



32 Lawn Road, Camden
Planning Application by
Fairview Estates (Housing) Ltd

Drainage Strategy and
Flood Risk Statement

October 2014

LAWN RD NW.3.





Lawn Road, Camden, NW3 2XU

Surface Water SUDs Strategy & Flood Risk Statement

Introduction

Infrastructure Design Ltd (IDL) has been appointed by Fairview Estates (Housing) Ltd to provide this SUDs strategy & Flood Risk statement for the proposed residential development at Lawn Road, Camden.

Given the overall size of the proposed development site (0.25HA), a full-scale Level 2 Flood Risk Assessment is not required to support the planning application.

Surface Water Drainage / SUDs

In accordance with the NPPF (National Planning Policy Framework), The Camden Development Policy (DP23) and London Plan (Policy 5.13) the surface water drainage strategy for the new development will incorporate sustainable urban drainage principles.

Guidance contained with the SUDs Manual (CIRIA C697) has been used to determine which SUDs features are most applicable to this development given its topography, ground conditions, scale and density.

The SUDs Hierarchy (refer to Appendix A) has been completed to summarise which SUDs features have been selected and why certain features have been discounted.

A flow control device will be incorporated ahead of the final outfall to the existing adopted sewer system to ensure that the discharge rate does not exceed 50% of the rate which exists from the development presently (in a 1 in 1 year return period storm event).

The onsite surface water drainage system will be designed to withstand runoff generated from all storm events up to and including a peak 1 in 100 year return period storm, plus an allowance for the potential effects of climate change (+30%).


Rainwater from roof areas will be collected for reuse, for irrigation purposes, with any surplus overflowing into the main onsite surface water drainage system. The design of the drainage system will assume that any rainwater harvesting vessels are 'full' at the time of a heavy rainfall event.

Flood Risk

By reference to The Environment Agency Flood Maps, the site is known to exist within a Low Risk Flood Zone 1 (0.1% probability of flooding in any year).

Notwithstanding the above, Map 2 contained within Section DP23 of The Camden Development Policy, identifies that the southern-most part of the development site is at risk of surface water (pluvial) flooding during periods of extreme rainfall. Therefore, the proposed surface water drainage strategy for the new development will ensure that any surface water generated in this area is collected, attenuated and released gradually into the adopted sewer system, thus preventing any flood risk to future occupiers.

Appendix A - The SUDS Hierarchy

Most Sustainable	SUDS technique	Flood Reduction	Pollution Reduction	Landscape & Wildlife Benefit	Included in the scheme?	Comments
	Living roofs	√	√	√		Due the extensive use of solar PV, this form of SUDs is not appropriate on this development.
	Basins and ponds - Constructed wetlands - Balancing ponds - Detention basins - Retention ponds	√	√	√		Due to the density of the new development and site topography, above-ground SUDs features of this type are not suitable.
	Filter strips and swales	√	√	√		Due to the underlying London Clay formation, infiltration techniques are not appropriate on this site.
	Infiltration devices -soakaways - infiltration trenches and basins	√	√	√		Due to the underlying London Clay formation, infiltration techniques are not appropriate on this site.
	Permeable surfaces and filter drains - gravelled areas - solid paving blocks porous paviments	√	√			Due to the underlying London Clay formation, infiltration techniques are not appropriate on this site.
	Tanked systems - over-sized pipes/tanks - storms/cells	√			√	Given the inability of the aforementioned SUDs features to offer an benefit on this scheme, the principal means of surface water attenuation will come in the form of below-ground cellular systems and over-sized pipes, with the outfall rate limited to no greater than 50% of the existing (pre-developed) rate.
	Least Sustainable					

