

## 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?


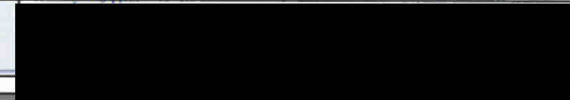
Policy D2 requires non-major developments to submit "adequate information" about how the development complies with the energy requirements of policy D2 and "information proportionate to the size of the development" regarding other matters of sustainability. These requirements for information will be 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:	Maan Alsalloum
Agent's name:	Salloum and Salloum Architects
Site Address:	22 Abbotswood, Guildford, GU1 1UX
Application reference (if known):	23/P/01900
Description of proposal: (e.g. total and types of units/floorspace)	Erection of an orangery to the rear of the property and addition oak framed carport to the side of the property
Questionnaire prepared by: (name and qualification/job title)	Maan Alsalloum (managing Director) RIBA
Signature of above:	
Energy information prepared by: (name and qualification/job title):	Maan Alsalloum - RIBA
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.

Where possible and viable secondary minerals will be used, however if not available locally taken into account the distance of travel for secondary aggregates to be sourced and the carbon footprint associated with to source secondary aggregates.

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.

Where viable, the use of primary aggregates will be minimised by using demolition of building materials as bulk fill. All organic excavated organic materials will be re-used in the garden or as fertiliser.

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

It is intended that unused mineral waste will be to identify each waste type look at best practice for segregating waste at source in order to separate recyclable material from non recyclable material. Where onsite recycling is not feasible, material will be transported to local recycling facilities for processing.

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

It is intended to work closely with others to minimise non mineral waste. We will work within the Borough council framework and the construction industry and suppliers to minimise primary mineral and non mineral waste.

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

Where possible and available, locally available Timber that is FSC certified will be used, Brickwork from the demolition will be re-used, where additional brickwork is required we will use local suppliers to provide matching brickwork. Locally materials will be sourced as much as possible in order to minimise the carbon footprint of the project.

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



It is intended that we will only work with suppliers for the carport and Orangery that provide FSC certified timber

**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 sustainable 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 questionnaire.

Being in a conservation area we are limited in the choice of material as we have to match where possible existing materials. However having said this it is intended that all materials used in the extension will either meet or exceed current building regulations. Where viable higher U value insulated glazing to be used in order to conserve energy. Large glazed areas to be used on the orangery in order to collect natural heat from the sun during the winter. All new walls will be insulated with cavity and it is intended to exceed current building regulation U values where possible. Under floor heating will be used in the orangery extension which has greater efficiency of radiant type conventional heating. If available it is intended to find a local supplier that uses cullet in the glass. However should this be not available local suppliers with alternative will be used to reduce the carbon footprint of long distance travel.

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.

The location of the orangery is North West facing. The facing side NW will be finished in glass in order to harvest the sun's energy to reduce the reliability on fossil fuels. The Roof of the orangery has two sizable lanterns again in order to capture the sun's energy where possible. There are some restrictions on how much sun enters this area due to the location and orientation of the proposed orangery. Under floor heating will be utilised which is more efficient than conventional heating methods.

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

Where possible we have used materials such as glass in order to maximise the solar gain by natural means.

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

It is proposed glazed doors will be openable to encourage passive cooling / Ventilation in order to dispel the need for any active cooling.

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

No, no active cooling required.

**3. Water efficiency (Policy D2 1d). See 'Error! Reference source not found.' in the sustainable design 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.

This is not a new dwelling

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

Not applicable

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

no

**4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 'Error! Reference 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.

no

**5. Climate change adaptation (Policy D2 4 and P4). See 'Error! Reference source not found.' in the sustainable 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.

no

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

Not applicable

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

no

**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.

Not applicable

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.

Not applicable

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.

Not applicable

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.

Not applicable

**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.

No

**9. New buildings: Carbon reduction calculation**

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

No

9b. 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 '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%