



Sustainable Design Statement

9 Mount Row, W1K 3RG

Located within the Mayfair Conservation Area

This report has been prepared to support a Planning Application for proposals affecting 9 Mount Row, London W1K 3RG. The proposal is for erection of a first floor infill extension, replacement of existing windows and doors, alteration to a main flat roof including new flat skylights and solar panels, refurbishment of existing first floor terrace and internal alterations. This report should be read in conjunction with the accompanying drawings and photo package included in the planning application as well as the Heritage Statement.

The Site and Context

9 Mount Row, W1K 3RG

Mount Row is located in the Mayfair Conservation Area in the City of Westminster.

The property is not listed.

Sustainable Design Statement

In reference to Policy 38D of the City Plan 2019-2040, Policy 36 (Energy), Policy 39 (Heritage) as well as other relevant policies/guidance including BREEAM, SuDS, energy conservation and water conservation.

The proposed development does not involve significant or substantial demolition of the existing building and seeks to retain and enhance both its original character as well as its longevity by ensuring its environmental credentials are upgraded to the highest possible standards.

Demolition and extension will be very minimal. The proposals include only partial demolition of an existing rear first elevation and only 2.9sq/m of additional floorspace would be added to the existing area.

There would be minimal need for new materials for construction purposes, and the materials used would be high quality stock brick and zinc roof cladding. These materials are not only durable, but are also in keeping with the traditional materials of the existing building of Westminster City Conservation Area.

The proposed development would retain the existing facing brick to retain the embodied carbon of the building and reduce the need for new materials. However, due to the tired condition of the existing building, the proposals would re-point and revive the bricks in order to increase their longevity.

Additionally, the roof insulation would be upgraded with the new extension and in the main roof to achieve current required u value, which would help with both heat loss in winter and gain in summer.

The Heritage Statement concludes that the proposals would enhance the local townscapes through the alterations to the existing building, and that the overall character and appearance of the Conservation Area would therefore be preserved and enhanced in line with Policy 39 of the Westminster City Plan.

The timber sash and casement windows would be double glazed, and the design also incorporates better insulation in order to optimise resource efficiency.

Additionally, water and resource and efficiency would be upgraded, utilising new system installations and underfloor heating systems. The development seeks to maximise water efficiency through the introduction of new systems and seeks where feasible to meet the residential optional water efficiency requirement of 105 l/ per person per day.

Replacing windows on the front and rear elevations with new high-performance windows would help to reduce thermal losses of the existing house.

Energy efficiency of lighting would be improved through the proposals, with the implementation of a series of rooflights to allow enhanced natural ventilation and purge capability during summer months. Low energy 100% LED lighting is also proposed throughout.

Nine solar panels to be installed on the top of the main roof on a 15 degree south facing pitch.

All of the improvements to the sustainability of the dwelling through the proposed works have been considered to either have a nil or minimal impact on the heritage of the asset and respecting the limits of what can be achieved without having a substantial or harmful impact whilst maximising opportunity to improve the useable lifespan of the dwelling.

Certain proposed alterations are likely to actually have an improving affect to the aesthetics and heritage value of the property, for example replacing the existing windows for heritage-style timber framed double-glazed equivalents.

In doing so, the internal secondary glazing panels can be removed which are currently highly visible from the Mount Row elevation and have a detrimental impact on the appearance of the fenestration.

Key sustainable design points:

- All lighting to be upgraded for 100% LED fixtures throughout.
- All new plumbing fixtures to have limited flow rates to ensure water consumption is under 105L per person per day including use of dual flush toilets and aerated showers, basin mixers & kitchen taps as well as the latest standards of dishwasher & washing machine.
- Major upgrades of insulation with minimal harm to the heritage of the asset including:
 - internally to the existing main roof/mansard roof by using rigid PIR insulation between joists and a thermal blanket under joists to reduce heat loss via the roof.
 - to the ground floor flat roof/first floor terrace to be reconstructed with new rigid PIR insulation as a 'warm-roof' deck substantially lowering the U-value over the existing.
 - within intermediate floors to reduce transference of heat from occupied and unoccupied spaces.
 - Note: upgrading insulation to external walls would have a substantial impact on the heritage of the asset and is therefore not under consideration for this development.
- Replacement of all existing glazing for heritage double-glazed panels which would offer both a significant improvement in heat-loss whilst also delivering a substantial improvement to the appearance of the property externally as the current secondary glazing is both clearly visible externally as well as internally and also creates additional glare/reflection when impacted by sunlight.
- Water-based underfloor heating throughout to improve heating efficiency and reduce the operating temperature of the mains heating system.
 - Note: none of the existing floors within the building are original or of any heritage value. The property is currently fitted mostly with modern porcelain tiles or laminate flooring which dates from the late 1990s until 2010s. The few remaining areas with parquet/herringbone flooring have been substantially damaged or disrupted by unsympathetic 20th century alterations and partition walls.
- New mains gas system boiler to the latest standards.
 - Note: an Air Source Heat Pump would not be appropriate for this property as there is no sufficient outdoor location for it to be located without having a substantial impact on the heritage of the property or without having adverse noise impacts on neighbouring properties.

- New/upgraded triple-glazed rooflights to the main flat roof as well as the first floor terrace (walk-on). These would substantially improve the heat-loss via glazing and provide additional natural light to the property to reduce reliance on artificial lighting.
 - Note: these would have an unsubstantial impact on the heritage of the asset as these would not be visible from Mount Row or neighbouring buildings and roof lights installed within the terrace would bring a substantial improvement of natural light to the ground floor which is currently poorly lit.
- Nine new solar PV panels to the main flat roof. Mounted directly onto the flat roof at a minimal 15 degree angle (south facing towards Mount Street). The installation would have an effective installed generating capacity of 3.7kW.
 - Note: these would have an unsubstantial impact on the heritage of the asset as these would not be visible from Mount Row or neighbouring windows.