Sustainable Design Statement - Householder Applications

A Sustainable Design Statement is required to demonstrate you have incorporated relevant sustainable design principles into the design of your development in line with our City Plan 2019-2040, in particular Policy 36 and 38 and following the guidance in our Environmental SPD.

How to use this template

The template is for guidance only. Not all of the questions will be relevant, and the level of detail will depend on the size and nature of your proposal and its impacts. You can enter questions directly into the template or use this to help inform your statement. Your statement may be a section in your Design and Access Statement, where one is required.

Please be aware that standards set out in the Building Regulations may affect your design and you should consider how you will meet the required standards early in the design process[1]. In all cases we recommend the use of a professional advice to help you prepare and submit your application and maximise the sustainability credentials of your scheme. You can search the following directories to find a professional with sustainable buildings expertise -

- https://www.greenregister.org.uk/search
- https://www.aecb.net/
- https://www.climatechangeandyourhome.org.uk/

A glossary of terms and links to sources of further information can be found at the end of this document.

1. Site Address

Kings Buildings, 16 Smith Square, London, SW1P 3HQ

2. About your development. Please use our interactive policies map to find out what policy constraints listed below apply to your site:

Is your site (identify all that are applicable)?	
In an Air Quality Focus Area?	☐
In a Flood Risk Zones 2/3 (mainly Pimlico and Victoria areas and sites close to the River Thames)?	☒

[1] The amended Building Regulations Standards Part F, L, P and Q come into force on 15 June 2022. The changes will not apply in relation to building work where a building notice or an initial notice has been given to, or full plans deposited with, a local authority before 15 June 2022 provided that the building work is started before 15 June 2023.

In a Surface Water Flood Risk Hotspot[1]?	☐
In or next to a Site of Importance for Nature Conservation [2]?	☐
A listed building[3] or in a conservation area[3] ?	☒

In each case where you have answered yes to any of the above, please provide details.

The site is situated within Flood Risk Zone 3 however the works are a very small scale refurbishment and will not be effecting the flood risks, with the improvement of the surface water drainage systems within the new small basement roof and allowance for improved maintenance.

The property is situated on the corner of Dean Stanley Street and the east side of Smith Square, in the City of Westminster. It is not statutory listed but has been labelled as an 'unlisted building of merit' by the local authority within the Smith Square Conservation Area.

3. **Materials and Circular Economy** Describe what materials you are using. In line with our policy, are you prioritising durable and high quality materials? Are you using low carbon healthy materials (i.e. low VOC emitting materials) and products made of natural materials?[4] Could you reuse materials on site and reduce or recycle the waste that will be created as a result of your extension/ refurbishment project?[5]

Existing steel and concrete beams and infill panels will be utilised during the works with minor repairs being undertaken. The stone coping to the parapet wall are to be removed, retained and re-bed onto the parapet wall.
New Velux roof lights are being installed, replacing the dated single-glazed units improving thermal efficiency within the basement (data sheet included within planning documents). The new rooflights encompasses low energy glazing unit reducing heat loss, solar gain for a better indoor climate, solar protection, security, safety lamination, toughened glass, UV filter, rain noise reduction, easy-to-clean technology and anti-dew.
Kemper liquid roof membrane is a solvent and odour free resin system with a controlled manufacturing process, utilising renewable resources and recycled content. The resin system is a durable and seamless product in terms of the design, ensuring a high-quality installation with a certified product and a 20-year manufacturer's warranty.
The use of 150mm thick polyisocyanurate rigid insulation board within the roof – this insulation is less toxic than other insulation materials, waterproof, flame retardant, lightweight and eco-friendly, minimising heat-loss.

[2] The Wildlife Assessment check tool may help clarify whether your project needs expert ecological advice.
[3] You will also need a design and access/ heritage statement and should choose measures which are sensitive to historic significance and traditional fabric, following Historic England advice.
[4] For advice on sustainable materials, see the Green Guide to Specification www.bre.co.uk/greenguide

4. **Optimising resources (energy and water)** City Plan policy requires development to optimise resource efficiency and minimise the need for plant and machinery, incorporating design for energy and water efficiency and following the principles of the energy hierarchy.
Please use the tables below to identify any measures incorporated and provide details and specification in the space below or attach product details to your statement, where relevant.

Energy Efficiency	Yes	No	N/a
Natural/ passive ventilation and design measures to reduce the need for mechanical plant	☒	☐	☐
Rooflights can be opened for natural ventilation.			
Mechanical ventilation with heat recovery	☐	☐	☒
Click or tap here to enter text.			
Active cooling systems, i.e. Air Conditioning Unit	☐	☐	☒
Click or tap here to enter text.			
Draught-proofing[6]	☒	☐	☐
Upgrading to double glazing, new incorporated window seals within the Velux windows and sealant surrounding the rooflights as part of the works.			
Insulation[7] (for example to roofs, tanks, pipes, internal or external walls)	☒	☐	☐
Click or tap here to enter text.			
Repairs/ damp proofing work to improve energy efficiency	☒	☐	☐
Click or tap here to enter text.			
Secondary or high performance glazing	☒	☐	☐
Click or tap here to enter text.			
Renewable energy technologies(e.g. photovoltaics, solar thermal panel, heat pump[8])	☐	☐	☒
Click or tap here to enter text.			
Smart meters[9]	☐	☐	☒
Click or tap here to enter text.			
Energy efficient lighting or appliances[10]			

[6] https://energysavingtrust.org.uk/advice/draught-proofing/
[7] http://energysavingtrust.org.uk/energy-at-home/reducing-home-heat-loss/
[8] https://energysavingtrust.org.uk/advice/in-depth-guide-to-heat-pumps/
[9] https://energysavingtrust.org.uk/advice/guide-to-smart-meters/
[10] https://energysavingtrust.org.uk/energy-at-home/buying-energy-efficient-products/

Click or tap here to enter text.			
Other – please specify	☐	☒	☐
Click or tap here to enter text.			

Water Efficiency	**Yes**	**No**	**N/a**
Can you incorporate any water efficiency or management features (e.g. water efficient taps, shower heads, use of water efficient A or B rated appliances, rainwater harvesting, water meter)? Please specify below.	☐	☒	☒
Click or tap here to enter text.			

5. Greening, biodiversity and climate resilience

Does your development involve the loss of an ecological feature or habitat, including a loss of a tree, garden or green space? Indicate if yes/no and provide details below-

No, cannot make a green roof as this area is too small, overlooked and receives no good daylight.

Have you considered any of the following opportunities for greening and enhancing biodiversity? – where yes, please provide details in the space below.

	Yes	No	N/a
A green or blue roof or green wall (please specify below whether extensive/intensive green roof or other)	☐	☐	☒
Currently is a lean-to roof and replacing with a lean-to roof with Velux windows to allow natural light within the basement area.			
Pond or rain garden[11]	☐	☐	☒
Click or tap here to enter text.			
Other greening including green walls, tree planting, additional landscaping	☐	☐	☒
Click or tap here to enter text.			
Wildlife enhancement features (such a bird/bat or insect boxes)	☐	☐	☒

[11] https://www.susdrain.org/delivering-suds/using-suds/suds-components/infiltration/rain-gardens.html

No space within the area of works.			
Other	☐	☒	☐
Click or tap here to enter text.			

Will your proposals result in a reduction or increase in hard surfacing? Will you use permeable materials and/or other measures for hard standings or parking areas to reduce surface water run-off and evaporation?

No

6. **Other – Please use this space to provide any further commentary on the proposed works, how they have incorporated sustainable design principles and set out any sustainability accreditation or standards you are pursuing, for example Enerphit, BREEAM or LETI best practice standards. Where accreditations are being achieved, please provide any assessments with your statement.**

The new roof will make a currently unsafe and unusable space suitable for use other than storage, enhancing the usable space in the building and improving thermal performance.

Further help and advice.
We offer a pre-application service to provide advice to applicants prior to the submission of an application. Further information can be found here:
Westminster Pre-application Advice.

Glossary

Air Quality Focus Area
There are eight Air Quality Focus Areas (AQFAs) in Westminster, which are designated by the Mayor of London. These areas not only exceed air quality limits but are also locations with high human exposure. 'Air Quality Neutral' is a term to describe development that do not contribute to air pollution beyond certain allowable benchmarks. The benchmarks are set out in the London Plan and Guidance https://www.london.gov.uk/sites/default/files/air_quality_neutral_lpg_-_consultation_draft_0.pdf

Circular Economy
The circular economy is a model of production and consumption, where materials are retained in use at their highest value for as long as possible and are then reused and recycled.

Embodied carbon
Embodied carbon may be defined as the carbon footprint of a material. It considers the amount of greenhouse gas emissions that are released throughout a production supply chain to produce a material or product. It considers all extraction, transport, processing and fabrication activities of a material or product.

Energy Hierarchy
The London Plan Energy Hierarchy (shown in the Westminster City Plan, Page 138, Figure 30) sets a tiered approach to reducing carbon dioxide emissions in the built environment. The first step is to reduce energy demand (be lean), the second step is to supply energy efficiently (be clean) and the third step is using renewable energy (be green). Further advice is set out in the Environmental SPD.

Flood Risk Zones
Large parts of South Westminster are in the Environment Agency's Flood Zone 3 where there is a more significant (1%) chance of flooding from the River Thames in any one year. There is also a small section within Flood Zone 2 with a moderate (0.1%) chance of flooding in any one year. If you are in a flood risk area you may need specialist advice for certain types of development, especially basement development and you may wish to incorporate flood resistance and resilience measures as part of the design. A Flood Risk Assessment may be needed. See Environment Agency Advice - https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#advice-for-minor-extensions

MVHR (Mechanical Ventilation with Heat Recovery)
An efficient way to provide ventilation, is through a MVHR system. The equipment circulates air in a dwelling using a small fan, whilst recovering the heat from inside so it is not lost.

Renewable Technologies
Renewable energy is derived from a source that is continually replenished, such as wind, wave, solar, hydroelectric and energy from plant material, but not fossil fuels or nuclear energy. Energy consumption can be reduced by generating energy using renewable technologies. Although not strictly renewable, geothermal energy is generally included. The Environmental SPD provides advice on different technologies which may be suitable in Westminster. You can also read Energy Saving Trust advice - https://energysavingtrust.org.uk/energy-at-home/generating-renewable-electricity/

Passive Building design
Passive design uses layout, fabric and form to reduce or remove the need for mechanical cooling, heating, ventilation and lighting demand. This may include measures to control solar gains such as solar shading and natural ventilation strategies.

Photovoltaics (PV)
Photovoltaic cells convert sunshine directly into electricity. See Energy Saving Trust for information - https://energysavingtrust.org.uk/advice/solar-panels/

Site of Importance for Nature Conservation
Sites of Importance to Nature Conservation (SINCs), known nationally as Local Wildlife Sites, are recognised as being of particular importance to wildlife and biodiversity. There are 33 SINCs in the Westminster which account for more than 3,000 hectares. SINCs provide important habitats for a range of species. If you are near a SINC you should pay particular attention to whether your development could have an impact on protected species. Before undertaking works, check the roof space for bird[12] / bat[13] roosts and other urban wildlife dependent on buildings for shelter. Any works that would affect breeding birds and their nests, such as works of demolition, vegetation removal or site clearance, should be done outside the nesting season from 1st of March to 31st July inclusive. You could also incorporate measures to enhance and encourage biodiversity as part of your works.

Surface Water Flood Risk Hotspot
In some areas of Westminster, modelling has identified a greater risk of surface water flooding. These are known as 'hotspots'. These 'hotspot' locations require particular attention in terms of flood risk management. To reduce risks in these areas, you may wish to consider Sustainable Urban Drainage measures to reduce the surface water runoff for example rainwater tanks, permeable paving and living roofs enhanced.

VOC
Abbreviation for Volatile Organic Compounds which can release easily into the atmosphere and can in some cases cause health problems and ozone depletion. Low VOC mostly refers to paints and other products that have a very low or zero VOC, e.g. sealants, adhesives and cleaners. These are better for both the environment and living organisms.

Zero Carbon
Causing or resulting in no net loss of carbon dioxide into the atmosphere. A zero carbon building is one with zero net energy consumption or zero net carbon emissions on an annual basis.

[12] Resources such as the Swift Mapper can be used to check for the presence of swifts before undertaking roof work. https://www.swiftmapper.org.uk/

[13] https://www.bats.org.uk/advice/im-working-on-a-building-with-bats

Sources of further advice and information

There are a range of links to sources of information within our Environmental SPD. The following may also be useful –

Planning Portal Advice on Greener Homes
https://www.planningportal.co.uk/info/200140/greener_homes

Energy Saving Trust Advice https://energysavingtrust.org.uk/

London Solar Opportunity Map - https://www.london.gov.uk/what-we-do/environment/energy/energy-buildings/london-solar-opportunity-map

Living Roofs website
https://livingroofs.org/

Advice on Sustainable Drainage and Rain Gardens
https://www.susdrain.org/delivering-suds/using-suds/suds-components/infiltration/rain-gardens.html
https://www.susdrain.org/delivering-suds/using-suds/suds-components/source-control/source-control.html

Advice on historic buildings, refer to Historic England Guidance:
Energy Efficiency and Historic Buildings

LETI Climate Emergency Retrofit Guide **-** advice to help develop a retrofit plan and adopt best practice targets for constrained (e.g. buildings in conservation areas or listed buildings) and unconstrained building types.

Mayor of London Guidance Urban Greening for Biodiversity Net Gain: A Design Guide-
https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf