

## **Climate Change, Energy and Sustainable Development Questionnaire**

### **When should this questionnaire be used?**

This questionnaire is for minor developments (developments from one to nine residential units and one to 1000 square meters of non-residential floor space) and householder developments.

Developments of a scale above these thresholds (major developments) should not use the questionnaire, but should instead submit a Sustainability Statement and an Energy Statement. See policy 'D2: Climate change, sustainable design construction and energy' (policy D2) and the 'Climate Change, Sustainable Design, Construction and Energy SPD' (the 'SPD') for more information. The SPD is available on the Council's website.

### **What is the purpose of this questionnaire?**

Policy D2 requires non-major developments to submit "adequate information" about how the development complies with the energy requirements of policy D2 and "information proportionate to the size of the development" regarding other matters of sustainability. These requirements for information will be deemed to have been met if a correctly completed questionnaire is submitted.

The questions in the questionnaire are based on requirements set out in Local Plan policies and you should refer to these to make full use of the questionnaire. The Climate Change, Sustainable Design, Construction and Energy SPD sets out guidance on the matters covered within the questionnaire.

The questionnaire is not an exhaustive list of sustainability matters and additions to the questionnaire are welcome.

The questionnaire is intended to guide development towards sustainable outcomes through compliance with Local Plan policy, from the initial proposal and site layout through to detailed design proposals, the construction process and finally the operation of the completed building. As a result, it is important that the questionnaire is first considered at the outset of planning and at the earliest stage of design. It should be updated as plans evolve.

If planning permission is granted, a condition will be applied requiring work to be carried out in accordance with the information provided in the questionnaire. It is important that the questionnaire is completed in good faith and any works identified within it are deliverable.

## Part 1: Applicant details

Applicant's name:

Mr Stuart Riley

Agent's name:

E. Kivilande on behalf of Harper Latter Architects

Site address:

High Barn Farm, High Barn Road, Effingham, Leatherhead, KT24 5PP

Application reference (if known):

24/P/00118

Description of proposal (e.g. total and types of units/floorspace):

Front, side and rear extensions, internal remodelling and construction of a new outbuilding.

Questionnaire prepared by (name and qualification/job title):

E. Kivilande on behalf of Harper Latter Architects

Signature of above:

Elina Kivilande

Energy information prepared by (name and qualification/job title):

E. Kivilande on behalf of Harper Latter Architects

Signature of above:

Elina Kivilande

## Part 2: Sustainable design, construction, and climate change adaption

1. Efficient use of minerals, use of secondary aggregates, waste minimisation and reuse of material from excavation and demolition (Policy D2 1a & 1b). See 'Resources, materials and waste' in the sustainable design and construction guide in section 5 of the SPD.

1.a. Will the use of primary minerals be minimised through e.g. the use of renewable materials, recycled and secondary aggregates, and other recycled and reused materials? Please provide details.

Yes. Renewable materials and recycled materials such as recycled and secondary aggregates will be used where possible.

- 1.b. Will demolition/excavation material from the proposed works be reused on site? Please provide details of where material will be derived and where it will be used.

Yes. Demolition materials will be recycled for use on site as landscaping materials where possible.

- 1.c. Will unused mineral waste be sent for reuse or recycling? Please provide details.

We anticipate re-using some hard products on site and where possible, other materials sorted and sent for recycling.

- 1.d. Will non-mineral construction waste (e.g. packaging, timber, plastics) be minimised? Please provide details.

Yes. Where possible suppliers will be instructed to use only returnable pallets and stillages. Waste minimisation also will be employed through tight specification of dimensions for component parts of the building.

- 1.e. Will locally sourced materials be used? Please provide details.

All bricks and tiles used in this development will be sourced from the UK. Local supply sources will be the focus of the procurement strategy, supply issues notwithstanding.

- 1.f. Will materials be sustainably sourced (e.g. FSC certified timber)? Please provide details.

Yes. All timber specified will come from FSC and PEFC sources and will be checked for compliance prior to orders being placed.

2. Low energy design: landform, layout, building orientation, massing and landscaping (Policy D2 1c and 2). See 'Site layout, landscaping and urban form' and 'Building design' in the sustainable design and construction guide in section 5 of the SPD.

- 2.a. Will operational energy demand be minimised through low energy design and the use of energy efficient fabric? Please provide details. This information should align with the energy data provided in parts 2a and 2b of this questionnaire.

The design and construction of works will ensure it meets and comply with Building Regulations. The reduction of thermal bridging will be made where possible.

- 2.b. Has the layout of the site, landscaping and orientation of buildings taken account of solar receipts and other environmental factors to reduce the need for mechanical heating and artificial lighting in the development? Please provide details.

Yes, design of the proposed scheme has been optimised where possible.

- 2.c. Will the internal layout of buildings make best use of solar gain and natural light? Please provide details.

Yes. The development proposal utilises the existing orientation of the building. The proposed windows ensure that natural light is maximised throughout the proposal.

- 2.d. Will passive cooling/ventilation measures be incorporated into the scheme? Please provide details.

Standard approach of trickle vents and openable windows and doors sufficient.

- 2.e. Will the scheme include mechanical cooling (e.g. air conditioning)? If so, explain why passive measures would not be adequate.

None to be specified

3. Water efficiency (Policy D2 1d). See 'Water efficiency' in the sustainable design and construction guide in section 5 of the SPD.

- 3.a. If the scheme includes new dwellings, will these be designed to the national optional building regulation water efficiency standard of 110 litres per person per day (regulation 36(2b))? The relevant Water Efficiency Calculation (s) (Part G) for the new dwellings should be submitted to the Council prior to occupation.

N/A

- 3.b. For all developments, will water efficiency measures be incorporated into the scheme to reduce the demand for water? Please provide details.

Water efficiency measures such as aerating shower heads and taps flow limiters will be specified, along with the latest low flush WCs.

- 3.c. For all developments, will water harvesting measures be incorporated into the scheme? Please provide details.

A rainwater harvesting butt will be supplied externally to supply water for garden purposes and external cleaning jobs.

4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 'Measures that enable sustainable lifestyles for building occupants' in the sustainable design and construction guide in section 5 of the SPD.

- 4.a. Will measures that enable sustainable lifestyles for building occupants be incorporated into the scheme? Please provide details.

The option to include an electric car charging point will be considered for the front of the property. The open plan nature of the ground floor and careful location of plug sockets and light switches will facilitate occupation by the less mobile if required. Ample space is available for home working and a fast broadband connection will be installed. A provision for cycle storage, as well as ample space for waste and recycling storage and garden compost has been made.

5. Climate change adaptation (Policy D2 4 and P4). See 'Climate change adaptation' in the sustainable design and construction guide in section 5 of the SPD.
- 5.a. Will the scheme incorporate adaptations for the full range of expected climate impacts including: hotter/drier summers, warmer/wetter winters, more frequent and severe heatwaves and overheating, and more frequent and severe heavy rainfall events and flooding? Please provide details.

The overheating calculations that form part of the SAP calculation process suggest that the current dwelling is assessed as having a 'not significant' potential for overheating, meaning there is plenty of scope for it to perform adequately as and when periods of extreme heat occur. Material specification for external areas will be checked to ensure durability and performance in hotter and wetter conditions.

- 5.b. Will the use of soft landscaping and permeable surfaces be maximised (as opposed to hard surfacing)? Please provide details.

Yes – both soft landscaping and permeable surfaces will be maximised. There will be works to the existing garden to make good following development.

- 5.c. Will surface water be managed by Sustainable Drainage Systems (SuDS)? Please provide details.

No – Surface water will be managed by existing system.

6. Any further information

Please provide information about any other sustainable design, construction and climate change measures that will be incorporated into the scheme.

N/A

## Part 2a: Energy

7. Combined (Cooling) Heating and Power ((C)CHP) networks (Policy D2 6, 7 and 8).
- 7.a. Will the development fall within the vicinity of a (C)CHP/heat distribution network (of any scale from single building to district heat)? If so, please list the identified networks.

No

- 7.b. If the development will fall within the vicinity of a (C)CHP/heat distribution network, will the proposed development connect to it or be connection-ready? If not, please set out a clear justification.

N/A

- 7.c. Is the development within a Heat Priority Area? If so, is a (C)CHP or heat distribution network proposed as the primary source of energy for the development? If not, please set out a clear justification.

No

- 7.d. If a new (C)CHP or heat distribution network is proposed, is it designed in accordance with the CIBSE Heat Networks Code of Practice? If not, please provide a clear justification.

N/A

8. Low and zero carbon energy

8.a. If the scheme includes the provision of low and zero carbon technologies, provide details of the proposed energy systems here including: type of technology, location of installation and predicted energy yield.

N/A

9. New buildings: Carbon reduction calculation

9.a. Will the proposed scheme deliver any new buildings (net or gross)?

No

9.b. If the answer to 9a is yes, please complete the following carbon reduction calculation template in part 2b.

### Part 2b: Carbon reduction calculation

For guidance on how to complete this table, see section 'Questionnaire Part 2b: Carbon reduction calculation' in section 6 of the SPD. Add more rows as appropriate.

1. Reference	2. Target Emission Rate (TER)	3. Dwelling Emission Rate (DER) or Building Emission Rate (BER)	4. % carbon reduction from TER
e.g. Plot 1	e.g. 17.2	e.g. 13.4	e.g. 22.09%