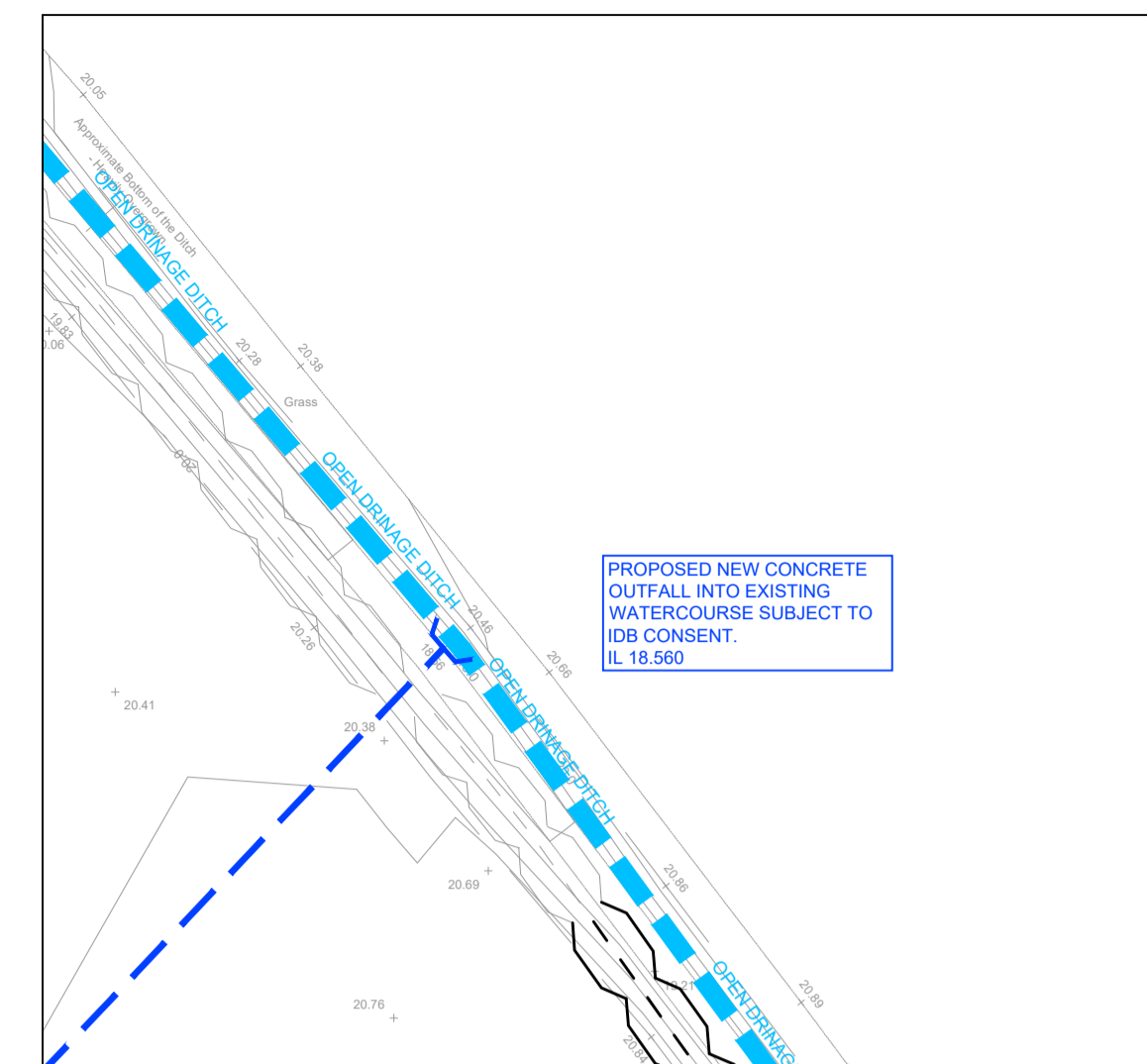


Drainage Strategy - Scale (1:250)



Off Site Drainage (NTS)



Proposed Impermeable Area Plan = 2932m<sup>2</sup> - Scale (NTS)

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**DO NOT SCALE OFF THIS DRAWING**

**Notes:**

1. This drawing is to be read in conjunction with all relevant architect's and engineer's drawings.
2. It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**Key**

- --- Proposed Surface Water Drainage
- --- Proposed Foul Water Drainage
- Open Drainage Ditch

**Drainage Strategy**

The site is located within flood zone 1 with a low risk of flooding from rivers or the sea and is less than 1 hectare, therefore a site specific flood risk assessment should not be required.

Under SuDs guidance the first point of discharge for surface water is percolation via soakaway. Site percolation was carried on 14<sup>th</sup> June 2022 and is proven infiltration via soakaway is not viable. Please refer to Topping Engineers report.

The existing site consist of disused barns with no positive drainage, therefore we are using greenfield run off rates of 1.4l/s per hectare to calculate the surface water discharge rate. The site has an area of 6449m<sup>2</sup>, using greenfield run of rates we are proposing a discharge rate of 0.9l/s.

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:**

Flow restriction 0.9l/s will be achieved using a 21mm orifice plate.

The proposed impermeable area is 2932m<sup>2</sup> + 10% urban creep equates to 3225m<sup>2</sup>. Based on a flow restriction of 0.9l/s and modelling using Micro Drainage software the attenuation requirement for a peak return period of 1 in 100year plus 30% climate change is 234.7m<sup>3</sup>.

Attenuation for the proposed impermeable area of 3225m<sup>2</sup> to be provided via GEO-CELLULAR TANK 23x13x0.8m DEEP = 239.2m<sup>3</sup>. The flows will be restricted using a 21mm orifice plate.

Surface water from the proposed site will connect into an open drainage ditch subject to IDB consent.

**Foul Water:**

The foul water is proposed to connect to a Klargester Biotech 6 treatment tank and discharge treated water into an open drainage ditch, subject to IDB consent.

P2	Update to Suit Site Layout	22/06/22	JS
P1	First Revision	21/06/22	JS
No.	Revision	Date	Drwn

Status **Preliminary**

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Project **The Yews, Stamford Bridge Road YO19 5LQ**

Drawing title **Drainage Strategy**

Drawn	JS	Chkd	RT	Date	June 2022	Scale	As Shown @ A1
Contract No.	19035	Drwg No.	DR-C-0100	Revision			P2