

Project name	153 Friar Street, Reading		
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1. INTRODUCTION

This planning statement has been provided by Hydrock on behalf of our client Vail Williams LLP in support of the planning application for a proposed change of use for 153 Friar Street, Reading.

The site has been identified as being within Flood Zone 1 and with an area of less than 1hectare. The proposals are for the change of use from commercial to residential development and permission is sought via the Permitted Development Route. As such, and in line with National Planning Policy Framework (NPPF) a Flood Risk Assessment is not explicitly required. However, and following discussions, the applicant has requested this Flood Risk Statement be prepared to provide a summary of flood risk from all sources. This note therefore provides a summary of the risks and planning related aspects of the site.

2. SITE INFORMATION

The site is located on Friar Street in Reading town centre and is within a dense urban area and bordered in all directions by existing commercial and residential use buildings.



Figure 1. Site Location with Approximate Red Line Plan

The proposed development is for a change of use of the first and second floors, currently used as an office and studio space, to two (2) 1 x bed flats. This will result in a change in vulnerability from the existing 'less vulnerable' to 'more vulnerable' for the residential development.

Proposed scheme drawings will be included within the planning submission. The proposals do not indicate any change in building footprint or levels.

3. FLOOD RISK

3.1 Fluvial and Tidal Flooding

The closest watercourse to the site is the River Kennet, a tributary of the River Thames, approximately 500m south of the site and flowing in a general north easterly direction. Approximately 800m north east of the site, separated by a railway embankment, is the River Thames flowing in a general easterly direction.

The current Environment Agency (EA) Flood Map for Planning (FMfP) shows the site to lie within Flood Zone 1, with regards to fluvial and tidal flooding, and this is the area of lowest risk defined as "*land having a less than 0.1% annual probability of river or sea flooding*". The flood zones associated with the River Kennet are indicated to remain in channel through Reading town centre and at its closest point to the site, whilst the River Thames is separated from the site by a significant railway embankment which acts as an informal flood defence to the site.

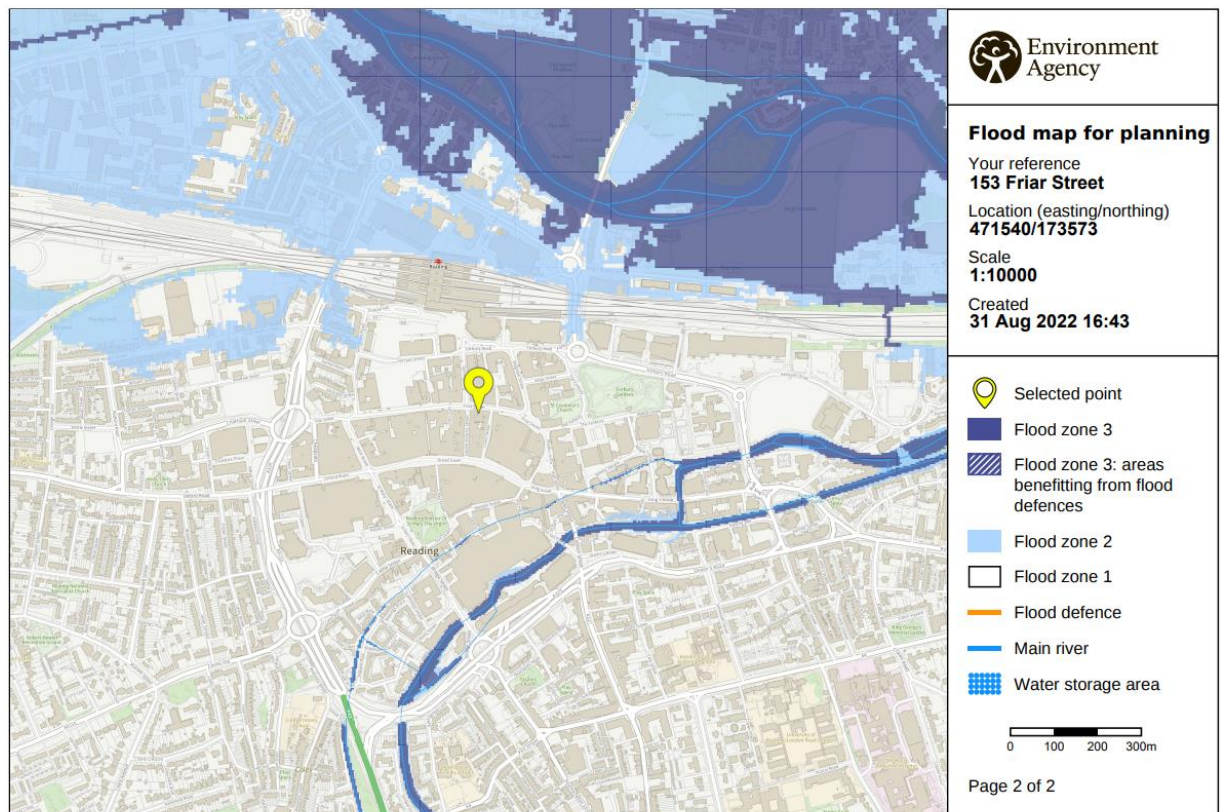


Figure 2. EA Flood Map for Planning

The River Thames tidal limit is considered to be Teddington and the Reading Borough Council Strategic Flood Risk Assessment [PBA, 2017] states that the geographical location of Reading ensures that tidal flooding is not a risk to the area. Therefore given the sites location in Flood Zone 1, the site is concluded to be at low risk of fluvial and tidal flooding.

With regards to climate change, the 1 in 1,000-year (Flood Zone 2) event can be viewed as a worst-case scenario. As the site is located within Flood Zone 1, and therefore outside of the 1 in 1,000-year event, the site is considered to be at low risk of fluvial and tidal flooding with the inclusion of climate change.

3.2 Surface Water Flooding

The EA Surface Water Flood Risk Mapping shows the site to be in a 'very low' risk areas which means that this area has a less than 0.1% annual exceedance probability .

The site is located in a heavily urbanised area and is therefore likely served by an extensive engineered drainage network. EA Mapping does not take into account any existing drainage features and is therefore considered a worst-case scenario. In the event of a prolonged or intense period of rainfall, the current low risk suggests that any such event would likely be mitigated by the drainage network and as such the site is concluded to be at low risk of surface water flooding both in the present day and with the inclusion of climate change.

3.3 Groundwater Flooding

British Geological Survey (BGS) Mapping indicates the site to be by superficial deposits of the Taplow Gravel Member consisting of sand and gravel, overlying bedrock of the Seaford Chalk Formation and Newhaven Chalk Formation.

Whilst the underlying bedrock of chalk and the sand / gravel superficial deposits are considered to be permeable, the close proximity of the site to the River Thames and the River Kennet suggests groundwater would be in hydraulic connectivity with the normal channel water levels and as such the EA Flood Zones mapping could be considered as the 'worst-case' for areas of groundwater emergence.

Given the sites location within Flood Zone 1 and the developed nature of the surrounding areas, and as such significant amount of impermeable paving, the site is concluded to be at low risk of groundwater flooding.

3.4 Infrastructure Failure Flooding

Given the developed nature of the surrounding area, it is expected that there is an extensive drainage network currently serving the area. In the event of any surcharging or blockage of the sewer network, water will overflow from the pipe network and travel along overland flow routes with the prevailing topography as 'sheet flow' and likely shallow in nature. It is typical for existing highway routes to act as these preferential flow routes and minimise risk to existing properties such as the proposed development site. Therefore, given that the risk of sewer flooding is likely only to be in the event of failure or blockage, this is considered to be a 'residual' risk, and as such the risk of potential flooding from sewers is concluded to be 'low'.

The EA Reservoir Failure Extent mapping (EA, 2022)¹ does not show the site to lie within the extent of potential reservoir flooding. Therefore, with no canals or further infrastructure located in the surrounding area it can be concluded that the risk of flooding from infrastructure failure to be 'negligible'.

4. NATIONAL PLANNING POLICY FRAMEWORK

4.1 Sequential and Exception Test

The NPPF Sequential Test requires that a sequential approach is followed to steer new development to areas with the lowest probability of flooding (i.e. Flood Zone 1, then 2, then 3).

The site is indicated to lie within Flood Zone 1 and is concluded to be at low or negligible risk from all assessed sources. In accordance with the Annex 3: Flood risk vulnerability classification of the NPPF the proposed new residential development would be classified as 'More Vulnerable'.

Paragraph 014 of the National Planning Policy Guidance states that *"...changes of use are not normally subject to the Sequential or Exception test..."*. It is therefore concluded that a Sequential or Exception Test would not be required in this instance.

4.2 Mitigation Measures

The site is shown to be in an area of lowest risk and therefore is not concluded to require any further mitigation measures.

The proposed development is accessed via an existing entrance off Friar Street which is shown to be at low risk from all assessed sources and as such safe access and egress is concluded to be possible.

¹ EA Long Term Flood Risk Maps - <https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

The development is a change of use and therefore there are no planned changes to the building footprint and given the sites location in Flood Zone 1 would not cause an increase in flood risk as a result of lost floodplain storage.

5. SUMMARY

This flood risk statement has been provided by Hydrock on behalf of our client Vail Williams LLP for a proposed change of use from commercial to residential off Friar Street, Reading.

The findings of this technical note have shown the site to be at low or negligible risk from all assessed sources of flood risk.

The proposals are for a minor development (under 1ha) and a change of use and permission is sought via the Permitted Development route which under the NPPG would not require the application of the Sequential or the Exception Test.

Safe access and egress are shown to be possible via an existing entrance off Friar Street and as the development is a change of use, located in Flood Zone 1 and therefore outside any functioning floodplain the site is concluded to not cause an increase in flood risk as a result of lost storage.

It is therefore deemed that this flood risk statement has shown the site to be at low risk of flooding and not cause an increase in flood risk as a result of the development and as such has satisfied the need for a formal flood risk assessment in this instance.