G30 CONSULTING

Drainage Strategy Report

Land Adjacent 2 Evelyns Close, Hillingdon

Inspired Design & Build Ltd

18th January 2021

1. SURFACE WATER DRAINAGE STRATEGY

1.1 General

G30 Consulting Ltd have been commissioned by Inspired Design & Build Ltd to undertake the surface water drainage design to satisfy Planning Condition 6 in relation to the proposed residential development at land adjacent 2 Evelyns Close, Hillingdon.

The development comprises the construction of a single residential property with 2no. car parking spaces to the front which are to be accessed off Evelyns Close.

In accordance with Building Regulations Part H- Drainage and Waste Disposal, surface water runoff generated by a site should look to discharge to one of the following listed in order of priority:

- An adequate soakaway or some other adequate infiltration system; or, where that is not reasonably practicable,
- A watercourse; or where that is not reasonably practicable,
- A surface water sewer; or where that is not reasonably practicable,
- A combined water sewer.

1.2 Infiltration System

At the time of producing this report an intrusive ground investigation report had not been undertaken to confirm ground conditions on site. In the absence of an intrusive ground investigation British Geological Survey (BGS) 1:50,000 scale geology mapping was reviewed to confirm the geology on site. The details of the underlying geology can be found below and in Figure 1 below:

Bedrock Geology: London Clay Formation - Clay, Silt and Sand. Sedimentary Bedrock formed approximately 48 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by deep seas. These sedimentary rocks are marine in origin. They are detrital and comprise coarse- to fine-grained slurries of debris from the continental shelf flowing into a deep-sea environment, forming distinctively graded beds.

Superficial Deposits: Langley Silt Member - Clay and Silt. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by windblown deposits (U). These sedimentary deposits are aeolian in origin. They are detrital, comprising medium- to fine-grained materials, forming lenses, beds (and locally) dunes.

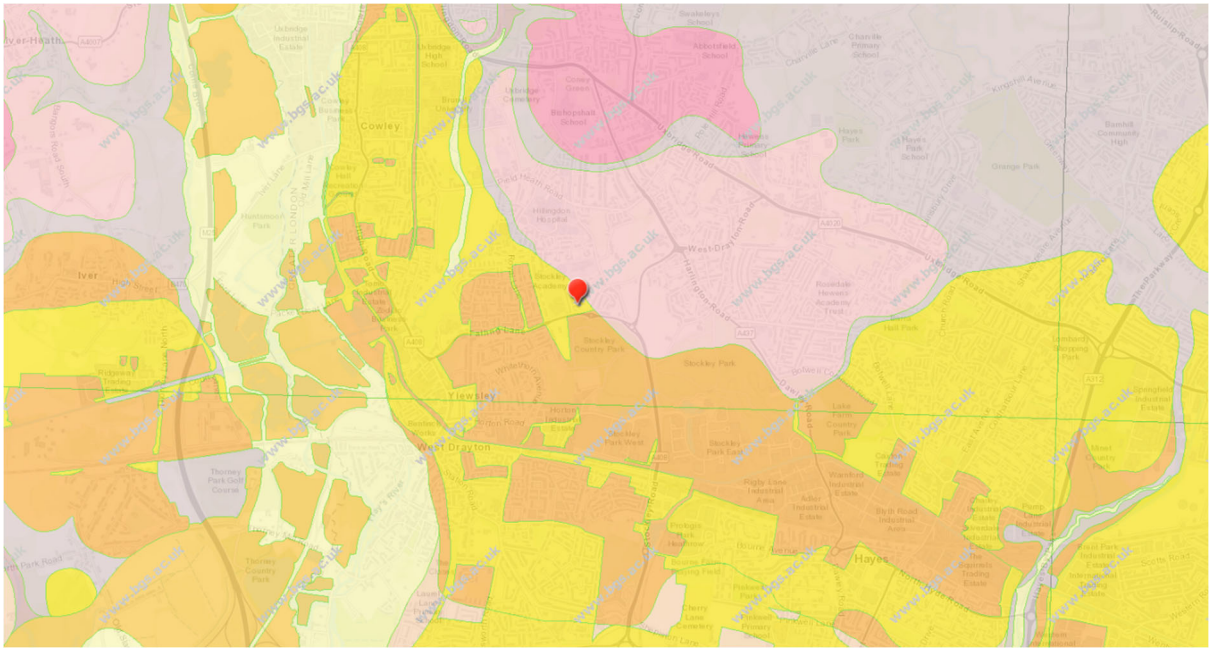

Figure 1 – British Geological Survey (BGS) 1:50,000 scale geology mapping

Due to the local geology on site and the proximity to the adopted highway / other residential properties infiltration drainage techniques have been discounted as the primary method of surface water disposal.

1.3 Watercourse

The nearest watercourse to the site is the Grand Union Canal which is located approximately 1.50km West of the site. Due to the distance from the site a direct discharge cannot be achieved.

1.4 Surface Water Sewer

Thames Water are responsible for adopted drainage assets in Hillingdon. Sewer asset record plans have been made available which show a surface water sewer located in Evelyns Close.

Surface water runoff from the site is proposed to discharge to the surface water sewer at a restricted rate of 1.2l/s for all storm events up to and including 1 in 100 year + 40% climate change.

Approximately 4.75m^3 of cellular crate attenuation is to be provided on site to attenuate surface water runoff from the residential property and the private driveway for all storm events up to and including 1 in 100 year + 40% climate change.