

FLOOD RISK ASSESSMENT

25 July 2023

PROPOSAL: *Retention of entrance gates and change of use for use class sui generis including container and skip storage; open and closed storage of building, scaffolding and lighting materials; storage of aggregate materials; vehicle storage and sales; and associated installation of portacabins, container stores, transportable soils and other structures.*

SITE: Land at Rainbow Industrial Estate, West Drayton

FOR: Mr Sharma



PROPOSED SITE PLAN – NOT TO SCALE – INDICATIVE ONLY

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01 INTRODUCTION AND POLICY CONTEXT

- 1.1 ET Planning have been commissioned to prepare a Flood Risk Assessment (FRA) associated with the retention of entrance gates and change of use for use class sui generis including container and skip storage; open and closed storage of building, scaffolding and lighting materials; storage of aggregate materials; vehicle storage and sales; and associated installation of portacabins, container stores, transportable soils and other structures (retrospective application).
- 1.2 The FRA has been prepared in accordance with relevant national regional and local planning policy and guidance on flooding as follows:
- The National Planning Policy Framework (NPPF) published by the Ministry for Housing, Communities and Local Government (DCLG), and the accompanying National Planning Practice Guidance (NPPG).
 - The Department for Environment, Food and Rural Affairs (DEFRA) published Preparing a Flood Risk Assessment Standing Advice (March 2019)
 - Department for Environment, Food and Rural Affairs(DEFRA)and The Environment Agency (EA) published Guidance for Planning Applications: Assessing Flood Risk (March 2014 – updated 2017)
 - The EA Flood Risk Standing Advice (FRSA) version 3.1 (2012 – updated 2022)
 - The EA Approach to Groundwater Protection (March 2017)
- 1.3 The site is falls within flood zone 1 which has the least risk of flooding and is at low risk of surface water and ground water flooding.

02 DEVELOPMENT SITE AND LOCATION

- 2.1 The site is located to the south east of Trout Road and North west of St Stephens Road, made up of land at the former Rainbow Industrial Estate. It is bounded by residential properties which front onto St Stephens Road, the canal to the south west and residential flats within Caxton House immediately adjoining the north west corner and further residential flats on the opposite side of Trout Road and beyond.
- 2.2 The site comprises of the following uses and development;
- vehicle storage and sales area
 - closed container storage area
 - storage of skips and associated vehicles and a container store
 - Aggregates storage area with silos
 - Conway street lighting storage area with palisade fencing, two stacked portacabins, overhead lighting and CCTV
 - General open storage area with portacabins used as ancillary site security units and welfare, storage of marble and timber and other building materials
 - Front gates and fencing, to secure the site and provide access from Trout Road
- Internal hardstanding/haul road

03 DEVELOPMENT PROPOSALS

- 3.1 The development proposal is for the retention of entrance gates and change of use for use class sui generis including container and skip storage; open and closed storage of building, scaffolding and lighting materials; storage of aggregate materials; vehicle storage and sales; and associated installation of portacabins, container stores, transportable toilets and other structures (retrospective application).

04 SEQUENTIAL TEST / EXCEPTION TEST

- 4.1 National planning policies are achieved through application of the Sequential Test and in some cases the Exception Test. The aim of a sequential test is to steer new

development to areas with the lowest risk of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding.

- 4.2 Paragraph 164 of the NPPF states that 'applications for some minor development and changes of use should not be subject to the sequential or exception tests but should still meet the requirements for site-specific [FRAs]'. Given that the proposed development is for a change of use, the sequential test and exception test need not be applied in this case.

05 FLOOD RISK REVIEW

- 5.1 Flood Zones relate to the probability of river or sea flooding to a specific area. The National Planning Policy Guidance (NPPG) denotes the following flood risk zones;

- Flood Zone 1 – Low probability of flooding. Land having a less than 1:1,000 annual probability of river or sea flooding
- Flood Zone 2 – Medium probability of flooding. Land having between 1:100 and 1:1,000 annual probability of river flooding; or land having between 1:200 and 1:1,000 annual probability of sea flooding.
- Flood Zone 3a – High probability of flooding. Land having 1:1,000 or greater annual probability of river flooding or land having 1:1,000 or greater annual probability of sea flooding.
- Flood Zone 3b – Functional floodplain. Land where water has to flow or be stored at all times.

- 5.2 According to the Flood Map for Planning figure below (Figure 1), the site (outlined in red) is located in Flood Zone 1.

Flood map showing the flood zone your site is in

The map shows the flood risk to your site and the surrounding area.

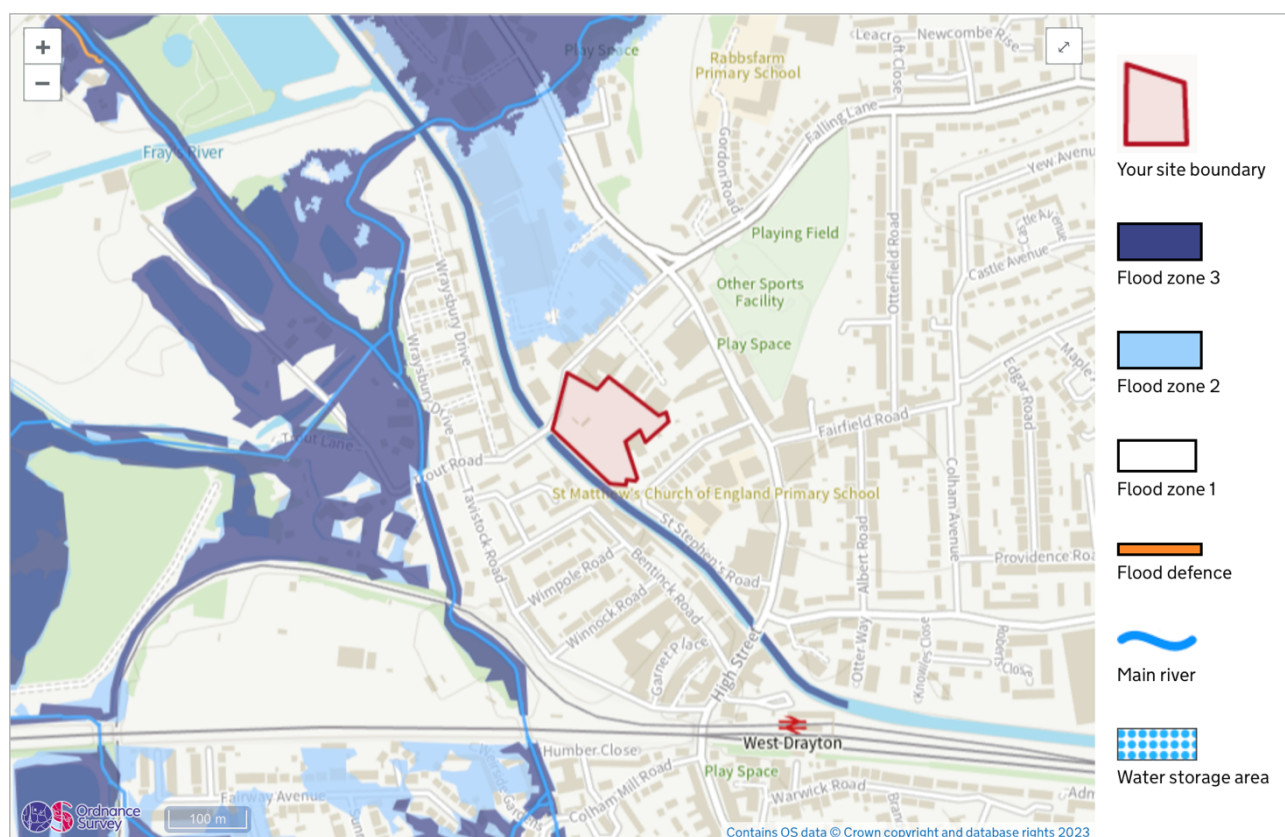
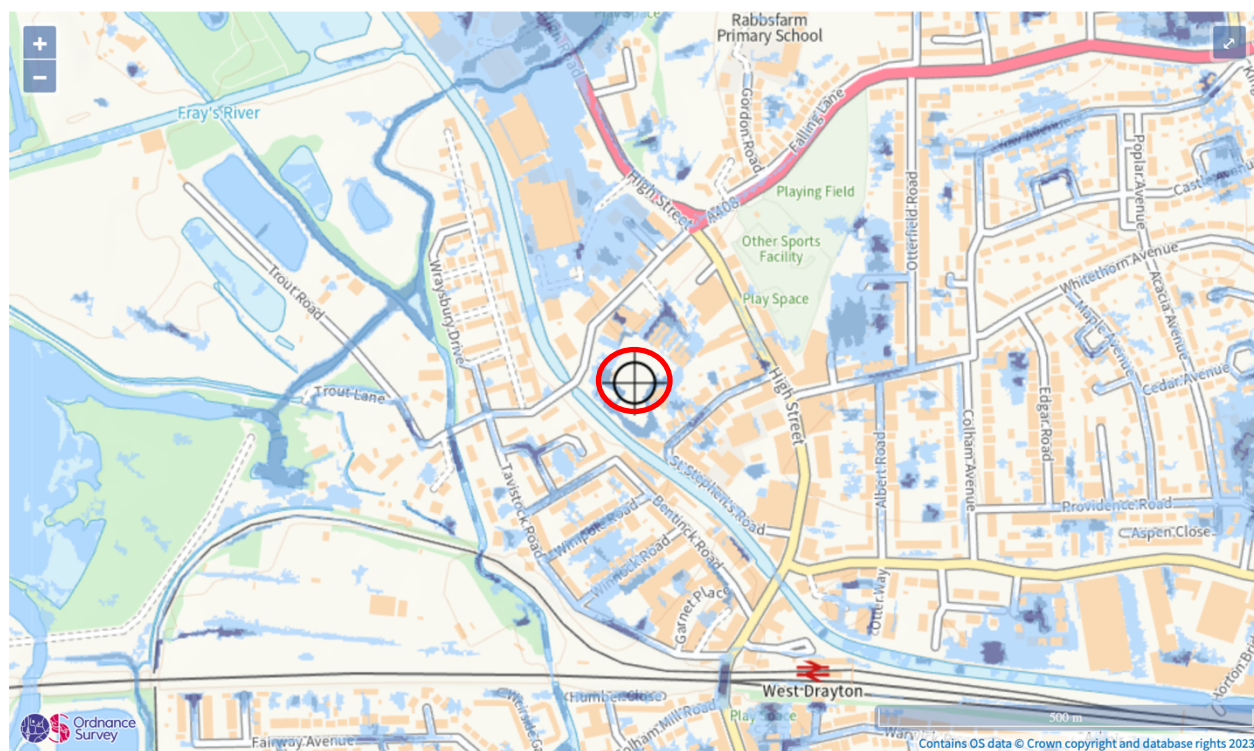


Figure 1: Flood Map for Planning
(Source:gov.uk)

- 5.3 As shown in this figure, the whole of the site is in an area deemed to possess a low probable risk of flooding with less than a 1:1,000 probability of sea or river flooding.
- 5.4 With regards to flood risk from surface water, the majority of the site has a low risk to surface water flooding. A site with a low risk of surface water flooding is defined by an area that has a chance of flooding of between 0.1% and 1%. Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. A medium risk level is a site that has a chance of flooding between 1%-3.3%. Figure 2 below shows the extent of surface water flooding, with the site being circled.



Extent of flooding from surface water

● High ● Medium ● Low ○ Very low ⊕ Location you selected

Figure 2: Surface flooding risk map

(Source: gov.uk)

5.5 The closest sources of flood risk is the Grand Union Canal which is 5 meters away from the site boundary. Despite this flood risks from canals are considered to be low, with regular examination being undertaken to minimise the risk of breach failure as a result of flooding, vandalism or structural failure.

5.6 The development is located outside of the 1:1,000 annual probability outline and will therefore have no impact on flooding elsewhere.

06 SURFACE WATER MANAGEMENT

6.1 This proposal will not alter the impermeable areas of the site. The demolition and clearance of the historic buildings has increased the impermeable areas of the site. The development will utilise the existing surface water drainage system.

- 6.2 As the site is for temporary use, the implementation of a SuDS strategy would not be reasonable or necessary.

07 RECCOMENDATION AND CONCLUSION

- 7.1 The subject application proposes a change of use of land within Flood Zone 1 which has the lowest probability of flooding. The use is considered to be less vulnerable. No sequential or exception test are therefore required. The existing drainage system of inlets and culverts will direct surface water away appropriately through the positive drainage system.
- 7.2 The flood risk from surface water map indicates the site is of a very low risk from surface water flooding and is not located within a Critical Drainage Area. Where possible, development can be located outside the areas at risk of surface water flooding and given the temporary nature of the development, it is considered to be appropriate for the location in terms of flood risk and complies with the NPPF, NPPG and local planning policy.

Completed: 12.07.23

DISCLAIMER: The advice given in this appraisal is provided on the basis of the information that can be found with reasonable enquiry on publicly and freely available online government and local government websites.