

Paul Nicholson Design

36 Nichol Place
Cotford St Luke
Somerset
TA4 1JD

Tel.: 01823-619090

E-Mail: nicholsonpaul2018@gmail.com

Sustainability & Energy Statement for:

*Proposed development of 9 dwellings on land at the former
Heathlands Riding Establishment, Hatch Ride, Wokingham, RG40 3AS*

Date of this Statement

;

10th May 2025

INTRODUCTION

The site is on the South side of Hatch Ride, an unmade road, and is some 180 metres South East from it's junction with Heathlands Road & 380 metres from the junction of Hatch Ride with Nine Mile Ride and Honey Hill to the South East. There are a number of existing buildings on the site which form the existing Heathlands Riding Establishment equestrian centre.

Hatch Ride is an established Public Right of Way.

The site is not listed and is not within a Conservation Area. No trees on the site, or adjoining it are TPO protected.

This Sustainability Statement has been prepared on behalf of the Applicants in support of the full planning application for the proposed re-development of the site at Hatch Ride to replace the current equestrian centre with 9 new dwellings.

It considers Local and Regional planning policy relating to the sustainability of the proposals and includes an Energy Statement and a Sustainable Drainage (SuDS) statement.

Best technical practice has employed in reference to established local and national databases to inform the selection of materials, systems and policies used herein.

In general, all dwellings are to be built to current Building Regulations Approved Documents A to S, new AD 'O' & Regulation 7 & have been designed to aim for Code for Sustainable Homes Level 4 accreditation.

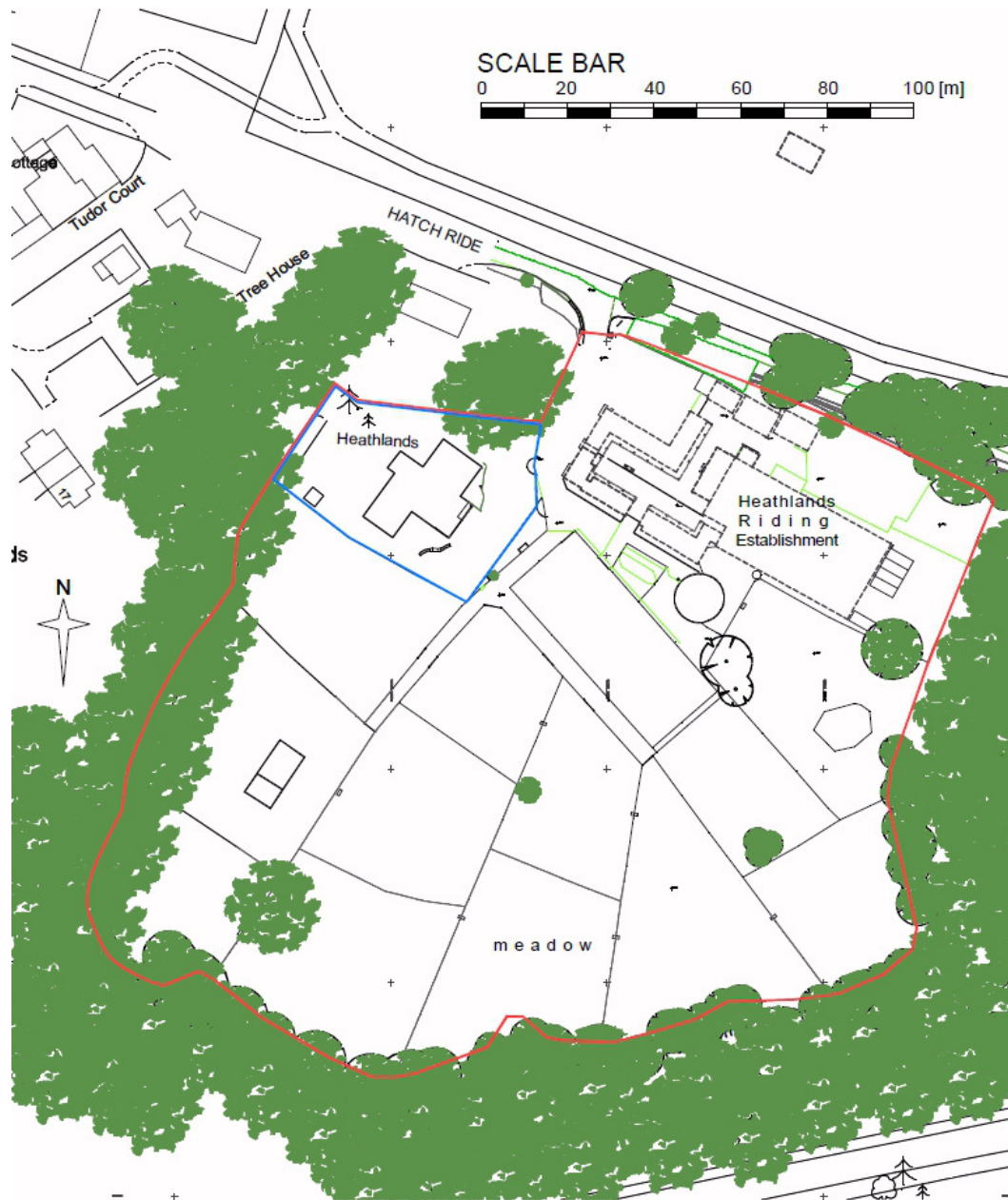
Subsequent assessments of the sustainability of each property proposed will be carried out by appointed & qualified assessors, with detailed itemised figures following Planning approval .

There are separate Design + Access statements, Flood Risk Assessment, Biodiversity and Environmental Survey reports which also accompany this application.

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2. 1 SITE & LOCATION PLAN - AS EXISTING - Not to scale – please see scale bar



2.2. SITE PLAN - AS PROPOSED - Not to scale – please see scale bar



3. SITE DESCRIPTION & DETAILS

- 3.1 The existing site features a mix of a number of different buildings which form the existing Heathlands Riding Establishment equestrian centre. There is also the existing Heathlands House on the site, which is to be retained and otherwise does not form part of the development proposals. South of the site features a large open grass meadow area with fencing to create paddocks. The meadow features a number of existing trees which are to be retained. There are no TPO trees on, or around the existing site.
- 3.2 The South, East and West boundaries of the site face onto adjoining woodland, all of which will remain and will be unaffected by the works proposed.

- 3.3 There is no footway to Hatch Ride on either side of the highway in this area only a grass verge exists each side.
- 3.4 'Heathlands', the existing dwelling on the site is to be retained and is not part of this application.
- 3.5 Flood risk assessment from the EA Flood Map for Planning has been checked, and the possibility of flooding from reservoirs etc. The site is in Flood Zone 1 with very little chance of surface water flooding. Appendix C following presents the preliminary Flood Risk findings. A sustainable drainage system will be required for the proposed redevelopment. This is a separate document.
- 3.6 The following image shows a street view of the existing Riding Establishment gateway onto Hatch Ride, taken from Google Maps.. 'Heathlands' is behind the trees on the right of this image.



3. 7. Google Street-view of the Existing Site Entrance

4. Outline of the Proposed Development

- 4.1 The proposal is to take down the existing stables, equestrian stores & facility buildings and to produce 9 new dwellings on the site. These are proposed as detached family dwellings.
- 4.2 The dwellings proposed are all 5 bedroom detached family homes in a two storey style, with facing brick facades & contrasting brick detailing and including gable details. Roofs are proposed in concrete tiles and to feature passive ventilation.
- 4.3 The proposals include drives & parking spaces for each dwelling, sited to ensure ease of overlooking from each property for security. There are Electric Vehicle charging points proposed – each sited securely attached to each dwelling.

There are also secure cycle spaces inside the garage accommodation for each dwelling or as lockable shed cycle storage at the rear of properties 4, 6 and 7 proposed on site, Asgard metal secure sheds are proposed as indicated on the last page of this statement.

- 4.4 To maximise solar gain, and aid the use of PV panels, the dwellings are orientated 35 degrees off South. This orientation matches the existing property at 'Heathlands' and follows the direction of the existing stable buildings on the site. This orientation will enable properties on the North and East of the proposals to take advantage of morning sunshine into rear garden areas and those on the West to gain evening sun. PV panel types & sizes to be advised by specialist producing the final SAP ratings & heating system / electrical system designs. Preliminary assessment is for 5no. JA Solar 600W N-type Bifacial Double Glass Half-Cell Traceable MC4 Solar Panels per property, to provide 3kWatts, or 2,267 kWh per annum per property. Detailed assessment based on roof area available, shading factors and energy assessment per property. (<https://solareon.co.uk/products>)
- 4.5 These proposals include an assessment of the use of attenuation tank arrays to BRE Digest 365 providing a Sustainable Drainage System (SuDS) with soak away percolation for site rainwater / surface water. These are proposed to be sited as shown on the SuDS drawing attached as Appendix A. The systems will be fed via a gravity type surface water MH system with check / interceptor inspection chambers and will be detail designed following percolation tests and arboricultural assessment of the proposed location. Please refer to the plan attached as Appendix A & the SuDS report for proposals.
- 4.6 Separate Biodiversity and Arboricultural reports and Design & Access Statements will be submitted for this proposal.

5. Sustainability Proposals

The proposals are required to satisfy the sustainability issues raised in the Wokingham Borough Local Development Framework document CD13.10 -Sustainable Design and Construction SPD : Adopted 28 May 2010.

These issues are as follows.

- a) Measuring and Demonstrating Sustainability,
- b) Sustainable Design and Energy Efficiency
- c) On-Site Renewable Energy Generation
- d) Water Resource Management
- e) Flood Risk Management
- f) Biodiversity
- g) Waste, Recycling and Composting facilities
- h) Sustainable Transport
- i) Health, Safety and Well-being
- j) Sustainable Construction

These matters are each addressed in turn below -

- a) Measuring and Demonstrating Sustainability,

*• The development has been designed to optimise the use of energy from the sun, please refer to item 4.4 above. Orientation of the proposal, at 35 degrees from South is suitable for obtaining the best passive solar advantage given other confines of the site. The position shown on plans for the building footprints allows the best possible solar gain factors for most of the proposed dwellings, given other design constraints.
The following Energy Statement under Item 6 on Page 8 will detail these provisions.*

- The development has been designed to optimise natural ventilation. This is proposed as 'passive stack' systems to avoid reliance on excessive mechanical ventilation. The passive stack system works by taking advantage of natural heat circulation within each individual property to discharge stale air through high level, roof mounted vents. Many of these vents are proposed to exit through the 'dovecot' features – as shown on the proposed roof plans & elevations for the scheme, proposal drawings 13956/06, 07, 08 and 09 indicate this. Windows & doors to the properties will be fitted with head vents in compliance with Building Regulation requirements of 4000mm² per door / window.

- Efficient use of energy in these proposals is proposed by specification of efficient modern insulation methods & use of thermally efficient materials and construction processes ensuring that the requirements of UK Building Regulations 2022 (as amended) are met or exceeded. A fabric led approach is adopted, as this makes it simpler to ensure on site that each element, doors, windows, floors, roof etc. are actually constructed on site to meet the technical standards as required by the design.

- level 4 - The development will be submitted for full assessment to ensure it meets the necessary mandatory Code for Sustainable Homes/ level 4 requirements. This requirement is equivalent to compliance with UK Building Regulations following the B.Reg 2022 updates.

- As this is not a mixed use development, a bespoke assessment is not required.

b) & c) Sustainable Design and Energy Efficiency considerations & On-Site Renewables

The possibilities of generation of energy from decentralised, renewable and /or other low carbon technologies were considered for this site, these were -

i) CHP (Combined Heat & Power) provision is considered not applicable. This form of wide network system is inefficient in small & medium sized residential schemes as it does not respond adequately to the diverse range of timing and demands of residential uses. The infrastructure requirements & installation demands are also considered unsuitable for this semi-rural location.

ii) Ground Source heat pumps are not considered efficient, or viable in this location. Reasons as above.

iii) Wind turbine installation, either property by property, or proportionately larger fewer turbines are not considered efficient, or viable in this location. Surrounding tree cover (please refer to site plans) makes wind turbines unsuitable.

iv) Air Source heat pumps are viable in this location. Space is available for such equipment at the rear of each property. Externally sited units would remove concerns of operational noise. Such units are capable of the individualised and often sporadic demands of residential use.

v) Photo-voltaic (PV), or solar panels are also suitable renewable tech, for the reasons of useful orientation of the proposed dwelling roofs on the site as described above. The use of PV with air-source heat pumps is also becoming a popular, efficient and well tested renewable combination.

vi) It is considered viable that the development can incorporate decentralised, renewable energy technologies to satisfy at least the 10% reduction in annual energy requirement of Policy NRM11 of the South East Plan.

Suitable for the site and location are PV installations on each roof - East, South & West orientated as appropriate - in combination with ASHP units individual to each dwelling. It is considered that these technologies will, with the inclusion of improved electronic systems & temperature limiter controls help the proposed development exceed the energy requirements currently required by UK Building Control.

d) Water Resource Management

The buildings will specify water systems which limit the storage capacity to 110 litres per person per day which is lower than the 125 LTR per person per day currently set as a minimum by UK Building Control. This is achieved by reduced hot water outflow for fittings by adoption of fittings compliant with Table 2.2 of Building Regulations Approved Document G -

Table 2.1 Maximum fittings consumption	
Water fitting	Maximum consumption
WC	6/4 litres dual flush or 4.5 litres single flush
Shower	10 l/min
Bath	185 litres
Basin taps	6 l/min
Sink taps	8 l/min
Dishwasher	1.25 l/place setting
Washing machine	8.17 l/kilogram

Table 2.1: Water fittings route for 125 litres per person per day standard.

Table 2.2 Maximum fittings consumption optional requirement level	
Water fitting	Maximum consumption
WC	4/2.6 litres dual flush
Shower	8 l/min
Bath	170 litres
Basin taps	5 l/min
Sink taps	6 l/min
Dishwasher	1.25 l/place setting
Washing machine	8.17 l/kilogram

Table 2.2: Water fittings route for 110 litres per person per day standard.

In addition, flow limiter aerators will be specified for taps and 300 litre water storage butts will be provided externally to each property (please refer to SuDS calcs). 'Owners Manuals', to be presented to every dwelling owner on occupancy, will provide specific water saving advice such as shower limiters, reducing tap flow and re-use of water. These should be provided electronically to save on paper and transport.

e) Flood Risk Management

As covered in item 3.5 above, The site is in Flood Zone 1 with very little chance of surface water flooding – very unlikely to flood in any event. Flood risk assessment from the EA Flood Map for Planning has been checked, and is presented later as Appendix C.

f) Biodiversity

Local Authority planning policy regarding the proposed removal of existing buildings on site, the proximity of nearby large trees and the general woodland nature of the sites surroundings indicate that a full bat survey is required before any demolition can occur, also, in the same context, if any presence of bats is uncovered a bat specialist should either be in attendance during the process of taking down any existing buildings or be available immediately to attend site to advise in case any bats are discovered inhabiting the buildings.

No other specific biodiversity concerns are evident. We have consulted the DEFRA Magic Map to assess any possible concerns.

g) Waste, Recycling and Composting facilities

Bin collection areas will be at the roadside to every proposed dwelling. The bin stores will contain refuse, recycling, food waste and multi-recyclable bins for each property. The bin stores are proposed as 2.3 x 1.2m x 1.5m ht face brick enclosures with felted timber flat roofs. These will be sited within the gardens of each property . The proposed new site access road is designed to facilitate the access, collection activity and manoeuvrability of a standard refuse vehicle.

h) Sustainable Transport

EV charging points are proposed on site, one charging point per property -

Type proposed - VEC01 by EVEC (<https://evec.co.uk/>) - 7.4kW EV Charger, Type 2 - 7 pin, Single Phase, Untethered.

To be fitted with a power supply to accommodate min. of 7.4kw (1 phase 32A) capacity.
Charging equipment to comply with: BS-EN-61851-1:2019. Electromagnetic Compatibility Regulations 2016 (or all previous regulations for earlier models, as appropriate).
EV points to comply with BS 8300-1:2018 - to consider the needs of EV drivers who may be disabled or have mobility issues. Complies with Building Regulations - Approved Document S.

Cycle parking provision is provided in garages for each property or secure metal shed Asgard cycle stores for the three dwellings proposed without garages. Please see last page of this report for sizes & details. Sheds to be green colour choice as standard.

Public transport is also readily available – some 870 metres walk from the site, to the East or West are bus stops for the local number 125 bus service to Wokingham or Crowthorne, leading to national transport routes.

i) Health, Safety and Well-being

* The proposals are residential. Issues of air pollution, noise and light pollution are minimal. Any exterior lighting and street lighting is proposed to be fitted with cap plates to avoid upward light transmission.

* Considering land affected by contamination – there are no records of any recent or historic uses on or near the site which could result in concern for any levels of contamination historically or currently.

* The site is in a suburban location, there are no significant impacts from pollution within the area and the proposals would have no significant impact on the area.

j) Sustainable Construction

• Materials will be locally sourced, preferably within 35 miles, or as near as possible. Wokingham, Slough, Farnborough and Reading are all within 35 miles of the site allowing materials to be obtained from the near area.

• Wherever possible materials are to be selected from ecologically sound ranges, and where possible are to be sourced from manufacturers listed in the GreenSpec index.
(<https://www.ecolabelindex.com/ecolabel/greenspec-pass>).

• A Site Waste Management Plan / Construction Environmental Management Plan will be required to be produced by a successful contractor tendering for the construction work. They would be required to be registered with the Considerate Constructors Scheme, therefore conforming to the schemes Code of Considerate Practice, which includes measures to ensure recycling of materials and proper disposal of any waste material to properly licensed locations.

• Re-use of the materials existing on the site, following an assessment of their capacity for incorporation, will be encouraged. Masonry can be site treated for re-use as ballast, hardcore or infill – road bases etc. Suitable brick and block can be re-purposed for below ground walling. Timber can be repurposed for new concealed structure or used as cladding /infill material.

6. Energy Statement.

6.1 Introduction:

The requirement here is in recognition of climate change and the Government requirement that all new homes must use heating & hot water systems free from fossil fuels by 2050.

The new Future Homes and Buildings Standard : 2021, covers the construction sector, providing changes to key sections of the UK Building Regulations affecting sustainability, including Approved Document L for conservation of fuel and power, Approved Document F for means of ventilation, and the introduction of Approved Document O for overheating mitigation.

Those changes were made in line with the requirement that all new homes from 2025 are expected to have a carbon reduction of 75-80% based on previous regulations and emission levels.

These dwellings have been designed to meet the current Building Regulations which require a 44% increase over the 2013 performance requirement.

Therefore, these proposals will achieve a reduction of over 10% as required by Wokingham Borough Local Development Framework SPD document CD13.10 - which was referenced to EST 'Best Practice' from 2010 and centred around the Building Regulation requirements at that time.

6.2 Energy System & Energy Saving measures proposed:

These proposed dwellings feature a 'fabric led' approach, to ensure that the physical building fabric, walls, floors, windows, doors and roof are highly insulated and well sealed from air gaps at junctions and edges so thereby provide a 'passive' envelope to prevent heat loss.

RECOMMENDATIONS FOR ENERGY EFFICIENCY SOLUTIONS TO BE ADOPTED

1. Main heating is proposed via a Viessmann Vitodotens 100-W 35kW combi-boiler. Gas fired with weather compensating system. 97% efficiency rating.
A 35KW output boiler is the estimated size for a 4+ bed dwelling.
2. Secondary system, to reduce gas / fossil fuel consumption is an air source heat pump (ASHP). This is proposed as an air to water unit.
3. System has in-built facilities to incorporate or adapt to output systems such as underfloor heating or radiator systems.
4. System allows individual room settings (allowing switch-off for extended periods etc.). Separate metering is required for the air-source unit.
5. A PV panel system for 5 number panels per plot at 2300 x 1130mm each are proposed, panels to be located on suitable roof slopes South East or South West facing. These will not be enough to provide all power and heating for the proposed dwelling. However, these panels as proposed will supply additional electricity which may be required to augment the ASHP system.
6. System design and installation for both the Heat Pumps and PV panels proposed will be provided by specialist manufacturers / suppliers with details, layouts and performance specifications provided following commission.
7. Other heat source measures considered were as described in item 5 b) and c) above.
8. The proposed new wall and floor constructions will be built to exceed modern standards. This will ensure minimum heat loss by exceeding the requirements of the current Building Regulations by the use of Robust Detail specifications adapted to provide increased energy saving where possible.
9. An electronic / on-line 'property management pack' to be supplied to each unit with detailed instructions on operating white goods, cooking and heating appliances, energy saving and water saving and water quality advice.
10. 400mm of new mineral wool insulation in the roof space and tight gap sealing, use of lapped and taped vapour control layers & roof-ventilation selected to suit the roof covering manufacturers recommendations will exceed current building regulation requirements.
11. High efficiency ASHP system as above to be specialist maintained. User app to be provided by the manufacturer for customer control.
12. Radiators will be fitted with room TRV's and fitted with zone controls.

13. Digital controls to be provided with 7 day programmable control, enhanced load compensation features, room thermostat controls etc.
14. Greenstar Comfort 1 controls (and many other manufacturers types) are now available as a wireless option, avoiding cable chasing etc., this is proposed to be specified as a favoured option.
15. Highly insulated hot water pipework as required under Building Regulations Approved Doc. L1, will be provided.
16. Bath tap limiters will be specified to ensure a maximum 48 degrees hot water temperature.
17. Reduced use of mains water to max 105ltr per person per day by
 - i) Use of a water-saving device in the toilet cistern. "Sanit" or similar cistern unit could save between one and three litres each flush.
 - ii) Fit tap aerators to all system taps to help reduce flows.
 - iii) WWF 'Guide to water saving' information to be included with the 'property management pack' to be supplied to each unit.
18. A SuDS system on the site is proposed & shown on a separate SuDS report & layout plan.
19. All Materials are to be selected from ecologically sound ranges, and where possible are to be sourced from manufacturers listed in the GreenSpec index.
(<http://www.greenspec.co.uk/>).
20. A daily log of construction deliveries and refuse output will be kept by the site supervisor, logging loads and destinations for waste. Waste is to be minimised, any materials removed from site are to be properly disposed of at the nearest licensed depot.
21. Ordering materials is to be timed to reduce the number of deliveries required to a minimum. Storage of materials on site is to be assessed to minimise on-site transport.
22. Construction methods are to be selected to be as low-carbon as possible, materials are to be re-used wherever possible, such as re-use of demolition materials on-site and retention of existing soil & landscape levels wherever possible.
23. Detailed proposals for ecology enhancement will follow. Proposals can include new natural hedges, bat and bird boxes, planting to attract and encourage wild-life and enhance the area for nature.

7. Conclusion

We believe that these proposals will form a sustainable, energy efficient and a low-carbon use on this site, providing comfortable and sustainable, efficient and affordable family dwellings in a very desirable location and increase the natural and ecological value of the site.

We respectfully ask the Council to consider this application for approval.

Asgard Cycle Storage shed - 4 cycle storage.

7' x 3' Asgard Access 4 Bike Metal Storage Shed (2.13m x 0.83m)

Product Code: SHS25429

From **£759.99**



Recommended by the UK cycling press and approved by the police, this robust metal bike shed provides the ultimate security for up to 4 bicycles.

- 10-year anti-rust guarantee
- Approved by the police and cycling press
- Built in the UK from thick, heavy-gauge galvanised steel
- Rust-resistant, weatherproof and maintenance-free
- Metal floor, lockable double doors and gas-assisted lid

Size & Specification

Select Colour

Access 4 Bike Metal Storage Shed - Green + £759.99

Optional Bike Store Installation

No Installation +£0.00

Accessories

- 0 Single Shelf for Asgard Access Shed + £44.99
- 0 Universal Hooks (pk 5) + £22.99
- 0 Disc Padlocks (Set of 2) + £25.99
- 0 Wooden Flooring For Access + £134.99

- Approved by the police and cycling press
- Able to store 4 bicycles
- Built in the UK from thick, heavy-gauge galvanised steel
- Rust-resistant, weatherproof and maintenance-free
- 10 year anti-rust guarantee.

- Integral metal floor
- Large double doors and gas-assisted, reinforced lid
- 2 shrouded, steel-plated locking points and hidden screw ends
- Integral ventilation system