

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.

Where possible renewable materials will be used and materials recycled.

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.

Where possible demolition materials will be reused, i.e. concrete/bricks crushed to form hardcore, as required.

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

Waste recycling to be managed by the contractor via their waste management plans which will require utilisation of an Accredited Waste Management company and separation of specific waste.

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

Where possible fabric will be purchased which does not rely on plastic/non-recyclable packaging. Any essential packaging will be recycled/returned to supplier

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

Where possible

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

Where possible and timber will be FSC Certified

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 has been influenced by the existing dwelling but seeks to optimise natural light and ventilation through the positioning of windows. The building works will meet or exceed Building Regulation requirements.

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, having regard to the constraints of the building and site.

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

Yes – windows positioned as far as practical to optimize solar gain and natural light.

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

The design includes opening windows with trickle vents

2.e. 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 '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.

Yes flow control valves on taps, dual/low flush WC's

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

The applicant will consider installing a water butt for water harvesting purposes.

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.

N/A

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.

N/A

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

Yes, where possible

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

N/A

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.

N/A

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.

N/A

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)?

N/A

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%