is not set within, or close to, a designated area at risk of flooding.

There are no public rights across the application property.

There is a PROW through the fields to the south of the property but visibility to the property is limited due to the existing mature planting and trees (which would be retained).

This statement has set out the design rationale and proposed detailing for the proposed replacement dwelling and works within its curtilage. It has demonstrated the proposed development will be complementary addition to the village and will sit comfortably within the context and provide a positive contribution to the area.

Further, this statement has demonstrated the proposal will meet the highest of sustainable construction standards, with

excellent thermal qualities, will enhance biodiversity and will be of a format that provides flexibility for adaptation to meet changing lifestyles.

Planning Policy Context

This submission has been prepared considering paragraph 38 of the National Planning Policy Framework ('Framework') which encourages Local Planning Authorities to approach decisions on development proposals in a positive and creative way. Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section 70(2) of the Town and Country Planning Act 1990 require applications for planning permission to be determined in accordance with the operative development plan unless material considerations indicate otherwise.

The operative development plan applicable to our Client's proposal comprises the Rutland County Council Local Plan 2018 - 2036. With consideration to the planning context set out above, the Plan's specific policies that have been addressed are:

Strategic Objective 16: Resources and climate change

To reduce the impact of both development and climate change on Rutland's environment and communities, through:

- sustainable design and construction.
- encouraging the prudent uses of resources, including the

re-use of previously developed land, reuse of secondary and recycled aggregates and safeguarding minerals,

- increasing use of renewable energy.
- addressing the implications of flood risk and climate change.

Policy EN2 – Place shaping principles

All new development must be appropriate in scale and design to the location, character and features of the setting and landscape within which it is situated.

7.9 Applicants are encouraged to work collaboratively with the County Council and engage in pre-application discussions. The Council's Place Shaping Principles can be used to guide pre-application discussions. Design and access statements, when required, should illustrate how the stages of the design process have been followed and in what manner the design principles have been addressed. Strong urban design skills can help to produce high quality site assessments and scheme visions. These skills can also help to create 'places', rather than simply delivering developments. The Council strongly encourages development teams to enlist urban design skills.

7.11 Development should respect and enhance local character by ensuring that it responds to its topography, wider context, the landscape setting within which it is located, and the local streetscape and local building materials. This does not preclude innovative designs that can raise quality.

PLANNING CONTEXT AND CONSIDERATIONS

(CONTINUED)

7.15 Development needs to respond to climate change through its design, considering measures such as sustainable travel, landscape, planting for biodiversity, and sustainable drainage. It will also be important to consider the impacts on the wider natural environment.

Policy EN3 - Delivering good design

1. To ensure high quality design is achieved throughout the County, all development proposals will be expected to:

a) Make a positive contribution to the local distinctiveness, vernacular and character of the area. Proposals should reinforce local identity and not have an adverse impact on the street scene, settlement pattern or the landscape / townscape character of the surrounding area. Proposals should be of an appropriate scale, density, massing, height and material, given the context of the area; and

b) Ensure there is no adverse impact on the amenity of neighbouring users in terms of noise, light pollution, loss of privacy and loss of light and have regard to features that minimise crime and the fear of crime; and

c) Provide sufficient private amenity space, suitable to the type and amount of development proposed; and

d) Take account of requirements of the Design SPD and made Neighbourhood Plans.

Policy EN4 – Sustainable building and construction

All development proposals will be expected to mitigate against and adapt to climate change, and will be expected to be designed to comply with present and future national policy requirements as well as contributing to local targets on reducing carbon emissions and energy use unless it can be demonstrated that compliance with the policy is not viable or feasible.

Conclusion

With the above summary in mind, this statement has demonstrated the proposed development is fully compatible with the provisions and requirements of the Local Plan and will contribute to the achievement of sustainable development.

Fundamentally, the proposed development will result in:

- a high-quality building that will unobtrusively sit within its curtilage;
- a highly functional dwelling to meet modern family life, replacing an outdated property, and ensuring flexibility exists to meet changing family requirements;
- a highly energy efficient building with a low carbon footprint;
- architecture of a high standard that is designed to last;
- a building which positively responds to the Conservation Area and enhances the surrounding context; and,

- a high level of bio-diversity enhancements to the property.

The proposed replacement dwelling aligns with the principles of sustainable development, respects the character of the Braunston Conservation Area, and adheres to local policies and guidelines. We kindly request that the Local Planning Authority consider this application favourably, taking into account the environmental benefits and the high-quality design of the proposed development.

EXISTING HOUSE



PROPOSED KNOSSINGTON ROAD STREETSCENE



1 Knossington Road Streetscene 1:100

CONCEPT SKETCH OF FRONT ELEVATION



CONCEPT SKETCH OF REAR ELEVATION



ARTISTIC IMPRESSION OF THE PROPOSED FRONT ELEVATION



ARTISTIC IMPRESSION OF THE PROPOSED REAR ELEVATION



PHOTO MONTAGE FROM KNOSSINGTON ROAD



EXISTING



PROPOSED

PHOTO MONTAGE FROM KNOSSINGTON ROAD



THANK YOU

HABITAT+

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