

PART NINETEEN

DESIGN STATEMENT

Proposed New House of Exceptional Design Quality



1.0 Introduction

- 1.1 This is a full application submitted to Mid Sussex District Council for the erection of a single dwelling and its associated infrastructure of exceptional design quality under the policy provisions of paragraph 84 (bullet point e) and 139 of the National Planning Policy Framework (NPPF 2024). Located at Caldyne Park, Turners Hill Rd, West Sussex. The site of this application is located on the southern side of Wallage Lane.
- 1.2 This Design Statement has been prepared to accompany this application, exhibiting the proposal's conformity with NPPF policy paragraph 84 (bullet point e). In that, it proposes a dwelling that would help raise the standard of design, reflecting the highest standards in architecture, and significantly enhance its immediate setting, benefitting the characteristics of the local area.
- 1.3 Additionally, significant weight should be given to the proposal as it satisfies the NPPF policy paragraph 139 (bullet point b). In that, the dwelling reflects an innovative and outstanding design that nestles into its surroundings and promotes high levels of sustainability and will raise the standard of design more generally in the area.

2.0 The Site & Surrounding Area

- 2.1 The landscape and design proposals have been informed by a detailed and rigorous site analysis. The key to good design, which fulfils the Council's objectives, is not only to provide for the needs of the occupants but also to respond sensitively to the characteristics of the site and its surroundings. These characteristics will influence the dwellings siting, form, scale and landscaping. There are a number of components of good design and achieving high quality design, as follows:
- **Site Appraisal** - Maximum benefits from the site and its features can only be obtained if a full survey of the site and its setting is carried out. When the context and characteristics of the site are fully understood, a design can evolve which reflects the character of the locality, thereby enabling the development to be readily integrated into the environment.

• **Site Layout** - New buildings should make a positive contribution to the special quality of the area and their setting.

• **Site History** - An understanding and acknowledgment of the sites history is essential for the development of an integrated and progressive proposal.

• **Massing and Form** - The form and massing of new buildings is one of the most important factors in the successful integration of new houses in established settings.

• **Materials** - Choice of materials should reflect and reinforce the character of the area.

• **External Appearance** - New buildings should be well proportioned. Genuinely creative and innovative designs should also be attractive. Contemporary designs, reinterpreting traditional forms and using local materials creatively, can add to the richness and interest of the area.

• **Setting** - New rural isolated dwellings should significantly enhance their immediate surroundings through exceptional architectural design, sustainability and innovative ecological enhancement.
- 2.2 The application site extends to approximately 5.8 hectares (14.3 acres) and is located in a predominantly wooded countryside, to the east of Crawley Down. The site lies within the **Parish of Cophorne**, within the administrative jurisdiction of **Mid Sussex District Council**, which in turn lies within the County of **West Sussex**. The Site is just outside the High Weald Area of Outstanding Natural Beauty which otherwise dominates the rest of Mid Sussex District Council.

2.3 The site is an irregularly shaped parcel of land located on the southern side of Wallage Lane and benefits from two established vehicular entry points. The main vehicular access is provided from Turners Hill Road to the west and secondary entry point is from Wallage Lane to the north. The junction of these two roads is to the west of the site. The mouth of the access is sufficiently wide and deep enough to enable a vehicle to park off the highway before entering through the gates and into the site. On exit from the site, visibility is good in both directions.

2.4 The Landscape setting around the site is predominantly woodland interspersed with gently undulating medium to large scale agricultural countryside. The site is predominantly wooded whilst enjoying open areas or glades. There are a few sporadically located residential dwellings and commercial uses. The site sits within an area of ancient woodland and was formerly used as a MoD fuel storage depot .
- The key landscape characteristics of the area are as follows: -
- 2.5 **Woodland** - Sussex is one of the most wooded parts of lowland Britain with ancient woodland covering approximately 39,000ha (10%) of the county. Bluebell woods associated with coppicing, open wood pasture associated with deer parks and the small Wealden woods in ghyll valleys are a key part of Sussex's distinctive and varied landscape. A great extent of interconnected ancient woods, steep-sided gill woodlands, wooded heaths and shaws, generally in small holdings with extensive archaeology and evidence of long term management.
- An aerial photograph showing a landscape with a mix of open fields and dense woodland. A red outline marks a specific area within the woodland, which is the subject of the application. The surrounding area includes various types of land use, from agricultural fields to more developed areas.
- Woodland
- 2.6 **Routeways** - Ancient routeways in the form of ridge-top roads and a dense system of radiating droveways, often narrow, deeply sunken and edged with trees, wildflower-rich verges and boundary banks
- 2.7 **Settlements** - A very high density of dispersed historic settlements of farmsteads and hamlets with late medieval villages founded on trade and non-agricultural rural industries. A dominance of traditional timber-framed buildings with steep roofs often hipped or half-hipped and an extraordinarily high survival rate of farm buildings dating from the 17th century or earlier.
- An aerial photograph showing a settlement area with numerous small buildings and structures. A red outline marks a specific area within the settlement, which is the subject of the application. The surrounding area includes various types of land use, from agricultural fields to more developed areas.
- Settlements
- 2.8 **Field and Heath** - Small, irregularly-shaped and productive fields bounded by hedgerows and small woodlands predominantly of medieval origin and managed historically as a mosaic of small agricultural holdings typically used for livestock grazing. Distinctive zones of heaths and inned river valleys
- An aerial photograph showing a landscape with a mix of open fields and dense woodland. A red outline marks a specific area within the field and heath, which is the subject of the application. The surrounding area includes various types of land use, from agricultural fields to more developed areas.
- Field and Heath
- 2.9 **Ancient Woodland** - includes 'ancient semi-natural woodland' mainly made up of trees and shrubs native to the site, usually arising from natural regeneration. The real value of ancient woodland is what's hidden beneath the leaf litter. Ancient woodland soils are unique, rich in nutrients and still have the original layers laid down by centuries of falling leaves. They've developed without disturbance from ploughing or chemicals and are alive with fungi, insects, microbes and worms.
- THE HIDE

Land at Caldyne Park,
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- 2.10 Over time, the creatures and microscopic life forms living in these soils have developed close-knit communities and relationships that we are only just beginning to discover and understand. Woodland floor plants have also evolved alongside these communities, often coming to depend upon them for survival. Some orchids, for instance, rely on certain kinds of fungi for nutrients, and in some cases their seeds won't germinate without their presence.

2.11 In addition to the wider landscape characteristics, the site analysis has considered the characteristics of the site and immediately surrounding area. The site itself is dominated by ancient and more recent woodland but with clearings and glades scattered amongst it, presenting opportunities for sunlight and daylight penetration and for locating a new building without harming the landscape character.
- Two maps showing the site location and surrounding area. The left map is a detailed aerial photograph with a red outline indicating the site location. The right map is a simplified map showing the site location and surrounding area, with a red outline indicating the site location. The maps show the site's proximity to the coast and the surrounding landscape.
- Ancient Woodland = 
- Site Analysis
- 2.12 Wind speeds are generally very low throughout the year due to the site being heavily sheltered and protected by mature trees along its boundaries. There is therefore limited opportunity to harness the wind's energy on this particular site.

2.13 With regard to solar site characteristics, a solar shading study revealed that in the morning and evening there is a large coverage of shading in the open areas, due to the surrounding tree belt. This highlighted the optimum point on the site that receives little to no shading throughout the day from the surrounding woodland tree belt. With regards to annual patterns of solar radiation, in the summer months there is a need to capture daytime heat from passive solar radiation and release it into the house overnight when external temperatures drop below comfort levels. In the winter months, the requirement for heating is much greater, as one may expect, resulting in the need for other sustainable forms of heating. The monthly relative humidity levels are comparatively high compared to the rest of the UK. It is therefore important to reduce relative humidity levels in the house to ensure the optimum environment for human comfort and health. This can be achieved through the use of hygroscopic building materials and the design of the building fabric will need to ensure relative humidity is optimised.
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- DD Architects

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2.14 The solar shading study was repeated for 0m, 3m, 6m and 12m, this showed that as you elevate by 3m there is at least a 35% reduction in shading. An understanding of the extent of the shadow projection from the existing trees is crucial to considerations of the optimum location, height, and orientation of the proposed house and fenestration in regard to the bioclimatic development which has formed an integral part of the scheme.

2.15 The site is fully hidden in distant views by the existing woodland and tree belt on the site and the immediate surrounding area. The open areas of the site are also screened to a significant extent by virtue of the existing woodland and peripheral vegetation, including in views from the public highway (Turners Hill Rd & Wallage Ln).

2.16 Turning to the character of the local area, a characteristic settlement pattern of CUT high density dispersed historic settlements of farmsteads and hamlets. Buildings within the environs of the site are predominantly detached houses, some with associated barns and outbuildings, and set within large spacious plots surrounded by mature tree belts and woodland. Crawley to the West, though physically separated, exerts a strong functional and visual influence on the area There is a dominance of traditional timber-framed buildings with steep roofs often hipped or half-hipped, varying in quality and of building sizes and heights. Similarly, an eclectic mix of materials are utilised with no common relationship to a neighbourhood style or suite of materials. Materials include black shiplap timber, stone cladding, red brick, render, thatch, clay and slate tiles and in some cases plastic weatherboarding. It is clear that there is no singular form of development within this part of the Mid-Sussex High Weald Character Area that epitomises local distinctiveness.

2.17 Following a detailed site analysis, a series of design considerations emerged that have informed the design development process and ultimately the landscape and development proposals that are proposed within this application. These can be summarised as follows:

- **Enhancing the landscape character and value** - Opportunities exist to both preserve existing landscape features and to enhance where possible. Improve habitat and biodiversity of the site.
- **Enclosure** - The site's strong sense of enclosure is one of its key features.
- **Protect the clearings** - The site is heavily wooded and doesn't have much open space. Clearings should be retained as much as possible. Opportunities exist to significantly enhance the biodiversity value of the central open part of the site.
- **Respect the root protection areas** - It is important not to encroach on the tree root protection areas.
- **Maximise daylight** - The woodland creates a lot of shadowing and therefore we need to grab as much sunlight within the open areas of the site throughout the day as possible.
- **Topography** – Utlising the sloping landscape and minimise the removal of material from the site.
- **Building location** – Working with the existing topography, landscape features and local climatic conditions to generate the sustainable design solution for this site.

2.18 The detailed site analysis (and its history) strongly directed the positioning of the building and the form it took. We interrogated the environmental qualities and various options for locating the dwelling on the site. In each instance, we assessed the impact on context, outlook, shadow, topography, terrain, passive solar gain, site history, entrance & access.



Aerial View - Site Outline

3.0 Historical Development

3.1 The 25 acres of land at Rowfant was originally acquired by the Air Ministry at the beginning of the second world war. Used as a secure fuel storage site by the RAF, as the fuel stores at Gatwick airport were considered extremely vulnerable. The land at Rowfant was developed by the ministry for sinking oil storage tanks underground. It is understood that the site was initially substantially cleared with the first buildings and storage tanks being constructed on the site between 1938 and 1939, with more added in 1943 to 1944. Architecturally of no particular interest, and constructed in concrete and brick with slate roofs.

3.2 During construction the 4,000 tonne capacity cylindrical fuel tanks were sunk into the ground. Evidently when the storage tanks were constructed in 1939, not only were the trees removed but the significant and irreplaceable ancient soil was removed from the site to sink the tanks into the ground.

3.3 In addition to the six fuel storage tanks on the site there were three 20,000 gallon water tanks for fire fighting at the Rowfant depot. With the ever-present risk of bombing attacks, it was essential that an air raid shelter be built for the service personnel working there. The huge structure, made from concrete, exists today at the site on the other side of Wallage Lane.

3.4 The tanks were removed between 1999 and 2001 which resulted in further substantial clearing of the site. The ministry of defence did not remove the storage containers in a delicate manner. The earth was moved out of the way using bull dozers with little regard for either the sites Biodiversity or ancient status. Fresh alien soil must have been brought back into the site to fill the voids left by the tanks. This is today evidenced as large mounds of earth in the location of the historic storage containers. The essential characteristic that defines Ancient woodland is that it is at least over 400 yrs old with the real value being the ancient irreplaceable soil. The historic nature of the ancient soil has therefore been substantially eroded not once, but twice in 1939 and 1999.

3.5 Due to the history of the site being in MOD ownership (formerly the Air Ministry) since the 1930's, the planning history of the site during this time is limited. Being within MOD ownership the site benefited from Crown immunity and this may explain the apparent lack of planning history records for the site between the 1930's and 1999. Sold by the Ministry of Defence in 1999 and now owned by builders Caldyne Ltd.



View of storage fuel tank with steel removed and concrete being destroyed



View inside storage tank showing concrete walls with steel removed

THE HIDE

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4.0 Proposal

4.1 Full planning permission is sought for the erection of a dwelling of exceptional design quality and innovative sustainable nature within the wooded countryside in West Sussex under the policy provisions of paragraph 84(e) & 139(b) of the National Planning Policy Framework.

4.2 In addition to the completed and signed application form and certificates of ownership, the plans and documentation that comprise the application are as follows: -

- Plans, Elevations, Sections, Exploded Axonometrics, Detailed Sections and Contextual Renderings prepared by DD Architects

- Extensive Supporting Documents (Detailing the full project evolution from site analysis to design responses to previous DRP Comments) prepared by DD Architects

- Landscape Layout (Drawing ID 0364 - 1000 - P04) prepared by Nicholas Dexter Ltd

- Energy Statement, (November 2025) prepared by Dr Rachel Mitchell, Greenbox Associates Ltd

- Structural Feasibility Assessment (December 2025) prepared by Ralph Tiemann, TIEMANN & Co Ltd

- Comprehensive Ecology & BNG Reports (February 2026) prepared by Arun Ecology:

- Preliminary Ecological Appraisal Report (PEA)
- Full BNG Metric Documentation - Statutory Metric (PDF & Excel), Condition Assessment (Excel), Baseline Habitat Plan & Proposed Habitat Plan (PDF). BNG Gain Plan (Word)
- Habitat Management and Monitoring Plan (With Ancient Woodland Report/Method Statement Included)
- Precautionary Method Statement for Hazel Dormouse

- Historic Ecology Reports:

- Ecological Scoping Survey (May 2014) prepared by Calumma Ecological Services
- Desktop Biodiversity Report (April 2014) prepared by Calumma Ecological Services
- Bat Survey Report (January 2020) prepared by Verdant Ecology
- Dormouse Survey Report (January 2020) prepared by Verdant Ecology
- Reptile Survey and Mitigation Report (January 2020) prepared by Verdant Ecology
- Ecology/Arboriculture Summary (January 2020) prepared by Verdant Ecology

- Arboricultural Reports (November 2025) prepared by The Sussex Tree Company:

- Arboricultural Impact Assessment Report - BS:5837 (Tree Survey, Arboricultural Impact Assessment, Tree Constraint Plan & Tree Retention and Protection Plan)
- Detailed Arboricultural Method Statement - BS:5837

4.3 The extensively developed proposal is as result of a detailed and thorough analysis of the site and surrounding area, informed by collaboration with experts in the architectural, environmental, arboricultural, sustainability, engineering, landscape and ecological specialisms.



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4.4 The fundamental objective of the proposal was to design a new house for the site that is of exceptional design quality and sustainably innovative, reflecting the highest standards in architecture whilst being sensitive to the defining characteristics of the local area, and making a significant enhancement to its immediate setting.

4.5 The critical development of this project has cultivated a unique and multifaceted scheme that not only forms a highly sustainable dwelling but enhances and ensures the preservation of its setting and the surrounding Ancient Woodland (heritage asset).

4.6 At the core of this proposal is the creation of a highly sustainable dwelling sitting within a truly rewilded site, that is of truly outstanding quality of design that will further the Government's design and sustainability objectives by assisting in meeting the challenge of climate change through high quality sustainable design and construction, thereby helping to raise the standards of design more generally.

The Landscape & Ecology - Rewilding the Site

4.7 The proposed rewilding of the site is at the heart of this proposal and has been developed in collaboration with ecology consultants (Arun Ecology) and landscape designer (Nicholas Dexter), resulting in significant **Biodiversity Net Gain of 30.73%**. These critical environmental measures underpin the overall design proposal.

4.8 100 years ago the landscape would be manipulated so as best to show off the house. This proposal, however, undertakes a landscape- & ecology-led approach to ensure that both the proposed dwelling and increased biodiversity measures enhance its immediate setting and the landscape character. The dwelling has evolved into a hide, where the occupants can view the flourishing wildlife and nature around them, within a isolated woodland clearing oasis.

4.9 While the area is primarily wooded, a large, secluded clearing exists on the site. This is where the proposed dwelling will be located, blending into the natural terrain of the site, providing occupants with a 360-degree view of surrounding wildlife. Protecting and enhancing this open space, along with the surrounding woodland, is essential for enjoyment and maintaining the integrity of the landscape.

4.10 The approach to the landscape and ecology rewilding has adopted the principle of conservation first followed by enhancement. Cumulatively, these environmental strategies have established a basis upon which something truly outstanding can be achieved for the site. Overall the rewilding can be separated into three components; First enhancement of the retained woodland, Second ecologically rich and diverse habitat creation and Third additional ecological enhancements.

1. Enhancement of the Retained Woodland

4.11 Both the ancient woodland and woodland within the site have been neglected and contaminated (soil removed from the ancient woodland and replaced with alien soil) due to its previous use by the MOD for fuel and water tank storage, and to their subsequent extensive clearance of the woodlands and tanks in 1999. This, combined with the invasive non-native rhododendrons, has had a profoundly detrimental effect on their baseline habitat conditions (Poor). Therefore, the first component of this rewilding strategy is to enhance the existing lowland mixed deciduous woodland (inc. ancient woodland) parcels.

4.12 The method of enhancement focuses on: the removal of INNS (Rhododendron ponticum), establishing a woodland understorey with native woody plants, establishing a woodland ground flora, managing canopy cover and composition, and re-establishing woodland processes such as natural decay.

1a. Removal of Invasive Non-Native Species (INNS)

4.13 Both the ancient woodland and woodland parcels within the site suffer from invasive and problem species. Rhododendrons have spread prolifically and are taking over large parts of the woodland and ancient woodland within the site. One of the most damaging and unfortunately, most common invasive species is Rhododendron ponticum.

4.14 The thick evergreen foliage of rhododendrons smothers native vegetation and its associated flora and fauna, whilst its roots exude a 'cocktail' of toxic chemicals, including cyanide, which further poisons the ground. Eventually, nothing is left beneath the trees but rhododendron, to the detriment of wildlife. Rhododendrons cannot be controlled by grazing, as most species, from humans to horses, birds, and insects, are poisoned if they ingest them. It is for this reason that the rhododendron plant has spread throughout the site unhindered.

4.15 Removal of the rhododendrons, combined with careful woodland management to bring sunlight to the woodland floor, will encourage native species to thrive once again and start reversing the years of damage.



Invasive Rhodedendrons On-Site (Panorma - P04)

1b. Ancient Woodland Management

4.16 Ancient woods have existed for many centuries and have developed into rich, complex, and irreplaceable ecosystems. Ancient woodlands are believed to have existed since 1600AD; however, many are older, and some may even date back to woodland that covered the UK around 10,000 years ago after the Last Ice Age.

4.17 Ancient woodland now only covers around 2% of the UK. Much of what remains has been damaged by planting with non-native conifers or colonisation by invasive species. However, careful woodland management to let in sunlight and removal of non-native species, including the rhododendron, encourages native species to thrive again, reversing the years of damage.

4.18 The ancient woodland boundary surrounding the site is proposed to remain with the applicant, who will enter into a 30-year Woodland Management Plan to ensure the maintenance and future enhancement of the ancient woodland. Such a Woodland Management Plan, in helping to conserve and enhance the biodiversity of the remaining boundary woodland, would meet

the objectives of both the NPPF and the Council's policy in relation to biodiversity and nature conservation. The proposed ecological rewilding scheme will secure the future of the ancient woodland as a heritage asset.

1c. Woodland Enhancements

4.19 The existing woodland canopy will be selectively thinned suppressed or poorly formed trees will be removed to increase light at ground level and support understorey and ground flora and fauna development. Canopy openings will be irregular to mimic natural woodland patterns, while healthy native trees will be retained and protected. Machinery use will be avoided in ancient woodland and restricted to designated routes elsewhere to minimise soil and root damage.

4.20 Once the invasive non-native species have been removed the woodland understorey is to be re-established. Native shrubs such as blackthorn, hawthorn and hazel will be planted to enhance the woodland understorey and complement the existing, sparsely distributed shrub layer.

4.21 In non-ancient woodland parcels, ground flora diversity will be enhanced mainly through structural management and natural regeneration. Where vegetation is sparse or species-poor, locally appropriate woodland plants or seed mixes may be sown, following light ground disturbance to create suitable establishment conditions.

4.22 Standing and fallen deadwood will be retained and increased to enhance habitat diversity. Selected trees may be converted into monoliths and deadwood may be intentionally damaged to accelerate decay and create microhabitats. Felled timber will remain on site in varied conditions to support fungi, invertebrates and other woodland wildlife.

4.23 Deer-exclusion fencing will be temporarily installed around the site perimeter to protect areas of lowland mixed deciduous woodland and ancient woodland parcels from deer browsing pressure, thereby supporting woodland enhancement and regeneration. Fencing will be retained only until planting and natural regeneration are successfully established, after which it will be removed.



Woodland Enhancement Examples

THE HIDE

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2. Ecologically Rich and Diverse Habitat Creation

4.24 The site has been neglected, contaminated, and ravaged since its intervention by the MOD, leaving it in very poor ecological condition. The modified grassland clearing is in particularly poor condition, and the creation of new, diverse, ecologically rich habitats is a critical component of the rewilding scheme. The proposed improvements deliver a total of 30.73% Biodiversity Net Gain, improving the site's current poor condition into a thriving ecological landscape (moderate and good) over the next 30 years.

4.25 New native lowland mixed deciduous woodland areas will be planted. These will connect to the retained and enhanced woodland parcels and will be composed of various broad-leaved trees, with diverse shrubs and ground plants beneath. This layered structure provides shelter, nesting sites and food for birds, mammals, insects and fungi. Woodland habitats support high biodiversity, connect surrounding habitats, improve soil health, and create stable conditions for wildlife.

4.26 The site's biodiversity will be significantly enhanced through the creation of new ecologically rich and diverse habitats in the open clearing, which currently is a large expanse of extremely poor ecological condition, open modified grassland. These new habitats include species-rich meadows, mixed scrub, a wild pond and individual tree planting.



Habitat Creation Examples 01

4.27 The majority of the modified grassland will be enhanced to neutral grassland, which is a species-rich meadow habitat made up of native grasses and wildflowers. These grasslands provide nectar and pollen for pollinators such as bees, butterflies and hoverflies. They also support birds, small mammals and many insects. Species-rich grasslands increase biodiversity, improve soil health and help connect habitats, creating an important food source and refuge for wildlife.

4.28 Diverse mixed scrub habitats will be created to form a natural transition between grassland and woodland. This habitat is a dense mix of native shrubs that provide natural shelter, nesting sites and foraging opportunities for birds and small mammals, while flowering shrubs support bees and other pollinators. The varied height and structure also create cover for reptiles and invertebrates, making scrub an important habitat for wildlife and increasing ecological connectivity across the landscape.

4.29 A large wild pond will also be established to the south of the dwelling and will support a wide range of wildlife. Aquatic plants, open water and shallow edges provide breeding and feeding areas for amphibians, insects, mammals and birds. Ponds are particularly important for species



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such as frogs, newts and dragonflies. Because they support many different organisms, ponds are among the most biodiverse habitats in the landscape.

4.30 In the western corner of the woodland clearing, the site has widely spaced fruit trees growing over the species-rich grassland (traditional orchard). Blossom provides an important food source for pollinators, while fruit supports birds and mammals. Mature trees can also develop cavities and deadwood used by bats, birds and insects. Orchards combine elements of woodland and meadow, creating a diverse habitat that supports a wide range of wildlife.

4.31 Ten scattered native trees will be planted within the species-rich grassland to provide food, shelter, and nesting opportunities for wildlife. Flowers will support pollinators, while seeds and fruits feed birds and mammals. As trees mature, they develop bark crevices, branches and cavities used by bats and invertebrates. Scattered trees also help connect habitats, allowing wildlife to move more easily through the landscape.

4.32 A hybrid (intensive) green and blue roof will foster a rich ecological environment by incorporating a variety of vegetation and capturing rainwater. This integration not only enhances the building's connection to the surrounding landscape but also creates unique habitats for wildlife, offering essential foraging opportunities and supporting biodiversity.

4.33 To maximize the rewilding of the site, a naturally rusted estate fence encircles the residential area, clearly defining its boundary while allowing the surrounding rewilded land to flourish. This rustic fencing blends seamlessly into the landscape, minimising visual disruption and enhancing the aesthetic harmony between the built environment and nature. By containing the residential space, it prevents non-native plant sprawl and disturbances from domestic activities, fostering enhanced biodiversity and supporting local wildlife. The design also encourages residents to explore the adjacent rewilded areas, promoting a deeper appreciation of the local ecology and responsible stewardship of the environment. In summary, the boundary not only serves an ecological function but also creates a harmonious coexistence between nature and habitat.



Habitat Creation Examples 02

3. Additional Ecological & Landscape Enhancements

4.34 The additional ecological enhancements proposed as part of the proposal do not contribute to the mandatory (BNG) net gain requirements, but have been included nonetheless due to the scheme's overall rewilding ethos. This will further enhance the local ecology by creating additional unique habitats and foraging opportunities.



Additional Ecological Enhancement Examples

4.35 In woodland management, retaining and increasing standing and fallen deadwood enhances habitat diversity. Selected trees may be transformed into monoliths, while intentional damage accelerates decay, creating microhabitats. By leaving felled timber in various conditions (deadwood log piles), fungi, invertebrates, and other woodland wildlife will be supported, enriching the ecosystem and promoting a healthier landscape.

4.36 Logs from woodland management will be stacked to form walls that merge from the building into the landscape. Deadwood log stack walls provide essential habitats for various species, supporting fungi, beetles, and small mammals. By allowing these structures to decay naturally, they enrich nutrient cycling and create microhabitats that enhance biodiversity. These walls serve as both a functional boundary and an ecological asset within the rewilding landscape, fostering healthy ecosystems.

4.37 Soil banks will be introduced to provide topographical diversity, creating varying moisture levels and soil conditions. These conditions support a wider range of plants and insects. Sunny slopes provide warm basking areas for reptiles and invertebrates, while sheltered areas offer cover for amphibians and small animals. By increasing topographic diversity, soil banks help create more varied habitats, ultimately facilitating complex ecosystems and supporting greater biodiversity.

4.38 Throughout the site, a dense network of new Hibernaculum structures, formed by stacked logs, provides rich habitats for invertebrates and insects, offering safe spaces for reptiles and amphibians to rest and hibernate. These refugia play a critical role in sustaining wildlife during colder periods and disturbances, contributing to habitat diversity and resilience in the rewilding scheme.

4.39 The site's landscaping design emphasises ecological balance, creating a harmonious blend between the dwelling and the surrounding wild landscape. By diversifying the native vegetation structures and establishing wildlife corridors, the site enhances habitat diversity and fosters a thriving ecosystem. Additionally, a variety of dedicated habitats will be installed, including bat

boxes, birdhouses, and bee central beehives, which will provide essential shelter and foraging opportunities for local wildlife. This intentional effort not only enriches the habitat for various species but also encourages the presence of seasonal visitors, such as the nightingale, enhancing the area's natural charm.

4.40 Complementing these efforts, integrating built habitats into the dwelling further merges the living space with nature. By incorporating features such as bat boxes, house sparrow boxes, and insect accommodations into the voids of the building's structure, the design promotes seamless coexistence with the surrounding environment. This innovative approach to landscaping and architecture ensures that the dwelling not only meets its residents' needs but also plays a vital role in supporting and enhancing the local ecology.



'Built-In' Habitat Examples

The Rewilding Landscape Masterplan

4.41 Bringing together the separate elements of the rewilding proposal as described above, the Landscape Masterplan will achieve the following significant benefits:

- The rewilding scheme achieves an exceptional Biodiversity net gain, which is three times greater than the statutory requirements. **The proposed scheme achieves a significant Biodiversity net gain of 30.73%** Across a total site area of 5.87 hectares, with 1.92 hectares of irreplaceable habitat.
- The landscaping and proposed dwelling have evolved together to develop an organic scheme that reflects the concept of a tree trunk merging into the landscape.
- A 30-year habitat management and monitoring plan has been agreed to ensure that the full site's visionary rewilding, including the extensive removal of the rhododendrons (INNS).
- Ancient woodland and woodland parcels will be retained and enhanced, with new native woodland parcel planting to strengthen the age diversity of the woodland, enhance wildlife corridors within the site, improve habitat connectivity, provide further screening, and overall enhance biodiversity.
- Selective management of the woodland canopy (suppressed or poorly formed) and the removal of the invasive non-native plants to increase light availability at ground level and create suitable conditions for ground flora to thrive.
- To avoid the creation of a new access driveway, the existing vehicular access track will be utilised and reinforced with an ecological root protection grid and corten steel edging to prevent any damage or adverse impact on the ground ecology.

THE HIDE

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- The landscaping features, such as the path, flower bed edging, and estate fencing, will be in corten steel, which will weather naturally (rust patina). This natural finish will seamlessly blend into the landscape, minimising visual disruption and enhancing the aesthetic harmony between the built environment and nature.

- The existing modified grassland will be significantly enhanced and rewilded, with a mix of native species-rich meadows, diverse scrub, a wild pond, and an orchard, to create a diverse ecological network.

- Excavated materials from the removal of the storage tank concrete remains, and other demolition waste will be recycled and reused in gabion walls. The walls will be primarily used areas in constant contact with water or to retain soil. Ecologically, this also provides further unique habitats and foraging opportunities for the local wildlife. Excess excavated material will also be used to create a suitable sub-base aggregate, thereby minimising the volume of material exported from the site.

- Soil from the pond excavation and building excavations will be reused to fill voids, reinstate the residential garden level, and create new wildlife habitats, such as the soil banks.

- An intensive green and blue roof (Bio-solar) atop the entire dwelling will support a diverse selection of fauna and flora, creating a unique habitat. whilst also providing an on-site optimal renewable energy source (PV) and water management strategy. This unique, innovative green roof will also harmoniously blend the dwelling into the surrounding landscape.

- The landscaping material palette will mimic that of the building, using materials that reflect the local woodland and colour palette, such as wood, local stone, soil from the site and materials that will be able to naturally weather and blend into the site, such as corten steel and the gabion walls, where moss and fauna will be encouraged to populate.

- The biodiversity enhancement goal is to support the site's broader wildlife connectivity and facilitate complex ecosystems. The long-term strategy is about letting nature take care of itself, enabling natural processes to repair damaged ecosystems and restore the degraded landscape, with the dwelling nestled within to harmoniously observe and reap the benefits of the restored wild landscape.

4.42 Planning is concerned with securing improvements and enhancements to our natural and built environment, in the wider public interest. The proposed landscape and ecological strategy for the site will not only significantly enhance the immediate setting of the site and the proposed new house, but it will also result in the conservation and restoration of existing habitats and the creation of several different and significant new habitats, thereby resulting in an overall significant net gain to biodiversity. This innovative rewilding strategy underpins the design proposal and is outstanding in its own right. But it is the sheer quality and skilful assimilation of the dwelling into the rewilded landscape that, together, achieve the design quality envisaged by paragraph 84(e) of the NPPF, thereby helping to raise the standards of design more generally in rural areas. The landscape proposals are exceptional for a development of this kind, but the design quality of the house elevates these proposals to another level.

DD Architects

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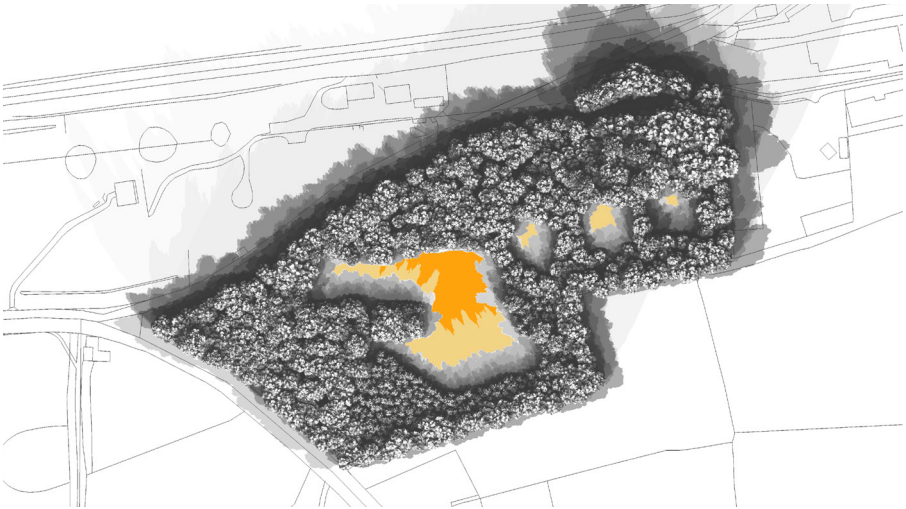
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Design Statement

Proposed New House of Exceptional Design Quality

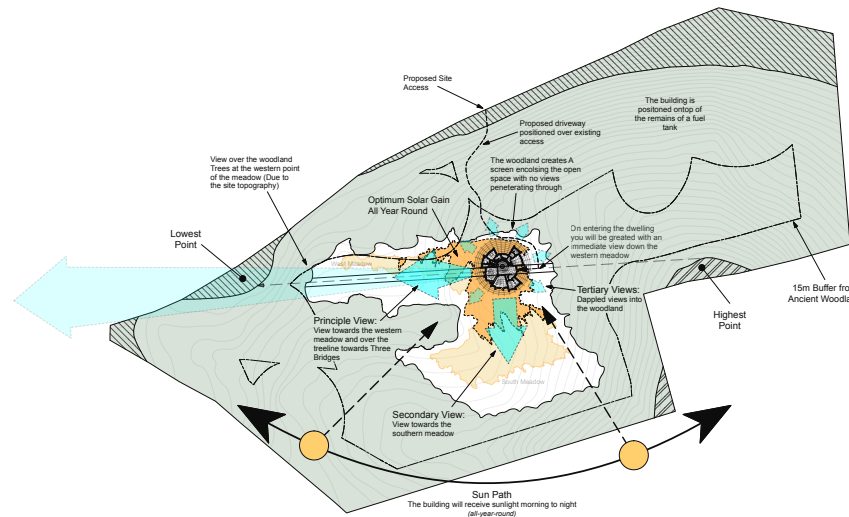
The Design - Site Layout

- 4.43 An extensive and detailed site analysis has informed the optimal position, scale, form and orientation of the proposed dwelling. Formulating a dwelling that sits harmoniously within the landscape and wider exceptional ecological rewilding goals, and enhances the surrounding area's character (See 'Part 13 - Positioning & Orientation' for further information).
- 4.44 To this end, the siting of the proposed dwelling has been informed by a series of other opportunities and constraints identified through the site analysis, developed in unity with the landscape and ecological design strategies outlined earlier in this statement. Key amongst these decisions was the desire to protect the clearing within the site and to minimise disruption to the woodland.
- 4.45 Respecting the integrity of the woodland is a key component of the design proposal and has directly informed the design concept. The dwelling was deliberately sited outside of the woodland root protection areas to avoid loss or damage to any existing trees (15m minimum).
- 4.46 To this end, the conceptual approach to design adopted by the proposals creates a high-quality house, cleverly designed as a contemporary regenerative building that seamlessly integrates with the landscape, maintains and enhances key landscape features on the site, and significantly enhances wildlife habitats and biodiversity. This whole-site design approach is truly unique.
- 4.47 The solar shading study highlighted that the central parts of the site, in the location of the greatest expanse of open glade, achieved the most daylight and the majority of direct sunlight throughout the day. The middle part of the day is when the central glade receives the most sunlight (approx. 13:00hrs), and this gradually dissipates as the sun moves around to the west. However, during the winter months, when the sun is set lower in the sky, a larger area of the open is shaded at ground level. The solar shading study revealed an optimum position (between 3m and ground level) on site that would ensure the dwelling receives sufficient solar gain year-round (passivhaus). Above 6m, the study revealed that the area receives full sunlight year-round (weather permitting), ensuring the rooftop solar panels are also in an optimal position.



Combined Sun Study - Showing Optimum Solar Gain Location

- 4.48 Layout design drivers other than the solar gain study amd woodland, include site history (positioning of the fuel storage tanks), public and private spaces within the site, site topography (the slope of the site), conservation of the ancient woodland, enhancement of the woodland, outlook (views throughout and over the tree belt enclosure), and the location of the existing routes and driveways within the site.
- 4.49 The proposal has been carefully developed three-dimensionally, ensuring that the scheme makes full use of the site's natural topography. This enables the dwelling to nestle within the landscape whilst providing breathtaking views within and outside the site (over the tree line).



Proposed Orientation & Sitting - Site Plan

- 4.50 The house has been strategically positioned towards the north-east of the central open space, following an extensive analysis outlined in the design development statement. There are several reasons for and advantages resulting from the sitting of the house in this location:
- The house is carefully positioned outside of the shadow created by the mature boundary woodland, thereby maximising solar gain and optimising the solar roof (PV panels).
 - The open aspect of the site, which is a key landscape feature, is retained and enhanced through appropriate landscape treatment.
 - Positioned on the existing slab of one of the fuel storage tanks previously on the site. Reducing the adverse impact on the ground ecology.
 - The house is orientated and positioned to appreciate the views and openness of the species-rich lowland meadows within the woodland enclosure.
 - The proposal utilises a much-reduced driveway to ensure more of the landscape is returned to nature. The remaining driveway will be reinforced with a tree root protection gravel grid, providing an ecological surface that safeguards the existing and enhanced ground ecology.

- The house is positioned to take advantage of the site's topography, composing a unique primary view over the tree belt enclosure (to the west of the site).
- The garage is located within the dwelling area to minimise additional intrusion into the landscape and maximise the site's rewilding potential.

4.51 The building's siting, landscaping, and rewilding (ecological enhancement) have been collaboratively developed by the architect (DD Architect), Landscape Designer (Nicholas Dexter), and Ecologist (Arun Ecology) to create a harmonious design that not only merges with the landscape but also significantly enhances it.

4.52 The design has been carefully developed three-dimensionally, ensuring the scheme makes full use of the site's natural topography. As a result, the dwelling has also been developed around the 'Raumplan Theory'. It provides residents with spaces at different levels for different needs, complemented by breathtaking views from the dwelling. The proposal will offer a unique, innovative dwelling that enhances the local context and character.

4.53 Through our extensive and critical site analysis, we have established the optimal position and orientation of the proposed dwelling. The resulting location has thoughtfully responded to the site's history, outlook, shadow, sun (passive solar gain), access, topography, root protection areas, terrain and biodiversity to ensure that it sits harmoniously within the local environment and enhances the character of the surrounding area.



Proposed Site Layout

- 4.54 The proposed site layout has been carefully considered to respond to the site's immediate and wider context and would clearly make a positive contribution to the landscape. The woodlands surrounding the clearing have been largely untouched to maximise the potential for rewilding (BNG) across the site.
- 4.55 Building construction is not a clean operation, as excavation work disturbs otherwise ecologically rich soil. Therefore, the proposal seeks to minimise this disturbance during construction by localising all building work within one area, which has historically been ecologically degraded.

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- 4.56 The building footprint is located on the remaining concrete slab and foundations of the historic fuel storage tank; the dwelling's garage will also be located underground within this area, with the residential garden area above, maximising the potential rewilding area. Reducing the proposal's overall landscape and ecological impact by minimising further disturbance in other areas around this sensitive site.

The Design - Concept Evolution

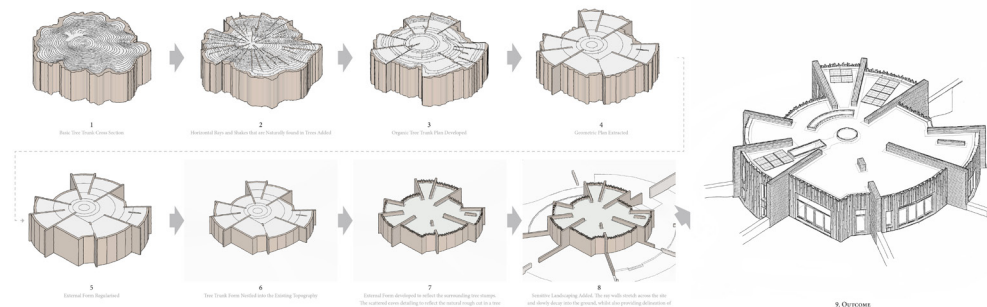
- 4.57 The central concept for the house's design and appearance was inspired by the cross-section of a tree trunk (as shown in the design development statement - Part Fourteen). From this inspiration, the two principal elements of the dwelling (external form and internal layout) were developed, creating a series of unique internal spaces that sit harmoniously within a highly attractive and resolved visual façade.



Concept Precedent Imagery

External Form:

- 4.58 The external form has been jointly developed alongside the 2D internal layout, ensuring that both the internal space requirements are satisfied and that the external form responds effectively to site constraints, such as topography and views across, whilst also making optimal use of solar gain, initially by removing the North-facing segments. The developed external form has extracted an architectural language from the original organic tree trunk and regularised the features to form a series of buildable geometric components.



3D Concept Realisation - External Form

- 4.59 The form has been developed into a series of segments of varying lengths that have been carefully adapted to internal and external parameters. Critically, two of the segmented areas were altered to signify the entrances and provide the principal strategic view through the dwelling, into the west



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meadow and over the woodland tree line. Floor-to-ceiling glazing has been integrated into the facade, maximising the views out and the daylight entering the dwellings (Passivhaus).

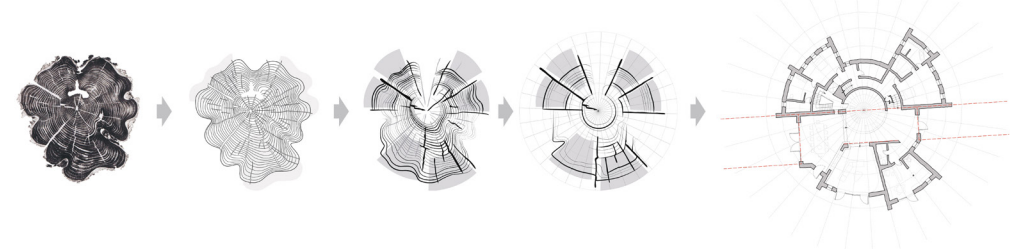
4.60 The concept was conceived to reflect the surrounding tree stumps, with the form and detailing evolving from these organic forms into a beautiful and buildable proposal. A tree trunk is not a clean-cut form; it has cracks, breaks, and texture at the micro and macro levels, which have informed its development. For example, the scattered eaves detailing and green roof have evolved, reflecting the natural irregular rough ridges and new growth seen on top of aged tree stumps.

4.61 The proposed “ray walls” take inspiration from the anatomy of a tree trunk, which features horizontal rays that radiate outward from the centre (pith) to facilitate the radial transport of nutrients and water. These rays are essential to the tree’s survival, and, as such, we have emphasised their importance by incorporating them into the design to define the building’s internal spaces and support the building services. The ray walls also extend across the site, gradually merging with the ground while also organising residential garden areas and enhancing the overall rewilded landscape.

Internal Layout:

4.62 The dwelling evolved from the central concept of a core structure surrounded by a series of varying-length segments. Each segment has been thoughtfully designed based on key site features, topography, views, and internal room requirements, seamlessly integrating the building’s layout with its surroundings. This approach transformed the home into a cohesive series of segmented spaces with purposeful lengths, widths, and heights, all converging around the central kitchen, the hearth, serving as the heart of the house.

4.63 The central core of the dwelling (kitchen) was established to provide a fixed point from which the rest of the spaces (segments) are anchored. The living spaces were positioned on the sloping terrain, and the outer walls were then raised to ensure the rooms receive full daylight all year round (passive solar gain). The combination of the dwellings’ sitting and 360° aspect assembles unique and special opportunities (views) to enjoy wonderful moments as one passes from one space to the next. This creates not only a highly attractive and unique visual envelope for the building but also fantastic internal spaces within it, rarely experienced in a residential environment.

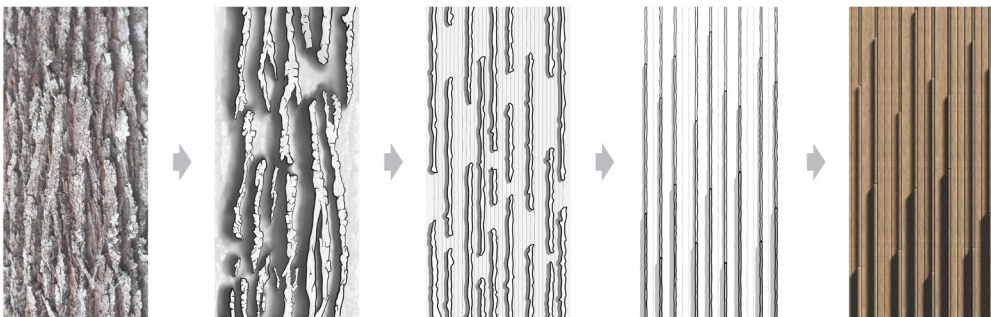


2D Concept Realisation - Plan

4.64 The philosophy of the trunk concept has been further developed in the interior using ‘The Raumplan Theory’, reflecting the harmony of the external form. (As per The Raumplan Theory) The spaces are divided by level changes arranged and designed based on their importance and space requirements, in combination with the site’s natural level changes. The dwellings’ combined sitting areas, spatial arrangements, and 360-degree views create unique, exceptional views to enjoy beautiful moments as one passes between and within spaces.

Bark Cladding Detail:

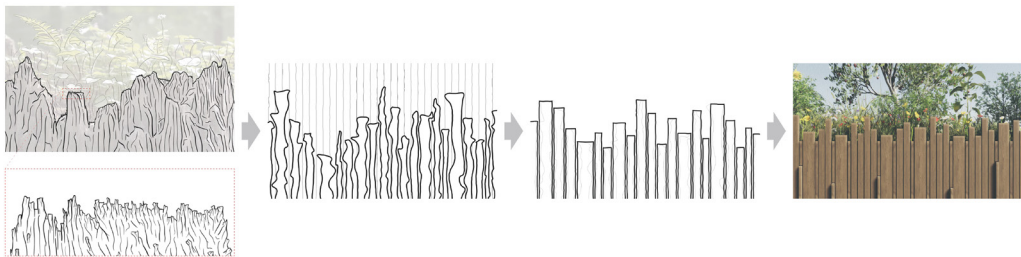
4.65 In addition to developing the internal layout and external form, a cladding detail was developed that mimics the shadow and texture of tree trunk’s (bark). The cladding was developed through an extensive, iterative process analysing the surrounding woodland bark to establish an architectural language that could be implemented on the building’s facade. Rather than continuing the bark shadow effect up the facade of the building, it recesses into the cladding to visually lighten the top of the building, mimicking the surrounding trees.



Bark Cladding Development

Scattered Eaves Detail:

4.66 Furthermore, the design of the eaves has evolved from the core concept of the tree trunk, shaped through an extensive iterative process that involved analysing the scattered tree trunks in the surrounding woodland. This analysis aimed to establish an architectural language that resonates with the textures and forms of the nearby tree trunks. The resulting design not only mimics these natural elements but has also been refined to work seamlessly with the developed cladding. This cohesive integration creates buildable eaves details that reflect the irregular rough ridges, splits and cuts observed on aged tree stumps, ultimately reinforcing the project’s core concept and harmonising with the surrounding woodland landscape.



Eaves Detail Development

The Design - Form & Appearance

4.67 Self-evidently, for designs to be considered original or exceptional or outstanding, they will be of a form and appearance that is different to that which already exists. Therefore, planning should not attempt to impose architectural styles or particular tastes, nor stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms and styles. However, it is proper to seek to reinforce or promote local distinctiveness. Moreover, high-quality, inclusive design should address connections between people and places and ensure the integration of new development into the natural, built, and historic environments.

4.68 Throughout the proposal’s evolution, a detailed 3D model has been developed, enabling us to analyse each choice in context. This method allowed us to develop a scheme that is not only highly attractive but also harmonises with the surrounding landscaping. We then extracted the model and developed a series of visualisations that demonstrate the proposal in context. (See ‘Part 14 - Proposed Views’ for further imagery).

4.69 The dwelling is formed from a series of straight/geometric elements, which, in combination with the locally sourced timber cladding, give the illusion of a curved façade while ensuring the dwelling is a relatively simple and highly buildable scheme. The proposal has been meticulously designed to ensure that the harmony of the concentric tree-trunk concept is embodied in both the internal layout and the external form.

4.70 The vertical, lightweight timber-clad building anchors the dwelling landscape, whilst the horizontal timber-clad ‘ray’ walls (which have evolved from the concept) segment the dwellings’ (internal) spaces and extend outwards, merging into the landscape.



South Eastern Meadow View - Dwelling Merging with the Landscape

4.71 The intentional and careful design utilises the natural level changes of the site, forming a dwelling that is nestled into the existing topography and anchored to the landscape, with lightweight vertical timber (bark) cladding echoing the surrounding woodland. Further, the intensive green roof merges the building with the surrounding landscape, enabling innovative biosolar panels to be subtly integrated into the roof.

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4.72 The building has also been thoroughly tested to ensure that the dwelling sits beautifully all year round. Below is an aerial view of the proposed dwelling each season:



Summer



Autumn



Winter



Spring



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The Approach:

- 4.73 The proposal utilises a reduced portion of the existing vehicular entry (from Wallage Lane) to maximise the landscape returned to nature (rewilding). The existing hardstanding is to be replaced with an ecological root protection grid (gravel finish) and corten steel edging, providing a naturalistic surface that safeguards and enhances the existing and future ground ecology, as well as the surrounding flora and fauna.
- 4.74 On approach, the first experience is a view of the dwelling through the dappled woodland, observing its unique frontage and sitting that forms a harmonious threshold between the building and landscape. There are two choices of parking and entry into the property - formal and informal - visitors are guided to the formal entrance by markings on the SuDS roadway. The formal entrance provides guest parking, with the informal entrance accessed from the underground garage.



Dwelling Approach 01
View upon entering the site from Wallage Lane



Dwelling Approach 02
View (left) towards the formal guest parking and main entrance



Dwelling Approach 03
View (right) towards the informal residents underground garage

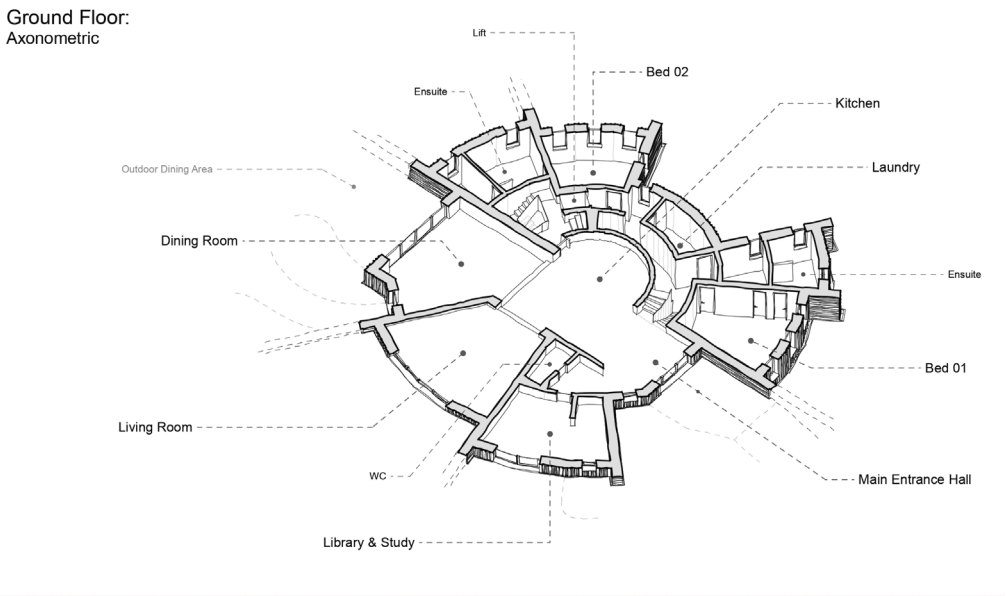
- 4.75 Upon entering the clearing, the dwelling features two access points. The first is the main formal entrance, which includes visitor parking. From the parking area, occupants walk through a large opening in the log pile wall. As you pass through, you are greeted with beautiful views across the southern clearing of the site. Striking corten steel detailing draws your attention to the main, large glazed entrance and, through the building, to the dining room on the other side, overlooking the western meadow area.
- 4.76 The second access point is the informal underground garage entrance, designed for residents' parking. This entrance leads into the lower floor reception area, where you can use the main circulation staircase to reach the ground floor level. This focal circulation space is enhanced by a large glass light that allows natural light to flood the space.



Primary Entrance View

The Design – Internal Layout

- 4.77 The internal layout of the house is designed to respond to local climatic conditions, key site features, and the lifestyles of future occupants. In keeping with the building's irregular exterior, the internal spaces are both interesting and functional, further reflecting the unique tree-trunk concept. This internal layout has been carefully developed through a three-dimensional model, ensuring that every decision contributes to a design that is functional, captivating, and harmonised with the surrounding landscape.
- 4.78 The interior design follows the principles of Raumplan theory, enhancing the unique internal experiences, establishing levels in response to space hierarchy and existing site topography, and blending the interior with the exterior. The general living areas are strategically positioned to face south, maximising direct sunlight, while the bedrooms and utility spaces, which are used less frequently and suit more stable daylight, are located on the north side. The lower ground floor features a series of controlled spaces, with glass floor lights and roof lights incorporated to allow natural light to permeate the areas.



Exploded Axonometric - Ground Floor Internal Layout

- 4.79 On approach to the dwelling from the existing track (north), there are two choices of parking and entry into the house. The main and formal entrance to the house is through a large, striking approach on the east elevation. Upon leaving the parking area and entering the outdoor entrance area, occupants are greeted by beautiful views across the site's southern clearing. On entry into the house, one is greeted by a large, spacious, high-ceilinged entrance hall. With framed views through the kitchen and dining room and beyond into the residential garden and eastern meadow. On the right side of the entrance hallway is access to the dwelling's four bedrooms and main circulation area, and on the left side is the W.C. and coat store. Access to the split-level bedrooms (four) is via a contemporary timber staircase, with natural light spreading across the circulation space from the rooflights; each bedroom has an en-suite and a walk-in wardrobe.

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Entrance Hall View
View towards the bedroom circulation and kitchen through to the dining room

- 4.80 Moving beyond the entrance hall, straight ahead are the open-plan living spaces (kitchen, living room, dining room), which have a continuous glazed connection to the outside, providing a continuous relationship with the rewilded site. The open-plan living space not only offers large views outside but also has access to outdoor areas that wrap around the facade, uniting the dwelling with the outside space and site. The dwellings' positioning and nestled relationship within the rewilded site make it the perfect space to observe and admire the flourishing wildlife and nature surrounding it.



Dinning Room View



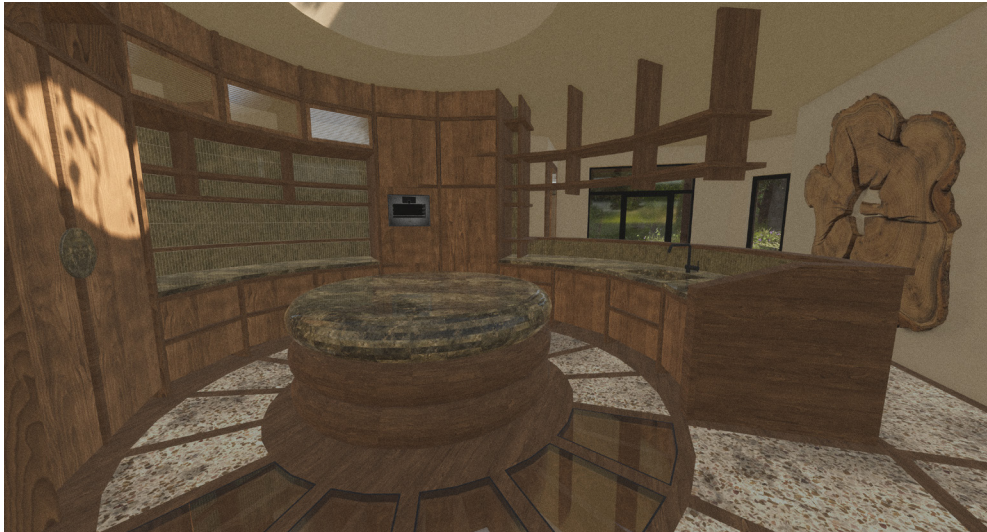
Living Room View



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4.81 The secondary and informal entrance is through the underground garage. Upon entering the house, one is directed toward the reception space on the lower ground floor, which features a large glass light that floods the space with natural light. From this point, occupants can access the northern circulation space to enter the bedrooms, the kitchen, and the large open-plan area. This can either be via the large focal contemporary timber staircase or lift, which has a large rooflight, further allowing light to flood into the space. This entrance is intended primarily for private and everyday use. Upon entering the kitchen, you can see through the building and out into the meadows and woodland beyond through a variety of large glazings, offering an almost 180-degree view from the kitchen. This immediately connects the house to the outside space. The kitchen serves as the focal point of the dwelling, leading to the living room, dining room, library, office, and bedrooms.

Interior Views:



'Heart of the House' (Kitchen) View



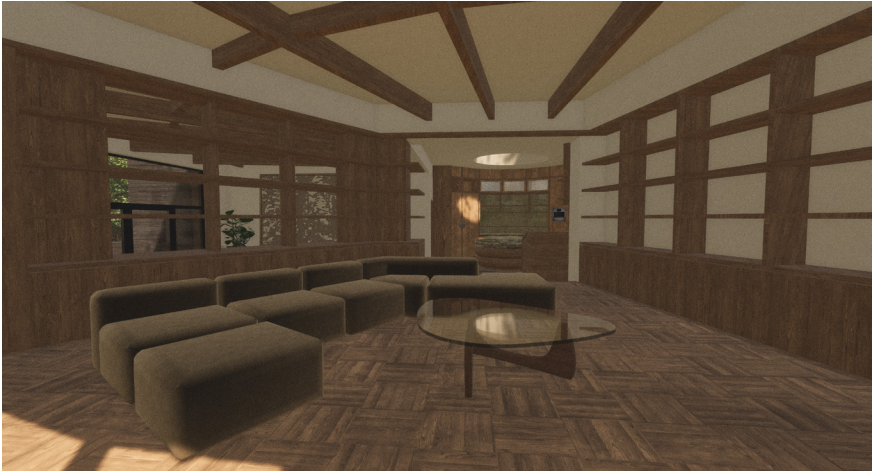
1. Kitchen To Entrance View



2. Kitchen To Living Room View



3. Kitchen To Dining Room View



Living Room to Kitchen View



Dining Room to Kitchen View

The Design - Low Carbon Material Palette

4.82 The rationale for the choice and application of building materials was to select materials that create a highly sustainable, highly efficient building, with finish materials distinctive to the local area that imbue the dwelling with an appropriate sense of place. The materials seek to reflect the building's unique and intimate relationship with nature, choosing materials that beautifully nestle the building within the extensively rewilded site. The materials have been chosen to form a robust, sustainable, buildable scheme with minimal long-term maintenance.

4.83 To this end, construction materials have been selected that have the least embodied energy, that generate the least waste, and prioritise locally available, grown or manufactured materials. This approach extends to residential garden landscaping, ensuring an integrated whole-site approach to sustainable development. The facade emerges from the woodland through a blend of locally sourced vertical and horizontal timber cladding, with an intensive green roof, and alu-clad triple-glazed windows & doors. In addition, subtle corten steel elements, recycled gabion walls, and log-pile walls that merge into the surrounding landscape. The proposed materials harmonise the scheme with its landscape, reflect the local area's characteristics, and ensure the scheme has no negative visual impact.



Primary Material Palette

4.84 The design incorporates an impressive array of environmentally conscious materials that not only enhance aesthetics but also promote sustainability. The locally sourced sweet chestnut timber cladding stands out as a primary feature, chosen for its lower carbon footprint compared to traditional oak. Its vertical installation beautifully mimics the shadow and texture of the surrounding trees, creating a seamless connection between the dwelling and its woodland setting. This natural element is complemented by the horizontal Shou Sugi Ban cladding, which is treated using a time-honoured method to achieve durability and fire resistance, while taking advantage of its low maintenance, non-toxic, and natural pest-repellent properties. This subtle contrast between the vertical and horizontal cladding enriches the architectural facade, creating beautiful depth to the dwelling's appearance, harmonising it with the surrounding woodland, and subtly reflecting the core concept.



Secondary Material Palette

4.85 Additionally, the design includes an innovative intensive green roof that supports a thriving ecosystem of native shrubs, forbs, and small trees, embodying the concept of nature reclaiming its space atop the structure. The use of Corten steel for landscaping elements like edging and fencing allows the material to develop a protective rust patina, further harmonising with the environment and adding to the overall integrity of the landscape. Furthermore, integrating recycled demolition waste into gabion walls demonstrates a commitment to sustainability while providing functional features, such as soil retention. The ecological driveway (root protection grid) effectively safeguards the site's soil and protects the root systems of surrounding trees, ensuring that the landscape thrives for years to come. Altogether, these materials create a harmonious interplay between modern design and natural elements, reflecting a thoughtful approach to sustainable and regenerative building practices.



Birds Eye View Visualisations - Expressing Materiality

The Design - Innovative Low Carbon Strategies

4.86 The proposal integrates a comprehensive low-carbon strategy, demonstrating a **highly innovative** approach to form an overall proposal of **exceptional design quality**. Parts 16 - 18 in the proposal documents provide a detailed breakdown and explanation of the pioneering solutions that have been specifically design and employed within the proposal.

4.87 The innovative low-carbon strategies have been divided as follows:

1.

Innovative Low Carbon Building Strategies:

•

Construction & Materials
2.

Innovative Low Carbon Energy Strategies:

•

Passivhaus Design

•

Power Technologies

•

Heating Strategies

•

Drainage and Water Treatment

Construction & Materials Strategies

4.88 At the heart of the proposals is a comprehensive, innovative low-carbon strategy adopting the principles of 'fabric first'. Before considering how the energy requirements of the house would be met through sustainable means, the challenge in innovation terms was to minimise the amount of energy the building requires to function.

4.89 The Construction & Materials Strategies have been developed in collaboration with an architectural engineering sustainability consultant and certified Passivhaus designer, Dr Rachel Mitchell, from Greenbox Associates Ltd, and a chartered structural engineer, Ralph Tiemann, from Tiemann & Co Ltd. Therefore, the resulting construction and wall build-up details have maximised the scheme's sustainability and buildability whilst ensuring it meets or exceeds the Passivhaus standard requirements.

4.90 Accordingly, to maximise the energy efficiency of the house:

- The walls above ground comprise cross-laminated timber (CLT) panels, externally insulated with a flexible wood fibre insulation, which is supported by a narrow-chord Larsen truss to minimise thermal bridging. Creating a highly sustainable and energy-efficient component.
- The walls and floor slab below ground comprise low-carbon (no cement), waterproof, reinforced concrete groundwork that is continuously externally insulated. The building employs a fully insulated raft system to provide superior thermal performance (thermal bridge-free), and the concrete mass acts as a thermal battery, stabilising indoor temperatures.
- The windows and doors are to be Norrskén Passivhaus Certified High Performance, triple-glazed, triple-sealed, argon-filled, Alu-clad, specified throughout. Or similar approved.
- The warm flat roof comprises a prefabricated CLT roofing structure, with supporting glulam joists, externally insulated with polyfoam roof board (or similar approved), topped with a blue roof attenuation grid and up to 415mm growing substrate (hybrid blue and intensive green roof).

4.91 The Building will be Continuously Externally Insulated (warm roof, under-slab insulation, and external wall insulation). This will remove thermal bridging opportunities and significantly reduce condensation risk, and improve the building's overall thermal performance. Airtightness is achieved through a multi-pronged approach that focuses on sealing CLT joints and protecting the overall structure with a continuous airtight layer (warm side) and a breather membrane (cold side).



Low Carbon Concrete



Insulated Raft System



CLT

4.92 Rather than using traditional pile foundations or shuttering formwork, this proposal will utilise a fully insulated raft system. This permanent insulative formwork offers a more environmentally friendly solution by reducing concrete waste and minimising the amount of manual labour required on-site, resulting in a faster and cleaner construction phase. The systems considered include ISOQUICK® EPS and Cordek Cellcore HX Plus®, both lightweight, prefabricated and pre-cut to fit the specific footprint, with any on-site offcuts 100% recyclable into new products. Additionally, the permanent formwork eliminates the need for traditional timber shuttering, which is often used only once and ultimately sent to landfill.

4.93 In addition, the concrete will be a low-carbon 'Eco' no cement concrete, such as Betolar Geoprime® Cement Free Concrete or Earth Friendly Concrete®, combined with a waterproofing admixture like Permatite®. This innovative choice not only reduces CO2 emissions by up to 80% through the utilisation of industrial by-products such as blast furnace slag, but also offers superior mechanical properties, enhanced durability, and moisture resistance, making it ideal for various applications. By promoting sustainability, it aligns with global efforts to combat climate change and can lower long-term maintenance costs, ultimately representing a forward-thinking solution that balances environmental responsibility with high-performance ambitions for modern construction projects.

4.94 Other than the groundwork, the entire structure (walls, floors & roof) will be formed from a series of prefabricated Cross-Laminated Timber (CLT) panels, which will be delivered and assembled on-site, streamlining construction and minimising labour costs. This solid engineered wood panel, an alternative to traditional concrete slabs, is sustainable, lightweight, and robust, offering excellent acoustic and thermal performance essential for energy efficiency in Passivhaus designs. CLT's superior insulation properties help maintain a stable indoor climate year-round, reducing dependence on heating and cooling systems. Additionally, its nearly waste-free installation process aligns with eco-conscious construction practices, making it an ideal choice for sustainable and regenerative building.



4.95 Wood fibre insulation offers a sustainable, breathable, high-performance, eco-friendly, low-carbon insulation made from wood waste. It offers excellent thermal insulation, superior moisture management, and breathability, contributing to healthier indoor air quality, while providing remarkable acoustic insulation for a peaceful living space. The Larsen Truss system (narrow chords), chosen for its outstanding thermal efficiency and low embodied carbon footprint, features an innovative design that positions insulation between narrow chords to minimise linear thermal bridging. Alternatively, I-joists with thin flanges could be employed to support the external wood fibre insulation, ensuring a robust and energy-efficient building envelope.

4.96 The proposed rooftop design will feature an innovative hybrid of intensive green, blue, and solar elements, providing a range of passive benefits. These advantages include enhanced thermal and acoustic insulation, increased roof lifespan, improved biodiversity, effective stormwater management through water storage, and controlled water release that can be utilised within the building's drainage and water treatment system. Integrating solar panels into the green roof maximises energy output, as the vegetation helps maintain optimal ambient temperatures, resulting in a cooling effect that can boost panel efficiency by up to ~6%. The installation will comprise nine mono-crystalline silicon AIKO N-Type Solar Panels with an expected output of 6.12 kWp. This dual-benefit approach not only enhances solar panel performance but also contributes significantly to the overall environmental impact of the roof.



Hybrid Blue, Green & Solar Rooftop (Biosolar)

4.97 Additionally, the biosolar roof will foster unique biodiversity by creating new diverse habitats. The runoff from the solar panels will generate varied moisture levels, resulting in both damp and dry areas that create a 'habitat mosaic.' This diversity allows for a broader range of vegetation, attracting various species, including butterflies, bees, and beetles. Along with its numerous passive benefits, the rooftop will support a rich selection of native shrubs, forbs, grasses, and small trees, effectively merging the dwelling with its surrounding woodland. This design concept reflects the original vision of an aged tree stump adorned with vibrant vegetation.

4.98 The proposed driveway will utilise the existing vehicular access track to avoid the creation of additional access and thereby minimise additional construction works and environmental impact. The driveway will be created via an 'ecological' and sustainable gravel driveway grid that has an

innovative construction principle which protects the ecosystem and integrates it into the site, Safeguarding the ground life and ecology of the site. It allows for permanent greenery coverage as it provides protection to the turf against pressure loading and shearing forces. It will also protect the soil against post-compression ensuring the ground remains breathable, allowing new thriving vegetation to grow throughout the grid. It will also provides excellent root protection for trees in the site and improved root development (no breakage of the capillaries).

Outline Specification & Passivhaus Credentials

4.99 The Proposals Passivhaus design and specification have been refined with in collaboration with the passivhaus specialist Dr Rachel Mitchell from Greenbox Associates Ltd. They confirmed that this refined design meets and exceeds the criteria to meet passivhaus classic standards in this climate zone. As part of their appopintment they undertook a comprehensive energy statement, where the building has been modelled in Passive House Planning Package (PHPP) and specialist thermal bridge modelling software Flixo.

•	Treatable Floor Area	= 560 m²
•	Airtightness	= Less than 0.6 ach@50Pa
•	Upper Wall u-value	= 0.12 W/m²K
•	Lower Wall u-value	= 0.14 W/m²K
•	Roof u-value	= 0.12 W/m²K
•	Floor u-value	= 0.13 W/m²K
•	Triple Glazed Windows	= Whole window < 0.85 W/m²K
•	Thermal Bridges	= Thermal Bridge Free Design
•	Frequency of Overheating	= 0% (>25oC)
•	Building Surface Area	= 1480.1 m2
•	Building Volume	= 2913.7 m3
•	S/V	= 0.51
•	Space Heating Demand	= 13 kWh/m²/yr
•	Energy Generation	= 15 kWh/m²/yr

4.100 The Passivhaus (or Passive House) standard is a building standard and construction concept designed to drastically increase the energy efficiency, comfort and longevity of a newly built property. Passivhaus buildings are eco-friendly by definition. They use extremely little energy (very energy efficient) without causing any environmental damage. This means that their energy demand can be satisfied by renewable energy sources where, in ordinary, 'inefficient' houses, the effect would be minimal. To meet the passivhaus standard for energy demand the building must use an annual maximum of 15kWh/m²/yr for heating or cooling to maintain the building at 20° C.

4.101 **The Final Design & Specification Achieves The Passivhaus Standard!**

4.102 In the above connection, the proposal is **truly innovative and of exceptional design** in that it is **'well above average', 'special', 'inspiring'** and **'unique'** when assessed against the general standard of normal housing proposals locally and nationally.

Design Statement

Proposed New House of Exceptional Design Quality

Power Technologies - Generation & Conservation

- 4.103 Having made the building envelope as energy-efficient as possible, the low-carbon regenerative strategy then considered how the house's heating and electricity could be generated on-site. Typically, more energy is produced than required in the summer months, and less energy is produced than required in the winter months. The challenge, therefore, is to design an energy system capable of maximising efficiency at all times of the year, both during the day and at night. This requires effective storage of heat and power from day to night, and the more difficult challenge of mitigating the reduced production and greater demand for energy in the winter months.

- 4.104 Grid balancing is perhaps the greatest challenge currently faced by society. Whilst there are sufficient power stations to meet the country's net energy needs, the real concern is the ability to meet peaks in energy demand. Whilst many sustainable developments promote themselves as carbon neutral, this is commonly based on calculations of the development's net energy demand and supply. However, the 'holy grail' in sustainable development terms is the ability to balance energy demand and supply in developments so that sufficient energy is generated and consumed throughout the day and night, and crucially, throughout summer and winter.



AIKO Solar Panels



Tesla Powerwall



ImmerSUN unit



Immersion Element

- 4.105 Electricity is generated by nine AIKO N-Type ABC Black Hole Series Solar Panels to power the house during the day. We intend to produce 5,000kW of electricity for domestic consumption, with the excess being exported to the grid. These cutting-edge monocrystalline silicon panels can each produce up to 615 pW and have an annual degradation of <0.35%.

- 4.106 The proposal includes 3x Tesla Powerwall 3 and 2x expansion pack batteries, for a total of 67.5 kWh of storage capacity. This storage system stores' daytime' solar-generated electricity (surplus energy not used during the day) for use in the evening and at night, providing a 'grid balancing' solution that cleverly eliminates dependence on the grid during peak consumption periods. The rollout of this technology would have far-reaching, positive environmental implications. The Tesla Battery's Secondary output powers the MVHR and Immersion element, which convert excess electricity back into heat for under-floor heating and domestic hot water.

- 4.107 Even during April and September (the longest sunny days of the year), the majority of electricity consumption occurs outside the sunniest part of the day. This leads to most electricity being sent to the grid during the day and to maintaining dependence on the National Grid for more than

12 hours on an average April–September day. Employing Powerwall battery storage as an integral part of the sustainable technology solution for the proposed development creates an opportunity to 'offset' daytime-generated energy for use when demand is at its highest, i.e., the evening.

- 4.108 Additionally, the proposal includes an ImmerSUN unit that transfers all surplus solar-generated electricity to an immersion heater element in the Sunamp Thermal store. This technology minimises the building's reliance on the grid, as on-site solar-generated energy can be stored as heat for use when demand requires. This is the most holistic way to design a truly sustainable dwelling.

Heating Strategies - Generation & Conservation

- 4.109 Vertical Borehole Heat Collectors are a pioneering state-of-the-art, innovative, and sustainable technology that has been integrated into the scheme. Vertical Bore Holes ensure the performance of collectors remains consistent and unaffected year-round, unlike horizontal collectors. Due to the stable temperature at 100m below ground level, it is likely to remain consistent throughout the year, unlike 1.5m below ground level (horizontal collectors). Ground-source heat pumps can also be 300-400% efficient in electricity use and primarily run on solar energy, reducing their carbon emissions to zero. The ambient ground temperature is pumped to the underfloor heating and cooling system (liquid system) to provide effective heating and cooling to the dwelling. This forms part of a wider thermal energy supply strategy for the dwelling, incorporating the use of "Phase Change Materials" in a large thermal heat store, which serves the thermal requirements of the house.

- 4.110 Heat from the ground-source heat pump is transferred to the Sunamp Thermal store, which is filled with phase change materials. These provide latent heat storage, allowing for the hot-water storage capacity of 10 average houses. Using this innovative system is key to harnessing & storing more of the sun's energy.

- 4.111 Mechanical Ventilation Heat Recovery (MVHR) is an essential element of this Passivhaus and low-energy building. The proposed dwelling will be highly airtight, requiring mechanical ventilation to move air throughout the house. Heat from the PCM Heat Stores is transferred to the air through an inline duct heater, and the warm air is circulated through the building via the MVHR system. Fresh air is proposed to enter the same trench as the PV cabling to warm outside air before entering the MVHR system.

- 4.112 Whilst ensuring the house is highly insulated (low heat transmission) and airtight to meet and exceed Passivhaus standards, thermal mass has been utilised internally. This will improve thermal comfort (by stabilising internal temperatures) and reduce energy costs by averaging out the temperature extremes (day-night). Although thermal mass has always been an aspect of buildings, it has only recently evolved into a tool for energy conservation. Thermal mass in a dwelling can act as a thermal battery. During the summer, it absorbs heat during the day and releases it at night to cooling breezes or a clear night sky, keeping the house comfortable. In winter, the same thermal mass can store the heat from the sun or heaters to release it at night, helping the home stay warm. The proposed thermal mass consists of 'eco' concrete slab and ground works (primary) and the underfloor heating screed (secondary). These materials have highly effective thermal masses due to their high specific heat capacity and high density.

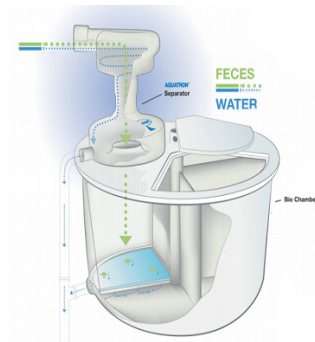
Drainage and Water Treatment

- 4.113 With regard to drainage and water, the conceptual approach is to minimise the need for water and maximise its use. Rainwater from roof runoff is filtered via a two-stage filtration system. Water is heated by the heat store and used in showers and baths. The wastewater is then collected by a Reaqua unit, which filters and treats the water for use in flushing toilets. Incredibly, the Reaqua unit also recycles heat from waste (grey) water and transfers it to the heat store. The solid waste from the toilets is transferred into an Aquatron System. When the toilet is flushed, the contents of the bowl are transported to the Aquatron System, where approximately 98% of the liquid fraction is separated by using the momentum of the flushing water, centrifugal force and gravity.

- 4.114 The solid waste falls into the bio chamber, where bacteria compost it and, if desired, by worms. The composting process is free of odour and flies because the bio filter is ventilated, and the small amount of liquid that follows the paper down into the bio chamber is removed by a drain at the base of the bio chamber. The resultant liquid is then sent to the UV unit, where it is exposed to ultraviolet (UV) light, which kills the bacteria. In this case, the liquid (foul water) is treated by a packaged water treatment plant before its transportation to a 3,000-litre rainwater harvester for reuse.

- 4.115 The rainwater harvester also collects surface water to maximise water efficiency. Potable water can be used to irrigate the area, and overflow water is directed to the drainage basin, which will become an enhanced seasonal wetland, with resulting ecological and biodiversity benefits.

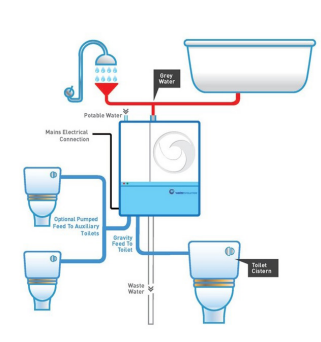
- 4.116 The solid waste, once treated, forms rich compost, perfectly suited to growing fruit and vegetables if the residents decide, or it can be scattered over the meadow for nourishment.



Aquatron



ROCA W+W



Reaqua +

- 4.117 The dwelling will utilise the ROCA W+W, a washbasin and WC integrated into a single sanitary ware unit. Its innovative system filters washbasin water for reuse in the toilet, whilst optimising bathroom space. A unique, distinct and original design that brings elegance and sustainability to the bathroom.

- 4.118 A foul sewage and surface water assessment was undertaken in May 2021, detailing the proposed sustainable drainage system and foul sewer design. Although this report was created for the previous scheme, the water use and strategies remain the same in this scheme. Overflow water and surface runoff will either be directed to shallow infiltration areas in 0.3m-deep meadow planting or to the drainage basin pond to the south of the dwelling. The proposed drainage basin

has been positioned in the proposed pond/wetland area, and, as part of the proposal, native ferns and wetland flora are to be planted to enhance species diversity.

- 4.119 Rather than a standard hardstanding driveway, the proposal will utilise a self-draining system. The principle of the system is that every raindrop seeps into the ground directly where it falls. This creates permeable, unsealed areas that prevent surface runoff, reduce flooding, and preserve the natural water cycle and groundwater regeneration. The 'ecological' gravel grids protect the ecosystem and integrate themselves into the site, safeguarding ground life and ecology. It protects the soil against post-compression, keeps the ground breathable, and protects groundwater from pollutants. It also provides root protection for old trees and new plantings.

- 4.120 The holistic technical aspects of the proposals and their seamless integration with the rigorous approach to sustainable environmental design (regenerative and rewilding scheme) demonstrate the 'raison d'être' of NPPF paragraph 84 bullet (e) and exemplify what this positive element of national planning policy seeks to achieve.

- 4.121 The submitted proposal is entirely consistent with the NPPF's vision and aspirations.



5.0 DESIGN ASSESSMENT

- 5.1

By way of policy background, as you will be aware, the circumstances in which new dwellings of exceptional quality or innovative nature of design can be approved in the countryside are set out at paragraph 84, bullet point (e) of the Revised National Planning Policy Framework (NPPF24).
- 5.2

The pre-cursor to the NPPF in relation to new housing development in the countryside was Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS7). Contrary to the normal policies of restraint for new residential development in the countryside, PPS7 contained an exciting provision (at paragraphs 10 and 11) that allowed new dwellings to be built in the countryside where they were of outstanding quality and design. Those dwellings proposed under the auspice of paragraphs 10 and 11 of PPS7 are commonly known as “PPS7 houses”.
- 5.3

At paragraph 10 of PPS7, the guidance stated that isolated new houses in the countryside would require special justification for planning permission to be granted, whilst at paragraph 11, the guidance went onto say: -

Very occasionally

, the exceptional quality and innovative nature of the design of a proposed, isolated new house may provide this special justification for granting planning permission. Such a design should be truly outstanding and **ground-breaking**, for example, in its use of materials, methods of construction or its contribution to protecting and enhancing the environment, so helping to raise standards of design more generally in rural areas. The value of such a building will be found in its refection of the **highest standards in contemporary architecture**, the **significant enhancement of its immediate setting** and its sensitivity to the defining characteristics of the local area.
- 5.4

It was this *provision* that allowed planning permission to be granted for the erection of new dwellings in the countryside where they were outside of defined settlement boundaries.
- 5.5

On 27th March 2012 the Coalition Government issued new national planning guidance in the form of the NPPF. Significantly, the provision that allows the erection of houses of exceptional quality and innovative nature of design in the countryside was retained in the new national planning policy framework.
- 5.6

On the December 2024 the Government issued the Revised NPPF, which also retained this provision.
- 5.7

At paragraph 84 of the NPPF (2021), the guidance advises local planning authorities that they should avoid new isolated homes in the countryside unless one or more of the required circumstances apply. One such circumstance is pargraph 84e:

b) The development would represenet the optimal viable used of a heritage assest or would be approporaite enabling **development to secure the future of heritage assets**;

e) The design is of **exceptional** quality, in that it:

Is truly outstanding, reflecting the highest standards in architecture, and would help to raise standards of design more generally in rural areas; and

Would significantly enhance its immediate setting, and be sensitive to the defining characteristics of the local area.
- 5.8

It is clear from the wording of the revised policy that some of the more difficult terms in paragraph 11 of the former PPS7 were not carried forward into the new guidance. For example, terms such as **‘very occasionally’**, **‘innovative’** and **‘ground-breaking’** no longer appear in the policy wording.

5.9

Whilst there is no doubt that proposals do continue to have to demonstrate that a dwelling proposed under paragraph 84 of the **NPPF** is of exceptional design quality, and rightly so, the removal from the policy of some of these more difficult terms, with the inclusion of paragraph 139 within the **NPPF** (**‘Significant Weight’** should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.’) was a response by Government to encourage and support those proposals that genuinely seek to raise the bar of quality in the design and execution of new dwellings in the countryside. Significantly, the objective of the policy is not one of constraint, but one of aspiration.

5.10

When assessing any application submitted under the auspices of paragraph 84 (e) of the NPPF24 it is therefore important to establish what **‘exceptional’** means. **‘Exceptional’** means unusual, not typical. Such dwellings should be **‘well above average’**, **‘special’**, **‘inspiring’** and **‘unique’**. It is evidently important that the benchmark of **‘typical’** is understood when considering a proposal in relation to Para 84 of the NPPF.

5.11

The appropriate benchmark is therefore an assessment of a proposal against the general standard of normal housing proposals in this country. As explained above, paragraph 84 (e) is a positively focused part of national planning policy, which is both aspirational and, most importantly, **achievable**. The NPPF is clear in its purpose to promote and support improvements in the design and sustainability of new housing in England.

5.12

The existence of a policy such as paragraph 84 (e) is testament to the desire of Government to facilitate the building of better quality dwellings in rural areas. The policy is a response to the reality that, despite the drive to improve the design quality of new housing generally, new housing continues to be very ordinary and with very poor environmental considerations.

5.13

The NPPF also advises that housing applications should be considered in the context of the presumption in favour of sustainable development.

5.14

Whilst it is recognised that one of the core planning principles for achieving sustainable development is actively managing patterns of growth to make the fullest possible use of public transport, walking and cycling and focusing significant development in locations which are or can be made sustainable, sustainable development in planning terms is a much broader concept embracing a whole host of objectives.

5.15

There are three dimensions to sustainable development which give rise to the need for the planning system to perform a number of roles – an economic role, a social role and an environmental role. Therefore, to achieve sustainable development, economic, social and environmental roles should be sought jointly and simultaneously through the planning system.

5.16

Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people’s quality of life, including (but not limited to): - moving from a net loss of biodiversity to achieving net gains for nature, improving the conditions in which people work, widening the choice of high quality homes, securing high

quality design

, supporting the transition to a low carbon future, supporting renewabe energy generation, contributing to conserving and enhancing the natural environment and reducing pollution, improving the health, social and cultural well-being for all and delivering sufficient community and cultural facilities.

5.17

It is therefore appropriate to take a broader view of sustainable development. For the reasons described more fully below, it is the case that the proposed development taken as a whole constitutes a sustainable form of development when considered in its full and proper meaning. The development proposals would achieve high-quality, inclusive design that would enhance the visual quality of the area and provide significant biodiversity net gains (rewilding scheme). The proposals would assist in supporting the transition to a low-carbon future by raising awareness of sustainable design and construction and generating sufficient energy to provide for both the needs of the dwelling itself and for additional properties, reducing current reliance on fossil fuels. The proposals would conserve and enhance the natural environment and achieve an overall net gain for biodiversity. The proposals would minimise water consumption, and they would create a new family house, widening the choice of high-quality homes.

5.18

Moreover, the policy provision in paragraph 84(e) specifically concerns new isolated homes of exceptional quality in the countryside. By definition, proposals formulated under the aegis of paragraph 84 of the NPPF will not therefore be in the most sustainable locations.

5.19

However, in this regard, it is also important to take account of the fact that the proposed development does not involve “significant development” that would generate large numbers of vehicle movements, which may otherwise necessitate a more sustainable location to avoid significant harm to overall sustainability objectives.

5.20

For all of the aforementioned reasons, it is submitted that the proposed development would constitute an exceptional sustainable form of development when assessed against the policies in the NPPF taken as a whole.

5.21

The proposed new dwelling is a holistic proposal, which addresses a multitude of considerations and opportunities in its elegant and thoroughly considered design. We have proposed a special and unique dwelling, which is clever in its approach to design and sustainability, and yet sits respectfully within the landscape setting.

5.22

The simple elegant form of the proposed dwelling skilfully assimilates into the site while functionally and formally addressing a myriad of site considerations, including; Setting (the immediate and wider environment), Orientation, Water movement, Solar radiation, Ecology, Biodiversity and Landscape character.

Living with Beauty - January 2020 - The report of the building better, building beautiful commission.

5.23

The purpose of the ‘Building Better, Building Beautiful Commission’ is to tackle the challenge of poor-quality design and build of homes and places, across the country and help ensure as we build for the future. The Commission gathered evidence from both the public and private sector to develop practical policy solutions to ensure the design and style of new developments, including new settlements and the country’s high streets, help to grow a sense of community and place, not undermine it.

THE HIDE

Land at Caldyne Park,
Turners Hill Rd,
West Sussex
RH10 4NB

The report proposes a new development and planning framework, which will:

1. Ask for Beauty

5.24 We do not see beauty as a cost, to be negotiated away once planning permission has been obtained. It is the benchmark that all new developments should meet. It includes everything that promotes a healthy and happy life, everything that makes a collection of buildings into a place, everything that turns anywhere into somewhere, and nowhere into home. In general, all that we seek by way of human health and environmental sustainability is bound up with beauty. So understood beauty should be an essential condition for the grant of planning permission.

2. Refuse Ugliness

5.25 People do not only want beauty in their surroundings. They are repelled by ugliness, which is a social cost that everyone is forced to bear. Ugliness means buildings that are unadaptable, unhealthy and unsightly, and which violate the context in which they are placed. Such buildings destroy the sense of place, undermine the spirit of community, and ensure that we are not at home in our world. Preventing ugliness should be a primary purpose of the planning system.

3. Promote Stewardship

5.26 Our built environment and our natural environment belong together. Both should be protected and enhanced for the long-term benefit of the communities that depend on them. Settlements should be renewed, regenerated and cared for. New developments should be regenerative, enhancing their environment and adding to the health, sustainability and biodiversity of their context. For too long now we have been exploiting and spoiling our country. The time has come to enhance and care for it instead. Designed to ensure that we pass on to future generations an inheritance at least as good as the one we have received. New developments should enhance the environment in which they occur, adding to the health, sustainability and biodiversity of their context, and therefore beauty.

5.27 The proposal is designed to fulfil these three goals; ensuring the site will be a beautiful place where people want to live and can flourish, freeing people for the blight of ugliness by regenerating the derelict and damaged site, and secures the long-term stewardship of the built heritage and surrounding natural environment within the site. Acting as a pacesetter and example of the success of prioritising beauty in all developments.

5.28 Beauty is not just a matter of how buildings look (though it does include this) but involves the wider ‘spirit of the place’. It involves both the visual character and the wider patterns of how we live and the demands we make on our natural environment and the planet. The proposal is designed as a beautiful building, that respects the heritage and landscape of the site and fits into the life and texture of the place. Supporting the cause of beauty on not only one scale but three scales; promoting beautiful buildings in beautiful places, where they are also beautifully placed. The extensive and intrinsic environmental nature of the project is continuous with the pursuit of beauty. Aligning with and exceeding the aspirations of the report.

National Design Guide - October 2019 (Updated 30th January 2021) - By the Ministry of Housing, Communities and Local Government.

5.29 The National Planning Policy Framework makes clear that creating high quality buildings and places is fundamental to what the planning and development process should achieve. This design guide, the National Design Guide, illustrates how well-designed places that are beautiful,

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Plumpton Pit Stop,
Ditchling Road,
Plumpton
BN7 3AF

Design Statement

Proposed New House of Exceptional Design Quality

- enduring and successful can be achieved in practice and forms part of the Government’s collection of planning practice guidance. The National Design Guide addresses the question of how we recognise well- designed places, by outlining and illustrating the Government’s priorities for well-designed places in the form of ten characteristics.
- 5.30

Buildings are an important component of places and proposals for built development are a focus of the development management system. However good design involves careful attention to other important components of places. These include:
- the context for places and buildings;

hard and soft landscape;

technical infrastructure – transport, utilities, services such as drainage; and

social infrastructure – social, commercial, leisure uses and activities.
- 5.31

A well-designed place is unlikely to be achieved by focusing only on the appearance, materials and detailing of buildings. It comes about through making the right choices at all levels, including:
- the layout (or masterplan);

the form and scale of buildings;

their appearance;

landscape;

materials; and

their detailing.
- 5.32

All developments are made up of these components put together in a particular way. The choices made in the design process contribute towards achieving the ten characteristics and shape the character of a place.
- 5.33

An understanding of the context, history and the cultural characteristics of the site and region has influenced the location, siting and design of the proposal. Ensuring it is well grounded in the locality and creates a positive sense of place to help foster a sense of belonging and contributes to well-being and community cohesion. The proposal has evolved with a thorough understanding of the sites opportunities and constraints, forming a proposal that is proportionate to the nature, size and sensitivity of the site and context beyond the site boundary. However, a well-designed proposal shouldn’t copy their surroundings in every way. Instead, the scheme has introduced elements that react to how we live today, to include innovation and to incorporate new sustainable features and systems. Enhancing positive qualities and improving negative ones. Exceeding the guidance of C1 (*Understand and relate well to the site, its local and wider context*) and C2 (*Value heritage, local history and culture*) of the national design guide.
- 5.34

The footprint and access of the proposal has been adapted from the historic fuel storage tank locations and tracks, adding a richness to the scheme from the unique integration of the sites heritage into the proposal in an environmentally sustainable way. The local vernacular has also informed the treatment of façades, characteristic materials and details, surpassing C2 (*Value heritage, local history and culture*) of the national design guide.
- 5.35

Well-designed, sustainable places with a strong identity give their users, occupiers and owners a sense of pride, helping to create and sustain communities. The scheme aims to delight its occupants and passers-by and will cater to a diverse range of residents and other users. Influenced
- by; the distinctive elements of the site, the light and shade cast on the site and an appreciation and understanding of vernacular, local character, landscape and local architectural precedents. The materials, construction details and planting have been selected with care for their context (local vernacular and native species) and are designed to suit the concept. The scheme responds to existing local character by extracting its own unique, high quality and attractive identity. Aligning with aspirations of I1 (*Respond to existing local character and identity*), I2 (*Well-designed, high quality and attractive*)and I3 (*Create character and identity*) of the national design guide.

5.36

Nature contributes to the quality of a place, and to people’s quality of life, and it is a critical component of a well-designed place. Nature has been prioritised so that diverse ecosystems can flourish to ensure a healthy natural environment that supports and enhances biodiversity. New natural features have been harmoniously incorporated into a multifunctional network that supports quality of place, biodiversity and water management, and addresses climate change mitigation and resilience. Food production and recreation provisions have been integrated to encourage self sufficiency, physical activity and promote health and well-being. Surpassing the guidelines of N1 (*Provide high quality, green open spaces with a variety of landscapes and activities, including play*) of the national design guide.

5.37

The landscape design has considered the wider and local context, access, connection between spaces, potential to contribute to strategic systems (water, energy and heat management) and its future management needs. The extensive environmental and ecological considerations produce a large biodiversity net gain that surpasses the statutory requirements of a 10% BNG. Existing areas of valuable biodiversity have been protected and enhanced, with priority given to rare or critical habitats and species. Confirming the project excels beyond the guidelines of N3 (Support rich and varied biodiversity) and N1 of the national design guide.

5.38

The dwellings functional, accessible and sustainable design ensures it fulfils H1 (*Healthy, comfortable and safe internal and external environment*) and H2 (*Well-related to external amenity and public spaces*) of the national guide. The internal environments and associated external spaces are designed to adapt and support the health and well-being of a diverse range of users, taking into account factors such as the ageing population and cultural differences. The comfort, safety, security, adaptability and ease of use designed into the proposal promotes an exceptional quality of life for the occupants.

5.39

The building has been designed as an exceptionally efficient and cost effective dwelling to run, reducing its greenhouse gas emissions and encouraging sustainable lifestyles. Strong attention to detail has been made concerning how the building operates on a day-to-day basis, both now and in the future. Refuse storage, cycle storage, services, utilities and external details like drainpipes and gutters have been thoroughly considered to minimise visual impact, unsightliness and avoid clutter. Fulfilling the points of H3 (*Attention to detail: storage, waste, servicing and utilities*) from the national design guide.

5.40

The proposal aims to conserve natural resources including land, water, energy and materials, responding to impacts of climate change by primarily reducing greenhouse gas emissions and minimising embodied energy. Following the energy hierarchy the proposal starts with; reducing the energy need, maximising energy efficiency and producing renewable energy on-site. The scheme makes the most of passive design strategies to minimise overheating and internal comfort by managing solar gain, layout, ventilation, thermal mass and insulation. Also addressing the potential effects of temperature extremes in summer and winter, increased flood risk, and more

intense weather events such as rainstorms. Fulfilling the ambition of R1 (*Follow the energy hierarchy*), R2 (*Selection of materials and construction techniques*) and R3 (*Maximise resilience*) of the national design guide.

5.41

Designed and planned for long-term stewardship, enables users to establish a sense of ownership and belonging, ensuring the building and site will age gracefully, whilst also able to adapt to users’ changing needs and evolving technologies. Designed so management and maintenance responsibilities are clearly defined for all parts of the development. Being designed and made to last fulfils points L1 (*Well-managed and maintained*), L2 (*Adaptable to changing needs and evolving technologies*) and L3 (*A sense of ownership*) of the national design guide.

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Ditchling Road,
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Design Statement

Proposed New House of Exceptional Design Quality

6.0 CONCLUSION

- 6.1 The central plank of the development proposals is the creation of a highly sustainable house of exceptional design quality that will further the Government's design and sustainability objectives by assisting in meeting the challenge of climate change through high-quality sustainable design and construction, and significant landscape and ecological enhancements, thereby helping to raise the standards of design more generally. Underpinning the proposals is landscape ecological rewilding, which seeks to restore and enhance the landscape and ecological value of the site and surrounding area through the long-term protection of important existing landscape features and the restoration and creation of new landscape features and natural habitats.
- 6.2 The Government recognises that climate change is one of the greatest challenges to modern day society and that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change. This objective is central to the economic, social and environmental dimensions of sustainable development.
- 6.3 Another important facet of sustainable development is high quality design. Good design is a key aspect of sustainable development, is indivisible from good planning and should contribute positively to making places better for people. Planning decisions should not attempt to impose architectural styles or particular tastes and they should not stifle innovation, originality or initiative. It is however proper to seek to promote or reinforce local distinctiveness, respond to local character and history and reflect the identity of local surroundings and materials, while not preventing or discouraging innovation. Local planning authorities should not refuse planning permission for buildings that promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design.
- 6.4 Adopting the Living with Beauty report and National Design Guide as a baseline for good design has allowed the design team to develop a comprehensive design that surpasses the guidance, creating an innovative and exceptional design.
- 6.5 Whilst visual appearance and the architecture of individual buildings are very important factors, securing high quality and inclusive design goes beyond aesthetic considerations to include connections between people and places and the integration of new development into the natural, built and historic environment.
- 6.6 In determining applications, "significant weight" should be given to innovative designs, which help to raise the standard of design more generally in the area. These national planning policy objectives are embodied in paragraph 84(e) and 139 of the NPPF. Whilst the bar set by paragraph 84 is necessarily high, it is clear that the support for houses of exceptional quality or of innovative nature of their design goes to the heart of sustainable development and the Government's objectives for climate change, high quality sustainable design and construction and environmental improvements that is the golden thread running through plan-making and decision-taking.
- 6.7 The proposals emanate from a detailed analysis and understanding of the site and its context with the surrounding area, including the key features and attributes of the landscape character area of which it forms a part. The site appraisal was informed by landscape, arboricultural and ecological surveys undertaken at the outset of the proposals and before any detailed design work was commissioned to provide a rich and in depth understanding of the site and locality. The design approach adopts good practice guidance in achieving high quality sustainable design.

- 6.8 The detailed analysis of the site identified a number of constrains and highlighted a number of opportunities afforded by the specific landscape characteristics of the site and surrounding area. The design and layout of the proposed dwelling is considered to be respectful of its setting within a small area of woodland previously used as fuel storage during WW11. The design reflects the sensitive nature of the site and ensures its long term preservation.
- 6.9 The conceptual approach to the design of the house has evolved from the detailed site analysis and has created a dwelling that reinterprets the local vernacular in a contemporary and highly sustainable way. Creating a design that assimilates with the landscape and brings together the existing woodland, open glades and other landscape features into an integrated whole, set within an informal landscape setting. The proposed materials are also characteristic of the local area and will minimise the visual impact of the scheme.
- 6.10 However, it is not only the outward design of the house that merits strong praise, but the architectural approach to its sustainable design and construction and how this is linked to a holistic approach to integrated on-site energy generation, energy conservation and water and waste management for the entire development.
- 6.11 In this case, the exceptional quality of the proposals cannot be narrowed down to one or two aspects of the development, although the design elements of the house alone are outstanding. The exceptional quality is more far-reaching as it results from a holistic approach to design hereby the interrelationship of design, materials, siting, orientation, energy demands, energy generation, functional use of spaces, location and landscape when taken together would also significantly further the aims and objectives of the Government's core principles for climate change, design and the natural environment.
- 6.12 The innovations proposed as an integral part of the building design and construction, justify considerable praise. The starting point for this truly sustainable house is the building's ability to minimise heat loss and thereby reduce its demand for energy. The proposed house will be one of the most sustainable buildings in the country, performing beyond passivhaus standards.
- 6.13 The innovative series of low carbon energy strategies have not, to date, been implemented in any building elsewhere in the country. In this respect, the energy strategy for the house is highly innovative and truly outstanding.
- 6.14 For all of the aforementioned reasons, it is submitted to the Council that the multifaceted nature of the proposed development represents a truly outstanding and of exceptional design quality, reflecting the highest standards in architecture that will significantly enhance its immediate setting, whilst being sensitive to the defining characteristics of the local area, thereby helping to raise consciousness of high quality sustainable design and construction and of standards of design more generally in rural areas.
- 6.15 The proposals will secure the necessary conservation and enhancement of the landscape characteristics of the site and provide net gains in biodiversity to the benefit of the surrounding area. The application will also result in the safeguarding of the parts of the ancient woodland that remains and will assist in mitigating the impacts of climate change.
- 6.16 There are not considered to be any highway safety or neighbour amenity issues in relation to this application.

- 6.17 Overall it is considered that the proposal is well designed, respects the character and appearance of the site and its surroundings, and will significantly enhance the character of the area, the immediate countryside and public realm. For these reasons the application proposals should be supported.
- 6.18 The surrounding woodland, hedges and trees will be largely screened from the wider countryside; whilst the proposal itself ensures the conservation and longevity of the ancient woodland.
- 6.19 It is considered that the application meets the specific requirements of the NPPF in relation to new homes in the countryside, and increasing biodiversity as a result of its high quality design and proposed woodland management plan and on this basis there is a clear material planning consideration that justifies the grant of planning permission in this instance.
- 6.20 It is therefore respectfully requested that the council supports the objectives inherent within the proposals and gives substantial weight to the benefits that would flow from the grant of planning permission, in accordance with the advice, aims and policy objectives of the National Planning Policy Framework, the suite of plans and documents designed to protect and enhance the landscape and ecological value of our environment.



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