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**Drainage Strategy**

The site is located within flood zone 1 with a low risk of flooding from rivers or the sea.

The existing site consists of residential properties.

NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

**Surface Water:**

Soakaway will be investigated via on site percolation testing, however based on UK Geological Maps the site is underlain by London Clay formation and it is unlikely that percolation would be suitable. As such we have assumed for the purposes of this strategy that percolation is not a suitable means of discharging SW.

The site has no watercourses recorded in the vicinity, therefore it is proposed to connect to sewer.

The existing impermeable area is 410m<sup>2</sup>, with a 1in1 year SW rate of 5.6l/s.

- Greenfield flow from site at 1.4l/s/ha - 0.28l/s
- Existing flow from site 1in1 year - 5.6l/s
- Existing flow from site 1in 30 year -40l/s
- Existing flow from site 1in 100 year-80l/s
- Proposed flow rate- 2l/s as per LLFA requirements

A 50% betterment of this rate would equate to 2.3l/s. However LLFA require flows to be restricted to 2l/s therefore SW flows will be restricted to 2l/s. Attenuation will be required up to 1in100 years plus 40% climate change.

The proposed impermeable area is 1.250m<sup>2</sup> including 10% Urban Creep

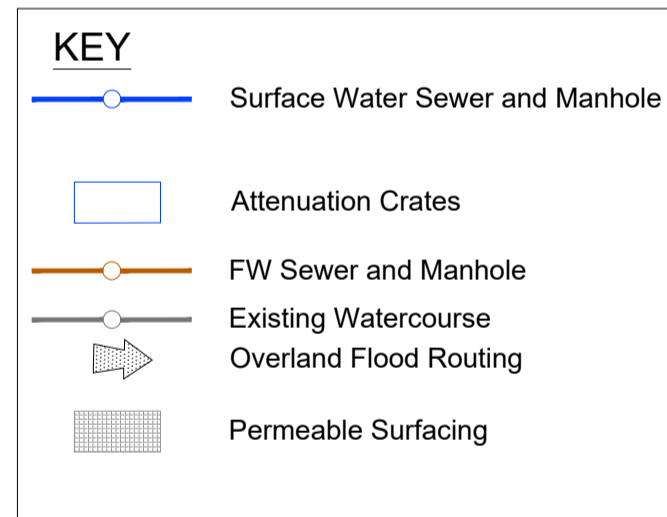
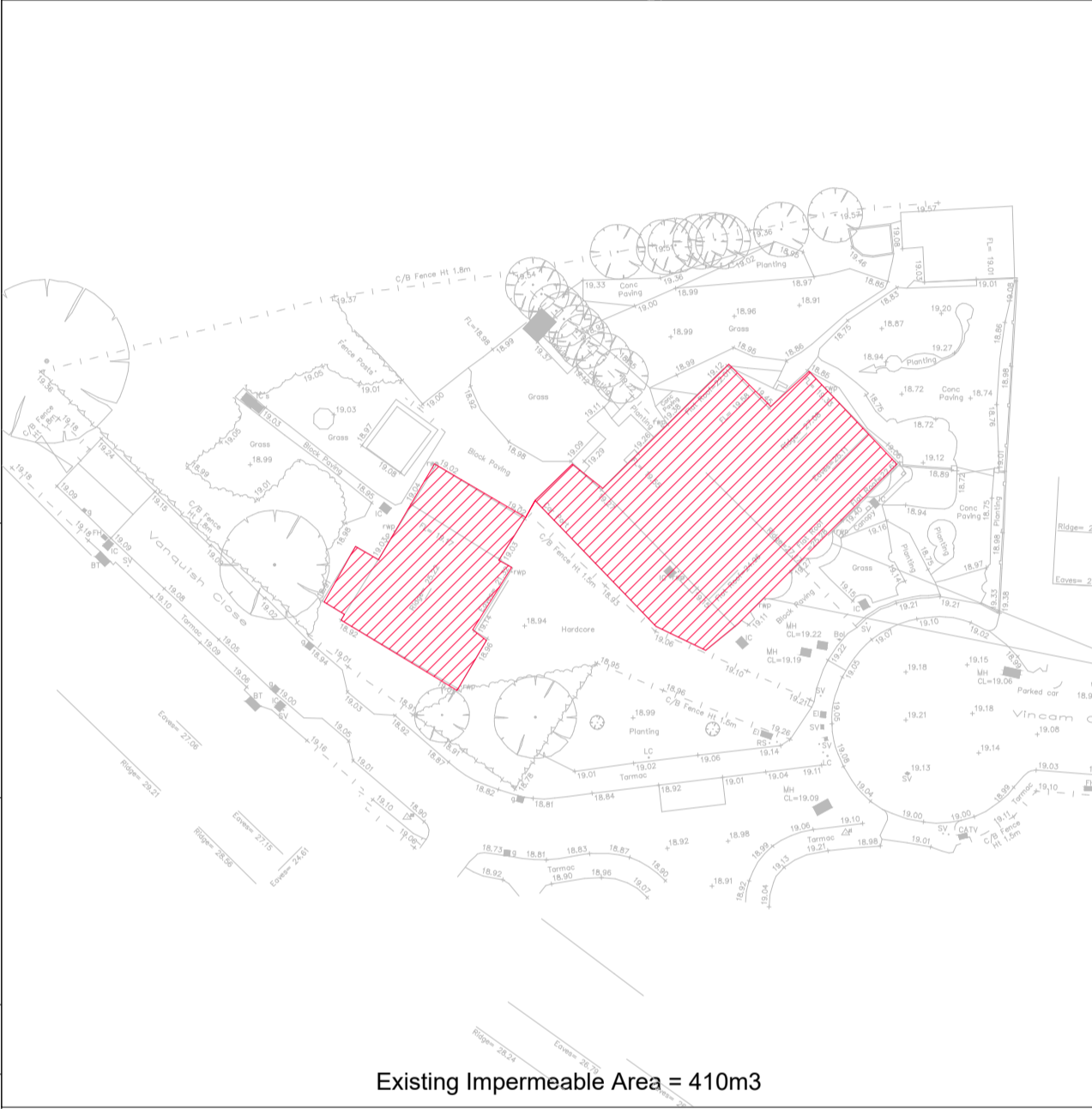
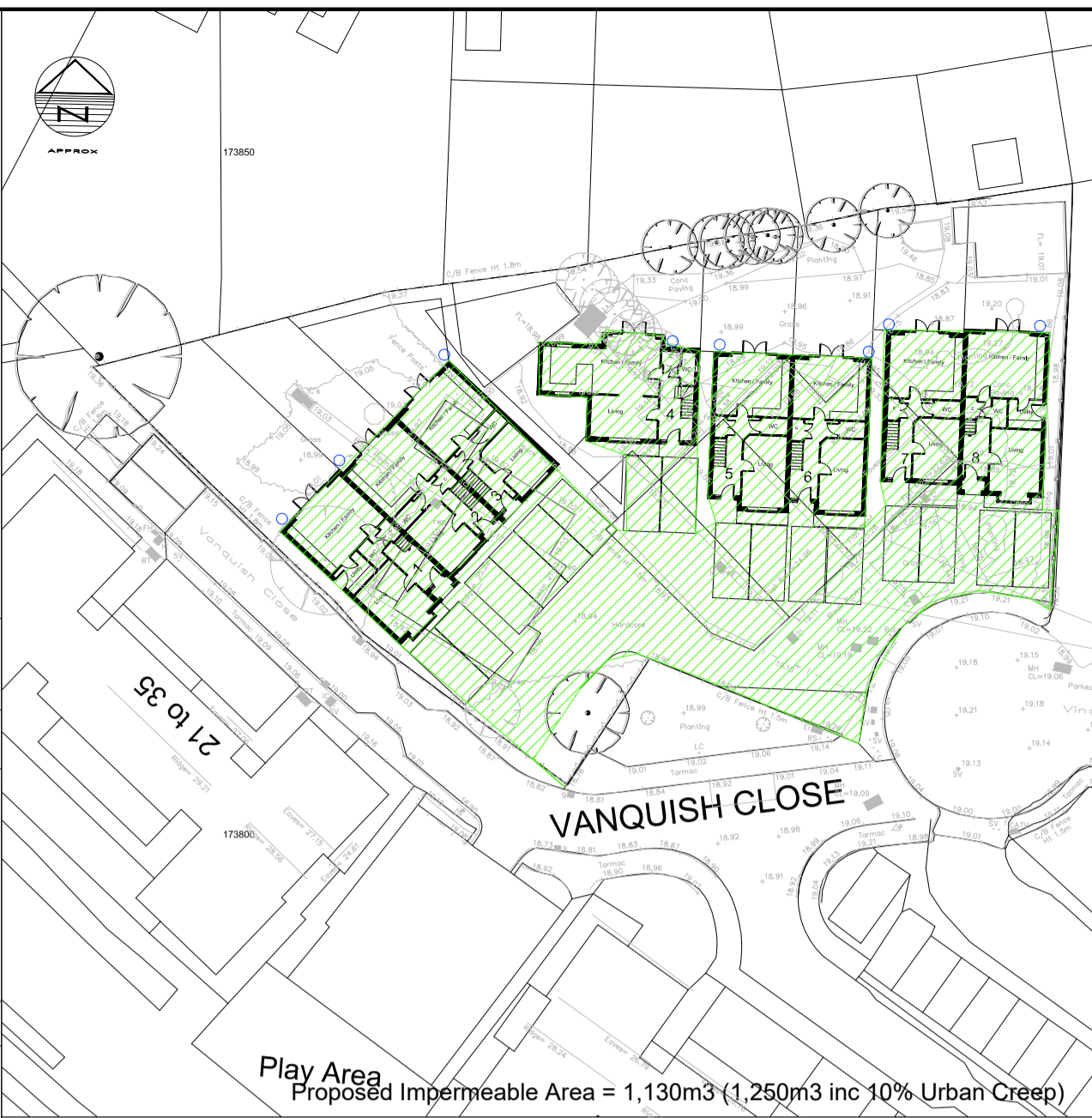
Based on these rates and an impermeable area of 1.250m<sup>2</sup> and a SW rate of 2l/s the attenuation required for the peak return period of 1 in 100 year plus 30% climate change is **64.6m<sup>3</sup>**.

This will be achieved by Storage Crates measuring

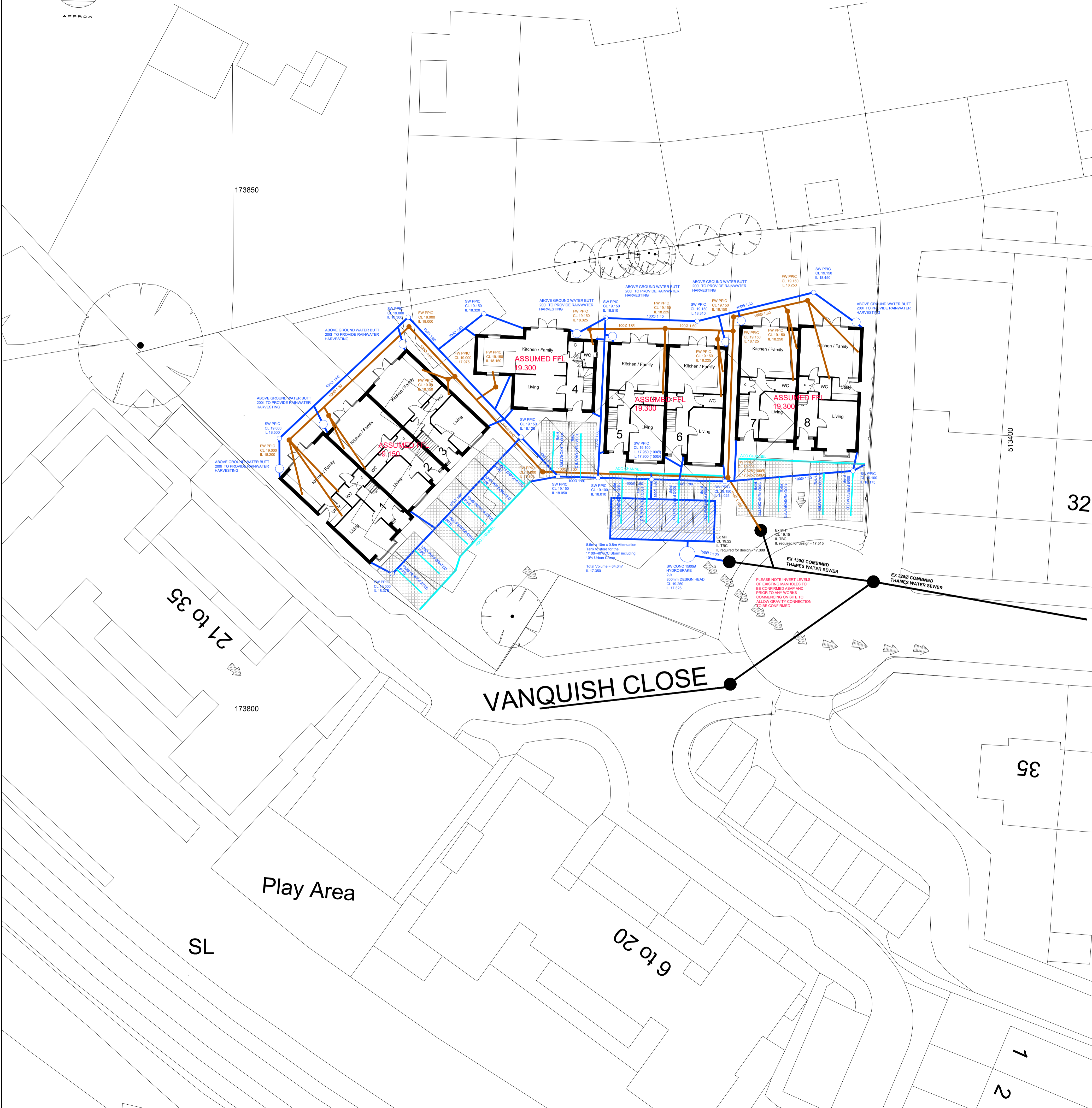
8.5m x 10m x 0.8m = 64.6m<sup>3</sup>

**Foul Water:**

The foul water is proposed to connect to Thames Water sewer via existing connection as shown.



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No.	Revision	Date	Drwn
<b>PRELIMINARY</b>			
<b>TOPPING ENGINEERS</b> CONSULTING CIVIL & STRUCTURAL ENGINEERS			
Client: <b>NFC Homes</b> Project: <b>Vincam Close, Whitton</b> Drawing title: <b>Drainage Strategy</b>			
Drawn	AD	Chkd	AD
Date	AUG 21		Scale
Contract No.	21495	Drg No.	DR-C-0100
Revision			P5