

# 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.

Applicant's name:	Richard Hayman-Joyce	
Agent's name:	Grant Marshall	
Site Address:	58 Collingwood Crescent, Guildford GU1 2PH	
Application reference (if known):	PP-12580802	
Description of proposal: (e.g., total and types of units/floorspace)	Proposed First Floor Front Extension over existing, to enlarge Master Bedroom, and to enlarge Ground floor Entrance Hall.	
Questionnaire prepared by: (Name and qualification/job title)	Grant Marshall. Cons. Tech. 1 & 2	
Signature of above:	GM	
Energy information prepared by: (Name and qualification/job title):		
Signature of above:		

# Part 1: Sustainable design, construction and climate change adaptation

- 1. Efficient use of minerals, use of secondary aggregates, waste minimisation and reuse of material from excavation and demolition (Policy D2 1a &1b). See 'Error! Reference source not found.' 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.

It is intended to reuse materials which are deemed to be still of satisfactory quality, to not affect the fabric of the build.

1b. 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.

Aggregate from the demolished brick / masonry walls of the existing extensions will be crushed and used as hard core for the new concrete floor slabs and other in situ cast elements. It may also be used to back fill new drainage trenches etc.

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

As much as practicable will be used in the building of the extension. If any mineral waste is left it will be sent for recycling.

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

Timber will certainly be reused wherever possible. Hopefully suppliers have reduced the packaging and plastic when delivered to the site. We hope the suppliers will take away the packaging and what is left will be sent for recycling.

1e. Will locally source materials be used. Please provide details.

We will be ordering materials and components from local builders' merchants and suppliers wherever possible.

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

Certainly, as far as possible. The timber will be FSC Certified.

- 2. Low energy design: landform, layout, building orientation, massing and landscaping (Policy D2 1c and 2). See 'Error! Reference source not found.' and 'Error! Reference source not found.' in the su stainable design and construction guide in section 5 of the SPD.
- 2a. 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 guestionnaire.

The principal fabric of the proposed extensions is brickwork with wide cavities and thermally efficient blocks to the inner skin. The cavity will have thermal insulation, which will have a higher U-Value than currently required by building regulations. The proposed design considers not only how to retain heat within the property in cold weather, but also preventing the interior overheating from too much solar gain during the summer months.

2b. 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.

Due to the existing orientation of the building, the proposed extension faces North- Northeast, therefore only receives sunlight early morning until midday.

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

As the proposal is to enlarge an existing Bedroom, the layout cannot be changed. The new glazed window will be constructed to the new thermal regulations.

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

### N/A

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

#### No

- 3. Water efficiency (Policy D2 1d). See 'Error! Reference source not found.' in the sustainable d esign and construction guide in section 5 of the SPD.
- 3a. 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

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

Where feasible there is intended to capture rainwater for garden use.

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

#### As existing.

- **4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See** 'Error! R eference source not found.' **in the sustainable design and construction guide in section 5 of the SPD.**
- 4a. Will measures that enable sustainable lifestyles for building occupants be incorporated into the scheme? Please provide details.

The new extensions will be built to provide highly insulated interiors to reduce the need to heating requirements.

5. Climate change adaptation (Policy D2 4 and P4). See 'Error! Reference source not found.' in the s ustainable design and construction guide in section 5 of the SPD.

5a. 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.

#### N/A

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

#### The rear garden already has maximised the soft landscaping.

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

#### The new extensions will drain into SuDS

## 6. Any further information

6a. Please provide information about any other sustainable design, construction and climate change measures that will be incorporated into the scheme.

# Part 2a: Energy

## 7. Combined (Cooling) Heating and Power ((C)CHP) networks (Policy D2 6, 7 and 8).

7a. 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.

7b. 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

7c. 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.

N/A

7d. 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

8a. 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

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

N/A

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

N/A

# Part 2b: Carbon reduction calculation

For guidance on how to complete this table, see section 'Error! Reference source not found.' in section Error! Reference source not found. 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%