NEW WORLD PAYPHONES

**TOWN AND COUNTRY PLANNING ACT 1990**

**TOWN AND COUNTRY PLANNING (CONTROL OF ADVERTISEMENTS) (ENGLAND) REGULATIONS 2007**

# FLOOD RISK ASSESSMENT

**by**

**NEW WORLD PAYPHONES**

**in support of Applications:**

- **LPA Ref: 23/1554/FUL**
- **LPA Ref: 23/1555/ADV**

**Telephone Kiosk outside 61 Broad Street, Teddington**

**LONDON BOROUGH OF RICHMOND UPON THAMES**

**October 2023**

## 1. Introduction

This Flood Risk Assessment (FRA) is submitted in support of the below referenced related applications:

- Telephone Kiosk outside 61 Broad Street, Teddington (Ref. 23/1554/FUL);
- Telephone Kiosk outside 61 Broad Street, Teddington (Ref. 23/1555/ADV).

The FUL application proposes a new Telephone Kiosk at the application site to replace the existing old telephone kiosk.

## 2. National Planning Policy Framework (updated 2021)

### Planning and flood risk

159. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

161. All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk, by: a) applying the sequential test and then, if necessary, the exception test.

162. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source.

167. When determining any planning applications, LPA's should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment (55). Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;

b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;

c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;

d) any residual risk can be safely managed; and

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

168. Applications for some minor development and changes of use (56) should not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments set out in footnote 55.

Footnotes

55. A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

56. This includes householder development, small non-residential extensions (with a footprint of less than 250m2) and changes of use; except for changes of use to a caravan, camping or chalet site, or to a mobile home or park home site, where the sequential and exception tests should be applied as appropriate. (our emphasis added)

Applicant commentary on NPPF policy on flood risk as it relates to the proposal

The NPPF states, *"Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere."*

The existing telephone kiosk proposed for replacement and upgrade is located in central Teddington, where for the past 25 or so years it has performed its public electronic communications function. This being the case, the proposed replacement kiosk needs to be situated where the existing is currently. As per the NPPF then, the development proposed should be made safe for its lifetime without increasing flood risk elsewhere.

The proposed replacement Kiosk is designed to be safe in terms of flood risk for its lifetime. As a one for one replacement, it would not increase flood risk elsewhere.

The NPPF states (para. 167), *"Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:*

*a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;*

*b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;*

*c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;*

*d) any residual risk can be safely managed; and*

*e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan."*

We respond below to the above-mentioned provisions:

*"a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;"* **Applicant** – this is the case with the proposal;

*"b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;"* **Applicant** – this is the case with the proposal;

*"c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;"* **Applicant** – given the nature of and very small scale of the proposal, it does not involve sustainable drainage systems;

*"d) any residual risk can be safely managed;"* **Applicant** – it can be;

*"e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan."* **Applicant** – By virtue of being open-plan and in no way enclosed, the proposed replacement kiosk incorporates safe access and escape routes.

NPPF para 168 states, *"Applications for some minor development and changes of use (56) should not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments set out in footnote 55."* Footnote 56 states, "This includes householder development, small non-residential extensions (with a footprint of less than 250m2)".

**Applicant** – The proposal falls within the remit of minor development which is not subject to the sequential or exception tests.

NPPF Footnote 55 states, *"In Flood Zone 1, a site-specific flood risk assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use."*

## 3. <u>Site-specific flood risk assessment</u>

Planning Practice Guidance on 'Flood risk and coastal change' (updated August 2022) states that site-specific Flood Risk Assessments (FRA's) need to be proportionate to the anticipated degree of flood risk, and appropriate to the scale, nature and location of the development. For example, where the development is an extension to an existing house (for which an application for planning permission is required) which would not significantly increase the number of people present in an area at risk of flooding, the local planning authority would generally need a

less detailed assessment to be able to reach an informed decision on the planning application.

As per NPPF Footnote 55, within Flood Zone 1, *"a site-specific FRA should accompany all proposals involving:*

- *sites of 1 hectare or more;*
- *land which has been identified by the Environment Agency as having critical drainage problems;*
- *land identified in a strategic flood risk assessment as being at increased flood risk in future; or*
- *land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use."*

According to the Environment Agency's Flood Map, the application site is within flood zone 1. See the below map extract; the application site (very small at this scale) is edged **red**.

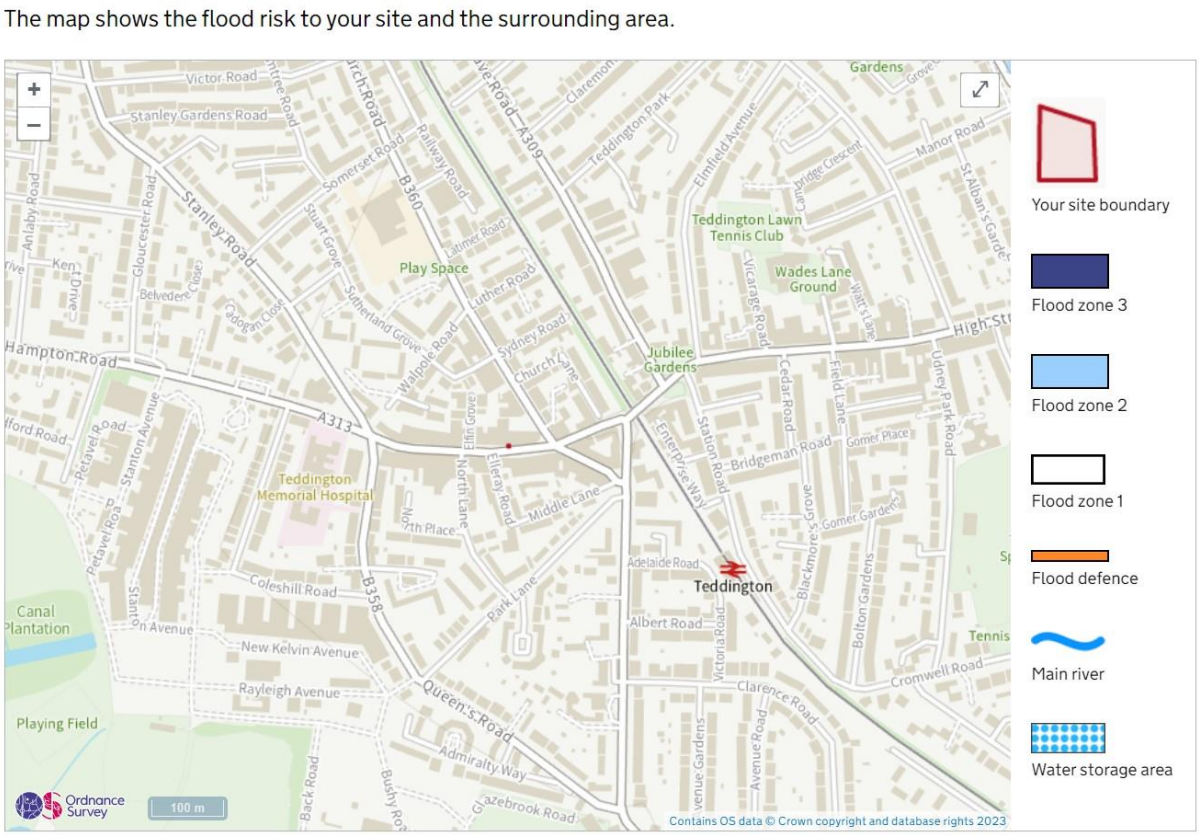


Fig.1

Adopted Local Plan (2018)

Policy LP 21 Flood Risk and Sustainable Drainage states:

*"A. All developments should avoid, or minimise, contributing to all sources of flooding, including fluvial, tidal, surface water, groundwater and flooding from*

*sewers, taking account of climate change and without increasing flood risk elsewhere. Development will be guided to areas of lower risk by applying the 'Sequential Test' as set out in national policy guidance, and where necessary, the 'Exception Test' will be applied. Unacceptable developments and land uses will be refused in line with national policy and guidance, the Council's Strategic Flood Risk Assessment (SFRA) and as outlined in the table below."*

London Borough Richmond on Thames Strategic Flood Risk Assessment (2021)

The above SFRA includes the following interactive maps:

- Fluvial and Tidal Flood Risk;
- Surface Water Flood Risk;
- Groundwater, Sewer and Artificial Flood Risk.

The below Fluvial and Tidal Flood Risk map shows that this entire area of Teddington, including the application site, is within the Critical Drainage Area.


Fig.2

At the application site, the below Surface Water Flood Risk map shows:

- Risk of Flooding from Surface Water Depth 1 in 1000 chance, 0.30 - 0.60m;
- Risk of Flooding from Surface Water Extent 1 in 1000 Chance.


Fig.3

The below Groundwater, Sewer and Artificial Flood Risk map shows:

- This entire area of Teddington is Susceptible to Groundwater Flood, Superficial Deposits Flooding >= 75%;
- This entire area of Teddington has Increased Potential for Elevated Groundwater, Permeable Superficial.

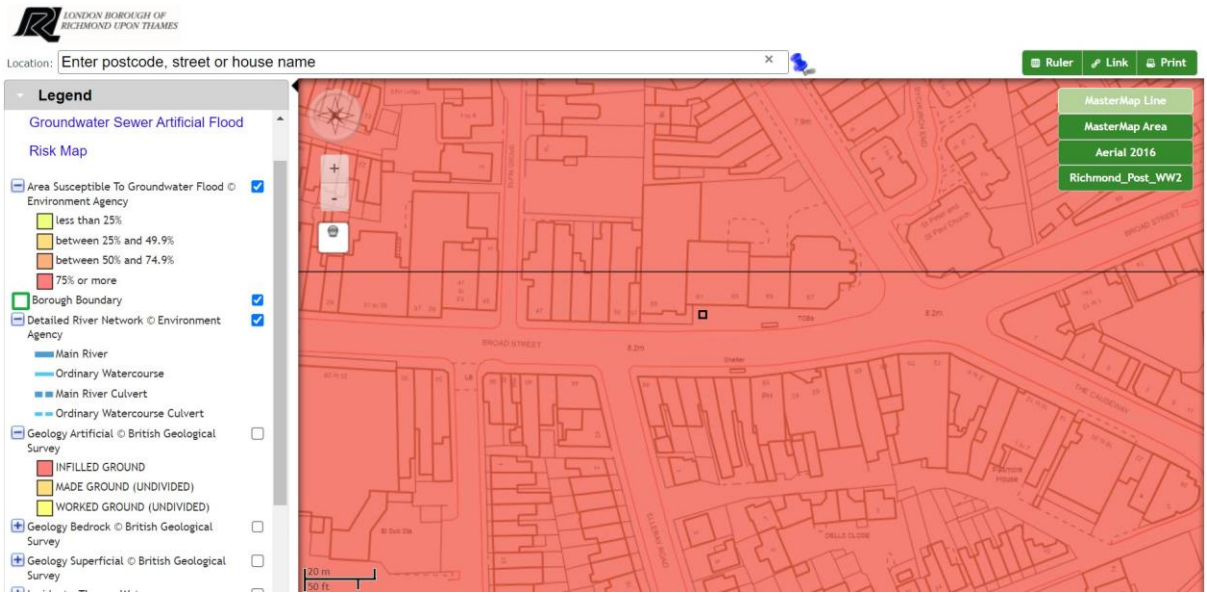


Fig.4

As noted in Fig.1 above, the application site is within flood zone 1. Land within flood zone 1 has a low probability of flooding from rivers and the sea, and most developments within zone 1 that are less than 1 hectare (ha) do not require FRA's as part of the planning application process.

As per NPPF Footnote 55, within Flood Zone 1, *"a site-specific FRA should accompany all proposals involving:*

- *sites of 1 hectare or more;*
- *land which has been identified by the Environment Agency as having critical drainage problems;*
- *land identified in a strategic flood risk assessment as being at increased flood risk in future; or*
- *land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use."*

Sites of 1 hectare or more

This is not the case here. The site area is 0.01 ha, and the footprint of the proposed Telephone kiosk is just 0.42 sq.m.

Land identified by the Environment Agency as having critical drainage problems

The SFRA Fluvial and Tidal Flood Risk map (Fig.2 above) shows that the entire area of Teddington, including the application site, is within Critical Drainage Area.

However, we note that para. 6.4.2 of the SFRA addressing the circumstances in which an FRA is needed (involving proposals within areas with critical drainage problems) states, *"Note that this does not include Critical Drainage Areas as defined by the London Borough of Richmond upon Thames' SWMP – there are currently no such areas defined by the EA within the borough at the time of publication of this SFRA in March 2021]".* (our emphasis added)

Land identified in strategic flood risk assessment as at increased flood risk in future

The SFRA Surface Water Flood Risk map (Fig.3) shows the application site is at:

- Risk of Flooding from Surface Water Depth 1 in 1000 chance, 0.30-0.60m;
- Risk of Flooding from Surface Water Extent 1 in 1000 chance.

The Surface Water Flood Risk Map highlights areas identified as at risk of surface water flooding. The mapping consists of the flood extent and depth of rainfall scenarios with a 3.3% (1 in 30), 1% (1 in 100) and 0.1% (1 in 1000) chance of occurring in any given year.

In this case, therefore, the chance of surface water flooding occurring at the application site in any given year is 0.1% (1 in 1000); very low likelihood.

Land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use

The SFRA Groundwater, Sewer and Artificial Flood Risk map (Fig.4) shows that this entire area of Teddington, including the application site, is:

- Susceptible to Groundwater Flood Superficial Deposits Flooding >= 75%;
- Has increased potential for Elevated Groundwater Permeable Superficial

Section 5.6 of the SFRA addresses Groundwater Flood Risk. Groundwater flooding occurs because of the underground water table rising, which can result in water emerging through the ground and causing flooding. This flooding tends to occur after extensive periods of heavy rainfall. During these periods, a greater volume of water infiltrates through the ground, causing an underlying aquifer to rise above its regular depth below the ground's surface. Groundwater flooding can occur in areas where the underlying soil and bedrock can become saturated with water. Therefore, ground composition and aquifer vulnerability are significant influences on the potential rate of groundwater flooding.

The bedrock geology for the entirety of the London Borough of Richmond upon Thames is London Clay, a geology type comprised of clay and silt, and one with very low permeability. This geological type generally has a low hydraulic conductivity, which means water does not easily move through it. Because of this poor drainage characteristic, ponding can occur if aquifer outcrops are located uphill of areas only underlain with London Clay.

Approx. 50% of the entirety of the London Borough of Richmond upon Thames is susceptible to Groundwater Flood Superficial Deposits Flooding >= 75%.

In addressing the issue of susceptibility to Groundwater Flooding, we point out that the proposed development involves replacement on a more-or-less like for like basis, it is very small scale (the footprint of the proposed Kiosk is just 0.42 sq.m, less than half a sq.m), the replacement Kiosk is open-plan and therefore in no way enclosed ensuring safe access and escape routes, the existing kiosk is surrounded by hard-standing comprising paving slabs a situation that would not change with the proposed development, and the proposed development would not introduce a more vulnerable use.

The proposed development would be safe for its intended users for the lifetime of the development, would not increase flood risk elsewhere, and would be sufficiently flood resistant and resilient to the level and nature of the flood risk in this case. The application therefore accords with National policy on flood risk and with Local Plan Policy LP21 which seeks for development to avoid or minimize contributing to sources of flooding.