

PART TWENTY
PROJECT EVOLUTION

Design Response to Previous DRP and Council Comments



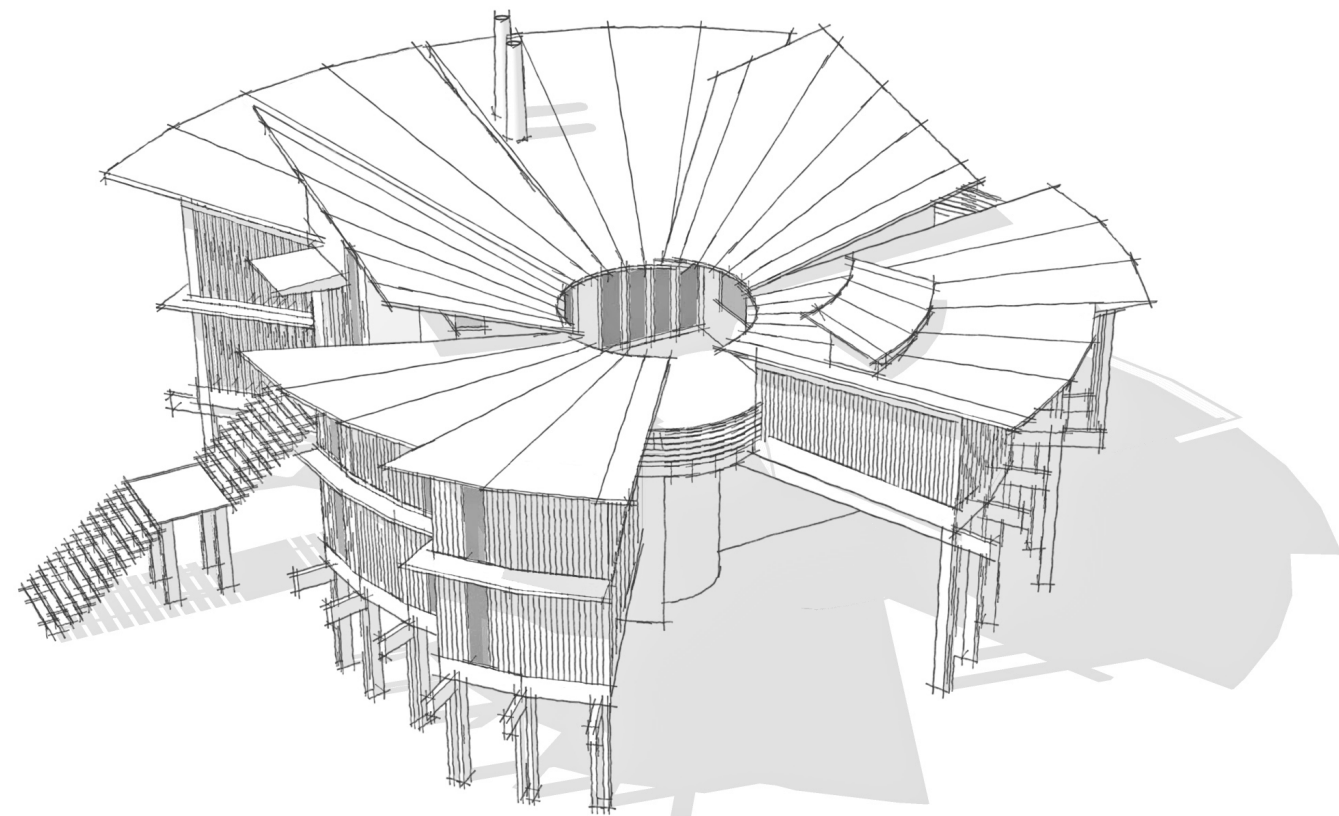
PROJECT EVOLUTION

Design Response to Previous DRP and Council Comments
Scheme Development

Scheme 01
DRP Review - 20.07.2021



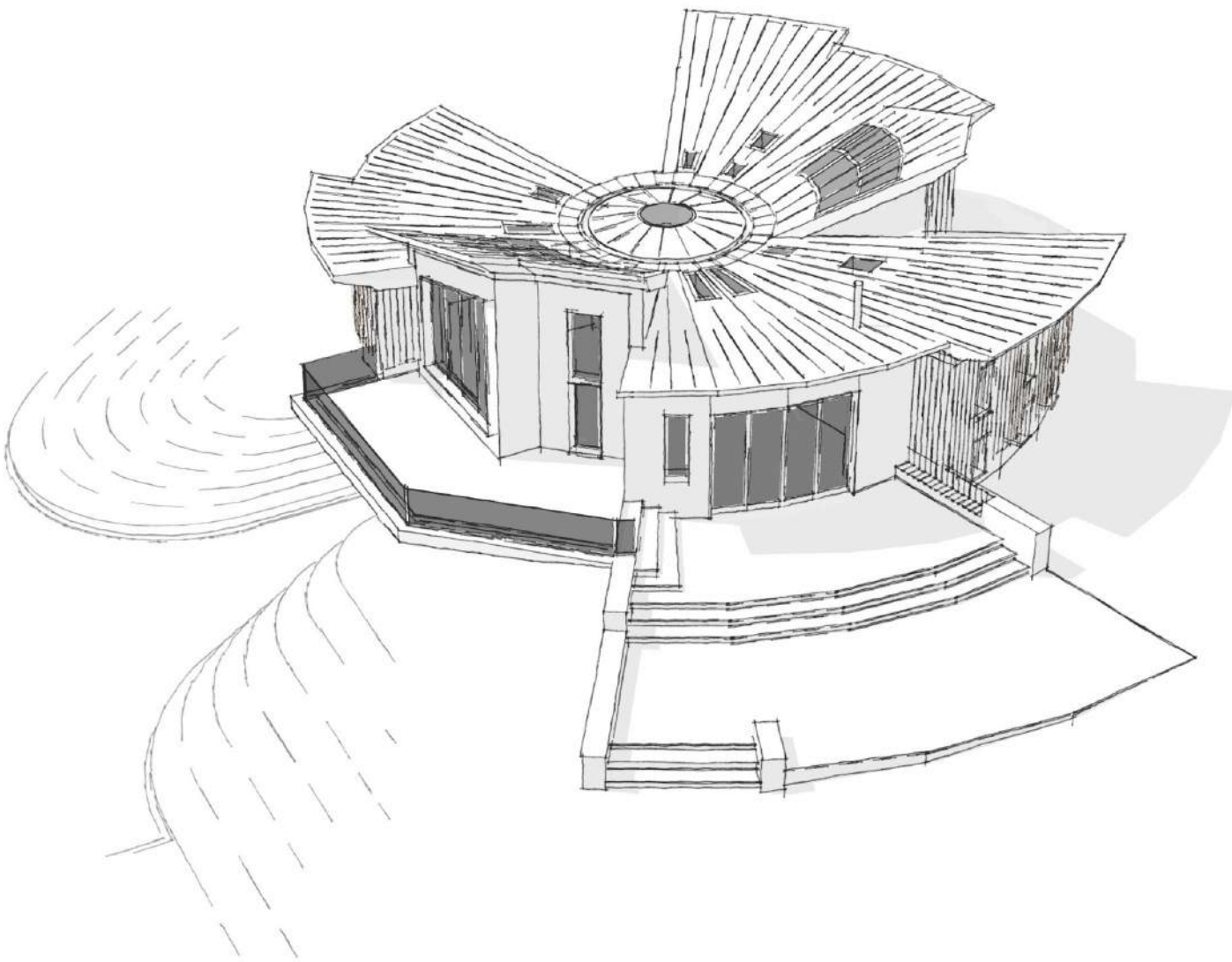
SCHEME DEVELOPMENT
1



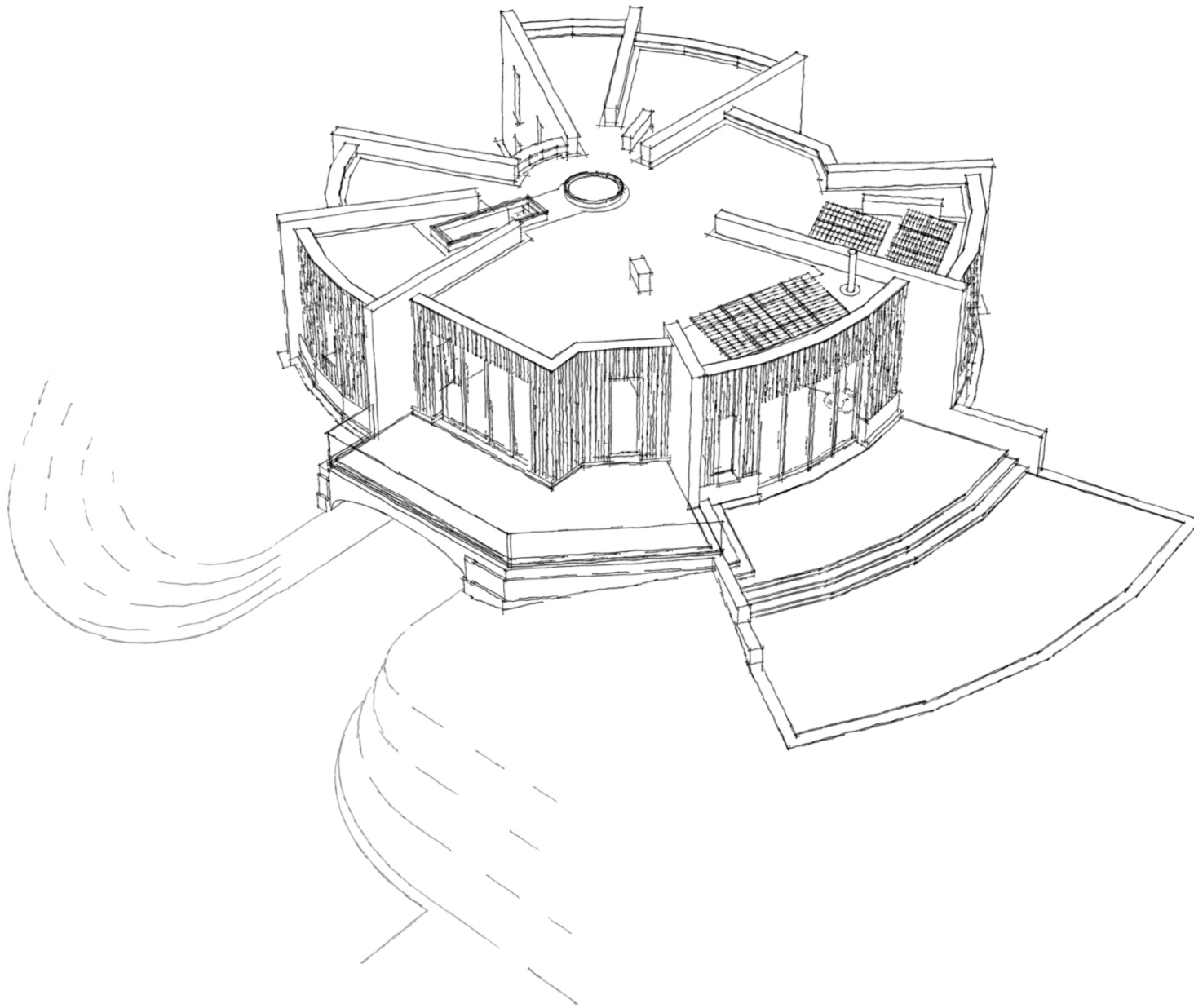
Scheme 02
DRP Review - 11.07.2023



SCHEME DEVELOPMENT
2



Scheme 03
Final Scheme - 2024



CALDYNE PARK

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



PROJECT EVOLUTION

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CALDYNE PARK

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1.0 Introduction

- 1.1

This Statement has been prepared in support of an application for planning permission to erect a new house of exceptional design quality under the policy provisions of paragraph 84 (e) of the NPPF. In addition, NPPF policy paragraph 139 (b) defines that ‘significant weight’ should be given to the proposal’s innovative and outstanding design, promoting high sustainability levels.
- 1.2

This statement will show how the final scheme (Scheme 03) has developed and evolved as a consequence of The Design Panel’s comments; The Planning Officer’s comments and The Council Consultee comments in response to application No DM/21/1345. The key council comments include and are APPENDED to this document:
- A.

Fire Council Consultant Comments - 24th June 2021 by Ian Stocks. *Both conditions were agreed.*

B.

Mid Sussex Design Review Panel Comments - 20th July 2021 by Neil Way (Chair), Mark Folkes, Nick Dexter, Gavin Sargent, Jake White, Phil Winch, Will Dorman (MSDC Urban Designer) and Jacob Lane (Planning Officer).

C.

Flood Risk & Drainage Council Consultant Comments - 13th September 2021 by Natalie James. *The condition was agreed.*

D.

Highways Council Consultant Comments - 13th September 2021 by Kyran Schneider. *All three conditions were agreed.*

E.

Planning Officer Comments - 29th November 2021 by Will Dorman (MSDC Urban Designer) & Stuart Malcolm (Case officer). Email Correspondence.

F.

Ecological Council Consultant Comments - 5th April 2022 by Mike Bird. *The condition was agreed.*

G.

Planning Officer Comments - 26th January 2023 by Will Dorman (MSDC Urban Designer) & Stuart Malcolm (Case officer). Email Correspondence.

H.

Mid Sussex Design Review Panel Comments - 11th July 2023 by Neil Way (Chair), Mark Folkes (Vice-Chair), Phil Winch, Gavin Sargent, Mike Alete, Anna Kramarczyk (MSDC Urban Designer) and Andy Watt (Senior Planning Officer).

- 1.3

Two primary development phases materialised in response to the design review panels’ comments. This can be seen on the page above, showing the scheme submitted for the first design review panel (Scheme 01), the second scheme (scheme 02) submitted for the second design review panel, and the third scheme (scheme 03), which reveals this final scheme.
- 1.4

The council consultant’s comments in respect of the previous scheme 02 (application No. DM/21/1345) are supportive, with the conditions agreed. Although the design has been modified, it is assumed that the consultee comments will remain the same. The scheme’s corresponding features, such as highways and ecology, have either stayed the same or improved (as demonstrated in this supporting document).
- 1.5

For clarity, the project evolution exhibited in this document has been divided into two sections: (2.0) the development from scheme one to scheme two and (3.0) the development from scheme two to scheme three following the two respective Design Review Panel Comments.

2.0 First Development Phase

- 2.1

This extensive development phase represents significant project evolution that responded to the council comments A-G. Every comment from the first design panel note has been included in the section, showing how the project development has responded to them. In addition, the critical comments from the council consultants and planning officer have also been included to support an explanation of the project’s evolution.
- 2.2

The design panel notes and other critical comments have been split and grouped into nine categories to simplify and clarify the key development changes:
- 2.3

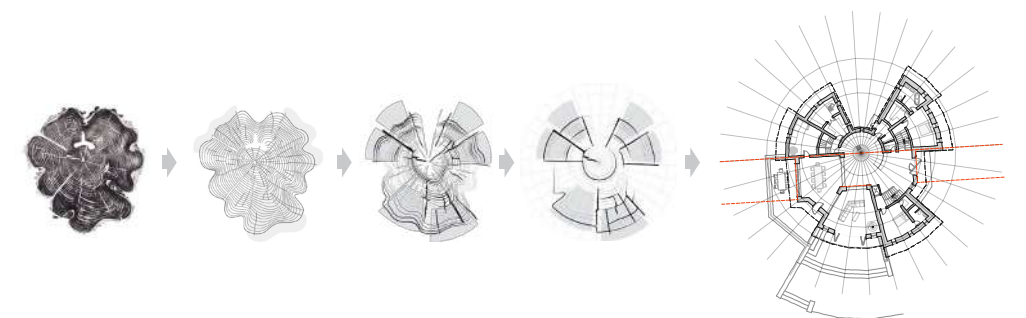
Concept Development:

B - ‘The panel agreed that the concentric circles idea was an interesting concept. Unfortunately, it had not been followed through thoroughly. It would greatly benefit from developing on many levels including materials, layout, sustainability and ecology.’

As a consequence of this review the scheme was extensively redesigned on many levels, with the concept extensively developed into the proposal at multiple layers.

Initially, the concept was evaluated and critically developed to inform the interior layout alongside the 3 Dimensional form. Then, the concept was advanced to inform multiple layers, such as massing, orientation, materials, ecology, sustainability, landscaping and low-carbon strategies. See parts 10 - 19 of this supporting document for further information.

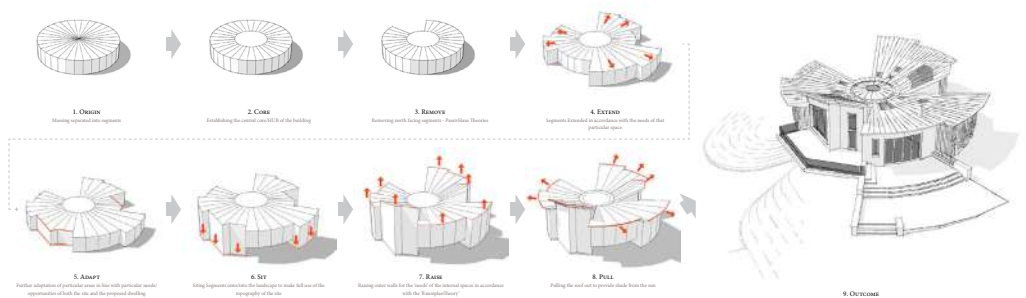
The new scheme has advanced from this core concept, which originates from the cross section of a tree trunk (i.e. 3D form). From this concept The Dwelling formed from a series of varying sections around a central core (The Heart of The House). These sections then form a series of sectional spaces of purposeful length and height, which have been determined by key site features and internal room requirements.



Scheme 2 - Layout Concept Evolution

In addition to this, the evolution of the massing concept started from a central core (aligned with the layout) within variously positioned and lengthened segments to satisfy key site features and internal room requirements. The massing segments were merged into the existing topography whilst also being raised to optimise both solar gain and views. Critically, two segmented areas have been adapted to signify the entrances and provide the principal strategic view through the dwelling into the west meadow and over the woodland tree line.

The combination of the dwelling’s location and 360-degree aspect generates unique and exceptional views to enjoy beautiful moments as one passes from one space to the next.



Scheme 2 - Massing Concept Evolution

However, upon reflection and on receipt of the Design Review panel comments of the 11th July 2023 (H) in respect of Scheme 02, it was decided to re-evaluate and re-develop the conceptual evolution of the external form (See para 3.5 Below) whilst retaining the concept in respect of the central layout. This development has evolved the concept to its logical conclusion, creating a highly harmonious external form that unites with both the internal layout and its setting.

2.4 Sitting:

B - ‘The building seems to sit on the landscape rather than within it and suggested a randomly landed lunar craft... The raised deck idea leads to a dead ground floor elevation with a dark undercroft that results in an uninviting building... The raised platform also makes the building seem remote from its surrounds. The building is not high enough to be above the trees to enjoy uninterrupted views with the added inconvenience of being raised above the ground via excessive stepped accesses. It would benefit from being brought down to ground level where it can better engage the surrounding landscape with the garage placed elsewhere.’

On reflection, we agreed with these comments and redesigned the proposal to merge with the natural level change of the landscape. The ‘lunar craft’ landed on the ground level, with a stone base anchoring the building to the site. A lightweight timber structure sits above, blending into the surrounding landscape (Scheme 2 & 3). On approach to the dwelling’s main entrance is a level entrance with a large striking pivot door, enabling the outside to penetrate the interior space seamlessly. On entry into the house, one is greeted to a large, spacious, high-ceilinged entrance hall, where one is then led towards the core of the building (kitchen), with spectacular 360°-framed views into the surrounding woodland. These views are possible through the dwelling’s exceptional utilisation of the site’s existing topographical level changes. The internal and external spaces are uniquely interconnected and arranged by embracing these level changes - Raumplan Theory.



Scheme 1

Scheme 2

Scheme 3

The proposal has been carefully designed to utilise the natural level changes of the site, forming a dwelling that is nestled into the existing topography. The dwelling is anchored to the landscape through a locally sourced stone base and a lightweight vertical timber cladding above echoing the surrounding woodland. The dwellings unique frontage and positioning within the ground forms a harmonious threshold between the dwelling and landscape.

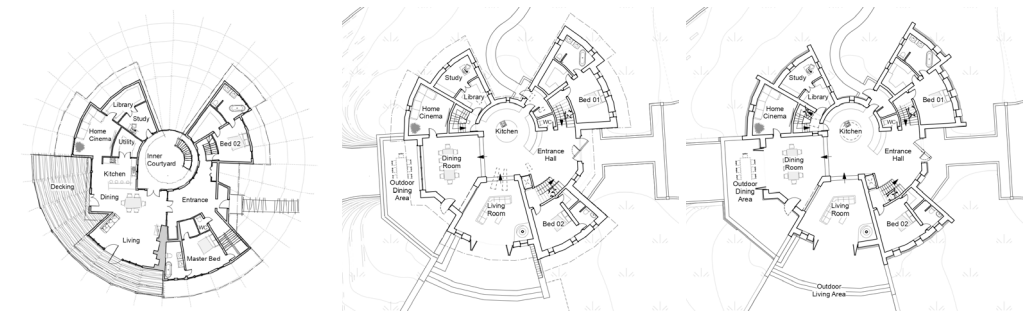
2.5 Layout:

B - ‘The building appears to turn in on itself. The floorplans appear constrained with walls awkwardly angled back on themselves compromising any open plan nature. The central core is very constrained, it needs to be a more useable and attractive space. A more evolved organic form should work better.’

On reflection, we agreed with this comment and sought to evolve the plan from the critically redeveloped concept. By moving the Kitchen to the central core of the building, the overall floor plan developed into a unique, functional and attractive open-plan arrangement, with views and level changes to bring individuality and hierarchy to each space.

The Kitchen moving to the centre of the building, also allows views straight through to the trees beyond in all directions from this communal heart of the building.

In addition, the scheme has been advanced through the adoption of ‘Raumplan theory’, creating a more evolved organic form and layout. The interiors and exteriors interconnected multi-level spaces have been arranged and designed based on their importance and requirements, combined with the site’s natural level changes.



Scheme 1

Scheme 2

Scheme 3

E - ‘Evolving the floorplan to respond to concentric circles / cross section of a tree trunk is an interesting idea, but builds in limitations including generating quite awkward shaped living spaces. While it works better than before, where the floorplan departs from the concentric circles it undermines the harmony and elegance of the concept’

Whilst the rooms are not rectangular, they all perform as required, and better still, they all have direct, expansive views of the open meadow and surrounding woodland whilst also evidently emanating from the heart of the house – the kitchen. The evolved floor plan in scheme 3 generates a series of harmonious and delightful living spaces that manifest the elegance of the concept.



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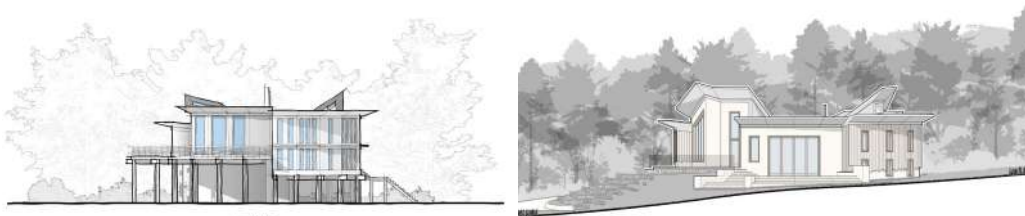
2.6 Scheme Presentation:

B - ‘The drawings need to show the relationship between the different materials more clearly.’

On reflection, we agree that the original drawings submitted did not clearly show the relationship between the materials (Sketched). Therefore, to amend this, we developed a new drawing strategy that clearly shows materials and spatial qualities. Additionally, we added a series of new drawings (such as 1:20 detail sections and exploded axonometrics) and renderings that clearly show the relationships between the different materials.

E - ‘The circular plan is handled as a series of faceted facades, rather than curved ones according to the floorplan but this is not revealed in the elevations which look flat.’

As part of the new drawing strategy, the floor plans were amended to show the building’s rectilinear structure clearly. However, in elevation, the building’s rectilinear elements are obscured by the dry-laid stonework and vertical timber cladding, which give the building the illusion of a curved facade. The proposal has been meticulously designed to ensure the harmony of the concentric concept is also embodied in the external form.



Scheme 1

Scheme 2

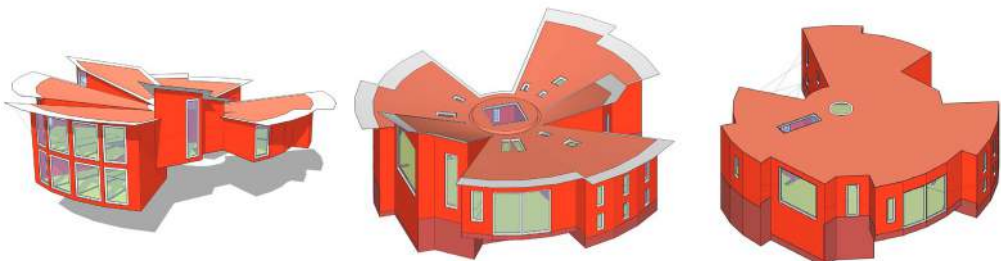
E - ‘Insufficient information/drawings are provided to show the relationship of the building with its context and immediate threshold. The floorplans don’t show them, the scale of the site plan is too small, and the elevations show the surrounds too schematically.’

On reflection, we agreed with this and amended the drawings to clearly show the surrounding context, and the plan scales have been doubled to show further information. In addition, for a detailed understanding of the proposal’s relationship with its context and how it sits elegantly within its immediate threshold, see parts 12 and 13 of this statement. Critically for the new scheme, a series of contextual visualisations have also been created that clearly show the building within its setting - Part 14.

2.7 Passivhaus:

B - ‘The scheme’s Passivhaus credentials were questioned because of the complexity of the design, thermal bridging issues and the need for much thicker walls to meet the standard.’

Sitting the scheme into the ground significantly reduced the complexity of the design. In addition, the Scheme 02 and The Final Scheme 03 have also undergone extensive Passivhaus analysis, critically including DesignPH Software, which ensures the design meets Passivhaus standards. See part 15 of this supporting document for further information.



Scheme 1

Scheme 2

Scheme 3

E - ‘Also if the building is aiming for passivhaus standards, this needs to be demonstrated (and it may be undermined by its relatively high surface area to volume ratio resulting from the series of recesses and projections and its predominantly single storey form).’

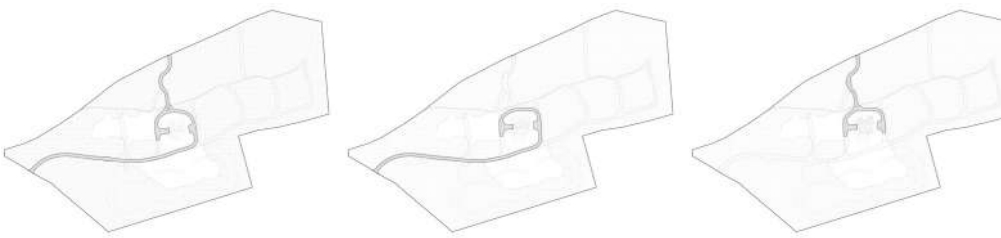
The final design has been analysed using Design PH, which ensures the design meets the passivhaus requirements. This has been demonstrated in Part 15 of the supporting document. In addition, surface-area-to-volume ratio (S/V) is an inaccurate and ineffective indicator of a buildings thermal behaviour as it does not account for many important variables, such as environmental factors and the building envelope (see part 15 for a more detailed explanation).

2.8 Driveway:

B - ‘The landscaping proposals nevertheless suggest the scheme could enhance its setting as it aims to eradicate the invasive rhododendrons and replace them with native species. The long driveway also needs to be reviewed as there is an opportunity to give more back to nature.’

A critical component of the proposal is significantly improving its setting through landscaping strategies that strive to protect and enhance the site’s biodiversity (i.e. invasive species removal and long-term woodland management). See parts 18 and 19 for a more detailed explanation.

On reflection we agreed and developed the driveway to ensure that a lot more of the landscape can be given back to nature. Therefore, an ecological grass SUDs driveway (TTE Turf) will be utilised and positioned on the existing track, mitigating the driveway’s impact on the ground ecology and merging it into the site. Rather than tarmac or other harmful hardstand driveways, this lightweight grass-covered driveway protects the soil against post-compression, maintains the ground’s breathability, safeguards the woodland root system and promotes future planting. In addition, the ecological grass grid offers a natural transition that facilitates an uninterrupted relationship between the living spaces (residential curtilage) and surrounding nature.



Scheme 1

Scheme 2 Development

Scheme 3

G - ‘Using the Wallage Lane entrance allows the drive to be significantly shortened, reducing its impact upon the wider site. The hardstanding still strangles half of the house and could easily be reduced.’

On reflection, we agreed and reconfigured the access to be solely off Wallage Lane, which significantly shortens the driveway and gives further back to nature. However, we disagreed that the proposed driveway is a ‘hardstanding’ that ‘strangles’ the house, as the proposed driveway is a natural ecological grass turf grid that offers an alternative to ‘hardstandings’. The ecologist Mike Bird (**F**) described it as a ‘*naturalist surface*’, which will seamlessly blend with the surrounding vegetation, preventing any negative hardstanding impact. Additionally, the ecological driveway will merge with surrounding vegetation to ensure uninterrupted views across the site and prevent any conceivable strangulation.

2.9 External Form:

E - ‘The external form also does not evoke the harmony suggested by the concentric plan. The overlapping monopitch roofs creates a sense of clutter and the series of recesses and projections generate a series of blank flank returns that lack any positive sculptural quality and look more like an unresolved accident generated by the floorplan... The basement garage and the amount of windowless/retaining walls around it are also a dead hand on the elevation.’

On reflection, we agreed with these comments and further dropped the dwelling into the ground and reduced its height. The original scheme submitted (Scheme 01) was in sketch form and lacked a clear presentation. Therefore, we worked up the scheme and rationalised the roof forms to remove any sense of clutter from any perspective. However, in the most recent scheme (Scheme 03), we further refined the roofline into an intensive green roof, conceived by evolving the concept to its logical conclusion.



Scheme 1

Scheme 2

Scheme 3

The proposal has undergone significant redevelopment that utilises the existing topographical level changes. The building’s orientation and positioning were also developed to provide strategic views across the open meadow and over the tree canopy, and optimise solar gain whilst being nestled within the landscape. Although the proposal gives the illusion of a curved facade, it is constructed from a series of carefully designed rectilinear elements. The dry-laid stonework, in combination with the timber vertical cladding, provides the illusion of curves.

Since the initial scheme (Scheme 01), the proposal has been meticulously and extensively designed to ensure the harmony of the concentric concept is embodied in the external form (Scheme 03); and has been followed to its logical conclusion.

2.10 Garage:

G - ‘The underground parking is still problematic. In addition to being a dead hand on the frontage, it lifts the deck incongruously above the ground and results in the building looking disconnected from its threshold... I think it would be better if the garage was a separate structure and discreetly located perhaps in the woodland area along the driveway approach.’

On reflection, we agreed that the dead hand on the frontage was problematic and disconnected from the threshold. Therefore to solve this issue we redeveloped the scheme to further nestle into the landscape with walling that merges into the ground blurring its threshold. In addition the garage walling dissolves into the topography whilst forming the garage access.

However we do not agree that the garage proposes an intrusive intervention, that should be relocated. This is because;

- The garage is located within the building to allow for direct access throughout the dwelling. Also, by integrating the garage into the envelope of the building (building footprint), it ensures there is no further intrusion into the landscape (in any other location), reducing the overall impact on the landscape and reducing potential ecological disturbances.
- The dwelling is located on the remaining 1-2m thick concrete foundations of the fuel storage tanks that were previously onsite. These foundations will need to be removed as part of the development regardless, to ensure that the biodiversity can thrive.
- I am also sure the reader is aware that building construction is not a clean operation, during building operations the topography of the landscape will change fundamentally we are proposing to minimise this disturbance during construction by localising all building work.

The final scheme (Scheme 03) further developed the building’s relationship with its threshold through the developed tree trunk concept. Resulting in dry-laid stone corbelling that grows out of the ground to support the lightweight timber structure, mimicking a treetrunk base.

2.11 NPPF Criteria:

B - ‘Overall Assessment - The panel support the concept but agreed this scheme was not sufficiently developed and therefore does not currently meet the high standards set out in NPPF para 79(e).’

On reflection, we agreed that the first scheme did not fully meet the high standards set out in the NPPF para 79(e). However, since the first scheme, the project has undergone an extensive redesign that meets and exceeds the high standards set out in the NPPF para 79(e).

Since the beginning of the project, the NPPF has been revised multiple times, changing the key policies related to isolated rural homes to paragraph 84, with significant weight given to paragraph 139. Despite this, the final scheme’s exceptional design exceeds or meets the high standards set out in the NPPF para 84(e), and its innovative nature ensures that ‘significant weight’ will be given to it due to paragraph 139 of the NPPE. Please see part 20, Design Statement, which demonstrates the scheme’s exceptional design and innovative nature.



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3.0 Second Development Phase

3.1 This phase represents the development in response to the previous design panel notes (**H - 11th July 2023**). The design panel notes have been categorised to simplify and clarify the critical development changes (all notes have been included):

3.2 **Existing Site & Surrounding Landscape:**

H - ‘In landscape terms, more evidence and analysis would be helpful to assess how the characteristics of the site and the surrounding landscape has influenced and enhanced the setting and building. More information is needed on ecology, historic field patterns, geology, and landform as well as on the perceptual aspects (such as dark night skies) that helps to build a narrative.’ It is recommended the AONB character is considered as part of the landscape analysis.’

Extensive investigations and analysis into the site and surrounding landscape characteristics were undertaken. Parts 1 - 13 and Part 19 clearly illustrate how the investigations significantly influenced the proposed interventions. Utilising this analysis resulted in an enhanced setting and building of exceptional design quality. Unfortunately ‘Andy Watt’ (who replaced Will Dorman as The Chair of The Design Review Panel) requested that the information relating to the Site and Surrounding Landscape was not required as part of the Design Review Panel presentation (**H**) as it had already been reviewed as part of the Original Presentation (**B**). The Supporting Documents to include the analysis of the site and surrounding landscape were however submitted as part of the Formal Planning Application documents.

3.3 **Ecology Enhancement:**

H - ‘There is limited information in the presentation demonstrating how the site would be enhanced. Whilst the proposal to remove invasive rhododendron is welcome, it is unclear how this would be achieved, over what period and the replanting proposals.’

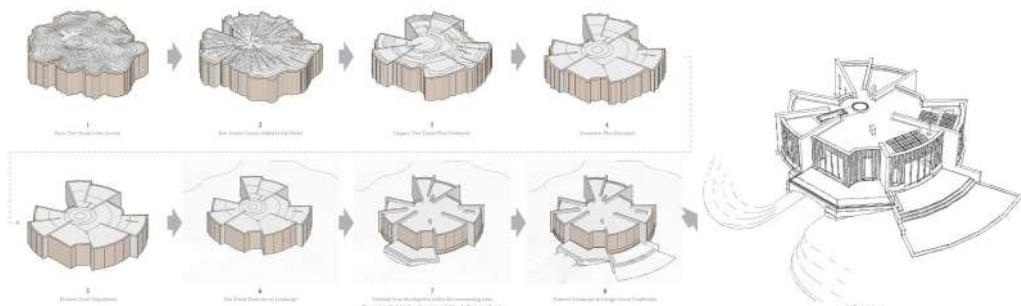
The information regarding rhododendron removal and woodland management is clearly shown in Part 19 (paragraphs 4.0 - 4.27) of The Supporting Documents. Additional information on the rhododendron removal is also presented in parts 8, 9, and 18 of The Supporting Documents.

3.4 **Concept Development:**

H - ‘The Panel were disappointed that the strong ‘tree-trunk’ inspiration had not been followed through to its logical conclusion. The plan form of the house was supported, but the Panel were not convinced how it sits into the site, particularly in terms of its scale (e.g. a 4m high entrance door, an internal double height space without a floor overlooking it) and how the building would be experienced from standing height outside (e.g. the extrusion of exaggerated forms to achieve tall glazed windows). The entrance way and road way appears somewhat excessive, borne from the idea that car parking and services should be located underneath the building. This makes the building sit too high, whereas it could be dropped into the site more and the basement removed.’

Since this feedback, the scheme has undergone an extensive redesign, evolving the concept to its logical conclusion, producing a layout and external form that harmoniously unite within its setting.

The dwelling’s siting has been carefully considered to ensure it sits beautifully within the landscape whilst presenting its unique and exceptional aesthetic. The proposal’s scale is deliberately unique, separating itself from typical dwellings whilst still merging itself within the landscape.



3D Concept Realisation - External Form

Although the DRP has noted the scale and floor-to-ceiling heights, we purposefully determined the proposed spatial qualities to align with the prestige of a dwelling designed as an exceptional dwelling. This design decision is extant within other rural, isolated (manor houses) and historical (Victorian and Edwardian) homes, which feature high ceilings often exceeding 3 meters (average around 3.6). The revised scheme (Scheme 03) offers a dwelling that merges within the landscape whilst affording the occupiers a sense of luxury/prestige with 3.5m ceilings. The high ceilings also allow abundant natural light to enter whilst enhancing its ventilation, supporting the health and well-being of the occupiers.

However, we disagree that the driveway is ‘somewhat excessive’. The driveway sits on less than 15% of the existing trackway, and as described by the council ecologist (Mike Bird - **F**), the driveway offers a ‘naturalist surface’, which will seamlessly blend with the surrounding vegetation and ensure uninterrupted views across the site. In addition, removing the ‘basement’ will have little to no impact on the setting of the dwelling as it has been carefully designed to ensure level access at the main entrance and a strategic view from the dining room across the western meadow and over the tree line. Additionally, moving the garage and services to reduce the roadway would likely cause significantly more ecological harm (see paragraph 2.8 of this statement).

3.5 **Solar Incidence:**

H - ‘The Panel felt that solar panels seem arbitrary in their positioning (oriented NE and NW), not fully tracking the sun around during the day. However, the use of fan-shaped panels manufactured to fit will contribute to an interesting design.’

Alongside the extensive redesign of the scheme, the new proposed solar array have been carefully analysed to locate their optimum orientation and amount to provide the dwelling with sufficient energy all year round.



Scheme 3 - Proposed Solar Panels Orientation

3.6 **Solar Radiation:**

H - ‘The heat gain of the building – with its large amount of glazing on the west elevation – was questioned, as the proposed overhangs will not shade the building sufficiently. The Panel felt that lighter lattice would blend in better, in the manner of a chopped down tree and an understanding of how new growth forms.’

After extensive analysis of the dwelling’s solar incidence and solar strategies, the scheme has been developed to harness the optimal solar gain without requiring shading or risking overheating. Additionally, the scheme has employed many techniques that in part, mitigate any risk of overheating, such as thermal masses and effective ventilation, this can be see in part 15 of The Supporting Documents.

3.7 **Passivhaus:**

H - ‘In sustainability terms, the Panel wish to be assured that the applicants make a clear commitment to Passivhaus certification, so that a planning condition can ensure its implementation.’

The proposal has undergone extensive testing on DesignPH software to ensure the dwelling will achieve Passivhaus certification. We are committed to achieving this - see Part 15 of The Supporting Documents.

3.8 **Material Use:**

H - ‘The use of Corten steel looks like a nice idea, but questioned whether it would be suitable for a door, which is by its nature a tactile feature.’

Corten Steel has been used on entrance doors and offers many benefits compared to other options, such as its superior resistance to atmospheric corrosion, which eliminates requirements for any environmentally harmful paint or protective coatings. Corten Steel is a high-performing, durable, versatile, cost-effective, sustainable (100% recyclable), and visually appealing material that’s natural patina blends seamlessly with the sites natural surroundings.

Therefore, Corten Steel offers an exceptional alternative to typical/standard doorways.

3.9 **Roof Form:**

H - ‘The proposed roof shape would jar, without any finessing of the edges. It seems to sit quite heavy on the building, reinforced by the gunmetal grey colour, so appears quite clunky. It could be simplified in detailing but made more exciting in section and lighter in weight, to reinforce the tree-trunk concept. The colour of the materials overall seemed inconsistent with the warm tones of timber, so perhaps more copper and bronze colouring. The use of stone was questioned, whereas timber could be used above raised land to avoid rot and to give the appearance of being dropped down to the ground, or the stone plinth could be significantly reduced.’

The redevelopment has replaced the gunmetal rooftop with an intensive green roof, blending the building with the surrounding landscape. The new proposed material palette purposefully blends with the tones in the surrounding woodland, using warm tones. In addition, the innovative cladding extracts and develops the texture and shadows seen on bark to further blend with the surrounding landscape.



Scheme 2

Scheme 3

In addition, stone is commonly used in the surrounding area and is a key characteristic that defines the architecture in the wider context, with an operating quarry within 5 miles of the site (See Part Three of The Supporting Documents). The proposed stone corbelling grows out of the landscape, mimicking the growth of a tree trunk with the lightweight timber framing sitting on top. This makes the dwelling appear to be merging into the ground whilst avoiding any rot issues inherent within the construction of a timber building, ensuring the buildings long-term lifespan.

3.10 **Construction Complexity:**

H - ‘The Panel were concerned that the detailed design had not been costed and the development was merely a development plot, which may result in a downgrading of the concept during the implementation phase.’

The redevelopment of the proposal is a ‘low-tech’ approach utilising ‘high-tech’ information that has simplified and refined all aspects of the proposal, inadvertently developing a significantly more straightforward and achievable scheme to construct. The proposed simplified and partially prefabricated construction will also ensure lower costs, improving project viability, and quicker construction, minimising the ecological disturbance of the construction phases.



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In addition, the building utilises traditional materials that define the characteristics of the surrounding area in a contemporary reworked manner to develop a scheme that harmoniously sits within the wider context whilst enhancing its immediate setting.

A Cost Plan undertaken by D.R.Nolans and Co Chartered Quantity Surveyors has been submitted in support of this application.

3.11 **Landscaping:**

H - *‘The Panel expressed concern regarding the hard landscape treatments around the immediate building, such as the extensive gabion terraces and the paved/ patios. For both, these seemingly jar with the landscape, and don’t merge or blend, with the shapes not appearing to be reflective of the natural soft edges of the surrounding woodland.’*

Since this feedback, the scheme has undergone an extensive redesign, re-evaluating and evolving the concept to establish a layout and external form that harmoniously unite with each other and the surrounding landscape. The hard landscaping has also been critically redesigned following this evolved concept.

The organic form of a tree trunk entering and merging with the ground has been critically investigated and materialised into an architectural strategy employed in the proposal, reflecting the natural soft edges of the surrounding woodland.

Stone corbelling extends from the dwelling into the landscape, mimicking the base of a tree trunk merging into the landscape. The outdoor living area patio steps down in accordance with the site’s natural topography to seamlessly merge with the landscape. As a juxtaposition the outdoor dining area is seamlessly elevated to exploit the views across and out of the site whilst merging into the landscape with the use of corbelling (extracted from the concept).

3.12 **Construction Queries:**

H - *‘The following queries also need to be resolved:’*

The following queries have all been resolved. Pls see below.

i. *‘Confirmation that the living room doors are air-tight, split bi-folds on a curve with a U-value of 0.8W/m2K.’*

All doors and windows will meet passivhaus standards; they will be airtight and have a minimum of 0.8W/m2K U-value. The living room doors are not curved and are constructed from four rectangular panels along the segmented two straight faces.

ii. *‘The oversized front door might be difficult to obtain.’*

The front door will be bespoke, and made as a thermally broken and insulated pivot door to ensure that it meets Passivhaus standards. Its size is irrelevant - much bigger doors have been in existence for thousands of years to include the main doors of the Parthenon (Pantheon), which are perfectly balanced so that they can be opened by one person and still have a 2,000 year old lock in operation.

iii. *‘The designPH extract image shows simplified fenestration – does putting in the correct design cause it to fail compliance?’*

Since this feedback, the scheme has been extensively analysed on DesignPH to optimise its Passivhaus credentials. The final scheme tested in Design PH matches the fenestration to the detailed 3D model. Although the image shows a simplified design, this is inherent within the Design PH Software - each component has been defined to represent the final scheme.

iv. *‘Reassurance that achieving air-tightness goals are practical – e.g. the detailed section shows quite a bit of thermal bridging at the first floor deck and the first floor wall / roof junction, as well as air tightness details at first floor deck.’*

This scheme has been extensively analysed and redeveloped, and as a result, the construction strategy has been significantly simplified as part of the new ‘low-tech, high information’ approach. This ensures that air-tightness goals are practical and that very minimal thermal bridging (Passivhaus standards) is achievable. See Drawing Numbers SK50B & SK51 for further construction detailing information.

v. *‘Complex systems tend to fail over time and replaced with simpler ones. In response to the combined low carbon energy strategies page, less is more.’*

This was noted and a critical element of our consideration during the redevelopment. The proposal has been redeveloped with a ‘low-tech’ ethos whilst utilising high-tech information, resulting in construction and sustainable strategies that are effective but simple and achievable. Although there are multiple components to the low-carbon energy strategies, they combine to provide multiple important sustainable and environmentally friendly benefits whilst being relatively simple.

vi. *‘Is the log burner flue on the images shown correctly?’*

Since this feedback, the proposal has been significantly updated, and we can confirm the log burner flue is shown correctly in the proposed images. It is a minimum of 1m above any building opening and 600mm above the highest rooftop feature.

3.13 **NPPF Criteria:**

H - *‘In theory, a paragraph 80 scheme could potentially be achieved on this site, but the current proposal is still some way short. It doesn’t enhance its immediate setting and is not sensitive to the surrounding landscape characteristics... Overall Assessment - Support with amendments to the design and refinement of details. The Panel re-iterated their backing for the concept and the plan form in particular. The presentation was encouraging, but further work needs to be done to ensure that it meets the requirements of Paragraph 80.’*

Extensive analysis of the site and surrounding landscape characteristics have significantly influenced the proposed scheme. This has resulted in a proposal that has carefully remodelled the surrounding landscape characteristics into a contemporary scheme that enhances its

immediate setting. This information is clearly shown in Parts 1 - 12 of The Supporting Documents.

The revised scheme has been extensively re-evaluated in response to the design panels’ feedback, evolving the scheme to a truly exceptional design. The concept has now clearly evolved to its logical conclusion (informing each element of the design), establishing a unified dwelling that sits harmoniously in its setting. The final scheme’s exceptional design exceeds or meets the high standards set out in the NPPF para 84(e), and its innovative nature ensures that ‘significant weight’ should be given as set out within paragraph 139 of the NPPF.

CALDYNE PARK

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



Appendix A: Fire Council Consultant Comments - 24th June 2021 by Ian Stocks.

Appendix B: Mid Sussex Design Review Panel Comments - 20th July 2021 by Neil Way (Chair), Mark Folkes, Nick Dexter, Gavin Sargent, Jake White, Phil Winch, Will Dorman (MSDC Urban Designer) and Jacob Lane (Planning Officer).



WEST SUSSEX COUNTY COUNCIL
WEST SUSSEX FIRE AND RESCUE SERVICE

HYDRANT CONDITION CONSULTATION WITH PLANNING AUTHORITY

Date: 24.06.2021

To: Stuart Malcolm From: Ian Stocks

Planning Ref: DM/21/1345

Address: Land at Caldyne Park Wallage Lane Rowfant Crawley West Sussex RH10 4NQ

Description: Proposed new 4-bedroom dwelling

Date of visit: N/A

RECOMMENDATION

Advice: x Modification: More Information: No Objection: Refusal:

Total number of hydrants required 1

This application has been dealt with in accordance with the statutory obligation placed upon Fire and Rescue Service by the following act;

Fire and Rescue Services Act 2004
Part 5, 38: Duty to secure water supply etc.

1) A fire and rescue authority must take all reasonable measures for securing that an adequate supply of water will be available for the authority's use in the event of fire.

This proposal has been considered by means of desktop study, using the information and plans submitted with this application, in conjunction with other available WSCC mapping and Fire and Rescue Service information. A site visit can be arranged on request.

I refer to your consultation in respect of the above planning application and would provide the following comments:

- 1) Prior to the commencement of the development details showing the proposed location of [1] one fire hydrant or stored water supply (in accordance with the West Sussex Fire and Rescue Guidance Notes) shall be submitted to and approved in writing by the Local Planning Authority in consultation with West Sussex County Council's Fire and Rescue Service. These approvals shall not be unreasonably withheld or delayed.
- 2) Prior to the first occupation of any dwelling/unit forming part of the proposed development that they will at their own expense install the fire hydrant in the approved location to BS 750 standards or stored water supply and arrange for their connection to a water supply which is appropriate in terms of both pressure and volume for the purposes of firefighting.

The fire hydrant shall thereafter be maintained as part of the development by the water undertaker at the expense of the Fire and Rescue Service if adopted as part of the public mains supply (Fire Services Act 2004) or by the owner / occupier if the installation is retained as a private network.

As part of the Building Regulations 2004, adequate access for firefighting vehicles and equipment from the public highway must be available and may require additional works on or off site, particularly in very large developments. (BS5588 Part B 5) for further information please contact the Fire and Rescue Service

If a requirement for additional water supply is identified by the Fire and Rescue Service and is subsequently not supplied, there is an increased risk for the Service to control a potential fire. It is therefore recommended that the hydrant condition is implemented.

Reason: In the interests of amenity and in accordance with Mid Sussex District Plan (2014 – 2031) Key Policies DP18 and DP19 and in accordance with The Fire & Rescue Service Act 2004.

Ian Stocks
Water and Access Manager

Email: frs.waterandaccess@westsussex.gov.uk

p NOTES OF MID SUSSEX DESIGN PANEL – 20th July 2021

Present:	Neil Way (Chair), Mark Folkes, Nick Dexter, Gavin Sargent, Jake White, Phil Winch
Apologies:	Mike Alete
In attendance:	Will Dorman (MSDC Urban Designer), Jacob Lane (Planning Officer)

Land at Caldyne Park, Wallage Lane, Rowfant

Description of scheme
Proposed new 4-bedroom house in the countryside under paragraph 79 of the NPPF (planning application reference DM/21/1345).

Presenter:
Architect/Designer: Conrad Howard (DD Architects)

In attendance
Ward councillor: Christopher Phillips
Case officer: Stuart Malcolm

The Panel's Comments

1. The panel agreed that the concentric circles idea was an interesting concept. Unfortunately, it had not been followed through thoroughly. It would greatly benefit from developing on many levels including materials, layout, sustainability and ecology.
2. The building seems to sit on the landscape rather than within it and suggested a randomly landed lunar craft.
3. The raised deck idea leads to a dead ground floor elevation with a dark undercroft that results in an uninviting building.
4. The raised platform also makes the building seem remote from its surrounds. The building is not high enough to be above the trees to enjoy uninterrupted views with the added inconvenience of being raised above the ground via excessive stepped accesses. It would benefit from being brought down to ground level where it can better engage the surrounding landscape with the garage placed elsewhere.
5. The building appears to turn in on itself. The floorplans appear constrained with walls awkwardly angled back on themselves compromising any open plan nature. The central core is very constrained, it needs to be a more useable and attractive space. A more evolved organic form should work better.
6. The drawings need to show the relationship between the different materials more clearly.
7. The scheme's Passivhaus credentials were questioned because of the complexity of the design, thermal bridging issues and the need for much thicker walls to meet the standard.

8. The landscaping proposals nevertheless suggest the scheme could enhance its setting as it aims to eradicate the invasive rhododendrons and replace them with native species. The long driveway also needs to be reviewed as there is an opportunity to give more back to nature.

Overall Assessment
The panel support the concept but agreed this scheme was not sufficiently developed and therefore does not currently meet the high standards set out in NPPF para 79(e).

PROJECT EVOLUTION

Appendix

CALDYNE PARK

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

Appendix C: Flood Risk & Drainage Council Consultant Comments - 13th September 2021 by Natalie James.

MSDC Planning Consultation Response

Flood Risk & Drainage Team

PLANNING APPLICATION CONSULTATION RESPONSE

APPLICATION DETAILS

Application Number	DM/21/1345
Planning Officer	Stuart Malcolm
Flood Risk and Drainage Officer	Natalie James
Response Date	13/07/2021
Site Location	Land at Caldynes Park, Wallage Lane, Rowfant
Development Description	Proposed new 4-bedroom dwelling.
Recommendation	No objection subject to condition

FLOOD RISK

The application site is over 1 hectare and therefore, under the National Planning Policy Framework, a flood risk assessment is required. The Surface and Foul Water Drainage report includes within its appendices an assessment of flood risk.

The site is within flood zone 1 and is at low fluvial flood risk (risk of flooding from Main Rivers). The site is not within an area identified as having possible surface water (pluvial) flood risk.

There are not any historic records of flooding occurring on this site and in this area. This does not mean that flooding has never occurred here, instead, that flooding has just never been reported.

SURFACE WATER DRAINAGE

The BGS infiltration potential map shows the site to be in an area with high potential. Therefore, the use of infiltration drainage such as permeable paving or soakaways may be possible on site. This will need to be confirmed through infiltration testing on site as part of detailed drainage design.

It is proposed that the development will utilise a rain water harvesting tank and infiltration to manage surface water drainage. A drainage strategy has been produced based on an assumed infiltration rate and designed to cater for the 1 in 100-year storm event with a 40% allowance for climate change. This approach is considered acceptable in principle.

The detailed drainage design will need to utilise on site infiltration test results when sizing drainage features. The rainwater harvesting storage capacity should not be included within the attenuation of the system. This is to ensure the surface water drainage system has enough storage capacity when the rainwater harvesting tank is full.

Further information into our general requirements for surface water drainage is included within the 'General Drainage Requirement Guidance' section.

FOUL WATER DRAINAGE

It is proposed that the development will utilise a package treatment plant with discharge to a drainage field to manage foul water on site. This approach is considered acceptable in principle.

We would advise that infiltration testing will need to be undertaken to ensure the drainage field is designed appropriately. Further information into our general requirements for foul water drainage is included within the 'General Drainage Requirement Guidance' section.

MSDC Planning Consultation Response

Flood Risk & Drainage Team

SUGGESTED CONDITIONS

C18D - SINGLE DWELLING/UNIT

The development hereby permitted shall not commence unless and until details of the proposed foul and surface water drainage and means of disposal have been submitted to and approved in writing by the local planning authority. The **extension/building** shall not be occupied until all the approved drainage works have been carried out in accordance with the agreed details.

Reason: To ensure that the proposal is satisfactorily drained and to accord with the NPPF requirements, Policy CS13 of the Mid Sussex Local Plan, Policy DP41 of the Pre-Submission District Plan (2014 - 2031) and Policy ...'z'... of the Neighbourhood Plan.

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

GENERAL DRAINAGE REQUIREMENT GUIDANCE

SURFACE WATER DRAINAGE

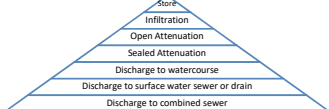
Proposed development will need to fully consider how it will manage surface water run-off. The hierarchy of surface water disposal will need to be followed and full consideration will need to be made towards the development catering for the 1 in 100-year storm event plus extra capacity for climate change. Climate change allowance should be in line with the Environment Agency's climate change allowance recommendations.

The use of pump-out surface water drainage is not considered to be sustainable and therefore would not be considered an appropriate means of managing surface water as part of a development.

Multiple dwellings / multiple unit development will need to provide a maintenance and management plan that identifies how the various drainage systems will be managed for the lifetime of the development, who will undertake this work and how it will be funded.

The proposed development drainage will need to:

- Follow the hierarchy of surface water disposal, as set out below.



- Protect people and property on the site from the risk of flooding.
- Avoid creating and/or exacerbating flood risk to others beyond the boundary of the site.
- Match existing Greenfield rates and follow natural drainage routes as far as possible.
- Calculate Greenfield rates using FEH or a similar approved method. SAAR and any other rainfall data used in run-off storage calculations should be based upon FEH rainfall values.
- Seek to reduce existing flood risk.
- Fully consider the likely impacts of climate change and changes to impermeable areas over the lifetime of the development.
- Consider a sustainable approach to drainage design considering managing surface water at source and surface.
- Consider the ability to remove pollutants and improve water quality.
- Consider opportunities for biodiversity enhancement.

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

FOUL WATER DRAINAGE

This proposed development will need to fully consider how it will manage foul water drainage. The preference will always be to connect to a public foul sewer. However, where a foul sewer is not available then the use of a package treatment plant or septic tank should be investigated.

The use of non-mains foul drainage should consider the Environment Agency's General Binding Rules. We would advise applicants that General Binding Rules 2020 came into force as of 1st January 2020.

The Environment Agency have advised that any existing septic tank foul drainage systems that are found to not comply with the 2020 Binding Rules will need to be repaired or upgraded. As such any foul drainage system which proposed to utilise a septic tank will need to comply with the new 2020 rules. Guidance into the General Binding Rules can be found on the government website (<https://www.gov.uk/guidance/general-binding-rules-septic-tanks>).

This matter can be discussed with Mid Sussex District Council Flood Risk and Drainage Team via planning@mid-sussex.gov.uk.

Plan showing watercourse maintenance strip

Advice: A watercourse maintenance strip of 5 to 8 metres is required between any building and the top-of-bank of any watercourse that it runs through or adjacent to the development site.

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

DESCRIPTION OF DEVELOPMENT	INFORMATION REQUIRED
MSDC curvet under or adjacent to site	Evidence of approval to build over or within proximity to MSDC assets will need to be submitted. Advice: Consultation will need to be made with Mid Sussex District Council. If there is a MSDC owned curvet running under or adjacent to the proposed development. Consultation should be made where such an asset is within 5m of any development. Building any structure over or within proximity to such curvet will require prior permission from Mid Sussex District Council. Normally it will be required that an ' easement' strip of land, at least 5 to 8 metres wide, is left undeveloped to ensure that access can be made in the event of future maintenance and/or replacement.
Watercourse on or adjacent to site	This matter can be discussed with Mid Sussex District Council Flood Risk and Drainage Team via planning@mid-sussex.gov.uk. Plan showing watercourse maintenance strip Advice: A watercourse maintenance strip of 5 to 8 metres is required between any building and the top-of-bank of any watercourse that it runs through or adjacent to the development site.

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

PROPOSED SURFACE WATER DRAINAGE METHOD	INFORMATION REQUIRED
Information	Percolation test results Advice: Sizing calculations, details and plans to demonstrate that the soakaway system will be able to cater for the 1 in 100-year storm event plus have extra capacity for climate change. Climate change allowance for residential development is 40% and for commercial development is 30%. Calculations which show the proposed soakaway will have a half drain time of 24 hours or less.
e.g. Soakaways	Evidence discharge rate will be restricted in accordance with West Sussex Local Flood Authority Policy for the Management of Surface Water. Advice: You cannot discharge surface water unrestricted to a watercourse. Discharge rates should be restricted to the Greenfield Offer runoff rate for the positively drained area for all events up to and including the 1 in 100-year rainfall event with climate change. If works (including temporary works) are undertaken within, under, over or up to an Ordinary Watercourse, then these works are likely to affect the flow in the watercourse and an Ordinary Watercourse Consent (OWC) may need to be applied for. Guidance into the OWC application process can be found on West Sussex County Council's website at https://www.westsussex.gov.uk/the-environment-and-consulting-with-environment-agency-on-flood-risk-and-management-of-rivers-and-water-courses. OWC applications can also be discussed and made with Mid Sussex District Council Flood Risk and Drainage Team via planning@mid-sussex.gov.uk.
Outfall to watercourse	If works (including temporary works) are undertaken within, under, over or up to an Ordinary Watercourse, then these works are likely to affect the flow in the watercourse and an Ordinary Watercourse Consent (OWC) may need to be applied for. Guidance into the OWC application process can be found on West Sussex County Council's website at https://www.westsussex.gov.uk/the-environment-and-consulting-with-environment-agency-on-flood-risk-and-management-of-rivers-and-water-courses. OWC applications can also be discussed and made with Mid Sussex District Council Flood Risk and Drainage Team via planning@mid-sussex.gov.uk.

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

FLOOD RISK AND DRAINAGE INFORMATION FOR PLANNING APPLICATIONS

The level of drainage information necessary for submission at each stage within the planning process will vary depending on the size of the development, flood risk, site constraints, proposed sustainable drainage systems etc. The table below provides a guide and is taken from the [Drainage Guidance for the English non-statutory SuDS Standards](#). Additional information may be required under specific site conditions or development proposals.

Pre-Sub	Sub	Full	Final	Document submitted
✓	✓	✓	✓	Flood Risk Assessment / Statement (checklist)
✓	✓	✓	✓	Drainage Strategy / Statement & sketch layout plan (checklist)
✓	✓	✓	✓	Preliminary layout drawings
✓	✓	✓	✓	Preliminary 'outline' hydraulic calculations
✓	✓	✓	✓	Preliminary landscape proposals
✓	✓	✓	✓	Ground investigation report (for infiltration)
✓	✓	✓	✓	Evidence of third-party agreement for discharge to their system (in principle / consent to discharge)
✓	✓	✓	✓	Maintenance program and on-going maintenance responsibilities
✓	✓	✓	✓	Detailed development layout
✓	✓	✓	✓	Detailed flood and drainage design drawings
✓	✓	✓	✓	Full Structural, hydraulic & ground investigations
✓	✓	✓	✓	Geotechnical factual and interpretive reports, including mitigation results
✓	✓	✓	✓	Detailed landscaping details
✓	✓	✓	✓	Discharge agreements (temporary and permanent)
✓	✓	✓	✓	Development Management & Construction Phasing Plan

USEFUL LINKS

[Planning Practice Guidance - Flood Risk and Coastal Change](#)
[Flood Risk Assessment for Planning Applications](#)
[Sustainable drainage systems \(SuDS\) standards](#)
[Water People Planner - A guide to making planning sustainable drainage into developments](#)
[Climate change allowances for climate change](#)
[Environment Agency guidance](#)
[West Sussex Local Flood Authority Policy for the Management of Surface Water](#)
Further guidance is available on the Sudrain website at <http://www.sudrain.co.uk/resources/>

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

INFORMATION REQUIREMENTS

The following provides a guideline into the specific information required based on the type of development, location and type of surface water drainage management proposed. Multiple lists may be relevant to a single application.

DESCRIPTION OF DEVELOPMENT	INFORMATION REQUIRED
Located in Flood Zone 2 or 3	Flood Risk Assessment which identified what the flood risks are and how they will change in the future. Also, whether the proposed development will create or exacerbate flood risk, and how it is intended to manage flood risk post development.
Located in an area where a significant flood risk has been identified (including increased surface water flood risk)	A Maintenance and Management Plan that shows how all drainage infrastructure will be maintained so it will operate at its optimum for the lifetime of the development. This will need to identify who will undertake this work and how it will be funded. Also, measures and arrangements in place to ensure perpetuity and demonstrate the sustainability requirements, including scheduled maintenance, inspections, repairs and replacements, will need to be submitted. A clear timetable for the schedule of maintenance can help to demonstrate this.
Multiple plot development	Evidence of approvals to build over or within proximity to public sewers will need to be submitted. Advice: Consultation will need to be made with the sewerage undertaker if there is a Public Sewer running under or adjacent to the proposed development. Building any structure over or within proximity to such sewers will require prior permission from the sewerage undertaker. Any development within 5m of a sewer will require consultation.
Public sewer under or adjacent to site	Advice: Consultation will need to be made with the sewerage undertaker if there is a Public Sewer running under or adjacent to the proposed development. Building any structure over or within proximity to such sewers will require prior permission from the sewerage undertaker. Any development within 5m of a sewer will require consultation.

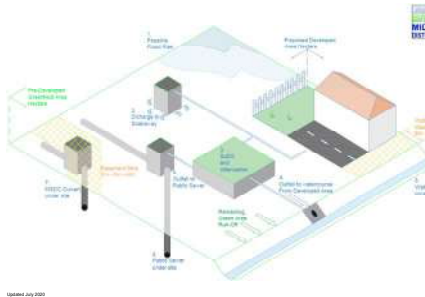
Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance

PROPOSED SURFACE WATER DRAINAGE METHOD	INFORMATION REQUIRED
Outfall to public sewer	Evidence discharge rate will be restricted in accordance with West Sussex Local Flood Authority Policy for the Management of Surface Water. Advice: You cannot discharge surface water unrestricted to a sewer. Discharge of surface water into a foul sewer system is not usually acceptable. Discharge rates should be restricted to the Greenfield Offer runoff rate for the positively drained area for all events up to and including the 1 in 100-year rainfall event with climate change. Unless agreed otherwise with the sewerage provider.
SuDS and attenuation	Evidence any discharge rates will be restricted in accordance with West Sussex Local Flood Authority Policy for the Management of Surface Water. Advice: Consultation will need to be made with the sewerage undertaker if there is a Public Sewer running under or adjacent to the proposed development. Building any structure over or within proximity to such sewers will require prior permission from the sewerage undertaker. Any development within 5m of a sewer will require consultation.

Updated: July 2020

MSDC Flood Risk & Drainage Team: General Drainage Requirement Guidance



Updated: July 2020



Plumpton Pit Stop,
Ditchling Road,
Plumpton
BN7 3AF

Appendix D: Highways Council Consultant Comments - 13th September 2021 & 28th June 2021 by Kyran Schneider.

WEST SUSSEX COUNTY COUNCIL CONSULTATION		WEST SUSSEX COUNTY COUNCIL CONSULTATION		WEST SUSSEX COUNTY COUNCIL CONSULTATION	
TO:	Mid Sussex District Council FAO: Stuart Malcolm	TO:	Mid Sussex District Council FAO: Stuart Malcolm	TO:	Mid Sussex District Council FAO: Stuart Malcolm
FROM:	WSCC - Highways Authority	FROM:	WSCC - Highways Authority	FROM:	WSCC - Highways Authority
DATE:	13 September 2021	DATE:	28 June 2021	DATE:	28 June 2021
LOCATION:	Land At Caldyne Park, Wallage Lane, Rowfant, RH10 4NQ	LOCATION:	Land At Caldyne Park, Wallage Lane, Rowfant, RH10 4NQ	LOCATION:	Land At Caldyne Park, Wallage Lane, Rowfant, RH10 4NQ
SUBJECT:	DM/21/1345 Proposed new 4 bedroom dwelling (Amended description).	SUBJECT:	DM/21/1345 Proposed new 4 bedroom dwelling (Amended description).	SUBJECT:	DM/21/1345 Proposed new 4 bedroom dwelling (Amended description).
DATE OF SITE VISIT:	N/A	DATE OF SITE VISIT:	N/A	DATE OF SITE VISIT:	N/A
RECOMMENDATION:	Advice	RECOMMENDATION:	Advice	RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	N/A	S106 CONTRIBUTION TOTAL:	N/A	REASON FOR REFUSAL:	Not applicable
This application has been dealt with in accordance with the Development Control Scheme protocol for small scale proposals.		This application has been dealt with in accordance with the Development Control Scheme protocol for small scale proposals which include up to 5 residential units or extensions to single units accessed from roads that do not form part of the Strategic Road Network (SRN). As such the comments provided by Strategic Planning should be considered to be advice only, with respect to this planning application.		In the interests of sustainability and as result of the Government's 'Road to Zero' strategy for at least 50% of new car sales to be ultra-low emission by 2030, electric vehicle (EV) charging points should be provided for all new homes. Active EV charging points should be provided for the development in accordance with current EV sales rates within West Sussex (Appendix B of WSCC Guidance on Parking at New Developments) and Mid Sussex Local Plan policy. Ducting should be provided to all remaining parking spaces to provide 'passive' provision for these to be upgraded in future. Details of this can be secured via condition and a suitably worded condition is advised below.	
This proposal is for the erection of a four-bedroom dwelling. The site is located on Wallage Lane, a C-classified road subject to national speed limit in this location.		This proposal has been considered by means of a desktop study, using the information and plans submitted with this application, in conjunction with other available WSCC map information. A site visit can be arranged on request.		Regarding cycles, the plans demonstrate ample on-site storage that can be utilised for secure and covered cycle parking, in accordance with WSCC parking standards. The inclusion of cycle parking will help promote the use of sustainable transport methods.	
WSCC in its role as Local Highway Authority (LHA) previously provided comments for this application, dated 28/06/2021, raising no highway safety concerns. The LHA has since been re-consulted by the LPA.		Summary This proposal is for the erection of a four-bedroom dwelling. The site is locaed on Wallage Lane, a C-classified road subject to national speed limit in this location. WSCC in its role as Local Highway Authority (LHA) raises no highway safety concerns for this application.		Sustainability The site is located in Rowfant, which lacks access to immediate services and amenities. The nearby road network in this location lacks footways and is mostly unlit. The nearest urban centre is Crawley, which is located approximately 2.4km west of the site. Consequently, residents are anticipated to rely on the private car for most trips. Cycling is an option for experienced cyclists.	
From inspection of the new information, the documents refer to ecology only. Therefore, this does not affect the LHAs original comments, which remain valid. Please refer to the LHAs previous consultation response, dated 28/06/2021, for relevant highway comments and recommended conditions.		Access and Visibility The site is served by two existing accesses: one on Wallage Lane and one on Turners Hill Road. From inspection of local mapping, there are no apparent visibility issues with the existing access on Turners Hill Road. Visibility appears somewhat restricted for the existing access on Wallage Lane. There would be a benefit to the cutting back of vegetation either side of this access, to improve visibility. Notwithstanding this, the LHA does not anticipate that this proposal would give rise to a material intensification of use of these existing accesses.		Conclusion The LHA does not consider that this proposal would have an unacceptable impact on highway safety or result in 'severe' cumulative impacts on the operation of the highway network, therefore is not contrary to the National Planning Policy Framework (paragraph 109), and that there are no transport grounds to resist the proposal.	
Kyran Schneider West Sussex County Council – Planning Services		In addition, an inspection of collision data provided to WSCC by Sussex Police from a period of the last five years reveals no recorded injury accidents attributed to road layout within the vicinity of the site. Therefore, there is no evidence to suggest the existing accesses are operating unsafely or that the proposal would exacerbate an existing safety concern.		If the LPA are minded to approve the application, the following conditions should be applied:	
		Parking and Turning For vehicular parking provision, the applicant has demonstrated a double-car garage and large driveway. The WSCC Car Parking Demand Calculator indicates that a dwelling of this size in this location would require at least three car parking spaces. Therefore, the LHA considers the proposed parking provision to be sufficient. There is also space for on-site turning to be achievable, allowing vehicles to exit the site in a forward gear.		Car parking space (details required) No part of the development shall be first occupied until the car parking spaces have been constructed in accordance with plans and details to be submitted to and approved in writing by the Local Planning Authority. These spaces shall thereafter be retained at all times for their designated purpose. Reason: To provide car-parking space for the use.	
		The LHA does note that the proposed garage falls slightly short of the minimum internal specifications for double-car garages of 6m x 6m as set out in Manual for Streets (MFS). The garage as proposed has approximate dimensions of 5.8m x 6.5m. Therefore, the LHA advises the applicant to widen the proposed garage to meet MFS specifications, to be considered for vehicular/cycle parking provision. Notwithstanding this, the LHA is satisfied that sufficient parking provision is available on-site.		Cycle parking No part of the development shall be first occupied until covered and secure cycle parking spaces have been provided in accordance with plans and details to be submitted to and approved by the Local Planning Authority. Reason: To provide alternative travel options to the use of the car in accordance with current sustainable transport policies.	
				Electric Vehicle Charging Spaces No part of the development shall be first occupied until the electric vehicle charging space(s) have been provided in accordance with plans and details to be submitted to and approved by the Local Planning Authority. Reason: To provide sustainable travel options in accordance with current sustainable transport policies.	
				Kyran Schneider West Sussex County Council – Planning Services	

Appendix E: Planning Officer Comments - 29th November 2021 by Will Dorman (MSDC Urban Designer) & Stuart Malcolm (Case officer). Email Correspondence.

From: Stuart Malcolm <Stuart.Malcolm@midsussex.gov.uk>
Date: Monday, 29 November 2021 at 15:17
To: Conrad Howard <conrad@ddarchitects.co.uk>, Will Dorman <Will.Dorman@midsussex.gov.uk>
Subject: RE: Incomplete Application Letter for Application No DM/21/1345 - Land At Caldyne Park Wallage Lane Rowfant Crawley West Sussex RH10 4NQ

Hi Conrad

Thanks for the additional submissions.

Will has commented on them as follows:

“This scheme starts to address the panel’s issues by bringing the building down to ground level, but overall the design quality is still far short of a para 79/80 standard. I have the following specific issues that contribute to this assessment:

- Evolving the floorplan to respond to concentric circles / cross section of a tree trunk is an interesting idea, but builds in limitations including generating quite awkward shaped living spaces. While it works better than before, where the floorplan departs from the concentric circles it undermines the harmony and elegance of the concept as evidenced by the awkward angle of the dining room façade and decking on the west side and front entrance on the east side.
- The stepped configuration of the floor levels will not make it easy to move around for people with disabilities. Also a disproportionate amount of space is needed for staircases given there is little more than one main floor of living space. Furthermore I am not convinced adequate space has been provided to accommodate the staircases particularly the one between the basement and ground floor.
- The external form also does not evoke the harmony suggested by the concentric plan. The overlapping monopitch roofs creates a sense of clutter and the series of recesses and projections generate a series of blank flank returns that lack any positive sculptural quality and look more like an unresolved accident

generated by the floorplan.

- The circular plan is handled as a series of faceted facades, rather than curved ones according to the floorplan but this is not revealed in the elevations which look flat.
 - The basement garage and the amount of windowless/ retaining walls around it are also a dead hand on the elevation.
 - There is no indication how rainwater discharge is dealt with and this is especially problematic because of the inward sloping roof profile and the absence of any space at the centre of the building to accommodate the runoff.
 - The detailed section shows thicker walls than before and the employment of natural local materials, which are to be commended. However, more information will need to be provided to demonstrate the schemes sustainability credentials, and specifically how this has influenced the design decisions.
- Also if the building is aiming for passivhaus standards, this needs to be demonstrated (and it may be undermined by its relatively high surface area to volume ratio resulting from the series of recesses and projections and its predominantly single storey form).
- Solar PV’s are shown on the roof in the detailed section, but the circular roofplan generates a series of triangular shaped roofs that, along with the relatively small amount of south facing roof, will limit their scope.
 - The wall thickness at the main ground floor level scales off at 450mm, however these are not represented accurately in the floorplans (which show thinner walls).
 - Insufficient information/drawings are provided to show the relationship of the building with its context and immediate threshold. The floorplans don’t show them, the scale of the site plan is too small, and the elevations show the surrounds too schematically.
 - The driveway appears to be much longer than it needs to be, and by wrapping all the way around the building it gives less opportunity for the living spaces to have an uninterrupted relationship with the surrounding nature, and imposes more tarmac on the ground than appears to be necessary. The greenhouse also appears to be unfortunately prominently positioned along the entrance approach.
 - At over 20m across this building has a large footprint and I feel there is some scope to reduce this such as accommodating more (such as the home cinema) in the lower ground floor which should also help improve the surface to volume ratio.

The main arbiter of this scheme will be the DRP. However, under the DRP’s Terms of Reference, there is only one more opportunity for it to be considered by them. To give it a better chance, the scheme needs to address the above points to demonstrate it meets the NPPF standard. Also while the quality of the drawings have been improved, they are still quite sketchy and there is scope for further improvement and more detail.”

Based on the above, I would recommend the submission of additional plans and details for Will and I to comment informally prior to a formal re-submission of amended plans.

Thanks

Stuart



Appendix F: Ecological Council Consultant Comments - 5th April 2022 by Mike Bird.

Ecological Advice

TO: Stuart Malcolm
FROM: Mike Bird
APPLICATION REF: DM/21/1345
SITE: Land at Caldyne Park Wallage Lane Rowfant Crawley
PROPOSAL: Proposed new 4-bedroom dwelling. Ecological information received 27/08/2021.
DATE: 5 April 2022

Recommendations

To avoid the risk of future encroachment of domestic garden into ancient woodland buffer zones or other semi-natural habitats surrounding the proposal (for example in case the property changes ownership), I would strongly recommend that MSDC ensure that these areas are clearly excluded from residential curtilage and that they cannot be considered part of the garden. Subject to this, I am of the view that overall the proposal offers the opportunity to secure a net gain for biodiversity if long-term positive management of the surrounding woodland is secured along with the other enhancements proposed. If consent is granted, I would recommend the following conditions to secure these enhancements and mitigate any negative impacts:

No development shall commence until the following details have been submitted to, and approved by, the local planning authority:

a method statement and protection plan to mitigate any impacts on wildlife and surrounding habitats during construction, including the location and specification for temporary protective fencing and reasonable avoidance measures to avoid harm to protected species during any vegetation clearance / pruning and full details of the access track specification where it passes through or adjacent to woodland;

a lighting plan showing the demonstrating how any external lighting will be specified and located to avoid light spill and glare impacting surrounding woodland / semi-natural areas; and

an enhancement and long-term (30-year) management plan for surrounding wildlife habitat within the applicants control, setting out long-term aims and objectives, monitoring methods and an initial 5-year action plan (with provisions for review and updating).

The approved details shall be implemented in full unless otherwise approved in writing by the local planning authority.

Reason: to prevent loss of, and contribute to a net gain in, biodiversity, in accordance with policies DP37 and DP38 of the Mid Sussex District Plan and 180 of the NPPF.

Condition 2 (subject to comments about excluding surrounding habitat from residential curtilage)

There shall be no artificial lighting introduced outside of the residential curtilage.

Reason: to prevent significant disturbance of nocturnal wildlife in accordance with DP38 of the Mid Sussex District Plan and 180 of the NPPF

Comments

I note that the development is within land previously classified as ancient woodland, but that Natural England have accepted evidence that large areas no longer meet the definition and have updated the boundaries in their inventory accordingly. I also note that loss of the ancient woodland is historic (connected with former MOD/defence uses) and appears unconnected with this proposal. This is an important factor in considering its acceptability as it is essential that deliberate clearance or destruction of wildlife habitats prior to submission of planning applications is disincentivised to avoid setting any precedent that could encourage further losses.

The proposal would maintain a minimum distance of 15m between the proposed dwelling and formal garden space and parking / turning areas, as required by Local Plan Policy DP37. However, to prevent encroachment of garden (for example if the property changes hands) into ancient woodland, ancient woodland buffer and recent secondary woodland, it is important that any planning consent ensures that these areas are clearly excluded from the residential curtilage so that planning consent would be required for a change of use. I would defer to the case officer as to whether this requires these areas to be excluded from the redline or if other planning measures are the most appropriate way to achieve this.

I note that proposed access would utilise existing tracks and note that it is proposed to use a SUDs driveway specification to provide a naturalistic surface. Whilst there could be some minor localised disturbance to wildlife from vehicles, given it is a single dwelling, I would consider, on balance, that such impacts would be outweighed if a long-term positive management plan for all of the woodland (ancient semi-natural and recent semi-natural) is secured.

The bat survey report submitted appears to be an early draft and doesn't provide any assessment but as the proposal will retain the woodland habitat, enhance a large part of the open grassland and provide an opportunity to secure long-term management of these habitats, the overall impact is likely to be positive and this applies to other protected / notable species, subject to basic precautions during site clearance and construction. This would be subject to there being no lighting outside of the immediate domestic curtilage and in any lighting in this area being designed to minimise light spill and glare.

It is suggested that a management plan is secured to cover a 30 year period, this being the expectation under the forthcoming mandatory biodiversity net gain and thus reflective of government expectations.

Mike Bird MCIEEM
Principal Consultant, Calyx Environmental Ltd

The contents of this memo are provided under a consultancy agreement between Calyx Environmental Ltd and Mid Sussex District Council. They do not constitute a view for or against a proposal, but represent independent ecological advice on the biodiversity implications of a planning application so that it may be determined in accordance with relevant planning policies and legal obligations.

From: Stuart Malcolm <Stuart.Malcolm@midsussex.gov.uk>
Date: Thursday, 26 January 2023 at 15:21
To: Conrad Howard <conrad@ddarchitects.co.uk>
Subject: RE: Incomplete Application Letter for Application No DM/21/1345 - Land At Caldyne Park Wallage Lane Rowfant Crawley West Sussex RH10 4NQ

Hi Conrad

Sorry for the delay on this.

Will has commented as follows on the latest iteration:

“This is an improvement and the overall building concept is clearly illustrated on page 17 of the drawings package, and more has been done to demonstrate the buildings relationship with its landscape threshold. I nevertheless still have the following comments:

- The elevations appear to have been improved partly because they are better drawn and partly because the slope appears to be less pronounced than before (it is not clear why this is?) and windows better positioned. Together this reduces the amount of blank wall and gives the building a more harmonious/resolved appearance. The curved facades will need to be consistently designed/carefully detailed to ensure they have a consistent curved appearance.
- Avoiding overlapping roofs has also improved the building’s appearance (although whether it sufficiently protects the facing walls from rain is another matter). In my view, the more steeply angled roofs above the dining area and entrance hall still don’t sit harmoniously with the rest of the roofline, however I would be happy for the DRP to be the final arbiter on this. While the steep roof may emphasise the entrance, a deep recess and contrasting facing materials could do this just as successfully. In respect of the dining area, if the underground parking was removed the floor level of the living area could be carried through and it would not be so necessary to raise the roof.
- Using the Wallage Lane entrance allows the drive to be significantly shortened, reducing its impact upon the wider site. The

hardstanding still strangles the northern half of the house and could easily be reduced.

- The underground parking is still problematic. In addition to being a dead hand on the frontage, it lifts the deck incongruously above the ground and results in the building looking disconnected from its threshold; this is especially demonstrated in the 3D images. It also involves an intrusive intervention into the natural topography. To avoid this, I think it would be better if the garage was a separate structure and discreetly located perhaps in the woodland area along the driveway approach.
- The main entrance hall would be better positioned on the north side so that it is immediately visible along the driveway approach/axis.
- It would be helpful to know the surface to volume ratio, as the DRP may well ask.
- As the rain is to all be collected in a single ring gutter, I am concerned there may be a risk of water pooling in the centre of the roof during the torrential downpours that have become increasingly common.”

I would strongly encourage these points to be addressed prior to formal re-submission.

As you are no doubt aware the application will need to back to the DRP when the formal submission is made. I understand that there is a spot on the April DRP for this application but I would be grateful if you could confirm your timescales.

Please also ensure that any other consultee comments are addressed prior to the plans being submitted formally. I’m particularly thinking of the Ecology comments that are attached for reference but all the other consultee comments should be looked at and addressed where relevant.

Kind regards

Stuart

Notes of Mid Sussex Design Review Panel – 11 July 2023

Present:	Neil Way (Chair), Mark Folkes (Vice-Chair), Phil Winch, Gavin Sargent, Mike Alete
Apologies:	Alice-Rose Hoile, Jake White, Richard Morrice, Cllr Christopher Phillips
In attendance:	Anna Kramarczyk (MSDC Urban Designer), Andy Watt (Senior Planning Officer)

Land at Caldyne Park, Wallage Lane, Rowfant

Description of the Scheme
Proposed new 4 bedroom dwelling in the countryside under paragraph 80 of the NPPF (Re-submission of current planning application DM/21/1345 to the DRP)

<u>Presenters</u>	
Architect/Designer:	Conrad Howard (DD Architects)
Developer:	Messrs Williams, Jacobs and Hooper

<u>In attendance</u>	
Ward Councillor:	Cllr Graham Casella
Case Officer:	Stuart Malcolm

The Panel’s Comments

The Panel commended a nice presentation overall and a very interesting design.

In landscape terms, more evidence and analysis would be helpful to assess how the characteristics of the site and the surrounding landscape has influenced and enhanced the setting and building. More information is needed on ecology, historic field patterns, geology, and landform as well as on the perceptual aspects (such as dark night skies) that helps to build a narrative. It is recommended the AONB character is considered as part of the landscape analysis.

The Panel expressed concern regarding the hard landscape treatments around the immediate building, such as the extensive gabion terraces and the paved/ patios. For both, these seemingly jar with the landscape, and don’t merge or blend, with the shapes not appearing to be reflective of the natural soft edges of the surrounding woodland.

There is limited information in the presentation demonstrating how the site would be enhanced. Whilst the proposal to remove invasive rhododendron is welcome, it is unclear how this would be achieved, over what period and the replanting proposals.

The Panel were disappointed that the strong ‘tree-trunk’ inspiration had not been followed through to its logical conclusion. The plan form of the house was supported, but the Panel were not convinced how it sits into the site, particularly in terms of its scale (e.g. a 4m high entrance door, an internal double height space without a floor overlooking it) and how the building would be experienced from standing height outside (e.g. the extrusion of exaggerated forms to achieve tall glazed windows). The entrance way and road way appears somewhat excessive, borne from the idea that car parking and services should be located underneath the building. This makes

the building sit too high, whereas it could be dropped into the site more and the basement removed.

The proposed roof shape would jar, without any finessing of the edges. It seems to sit quite heavy on the building, reinforced by the gunmetal grey colour, so appears quite clunky. It could be simplified in detailing but made more exciting in section and lighter in weight, to reinforce the tree-trunk concept. The colour of the materials overall seemed inconsistent with the warm tones of timber, so perhaps more copper and bronze colouring. The use of stone was questioned, whereas timber could be used above raised land to avoid rot and to give the appearance of being dropped down to the ground, or the stone plinth could be significantly reduced.

The heat gain of the building – with its large amount of glazing on the west elevation – was questioned, as the proposed overhangs will not shade the building sufficiently. The Panel felt that lighter lattice would blend in better, in the manner of a chopped down tree and an understanding of how new growth forms.

The Panel felt that solar panels seem arbitrary in their positioning (oriented NE and NW), not fully tracking the sun around during the day. However, the use of fan-shaped panels manufactured to fit will contribute to an interesting design. The use of Corten steel looks like a nice idea, but questioned whether it would be suitable for a door, which is by its nature a tactile feature.

In sustainability terms, the Panel wish to be assured that the applicants make a clear commitment to Passivhaus certification, so that a planning condition can ensure its implementation.

The following queries also need to be resolved:

- Confirmation that the living room doors are air-tight, split bi-folds on a curve with a U-value of 0.8W/m2K.
- The oversized front door might be difficult to obtain.
- The designPH extract image shows simplified fenestration – does putting in the correct design cause it to fail compliance?
- Reassurance that achieving air-tightness goals are practical – e.g. the detailed section shows quite a bit of thermal bridging at the first floor deck and the first floor wall / roof junction, as well as air tightness details at first floor deck.
- Complex systems tend to fail over time and replaced with simpler ones. In response to the combined low carbon energy strategies page, less is more.
- Is the log burner flue on the images shown correctly?

The Panel were concerned that the detailed design had not been costed and the development was merely a development plot, which may result in a downgrading of the concept during the implementation phase. In theory, a paragraph 80 scheme could potentially be achieved on this site, but the current proposal is still some way short. It doesn’t enhance its immediate setting and is not sensitive to the surrounding landscape characteristics.

The Panel would like to see the next iteration of the design return for their appraisal.

Overall Assessment

Support with amendments to the design and refinement of details. The Panel reiterated their backing for the concept and the plan form in particular. The presentation was encouraging, but further work needs to be done to ensure that it meets the requirements of Paragraph 80.