
Sustainability Statement

Parklands, Keymer Road, Burgess Hill,
West Sussex, RH15 0BA

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Contents

- 1.0 Introduction 3
- 2.0 Sustainable Development Context 4
- 3.0 Energy Efficiency and Building Form 5
- 4.0 Natural Light and Ventilation 6
- 5.0 Materials and Resource Efficiency 7
- 6.0 Biodiversity and Landscape 8
- 7.0 Water Management, Drainage, and Structural Sustainability 9
- 8.0 Long-Term Resilience and Adaptability 10
- 9.0 Conclusion 11

1.0 Introduction

1.1 This Sustainability Statement has been prepared in support of a planning application for a proposed dwelling at the Land to the Rear of Parklands, Keymer Road, Burgess Hill.

1.2 The purpose of this statement is to demonstrate how sustainability considerations have informed the design of the proposed development and how the scheme responds to the objectives of Policy DP39 (Sustainable Design and Construction) of the Mid Sussex District Plan.

1.3 This statement should be read alongside the submitted Planning Statement, Design and Access Statement, Ecological Reports, Arboricultural Information and Drainage Strategy.



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25166_MHS_S3_100_SITE+LOCATION PLAN
--- Land - ownership boundary

2.0 Sustainable Development Context

2.1 The sustainability credentials of the site and the wider development proposals are addressed in detail within the accompanying Planning Statement prepared by Geraint John Planning.

2.2 The Planning Statement demonstrates that the site occupies a sustainable location within the settlement boundary of Burgess Hill, with access to local services, facilities, public transport connections and active travel routes. It further assesses the proposals against the economic, social and environmental objectives of sustainable development as set out within the National Planning Policy Framework and the Mid Sussex District Plan.

2.3 The Planning Statement concludes that the proposal represents a sustainable form of development in principle and should be read alongside this Sustainability Statement.

2.4 This document therefore focuses specifically on the sustainability credentials of the proposed building, landscape strategy and site design in response to Policy DP39.

3.0 Energy Efficiency and Building Form

3.1 A fundamental principle of sustainable design is reducing energy demand before considering the incorporation of renewable technologies. The proposed dwelling has therefore been developed using a fabric-first approach, seeking to minimise operational energy requirements through the careful design of the building form, building envelope, orientation, positioning and internal arrangement.

3.2 The proposed dwelling represents a significant reduction in scale when compared to the extant planning permission (Ref: DM/16/0392) that currently exists on the site. The building has been reduced in footprint, volume and overall floor area, resulting in a more compact and efficient form that requires fewer construction materials and reduces long-term operational energy demand.

3.3 The dwelling has been designed to achieve high levels of thermal performance through the use of a highly insulated building envelope, and high levels of airtightness through careful detailing. Particular attention will be given to reducing thermal bridging and improving the overall efficiency of the building

fabric, helping to minimise heat loss and improve occupant comfort throughout the year. The South-Westerly aspect most prone to overheating has minimal openings/glazing and is bordered by the service/secondary spaces internally. The North, East and North-Easterly aspect features the largest area of glazing to allow for landscape views whilst minimising negative solar gains.

3.4 The internal arrangement adopts a simple and efficient plan arrangement centred around a compact service core, reducing circulation space and supporting the efficient operation of the building. Principal living spaces are positioned to maximise natural daylight and passive solar gain, whilst secondary spaces are arranged according to their orientation and intended use to optimise environmental performance throughout the year.

3.5 The simple rectangular building form minimises unnecessary complexity and reduces the extent of the external envelope relative to the floor area, contributing to overall energy efficiency. The reduction and simplification of the overall built form, combined with an efficient internal layout,

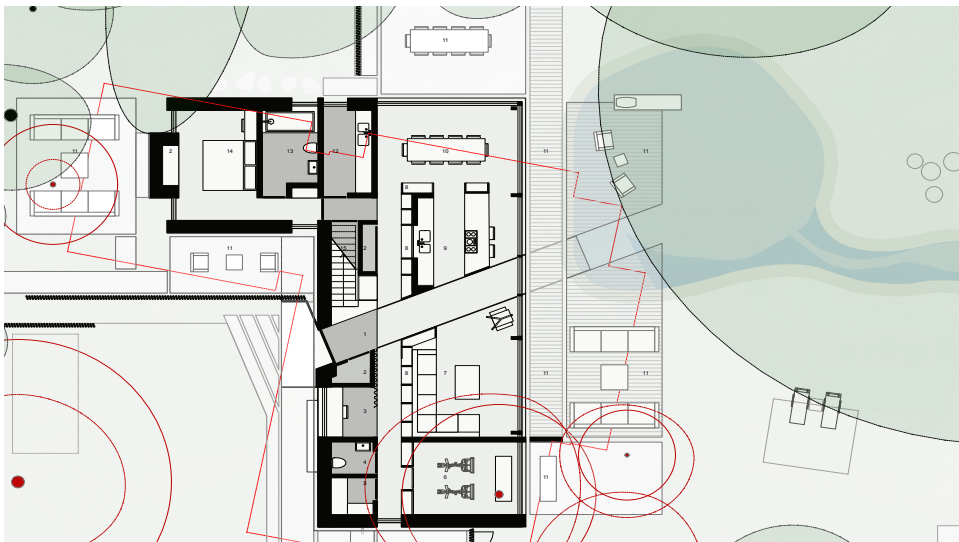
contributes positively to both embodied and operational sustainability.

Renewable and Low Carbon Technologies

3.6 In accordance with the objectives of Policy DP39, the proposed dwelling is intended to incorporate a range of renewable and low-carbon technologies as part of its overall energy strategy.

3.7 These measures are anticipated to include an air source heat pump, photovoltaic panels and electric vehicle charging infrastructure. Battery storage is also proposed, subject to detailed design development and final specification, in order to maximise the efficient use of renewable energy generated on site.

3.8 Through the combination of a fabric-first approach, high-performance construction and the incorporation of renewable and low-carbon technologies, the proposal seeks to minimise operational energy consumption, reduce reliance on fossil fuel-based energy sources and deliver a highly efficient home with reduced environmental impact throughout its lifespan.



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25166_MHS_S3_206_PROPOSED GROUND FLOOR PLAN

4.0 Natural Light and Ventilation

4.1 The design has been developed to use the architecture of the building itself as a primary environmental response, reducing reliance on mechanical systems wherever possible.

4.2 The building has been carefully orientated to respond to both the site's woodland setting and the daily path of the sun. Principal living spaces are positioned to benefit from natural daylight and passive solar gain throughout the year, whilst secondary accommodation is arranged according to its intended use and environmental requirements.

4.3 Large areas of glazing have been introduced to frame views and bring daylight deep into the plan, reducing reliance on artificial lighting during daytime hours. The relatively narrow floorplate and openings on multiple elevations facilitate natural cross ventilation throughout the building.

4.4 At first-floor level, external terraces

have been integrated into the design to create additional opportunities for natural airflow and passive cooling. These spaces allow bedrooms and upper-level accommodation to benefit from increased ventilation whilst maintaining privacy and connection to the surrounding landscape.

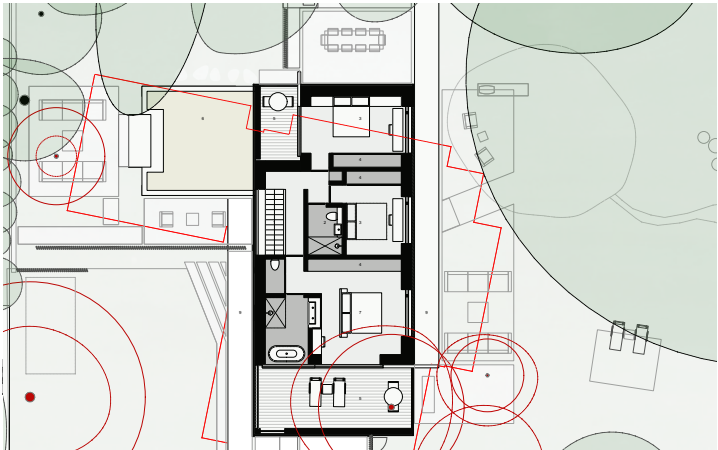
4.5 The location and extent of glazing has been carefully calibrated in response to orientation, daylight requirements and thermal performance. South-west facing elevations feature more restrained or screened glazing where appropriate, reducing unwanted solar gain during warmer periods whilst maintaining good levels of natural daylight and visual connection to the landscape.

4.6 Projecting canopies, privacy screens and recessed areas of glazing have been carefully incorporated to provide solar shading where required. These elements help moderate summer solar gain, reduce the risk of overheating and improve occupant comfort

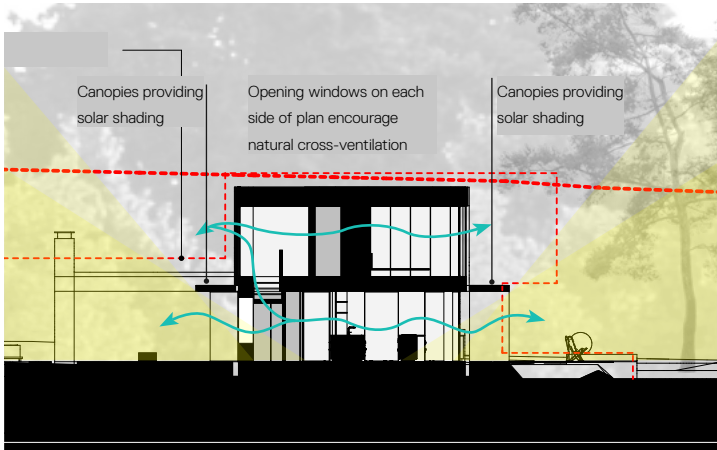
throughout the year. The canopies are designed to provide shade in the steep-angled summer sun, whilst allowing low winter sun to shine into the house and provide positive thermal solar gains.

4.7 The retained mature trees and woodland planting surrounding the dwelling further contribute to the environmental performance of the building by providing seasonal shading, local cooling and protection from prevailing weather conditions.

4.8 Together, these measures create a comfortable internal environment through passive design principles, reducing reliance on energy-intensive building services and contributing to lower operational energy consumption throughout the life of the building.



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25166_MHS_S3_207_PROPOSED FIRST FLOOR PLAN



coloured overlays indicative (Representation of shading and ventilation.)
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25166_MHS_S3_300_APPROVED AND PROPOSED LONG SECTIONS

5.0 Materials and Resource Efficiency

5.1 The material palette has been developed to provide a durable and long-lasting response to the site's woodland setting.

5.2 Materials have been selected for their robustness, longevity and suitability within the local microclimate. The external palette adopts a restrained and recessive character that allows the building to sit comfortably within the landscape whilst requiring minimal ongoing maintenance.

5.3 The proposal seeks to make efficient use of resources through the delivery of a smaller and more efficient building than that currently approved for the site. The reduction in built volume directly reduces material consumption and the environmental impacts associated with construction.

5.4 The design incorporates a significant use of timber and other natural materials, reducing reliance on highly processed finishes

where appropriate and contributing to a warm and enduring architectural character. The inclusion of timber within the proposal wherever possible, improves the buildings sequestered carbon over its life as well as its embodied carbon through selective use of sustainably sourced timber from ethical forestries.

5.5 Materials have been selected to minimise maintenance requirements and promote long-term durability, reducing the need for replacement, secondary finishes and future material consumption throughout the life of the building.

5.6 Subject to final design development, engineering coordination and cost considerations, the project will seek to maximise the use of timber construction, including opportunities for off-site manufacture and mass timber construction where viable. In addition to reducing construction waste and improving

construction efficiency, timber provides a renewable structural material capable of storing carbon throughout the lifespan of the building.

5.7 Opportunities to utilise mass timber, not only improve the embodied and sequestered carbon credentials of the proposal but also allow for operational sustainability through improved airtightness, higher quality construction and a reduced requirement for mechanical assistance.

5.8 The building has been developed with longevity and adaptability in mind. Durable materials, flexible internal spaces and a timeless architectural approach will help ensure the dwelling remains functional and relevant throughout its lifespan, reducing the likelihood of significant future alteration, replacement or refurbishment.



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25166_MHS_S3_405_APPROVED AND PROPOSED WEST
ELEVATIONS

6.0 Biodiversity and Landscape

6.1 The retention and enhancement of the site's landscape character has been a key driver throughout the design process. The proposals seek to work with the site's existing woodland setting, allowing the landscape to remain the defining characteristic of the development.

6.2 The site is characterised by mature trees, established vegetation and a distinctive woodland environment. The proposed dwelling has been carefully positioned and designed to work within this landscape framework, retaining the majority of significant trees and preserving the site's established character wherever possible.

6.3 The architecture adopts a muted and recessive material palette that allows the building to sit quietly within its surroundings and reduces its visual prominence when viewed from the wider landscape. The reduced scale and footprint of the dwelling further assists in minimising its impact on the existing landscape structure, **with the**

proposal being invisible from the public highway.

6.4 The proposals are supported by detailed ecological assessments and arboricultural information. These documents identify opportunities to protect existing habitats, retain important vegetation and implement enhancement measures that will contribute positively to biodiversity over the long term.

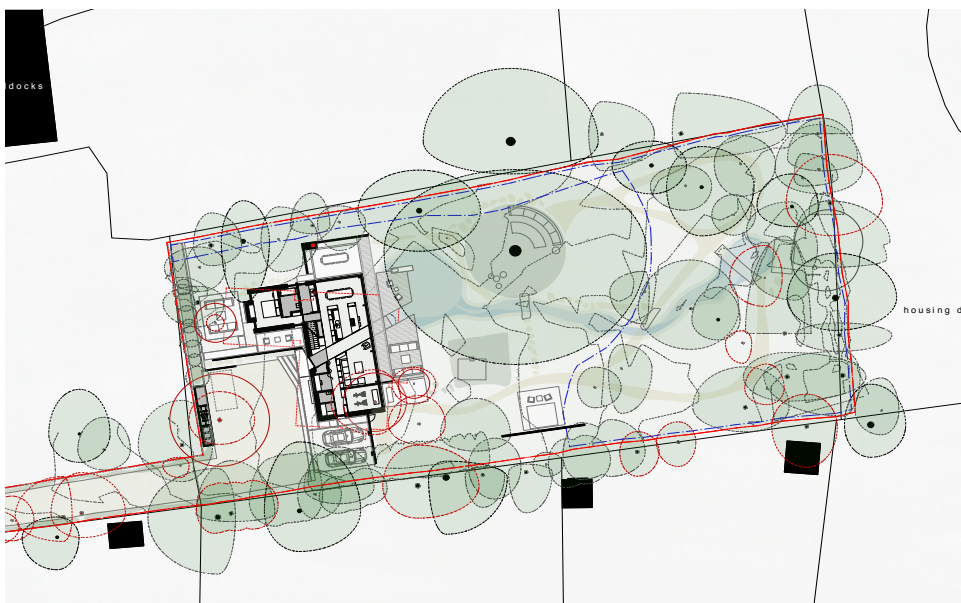
6.5 Existing ecological constraints and habitat retention requirements have informed the layout and extent of development across the site. As a result, significant areas of the plot will remain undeveloped and continue to provide habitat value, ecological connectivity and opportunities for biodiversity enhancement.

6.6 The retention of mature trees and vegetation provides a range of environmental benefits including habitat creation, carbon storage, natural shading,

rainwater interception and local microclimate regulation. These landscape features form an important component of the site's long-term environmental resilience.

6.7 The landscape proposals include the reinstatement and enhancement of a pond within the site. In addition to creating valuable habitat and supporting local biodiversity, the pond will contribute positively to the site's wider landscape strategy and ecological resilience.

6.8 Through the implementation of the recommendations contained within the supporting ecological reports, the development seeks not only to minimise environmental impacts but also to deliver measurable ecological enhancements and long-term biodiversity benefits across the site. The clients are already undertaking measures under an ecological licence (and relevant supervision) based on recommendations from the previous consent for the site.



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25166_MHS_S3_205_PROPOSED SITE PLAN

7.0 Water Management, Drainage and Structural Sustainability

7.1 7.1 In accordance with national and local planning policy, surface water will be managed on site through the implementation of Sustainable Drainage Systems (SuDS). The site drainage strategy follows the established drainage hierarchy, with discharge proposed to a nearby watercourse due to the anticipated low infiltration capacity of the underlying ground conditions.

7.2 All SuDS components will be carefully designed and sized to accommodate runoff from the critical 1 in 100 year storm event, inclusive of a 45% allowance for climate change. Exceedance flow routes will also be incorporated to ensure that any flows above the design capacity are safely managed across the site without increasing flood risk.

7.3 Foul water will be treated via a package treatment plant, with secondary treatment provided through a drainage field. This approach will minimise pollutant

discharge to the receiving environment and support the long-term environmental sustainability of the site.

7.4 Water-efficient fittings and appliances will be incorporated where appropriate in accordance with current Building Regulations requirements, reducing potable water consumption and supporting the efficient use of natural resources.

Structural Sustainability

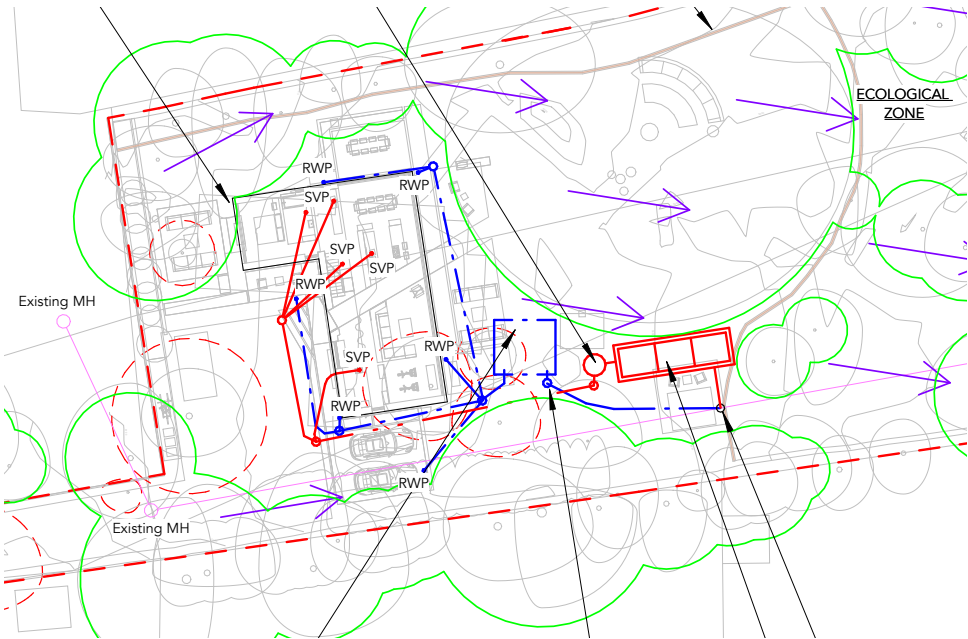
7.5 The structural design of the proposed development has been carefully considered to ensure that it responds effectively to both functional requirements and environmental performance objectives. Material selection will prioritise efficient use and seek to reduce embodied carbon wherever possible.

7.6 Timber-based materials may be

favoured due to their lower carbon footprint and renewable characteristics. Where viable, opportunities for timber construction will be explored as part of the wider sustainability strategy for the development.

7.7 Where concrete is required, particularly within the substructure, measures will be taken to reduce its environmental impact. This may include the specification of cement replacement materials and the use of admixtures to lower the overall embodied carbon associated with construction.

7.8 The overall structural approach seeks to balance durability, performance and sustainability to support the long-term resilience of the building.



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0358 MHS Drainage Report [1] - FOLD Engineers

8.0 Long-Term Resilience and Adaptability

8.1 Sustainability is not solely determined by the initial construction of a building, but also by its ability to remain functional, adaptable and desirable throughout its lifespan. The proposed dwelling has therefore been designed with longevity and flexibility as key considerations.

8.2 The internal arrangement adopts a simple and efficient layout centred around a compact service core, allowing the principal living spaces to remain open, flexible and capable of adapting to changing patterns of occupation over time. The open-plan nature of the primary living spaces provides opportunities for future subdivision, reconfiguration or adaptation should the needs of future occupants change.

8.3 The accommodation has been designed to support long-term occupation by a wide range of users and age groups. The inclusion of a ground floor bedroom and associated bathroom facilities provides a degree of future accessibility and adaptability,

allowing the dwelling to respond to changing family circumstances, multi-generational living arrangements or the needs of occupants wishing to remain within their home later in life.

8.4 The simple building form, durable material palette and fabric-first approach provide a robust framework capable of accommodating future technologies, services and performance improvements as building standards and occupant requirements evolve.

8.5 By prioritising quality, durability and adaptability, the proposal seeks to maximise the useful life of the building, reducing the likelihood of significant future alteration, replacement or premature redevelopment. This long-term approach to design represents an important component of the overall sustainability strategy for the development.

9.0 Conclusion

9.1 This Sustainability Statement demonstrates how the proposed dwelling has been designed in accordance with the principles of sustainable design and construction set out within Policy DP39 of the Mid Sussex District Plan.

9.2 The proposal adopts a fabric-first approach to energy efficiency, incorporating a highly insulated building envelope, efficient building form and passive environmental design measures to reduce operational energy demand. The development also proposes the incorporation of renewable and low-carbon technologies, including an air source heat pump, photovoltaic panels and electric vehicle charging infrastructure.

9.3 The design has been carefully developed to maximise natural daylight, natural ventilation and passive solar performance whilst reducing the risk of overheating through the considered use of orientation, solar shading and landscape integration.

9.4 The scheme retains and enhances the site's existing woodland character, preserving significant trees and habitats whilst incorporating ecological enhancements, landscape improvements and the reinstatement of a pond to support long-term biodiversity and environmental resilience.

9.5 Through the use of durable materials, efficient resource use, sustainable drainage and water management measures and a flexible and adaptable building layout, the proposal seeks to minimise environmental impacts whilst creating a high-quality home capable of responding to changing needs and future environmental challenges.

9.6 Together, these measures deliver a sustainable form of development that responds positively to its setting, supports the objectives of local and national planning policy and provides long-term environmental, social and economic benefits.



not to scale : excerpt from Design and Access Statement

