

Sustainability Checklist

Important: Please read instructions below.

Before you begin, download this form to your computer and complete using Acrobat Reader. **Please do not complete this form within your web browser (i.e. Explorer, Chrome, Firefox) as the information you write on and sign the form cannot be saved.**

How to use the checklist

The sustainable design and construction submission checklist needs to be submitted with applications for all new development (that result in a residential net gain of 1 dwelling and above or an increase in non-residential floorspace) and can also be used as part of the pre-application process.

The purpose of this checklist is to explain and evidence how the proposed development complies with District Plan policies that seek to improve the environmental sustainability of new development. The checklist topics and criteria reflect the sustainable design and construction guidance set out in the **Sustainability Supplementary Planning Document (SPD)**: www.eastherts.gov.uk/sustainabilityspd

The checklist should be used as a tool to provide an overview of how a scheme addresses different aspects of sustainability, although each application will be assessed on its own merit, taking account of local circumstances. It does not replace other application submission requirements, but aims to provide an overarching framework to help facilitate the assessment of different, often overlapping, strands of sustainability.

Applicants should:

- Briefly summarise/ explain how their proposal complies with the relevant criteria, signposting to other relevant statements/ surveys as appropriate (for example, the transport assessment, biodiversity checklist and Sustainable construction, energy and water statement). The checklist does not need to repeat detailed information submitted elsewhere, but should provide an overview of the approach taken in the scheme.
- Ensure answers are explained and justified, not simply 'yes' or 'no' or 'not applicable';
- Use District Plan policies and the relevant sections in the SPD to inform responses;
- Ensure the level of detail submitted is proportionate to the type of application. For outline applications, the relevance of criteria will depend how many matters are reserved. Given the importance of incorporating sustainability measures early into the design process (as outlined in section 2 of the SPD), the Council think it is important that the checklist is considered at the outline stage. However, it is recognised it may not be possible to provide all the information required. In these circumstances, the applicant should demonstrate which checklist criteria are not applicable to their proposal.
- Ensure the level of detail submitted is proportionate to the scale of application. While major applications will require significantly more input than others, it is appropriate that all submissions should consider the sustainable design and construction issues raised and provide a response.
- Refer to the Council's website for further details about the submission requirements of particular applications: <https://www.eastherts.gov.uk/planning-building/make-planning-application>

Site name and reference

Dingley Dell, The Street, Furneux Pelham, Nr Bishop's Stortford, Hertfordshire, SG9 0LJ

Details of person responsible for completing checklist

Name

Mark Wiffen

Organisation

Marlin Design

Relationship to the proposal (e.g. applicant, agent, consultant)

Agent

With the following questions, please give a summary of the approach you are taking to address the criteria stated in the boxes provided.

Energy and carbon reduction

En.1 Does the Sustainable construction, Energy and Water Statement detail how the proposed development's carbon emissions have been minimised and to what extent?

Have full and reserved matters planning applications also included a carbon reduction template within the statement? (See SPD Section 3.3 and appendix B)

We will arrange for an Energy & Water Statement to be provided following granting of Planning Consent to be completed via Discharge of Condition application. We will also provide a Carbon Reduction template in line with the submission requirements of the District Plan.

En.2 How have the site layout and building orientation and form been designed to minimise energy use? E.g. passive solar gain, natural shade, natural ventilation, thermal mass) (See SPD section 3.2.3)

The proposed dwelling has a similar orientation to that of the existing dwelling. The main living space is located on the south side of the property with bedrooms to the north & east sides and Kitchen to the west side. Increased eaves overhangs will provide shading to all elevations to reduce solar gain and improve natural shading. Natural ventilation is provided by larger format openable windows. All fenestration will be thermally efficient and air tight. We are proposing to use premanufactured SiPs panel building systems with high thermal efficiency to exceed the requirements of the Building Regulations. Under floor heating over an insulated suspended beam and block floor will provide heating via Air Source Heat pump throughout the property, thereby maintaining a stable and constant temperature within the property.

En.3 How has the energy hierarchy been applied to prioritise reducing the need for energy and implementing the 'fabric first approach'? (See SPD sections 3.2.2 and 3.2.3)

External walls, and roof structure are proposed to be of premanufactured SiPs system with thermal insulation levels in excess of the requirements set out in Part L of the Building Regulations. This will provide a complete air tight and wind tight structure.

En.4 How will you ensure that where renewable/ low carbon technologies have been included to reduce carbon, that these will be successfully integrated into the design of the development? (See SPD sections 3.2.4 and 3.2.5)

We proposed to install Air Source Heat Pumps for the main heating system and domestic hot water system. Details of the final system will be finalised at the Building Regulations stage by the relevant technical team.

En.5 How has the energy embodied in construction materials been reduced? (e.g. reuse and recycling/ sustainable materials/ locally sourced) (See SPD section 3.2.6)

Existing masonry materials will be reused on site as hardcore where possible.
Where possible all materials will be sourced locally
All timber products will be from sustainable sources and harvested responsibly

Climate Change Adaptation

CA.1 How has the site layout and buildings been designed to mitigate overheating, giving priority to measures in line with the cooling hierarchy? (See SPD section 4.2.2)

Larger windows/sliding doors allow increased natural light into the main living space thereby reducing the need to use electric lighting.

increased eaves overhang provides shading

Passive cross ventilation provides cooling via the larger format opening windows within the main open plan Living/Dining/Kitchen area

CA.2 How has overheating been assessed and what measures are proposed to address it?
(See SPD section 4.2.2)

As previously outlined in CA1 above,

Larger windows/sliding doors allow increased natural light into the main living space thereby reducing the need to use electric lighting.

increased eaves overhang provides shading

Passive cross ventilation provides cooling via the larger format opening windows within the main open plan Living/Dining/Kitchen area.

The insulation of the fabric, glazing and overheating will be dealt with during the detail design at Building Regulations stage

CA.3 What Green Infrastructure is proposed? (See SPD section 4.2.3)

The existing hedgerows are to be retained, save for a short length to the frontage to allow for the new vehicle access. All existing trees are being retained, with the new dwelling being designed around the existing fruit trees.

CA.4 How have existing landscape features such as trees/woodlands and hedgerows been protected and incorporated within a Green Infrastructure network? (See SPD section 4.2.3)

As CA3 above,

The existing hedgerows are to be retained, save for a short length to the frontage to allow for the new vehicle access. All existing trees are being retained, with the new dwelling being designed around the existing fruit trees.

Bat boxes will be installed where required.

CA.5 Where feasible and appropriate, have green roofs or walls been included. Please explain your answer? (See SPD section 4.2.3)

We have not included green roofs or walls in the proposal as it would not be compatible with the nature of the area.

The new dwelling's design is a nod to the existing dwelling and sits well within the countryside aesthetic of the village.

We do not consider that green roofs or walls would be appropriate on this development.

CA.6 Have measures been included to address surface water runoff? (See SPD section 4.2.4)

Surface water run off will be dealt with via permeable granite sets to the vehicle parking area and soakaways or natural water courses where possible

CA.7 If the application is major development, have details of SUDs been submitted? (See SPD section 4.2.4)

The proposal is not a Major Development.

Water efficiency

WA.1 For new residential proposals, have you demonstrated compliance with the target for mains water consumption to be 110 litres or less per head per day in the Sustainable construction, Energy and Water Statement? (See SPD section 5.2.2)

Fittings will include low flow rate taps, water efficient shower heads and efficient dual flush WCs. The development will comply with the water consumption target in Policy WAT4 of 110 litres or less per head per day.
Compliance with Part G2 of the Building Regulations will also be targeted.

WA.2 For non-residential development have measures been taken to reduce water consumption in the proposed development? (See SPD section 5.2.3)

Not required

WA.3 Has consideration been given to the using water recycling systems? (See SPD section 5.2.4)

Water butts will be sited to capture rainwater

Pollution-Air Quality

AQ.1 How has the proposal addressed the recommended minimum air quality standards? These apply to all new development as set out in paragraphs 6.1.2.2 of the SPD.

The proposals will comply with the recommended minimum standards.

The dwelling will exceed the requirements of Part L of the Building Regulations thereby reducing carbon output

All materials will be sourced as locally as possible

An electric vehicle charging point can be provided within the existing garage.

- AQ.2** How does the proposal show consideration of air quality in the design of new development?
Design should address the following principles:
- Building and development layout and design
 - Emissions from transport
 - Sustainable energy
- (See SPD section 6.1.2.4)

There are minimal air pollution issues around the location.

The site's location provides a natural distance from any sources of air pollution.

The existing hedging and trees provide a natural filter for trapping of airborne particles as well as providing habitats for local biodiversity.

- AQ.3** How has emissions mitigation been incorporated into the proposal? (See SPD section 6.1.2.5)

Measures to control the air quality are not required for this scheme as the proposals are considered to provide good air quality.

AQ.4 How will emissions be minimised through the construction and demolition phase of the development? Measures should follow the national guidance set out in section 6.1.2.7 of this SPD.

The construction site operatives will aim to maintain low emission levels through good site management and the use of low emission technology and equipment.

Contractors will ensure that site works are compliant with IAQM Guidance on the Assessment of Dust from Demolition and Construction.

Materials will be locally sourced where possible.

AQ.5 Has an Emissions Assessment been carried out as part of the Air Quality Neutral Requirement? The assessment should utilise the Damage Cost Approach.

The development does not require an Air Quality Assessment.

The development does not exceed the minor development classification.

The development is not adjacent to an Air Quality Management Area.

AQ.6 Has an Air Quality Impact Assessment been submitted? This must be submitted if the proposal meets any of the criteria listed in paragraphs 6.1.3 of the SPD.

Refer AQ5 above

AQ.7 Has an Air Quality Neutral Assessment been submitted? This must be submitted if the proposal meets the criteria listed in paragraphs 6.1.3 of this SPD.

Not required

Pollution: Light Pollution

- LP.1** Does the proposal materially alter light levels outside the development and/or have the potential to adversely affect the neighbouring uses or amenity of residents and road users or impact on local ecology? (See SPD section 6.2.2)

Light levels will not be affected outside of the development

- LP.2** Is the proposed light design the minimum required for security and operational purposes? (See SPD section 6.2.2)

No significant external lighting is proposed. Where lighting for security or access purposes is installed this will be on motion sensors/timers.

LP.3 Does the proposal minimise potential glare and spillage? Please detail the design measures adopted to ensure this. (See SPD section 6.2.2)

The proposals will not produce any issues

Biodiversity

Bio.1 Have you submitted East Herts biodiversity checklist? (See SPD section 7.3)

Completed and submitted with the application

Bio.2 In accordance with the Biodiversity checklist, does the proposal affect a protected species or habitat? (See SPD section 7.2.4 and 7.3)

Please refer to the submitted Bat survey report

Bio.3 If a protected species or habitat has been identified, has an ecological survey, with sufficient information been undertaken? (See SPD section 7.2.4 and 7.3)

Please refer to the submitted Bat survey report

Bio.4 If relevant, has an ecological survey, with sufficient information been undertaken to assess the likely ecological impact of the development?

Please refer to the submitted Bat survey report

Bio.5 Has the mitigation hierarchy been applied undertaken, to demonstrate an adverse impact on biodiversity has been avoided? If this is not possible, has the impact been mitigated and then subsequently compensated? (See SPD section 7.2. and 7.3)

All existing trees and hedging are retained. Impacts on Biodiversity are avoided.
Bat and Bird boxes can be installed as required.

Bio.6 Has a net gain been achieved using a locally approved biodiversity metric?
(See SPD section 7.2.5)

Net gain can be achieved by the further integration of nest boxes for birds and bats.

With the footprint of the proposed dwelling being larger than the existing the majority of the site is still given over to soft landscaped areas, with the majority of the gardens laid to lawn.

Retention of the existing fruit trees and boundary hedging retains biodiversity and any minor losses will recover after the construction phase.

Bio.7 Has a suitable biodiversity management and monitoring strategy for the site been proposed?

This can be covered by a condition to the granting of Planning Permission reviewed later by the LPA

Sustainable Transport

- T.1** Have you demonstrated that the development includes measures that reduce the overall need to travel, and particularly by private car? (See SPD section 8.2.2)

Please refer to attached sheet

- T.2** Have you demonstrated how, as first principles of design; the scheme's proposals prioritise walking and cycling within the development and link with existing networks beyond the development to deliver healthy and walkable neighbourhoods? (See SPD section 8.2.3)

Please refer to attached sheet

T.3 Where cycling facilities and any bus stops and/or transport hubs are to be provided, have you demonstrated that they accessible and attractive for all users and offer appropriate shelter? (See SPD section 8.2.3)

Please see attached sheet

T.4 Have you included measures (traditional and/or innovative) to encourage uptake of more sustainable modes of transport and engender modal shift from the outset of development? (See SPD section 8.2.2 and 8.2.3)

Please see attached sheet

T.5 Have you developed and submitted to Herts County Council an appropriate Travel Plan, Transport Assessment and/or Statement (as appropriate)? (See SPD section 8.2.4)

Please see attached sheet

T.6 Where car parking is to be provided, have you provided justification for the number of spaces proposed and made provision for electric vehicle charging in accordance with the Vehicle Parking Provision at New Developments SPD?

Please see attached sheet

Waste Management

W.1 Have measures been proposed to reduce, re-use and recycle construction and demolition waste? (See SPD Sections 9.2.2 and 9.2.3)

Please refer to attached sheet

W.2 How has the internal and external design of the development factored in effective sustainable waste management measures? Has sufficient detail been submitted with the application? (See SPD Section 9.2.4)

Please refer to attached sheet

W.3 Have all the relevant criteria identified in table 13 of the SPD been addressed?
(See SPD Section 9.2.4)

Please refer to attached sheet

Data Protection Clause

In accordance with the Data Protection Act 2018 the information you supply the Council will be used to process the planning application or any subsequent appeal and retained as per our published corporate data protection privacy policy which may be found here. Your details and comments will be shown on the website and this information may be shared with other Council departments and/or outside partners.

I agree (Please tick this box to confirm your agreement).

If you are happy with the information contained in this checklist, please save the PDF and submit with your planning application.