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Proposed development at

Moss Green Close,

Huyton,

Knowsley

for Built Group Ltd.,

Drainage and Flood Risk Assessment Report

Ref.: 21475
July 2021

1.0 Introduction

- 1.1 We have been commissioned by Built Group Ltd. on behalf of Livv Housing Group to undertake a surface water drainage design for the proposed development at Moss Green Close, Huyton, Knowsley.

2.0 Scope and objective

- 2.1 The specific objectives of this report are to demonstrate the proposed means of collection of the surface water for the proposed planning application.

3.0 Limitations

- 3.1 This report is prepared for the sole use of Built Group Ltd. and Livv Housing Group for the purposes of developing land to the west of Moss Green Close, Huyton. The report shall not be used by any third party unless that party has been granted a contractual right to rely on the report for the purpose that it was prepared.
- 3.2 The report is prepared on the information derived from various sources including the appropriate design standards.
- 3.3 If the development proposal changes it will be necessary to update the report to reflect those changes.

4.0 Site Description

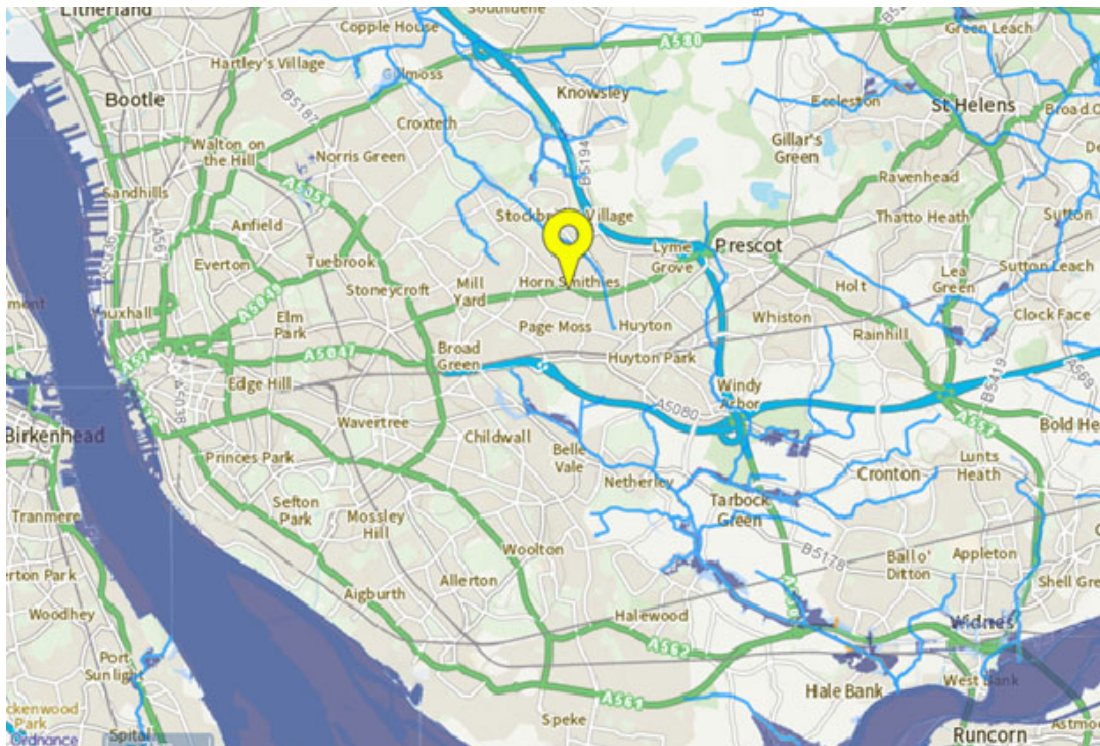
- 4.1 The site is located off Moss Green Close, Huyton, Knowsley, L36 2AB. The national grid reference for the centre of the site is 342911, 391931. At present the site is derelict land. The existing gross site area is circa 2334m².
- 4.2 A response to our pre-development enquiry to United Utilities has been received and surface water will be discharged to the existing sewers in Moss Green Close.

5.0 Proposed development

- 5.1 The proposed development is to construct a new residential development with 10 nr. 2-bedroom dwellings.

6.0 Flood Risk Assessment

- 6.1 The site lies within Flood Zone 1 on the Environment Agency (EA) Flood Map (<1% chance of flooding in accordance with the Flood Zone classifications of the NPPF) and is therefore considered to be at low risk of flooding from rivers. Reviewing the Environment Agency mapping service confirms that the application site is wholly within Flood Zone 1. Below is an extract from the mapping service provided by the Environment Agency.



Proposed development location

- 6.1 An assessment of other potential sources of flood risk has been carried out including drains and sewers and groundwater. It is considered that there is a low risk of flooding to the site from these sources.
- 6.2 The existing drainage that runs in the alleyway north of the development is low risk of flooding.
- 6.3 Sustainable Drainage Systems (SUDS) techniques for conveyance and storage have been considered during the detailed design stage.

7.0 Foul Sewerage proposals

- 7.1 The development consists of 10 nr. dwellings, resulting in a foul water discharge rate of 0.55l/s into the existing foul sewer adjacent to 148 Liverpool Road.

8.0 Surface Water proposals

8.1 Design Codes

The surface drainage system will be design in accordance with the following documents

BS EN 752:2008 Drain and sewer systems outside buildings

BS EN 10256-2:2000 Gravity drainage systems inside buildings

8.2 Strategy

The drainage strategy for the development is for United Utilities to adopt the network – including oversized pipes for the 1 in 30 year event - and for the 1 in 100 year + 40% Climate Change attenuation storage to be maintained by Livv Housing Group.

In the pre-development enquiry to UU, an allowable discharge rate of 5l/s was confirmed as the new discharge rate from the development.