

Preliminary Flood Risk Assessment

Updated 02 June 2026

Persian House Ltd t/a Persian Palace

2 Bridge Street, Caversham, Reading, RG4 8AA

Report by Mr Louis Turner BSc (Hons)

Supervised by Mr Joseph Turner

CONTENTS

1. Introduction

- 1.1 Project Overview
- 1.2 Purpose of Investigation
- 1.3 Scope of Work
- 1.4 Limitations

2. Site

- 2.1 Site Description and Location
- 2.2 Proposed Development
- 2.3 Vulnerability Classification

3. Initial Conceptual Site Model

- 3.1 Potential Flood Sources
- 3.2 Potential Flood Receptors
- 3.3 Potential Flood Pathways
- 3.4 Risk Assessment Methodology
- 3.5 Conceptual Site Model

4. Conclusions

- 4.1 Risk Evaluation
- 4.2 Existing Flood Mitigation Measures
- 4.3 Proposed Flood Mitigation Measures
- 4.4 Floodplain Compensation
- 4.5 Safe Access and Egress
- 4.6 Surface Water Management
- 4.7 Conclusions

5. Flood Warning & Evacuation Plan

- 5.1 Roles and Responsibilities
- 5.2 Flood Warnings
- 5.3 Evacuation Procedures
- 5.4 Safe Evacuation Route

6. Contacts

7. References

1. Introduction

The following document is a Preliminary Flood Risk Assessment carried out by Oakshire Environmental, and includes details of the site, vulnerability classification, flood linkages and an evaluation of risk.

1.1 Project Overview

The client's proposed project involves the removal of dilapidated landing stage structure and erection of a replacement at 2 Bridge Street, Caversham, Reading, RG4 8AA. Oakshire Environmental have carried out a Flood Risk Assessment as described below.

1.2 Purpose of Investigation

The objectives of the Preliminary Flood Risk Assessment were to:

- Develop a detailed assessment of the site.
- Identify potential flood sources, receptors and pathways at the site.
- Assess the level of potential flood risk.
- Determine the requirement or scope of further investigations or mitigation measures.

1.3 Scope of Work

- Brief introductory information has been noted to provide context to the report and include an Introduction, Project Overview, Scope of Work and Limitations.
- To develop a detailed assessment of the site, desk studies have been carried out to collate information obtained from sources including the Environment Agency, Local & National Authorities, Strategic Flood Risk Assessments and Detailed Terrain Model (DTM) LiDAR topographical surveys.
- This information has been used to identify potential flood sources, receptors and pathways at the site, as part of an initial Conceptual Site Model.
- To assess the level of potential flood risk, a Conceptual Site Model have been produced to categorise the potential severity of the impact of the flood linkage on the receptor and the probability of the flood linkage being present.
- Following the assessment of flood linkages, an evaluation of flood risk, mitigation measures, surface water management and safe access and egress has been conducted to determine the requirement or scope of further investigations.
- A strategy for the implementation of flood evacuation measures has been outlined, including appropriate flood warning, resilience and recovery measures to reduce the impact of a flood event.
- Supporting appendix include photographs, maps, and plans of the site.

1.4 Limitations

Quantum Intelligent Trading Ltd is previously and hereafter referred to as "Oakshire Environmental" or "the company". Oakshire Environmental has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. This report is only valid when used in its entirety and any information or advice contained within the report should not be relied upon until considered in the context of the whole report. Oakshire Environmental disclaims any responsibility to the client and others in respect of any matters outside the scope of this work. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate. This report has been prepared solely for the benefit of the client and any other party using or placing reliance upon any information contained in this report does so at their own risk. Oakshire Environmental accepts no responsibility or liability for the contents of this report being used for any purpose or project for which it was not commissioned. Oakshire Environmental accepts no liability whatsoever for any loss or damage arising from the interpretation or use of the information contained within this report. Furthermore, Oakshire Environmental does not accept any liability for the consequences of any legislative changes or the release of subsequent guidance documentation and following delivery of the report has no obligation to advise the client or any other party of such changes or their repercussions.

This report excludes consideration of potential hazards arising from any activities at the site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities. Oakshire Environmental does not warrant or guarantee that the site is free of hazardous or potentially hazardous materials or conditions. It should be noted that this report has been produced for environmental purposes only.

2. Site

The following section provides a description of the site, location and proposed development, in addition to, planning and site history, utilising information obtained from the client and publicly available sources.

2.1 Site Description and Location

The site is located on Bridge Street in Caversham, Reading, and is approximately 250m². The site is comprised of a ground floor restaurant and a lower ground floor bar with an outdoor terrace to the south west situated over the River Thames. Based on Environment Agency LiDAR data, ground levels across the site range from approximately 37.00mAOD on the outdoor terrace area to 39.84mAOD at the east fronting Bridge Street.

The site is bordered by restaurants and retail units to the north, Bridge Street to the east and the River Thames to the south west. The surrounding area is predominantly residential with some commercial premises.

National Grid Reference: SU 71145 74670

2.2 Proposed Development

The proposed development is retrospective and involves the construction of an extension at the lower ground floor level to provide a seating terrace on an existing mooring platform over the River Thames. A permanent canopy has also been installed to shelter the terrace from adverse weather while the base of the terrace is constructed with composite decking with gaps that will allow water to enter the structure when the river level rises. Based on EA LiDAR data, the floor level across the terrace ranges from approximately 37.00mAOD to 37.40mAOD.

2.3 Vulnerability Classification

Table 2 in the NPPF technical guidance (Flood Risk Vulnerability Classification) assesses the flood risk vulnerability of a site based on the site's use. Based on this assessment, the proposed restaurant development falls within the category of 'less vulnerable'.

The flood risk map for planning indicates that the site falls within Flood Zone 3. Model results from the Environment Agency's Thames (Pangbourne to Sonning) 2019 model show that the 5% AEP flood extent encroaches onto the site and covers the terrace area, therefore, this area is designated as Flood Zone 3b.

The Reading Borough Council Strategic Flood Risk Assessment (SFRA) states that Flood Zone 3b in the borough has been further delineated into two sub-categories including 'Developed' and Functional Floodplain'. Flood Zone 3b 'Developed' refers to areas of previously developed land which are considered equivalent to Flood Zone 3a for planning purposes. Given that the site is previously developed, it will be considered equivalent to Flood Zone 3a for the purpose of this assessment, therefore, the proposed development is considered to be appropriate in this location and the Exception Test is not required.

It should be noted that these Flood Zones do not take into account the impact of any flood defences or site-specific mitigation measures.

Table 1: Flood Risk Vulnerability Classification table from National Planning Policy Framework Technical Guidance

Flood Risk Vulnerability Classification					
Flood Zones	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	•	•	•	•	•
Zone 2	•	Exception Test required	•	•	•
Zone 3a	Exception Test required	×	Exception Test required	•	•
Zone 3b	Exception Test required	×	×	×	•

Key: • Development is appropriate
 × Development should not be permitted

3. Initial Conceptual Site Model

The following section outlines potential flood sources, pathways and receptors, utilising information gathered in the previous sections, to develop an initial conceptual site model.

3.1 Potential Flood Sources

The following section outlines potential flood sources, pathways and receptors, utilising information gathered in the previous sections, to develop an initial conceptual site model.

Rivers & Seas

The site is situated on the River Thames the Environment Agency's Flood map for planning shows that the south west of the site, fronting the River Thames, would be at risk of flooding in a 1% AEP event if flood defences did not exist.

There are flood defences along the River Trent in this location in the form of natural high ground with a design Standard of Protection (SoP) of up to 5 years. These are not considered to offer sufficient protection to the site.

The Environment Agency's Thames (Pangbourne to Sonning) 2019 model, taking into account flood defences, shows that the south west of the site is at risk of flooding in a 1% AEP event and the maximum flood level at the site is 38.154mAOD. This could result in flood depths over 1m across the terrace area.

Environment Agency data shows that the site has previously flooded on several occasions with one event, in 1947, affecting the majority of the site while subsequent events in 1977, 2003, 2007 and 2013/14 affected only the south west and west, including the terrace area. All of these occurred as a result of the River Thames exceeding its channel capacity.

The site is a significant distance from any tidal source and above the anticipated extreme tidal levels, even when considering the impacts of climate change. There is also no record of historical tidal or sea flooding, therefore, the risk of flooding from tidal sources is negligible.

Surface Water

Surface water runoff is caused by heavy rainfall that can overwhelm the drainage network. The Environment Agency Risk of Flooding from Surface Water mapping can be used to identify areas at risk of surface water flooding. Map data shows that surface water predominantly follows topographical flow paths of existing watercourses or dry valleys and can pond in low-lying areas. The risk is most often confined to roads with some run-off flow routes around properties.

Environment Agency maps show that the risk of surface water flooding at the site is very low and no surface water flooding is anticipated on the site in an up to 0.1% AEP event. The Reading Borough Council SFRA also shows that there are no records of surface water flooding in the vicinity of the site.

Groundwater

Flooding from groundwater can occur when the water table rises and reaches ground level allowing water to seep through to the surface. This means that water may rise up through floors or underground rooms such as cellars or basements. Groundwater flooding is much slower to occur than river flooding and will usually happen days, weeks or even months after heavy or prolonged rainfall. And it may last weeks or even months.

The underlying Chalk bedrock is a principal aquifer of high productivity and the superficial Alluvial deposits are likely to be of variably permeability, suggesting a potential risk of flooding from groundwater. Environment Agency mapping outlined in the Reading Borough Council SFRA shows that the site lies within an area considered to be of low to moderate susceptibility to groundwater flooding. There are no records of groundwater flooding in the immediate vicinity of the site suggesting a low risk of groundwater flooding, however, it should be noted that groundwater flooding in this location would occur in conjunction with fluvial flooding, therefore, it is difficult to attribute any flood events to groundwater flooding specifically.

Given the absence of any proposed (retrospective) below ground infrastructure at the site, the risk from groundwater flooding is considered to be low.

Sewers

Sewer flooding occurs when heavy rainfall and flooding overloads sewer capacity or when sewers cannot discharge to watercourses due to high water levels. Sewer flooding can also be caused by blockages, collapses, equipment failure or groundwater leaking into sewer pipes. Sewer flooding is often synonymous with other sources of flooding such as river, surface water and groundwater flooding.

The Reading Borough Council SFRA provides recorded flood incidents from Thames Water's DG5 register and shows that, as of February 2016, there were over 100 recorded flood incidents within the 'RG4 8' postcode area. This suggests that the area is highly susceptible to sewer flooding, however, the RBC Historic Flood Records map does not show any sewer flood records in the vicinity of the site and the site is at very low risk of surface water flooding suggesting that sewer flooding is not likely to impact the site.

Reservoirs

The level and standard of inspection and maintenance required for reservoirs means that the risk of flooding from reservoirs is generally very low. The only reservoir of relevance to Reading Borough is Whiteknights Lake 2.94km south east of the site and the Detailed Reservoir Flood Map shows that the site would be unaffected by a failure or overtopping of this reservoir. Environment Agency mapping also shows that there is only a risk to the site from reservoir flooding when there is also river flooding.

Climate Change

Climate change projections show an increased chance of warmer, wetter winters and hotter, drier summers with a higher likelihood of more frequent and intense rainfall. This is likely to make severe flooding happen more often. It is necessary to ensure that a development will be safe from flooding for its lifetime, which will vary for a development of this kind, however, a minimum of 75 years can be considered conservative for a commercial development. Environment Agency guidance recommends that the impacts of climate change on peak river flow are assessed based on management catchments and recommends the use of the 'central' allowances for less vulnerable developments. To assess the impacts of climate change on peak rainfall intensity in large rural catchments the peak river flow allowances should also be used. The central climate change allowance for the 2080s in the Thames and South Chilterns management catchment is 31%.

Modelling of the 1% AEP flood extent, including a range of climate change allowances, has been carried out for the site. The 35% climate change allowance was used to assess the site as this is the closest to the recommended 31% allowance and allows a conservative assessment to be made. Based on this modelling, the majority of the site is at risk of flooding to a maximum flood level of 38.61mAOD. This would result in significant flood depths across the terrace area.

Climate change modelling of surface water has not been carried out for the site, however, the 0.1% AEP event can be used as a proxy. Based on this, the site is not considered to be at risk of surface water flooding, taking into account climate change.

3.2 Potential Flood Receptors

Given the proposed use of the site, the following receptors are considered:

- Residential end users
- Proposed terrace

3.3 Potential Flood Pathways

Based on the expected on-site receptors, relevant pathways for the above receptors include:

- River Thames
- Permeable underlying bedrock
- Local sewers

Pathways between off-site sources and off-site receptors is beyond the scope of this assessment.

3.4 Risk Assessment Methodology

The potential level of risk posed by a particular source is determined by assessing the potential severity of the impact of the flood linkage on the receptor, if it is assumed to be present, and the probability of the flood linkage being present.

Severities are categorised from Minor to Severe and probabilities are categorised from Unlikely to High Likelihood to give a potential level of risk output.

Table 5: Risk Matrix

Probability	Severity of Consequence			
	Severe	Medium	Mild	Minor
High Likelihood	Very High Risk	High Risk	Moderate Risk	Low / Moderate Risk
Likely	High Risk	Moderate Risk	Low / Moderate Risk	Low Risk
Low Likelihood	Moderate Risk	Low / Moderate Risk	Low Risk	Very Low Risk
Unlikely	Low / Moderate Risk	Low Risk	Very Low Risk	Very Low Risk

Very High Risk

There is a high probability that severe harm could arise to a designated receptor from an identified source; or there is evidence that severe harm to a designated receptor is currently happening.

High Risk

Harm is likely to arise to a designated receptor from an identified source.

Moderate Risk

It is possible that harm could arise to a designated receptor from an identified source. It is relatively unlikely that any such harm would be severe or if any harm were to occur it is more likely that the harm would be relatively mild.

Low Risk

It is possible that harm could arise to a designated receptor from an identified source, however, it is likely that this harm, if realised, would normally be mild.

Very Low Risk

There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

3.5 Conceptual Site Model

The information in this section has been compiled to produce an initial conceptual site model outlining the potential sources, pathways and receptors to consider at the site. The level of risk was categorised by considering the severity and probability, as outlined in the previous section.

Table 6: Conceptual site model

Sources	Pathways	Receptors	Severity	Probability	Potential Level of Risk	
Fluvial Flooding	River Thames	Residential end users Proposed terrace	Medium	Likely	Moderate	The Environment Agency's Thames (Pangbourne to Sonning) 2019 model, taking into account flood defences, shows that the south west of the site is at risk of flooding in a 1% AEP event and the maximum flood level at the site is 38.154mAOD. This could result in flood depths over 1m across the terrace area.
Groundwater Flooding	Permeable underlying bedrock		Mild	Low Likelihood	Low	The underlying Chalk bedrock is a principal aquifer of high productivity and the superficial Alluvial deposits are likely to be of variably permeability, suggesting a potential risk of flooding from groundwater. Environment Agency mapping outlined in the Reading Borough Council SFRA shows that the site lies within an area considered to be of low to moderate susceptibility to groundwater flooding. There are no records of groundwater flooding in the immediate vicinity of the site suggesting a low risk of groundwater flooding. Given the absence of any proposed (retrospective) below ground infrastructure at the site, the risk from groundwater flooding is considered to be low.
Sewer Flooding	Local sewers		Mild	Low Likelihood	Low	Thames Water's DG5 register shows that, as of February 2016, there were over 100 recorded flood incidents within the 'RG4 8' postcode area. This suggests that the area is highly susceptible to sewer flooding, however, the RBC Historic Flood Records map does not show any sewer flood records in the vicinity of the site and the site is at very low risk of surface water flooding suggesting that sewer flooding is not likely to impact the site.
Climate Change	River Thames		Medium	Likely	Moderate	Modelling of the 1% AEP flood extent, including a 35% allowance for climate change, shows that the majority of the site is at risk of river flooding to a maximum flood level of 38.61mAOD. This would result in significant flood depths across the terrace area.

4. Conclusions

4.1 Risk Evaluation

The initial conceptual site model identified the following potential flood linkages present at the site and the following conclusions have been drawn:

- There is a **moderate risk** to residential end users and the proposed terrace from river flooding from the River Thames.
- There is a **low risk** to residential end users and the proposed terrace from groundwater flooding through the permeable underlying bedrock.
- There is a **low risk** to residential end users and the proposed terrace from sewer flooding in local sewers.
- There is a **moderate risk** to residential end users and the proposed terrace from river flooding, taking into account climate change.
- There is a **negligible risk** to residential end users and the proposed terrace from surface water flooding, taking into account climate change.
- There is a **negligible risk** to residential end users and the proposed terrace from reservoir flooding.

4.2 Existing Flood Mitigation Measures

Flood defences along the River Thames are not considered to offer sufficient protection and there are no formal flood mitigation measures at the site.

4.3 Proposed Flood Mitigation Measures

Given the significant depth of river flooding at the site and the nature of the retrospective development, it is not considered feasible to set the finished floor level of the terrace 300mm above the 1% AEP flood level, including a 35% allowance for climate change.

In accordance with the Environment Agency's Standing Advice for minor extensions, where flood levels cannot be raised to the required height, extra flood resistance and resilience measures should be implemented and these measures should protect the development to at least 600mm above the estimated flood level.

Flood resistance measures have, therefore, been implemented into the proposed development including the installation of an aluminium flood proof entrance door from the lower ground floor with 24mm double glazing, the installation of flood proof glass around the terrace and the use of composite decking. The pre-existing mooring platform is also constructed with treated wood on top of steel which will be resilient to flooding.

4.4 Floodplain Compensation

The entire terrace area is situated within the 1% AEP (+35%CC) floodplain, therefore, it will not be possible to provide flood compensation on a level for level, volume for volume basis on the site. Where it is not possible to provide level for level floodplain compensation then other forms of mitigation may be considered.

The base of the terrace is constructed with composite decking with gaps that will allow the ingress of flood water during a flood event thereby reducing the displacement of flood waters as much as possible.

4.5 Safe Access and Egress

There is a significant risk of river flooding at the site and safe access and egress will not be possible to and from the site during design conditions, without the intervention of emergency services.

The terrace area is situated within the Environment Agency's 'Properties closest to the River Thames from Scours Lane, Reading to Caversham Lakes', therefore, it is recommended that the site owner/manager sign up to receive Environment Agency Flood Warnings.

Upon receipt of a flood warning site users should seek to evacuate the site onto Bridge Street and travel north for 140 yards and turn left onto Church Road (A4074) from which large areas in Flood Zone 1 can be accessed. This evacuation route is short and easily navigable for site users with mobility issues. The evacuation route is shown in the Appendix.

4.6 Surface Water Management

Generally, it is desirable to discharge surface water runoff into the ground before allowing discharge to a surface water body, surface water sewer, highway drain, or a combined sewer.

The proposed development will result in no change to the impermeable surface area, therefore, the rate and volume of runoff will be unchanged and the flood risk off-site will not be increased.

4.7 Conclusions

The site lies within Flood Zone 3, based on the Environment Agency's Flood Map for Planning. Assessment of the risk to the site from all sources of flooding, including consultation of the Environment Agency's (Pangbourne to Sonning) 2019 and the Reading Borough Council SFRA, shows that the site is considered to be at moderate risk from river flooding, low risk from groundwater and sewer flooding and a negligible risk from tidal, surface water and reservoir flooding.

There is also considered to be a moderate risk to the site from river flooding and a negligible risk from surface water flooding when taking into account climate change.

Given the significant depth of river flooding at the site and the nature of the retrospective development, it is not considered feasible to set the finished floor level of the terrace 300mm above the 1% AEP flood level, including a 35% allowance for climate change. Flood resistance measures have, therefore, been implemented into the proposed development in accordance with the Environment Agency's Standing Advice for minor extensions.

The base of the terrace is constructed with composite decking with gaps that will allow the ingress of flood water during a flood event thereby reducing the displacement of flood waters as much as possible.

The terrace area is situated within the Environment Agency's 'Properties closest to the River Thames from Scours Lane, Reading to Caversham Lakes' Flood Warning Area, therefore, it is recommended that the site owner/manager sign up to receive Environment Agency Flood Warnings and upon receipt of a flood warning site users should seek to evacuate the site onto Bridge Street and travel north for 140 yards and turn left onto Church Road (A4074) from which large areas in Flood Zone 1 can be accessed.

The proposed development will result in no change to the impermeable surface area, therefore, the rate and volume of runoff will be unchanged and the flood risk off-site will not be increased.

It should be noted that these conclusions are based on the currently proposed development plan, therefore, flood risk at the site should be re-assessed if material changes are made to the proposed development.

5. Flood Warning & Evacuation Plan

This Flood Warning & Evacuation Plan is intended for use by management and supervisory staff responsible for site safety. A simplified briefing note follows which should be provided to all employees.

5.1 Roles and Responsibilities

It is the responsibility of the building managers to sign up to Environment Agency Flood Alerts and Warnings and Met Office severe weather warnings so they can be made aware of a potential flood event. If CCTV is available on site, this should be regularly reviewed for encroaching floodwaters.

All members of the management team will also register for Environment Agency flood warnings to avoid reliance on a single individual. These roles will monitor warnings, initiate communication, and coordinate site closure.

Building managers must also know how to locate and switch off critical services such as gas, electricity and water where applicable and they should compile and maintain a list of important contact information including the contacts outlined in this report.

Following a flood event, building managers should arrange for clearance and maintenance works to be completed as necessary.

Flood-related roles and responsibilities will be reviewed annually and after any flood event.

5.2 Flood Warnings

The Environment Agency (EA) operate a flood forecasting and warning service in areas at risk of flooding from rivers or the sea. Forecasting and warning rely on direct measurements of rainfall, river levels, tide levels, in-house predictive models, rainfall radar data and information from the Met Office. This service operates 24 hours a day, 365 days a year and the Environment Agency aim to provide at least 2 hours warning between the Flood Warning alert being issued and the commencement of flooding.

If flooding is forecast, there are three types of warning including Flood Alert, Flood Warning and Severe Flood Warning. A Flood Alert is issued two hours to two days in advance of flooding and means that flooding is possible and people should be prepared, a Flood Warning is issued half an hour to one day in advance of flooding and means that flooding is expected and immediate action is required, while a Severe Flood Warning is issued when flooding poses a significant risk to life or significant disruption to communities and means that severe flooding is expected and there is a danger to life.

The site is situated within the Environment Agency's 'Properties closest to the River Thames from Scours Lane, Reading to Caversham Lakes' Flood Warning Area.

Management staff must follow the formal sequence of EA flood warnings. Each warning stage requires a specific and escalating response from site management to ensure that the site is vacated before any flooding reaches the site.

The EA issues warnings in the following order, and the site's procedures correspond directly to these stages:

- Flood Alert – flooding is possible; staff and managers prepare for potential closure.
- Flood Warning – flooding is expected; the site must close and all staff must evacuate immediately.
- Severe Flood Warning – danger to life; the FWEP is designed so that no staff remain on site at this stage.

- Warnings No Longer in Force – used to confirm when it is safe to return following consultation with the Local Authority and emergency services.

These warnings may be issued during working hours or overnight. If warnings are issued outside working hours, senior managers will ensure the site does not open until the warning has been lifted and conditions have been reviewed. This prevents staff arriving at a developing or active flood situation.

Communication with staff during a flood warning will use existing company channels such as email, SMS, internal messaging systems or other established methods.

Contractors and visitors on site during a Flood Alert or Flood Warning will follow the same evacuation instructions as staff and must leave the site immediately when directed. It is imperative that a system is in place to ensure flood communications from management reach contractors and visitors.

5.3 Evacuation Procedures

The first phase of the evacuation plan will be triggered upon receipt of a Flood Alert from the Environment Agency.

The following structured warning sequence forms the site's flood response and evacuation procedure and ensures that all actions are taken before floodwaters reach the site.

All evacuation decisions must be made in accordance with the advice of emergency services and responder agencies, who may override this plan depending on conditions.

1. Flood Alert – Prepare. A Flood Alert indicates that flooding is possible.

Upon receipt of a Flood Alert during working hours:

- Staff will be informed that flooding is possible and that the site may close at short notice.
- External contractors and visitors will be advised of the situation.
- Critical equipment, documents, and movable assets should be prepared for relocation to upper floors where safe refuge is available.

This phase is preparatory only but must be taken seriously due to the significant flood depths anticipated at the site.

- 1A. Flood Alert (Out of Hours / Overnight)

If a Flood Alert is issued when the site is closed:

- Managers receive the alert automatically.
- Senior managers assesses whether conditions are likely to escalate before the next working day.
- If escalation is possible, senior managers will instruct that the site must not open until conditions are reviewed.
- Staff scheduled for early shifts will be notified not to attend until clearance is given.

This prevents staff arriving at a developing flood situation.

2. Flood Warning – Act. A Flood Warning indicates that flooding is expected.

- The site will close immediately.

- All staff evacuate the site before any flooding reaches the site.
- Any assets that cannot be removed are raised to upper floors or protected where possible.

2A. Flood Warning (Out of Hours / Overnight)

If a Flood Warning is issued when the site is closed:

- Staff are notified not to attend until the warning is lifted.
- No attempt is made to enter the site to move assets.
- The site remains closed until senior managers confirm safe access.

This ensures no staff are exposed to hazardous conditions during early-morning arrival or during their journey.

3. Severe Flood Warning – Survive. A Severe Flood Warning indicates danger to life.

The FWEP is designed so that no staff are present by this stage.

If a Severe Flood Warning is issued unexpectedly while the site is occupied:

- Staff must evacuate only if safe to do so.
- If evacuation is not possible, staff must shelter in place on upper floors, where safe refuge is available, and follow emergency services' instructions.
- Utilities should only be isolated if it is safe to do so.

4. Warnings No Longer in Force – Return to Site

When the Environment Agency issues a "Warnings No Longer in Force" notice:

- Senior managers contact the Local Authority and emergency services to confirm that access is safe.
- No staff may return until the site is formally cleared.
- A controlled inspection is carried out to assess structural integrity, contamination, and utility safety.
- Power, gas, and water systems must not be re-energised until confirmed safe by qualified personnel.

5.4 Safe Evacuation Route

In the absence of vehicle parking on the site, a pedestrian evacuation route will be required. Staff will exit via the site access onto Bridge Street, travel north for 140 yards and turn left onto Church Road (A4074) from which large areas in Flood Zone 1 can be easily accessed.

Clear signage within the site should be provided highlighting the evacuation route.

If a warning is issued outside working hours, the site will not open, preventing staff from arriving at a developing flood situation. No attempt should be made to travel to the site during any active warning period.

6. Contacts

Contact Name	Contact Information
Environment Agency Incident Hotline	0800 80 70 60 (24hrs)
Environment Agency Floodline	0345 988 1188 (24hrs)
Environment Agency Flood Warnings	gov.uk/sign-up-for-flood-warnings
Met Office UK weather warnings	metoffice.gov.uk/weather/warnings-and-advice/uk-warnings
Reading Borough Council (Lead Local Flood Authority)	reading.gov.uk/crime-and-safety/emergency-planning/flooding/
	0118 937 3787
	01344 351 999 (Out of Hours)
Thames Water Utilities Limited	thameswater.co.uk/help/emergencies/flooding
	0800 316 9800
National Flood Forum	nationalfloodforum.org.uk
	01299 403 055

7. References

British Geological Survey. *British Geological Survey (BGS)* [online] Available at: <bgs.ac.uk/>.

Department for Communities and Local Government. *Technical Guidance to the National Planning Policy Framework.*

Department for Environment Food & Rural Affairs, 2022. *Climate Change Allowances.* [online] Available at: <environment.data.gov.uk>.

Environment Agency, 2019. *Pangbourne to Sonning.*

Environment Agency, 2025. *Flood map for planning.* [online] Available at: <flood-map-for-planning.service.gov.uk>.

Environment Agency, 2025. *Flood risk and coastal change.* [online] Available at: <gov.uk/guidance/flood-risk-and-coastal-change>.

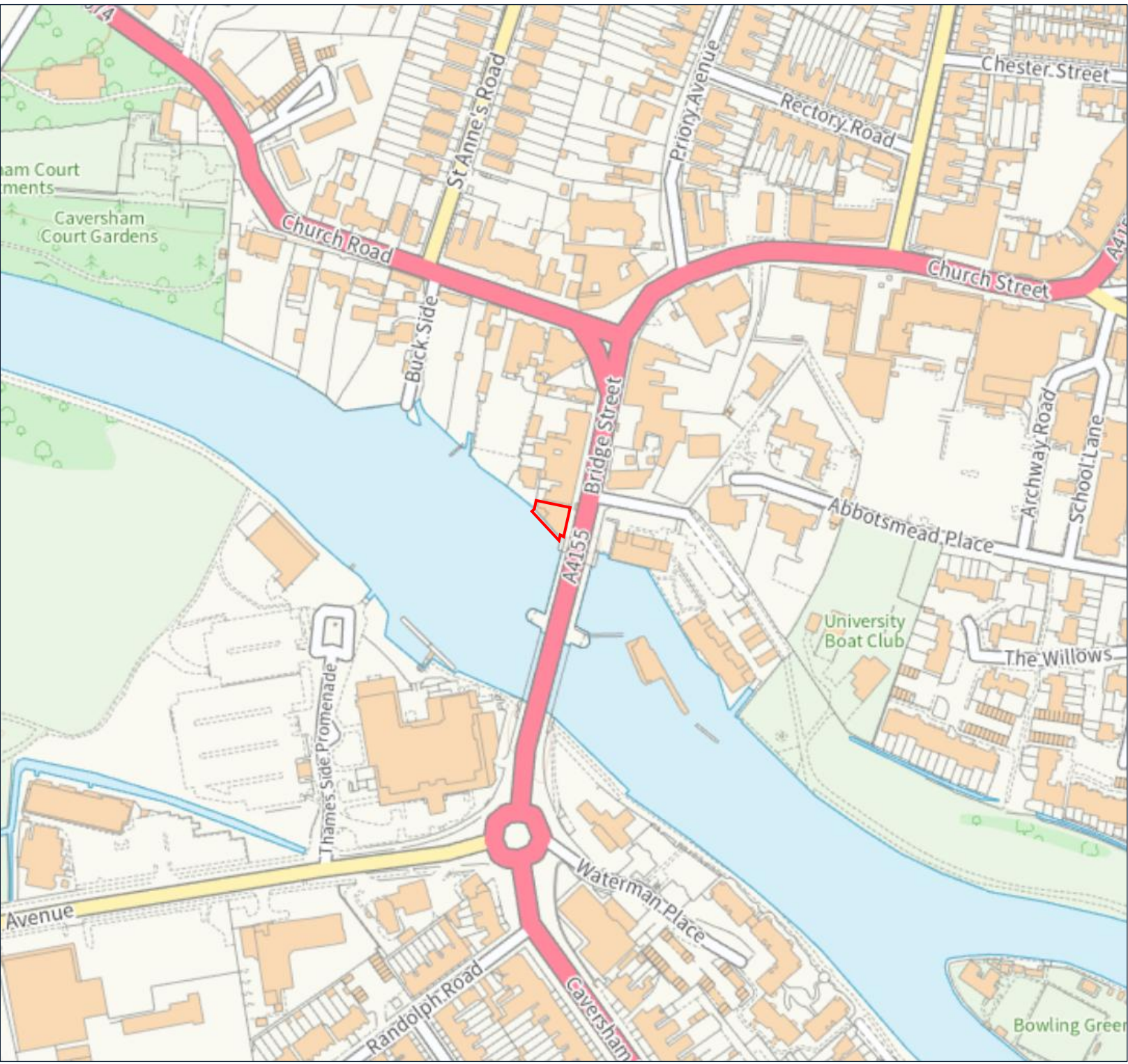
Environment Agency, 2022. *Flood risk assessments: climate change allowances.* [online] Available at: <gov.uk/guidance/flood-risk-assessments-climate-change-allowances>.

Met Office. *UK weather warnings.* [online] Available at: <metoffice.gov.uk/weather/warnings-and-advice/uk-warnings>.

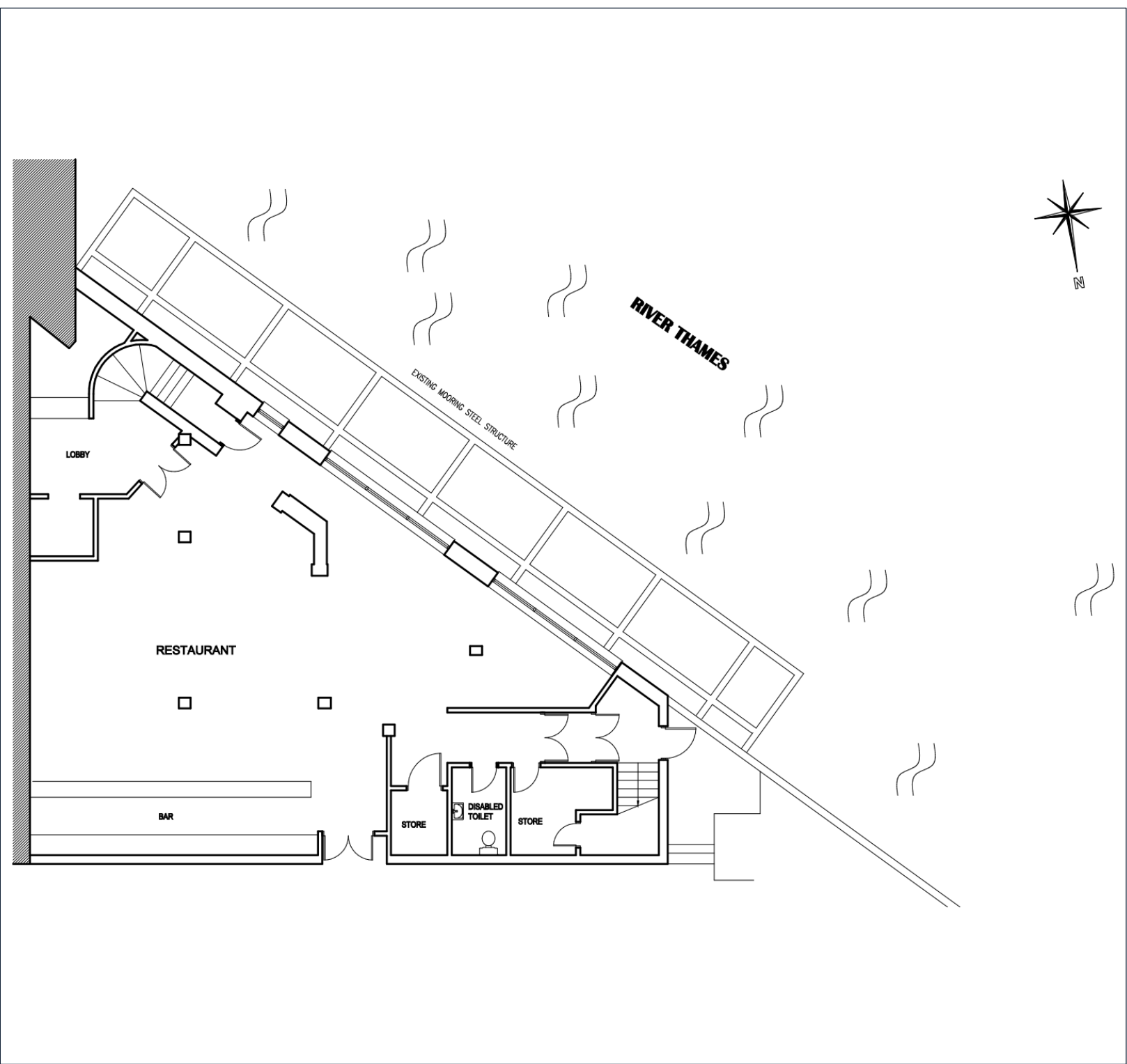
Peter Brett Associated LLP, 2017. *Reading Borough Council Strategic Flood Risk Assessment.* [online] Available at: <reading.gov.uk>.

Ordnance Survey. [online] Available at: <ordnancesurvey.co.uk/>.

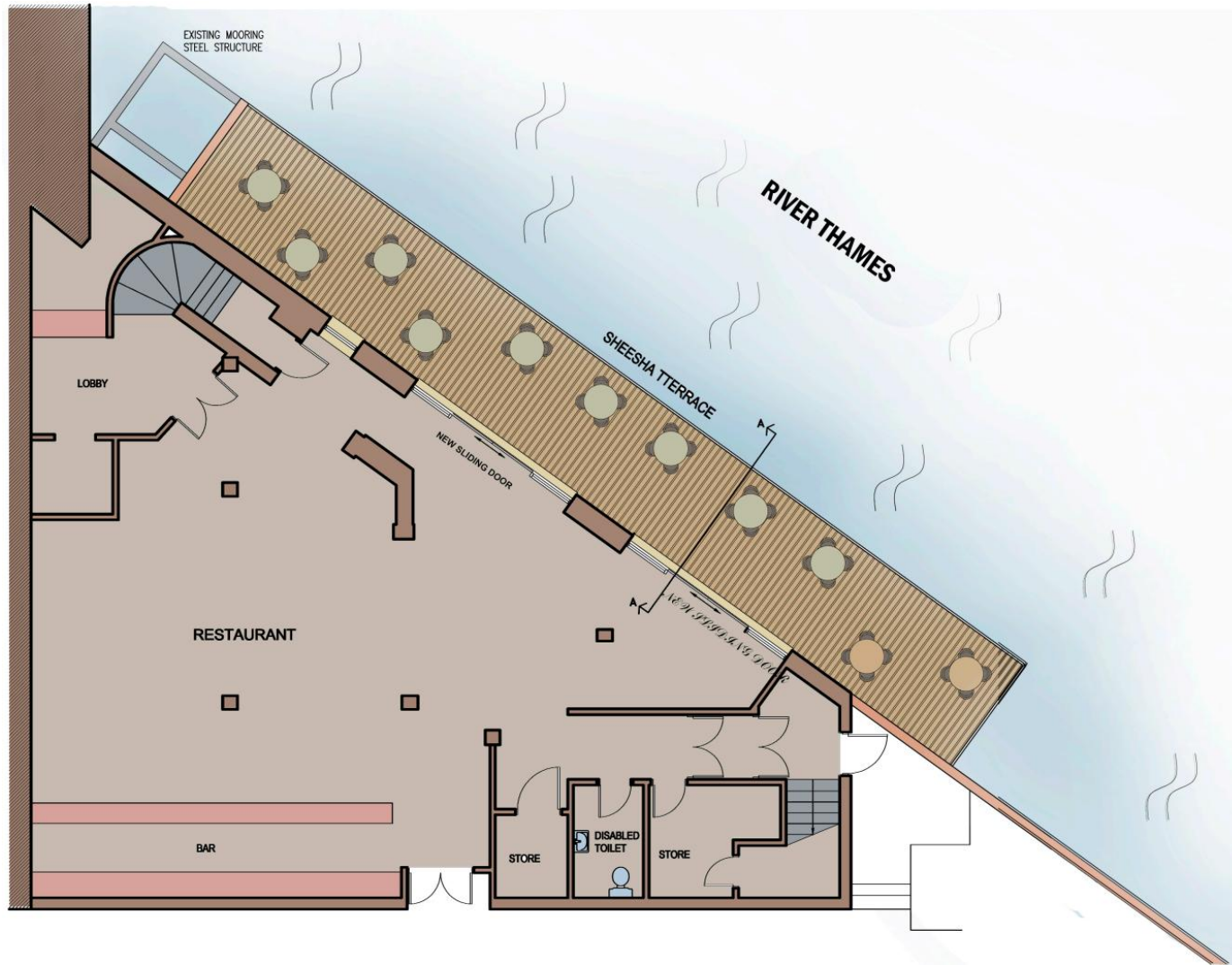
Oakshire Environmental. Available at: <oakshireenvironmental.co.uk>



Appendix - Site Maps & Plans	
Description	
Site location plan	
Sources	
Contains OS data © Crown copyright and database rights	
Key	
	Site boundary
	North



Appendix - Site Maps & Plans
Description
Pre-existing lower ground floor plan
Sources
Pioneer Designs



Appendix - Site Maps & Plans

Description

Existing lower ground floor plan

Sources

Pioneer Designs

Appendix - Site Maps & Plans

Description

Pre-existing elevation

Sources

Pioneer Designs



RIVERSIDE ELEVATION

Appendix - Site Maps & Plans

Description

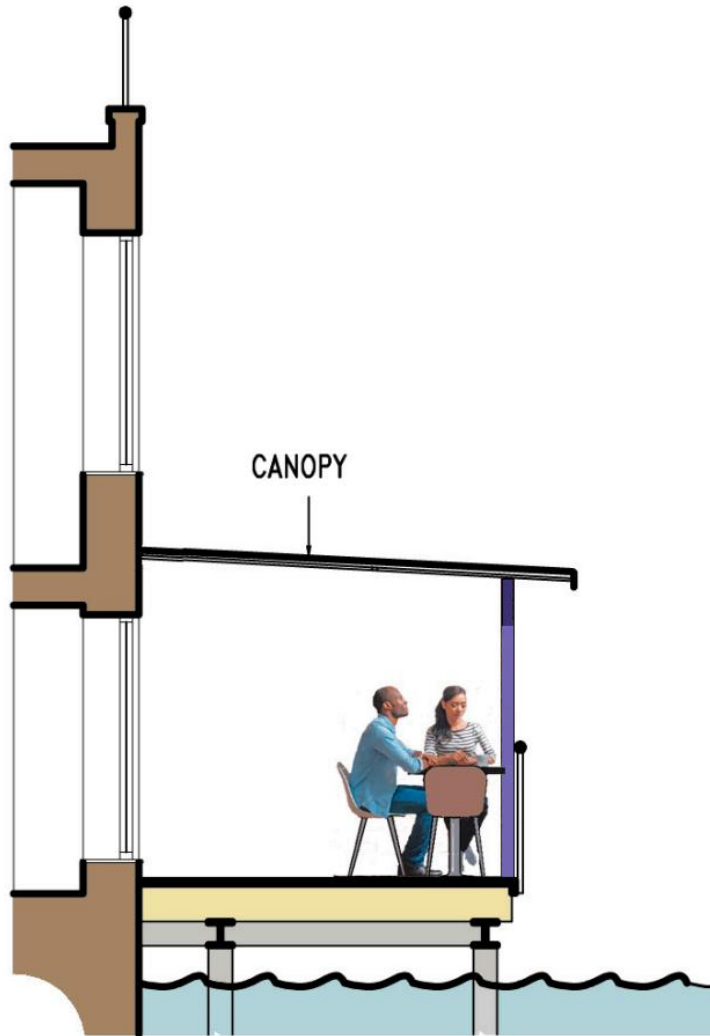
Existing elevation

Sources

Pioneer Designs



RIVERSIDE ELEVATION



SECTION A-A

Appendix - Site Maps & Plans

Description

Existing section

Sources

Pioneer Designs



Appendix - Site Photos

Description

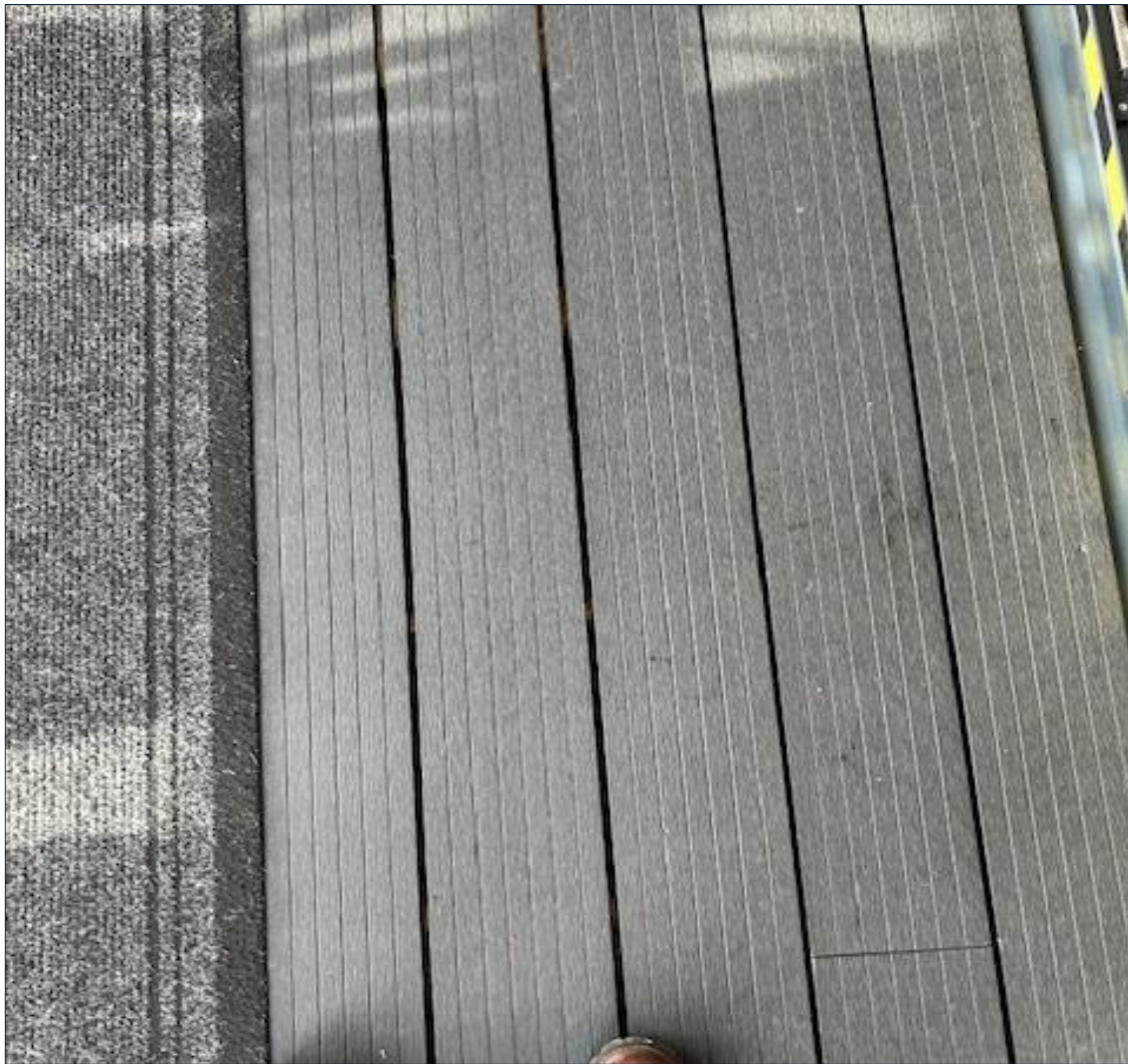
Photo of the site from the south bank of the River Thames, facing north east



Appendix - Site Photos

Description

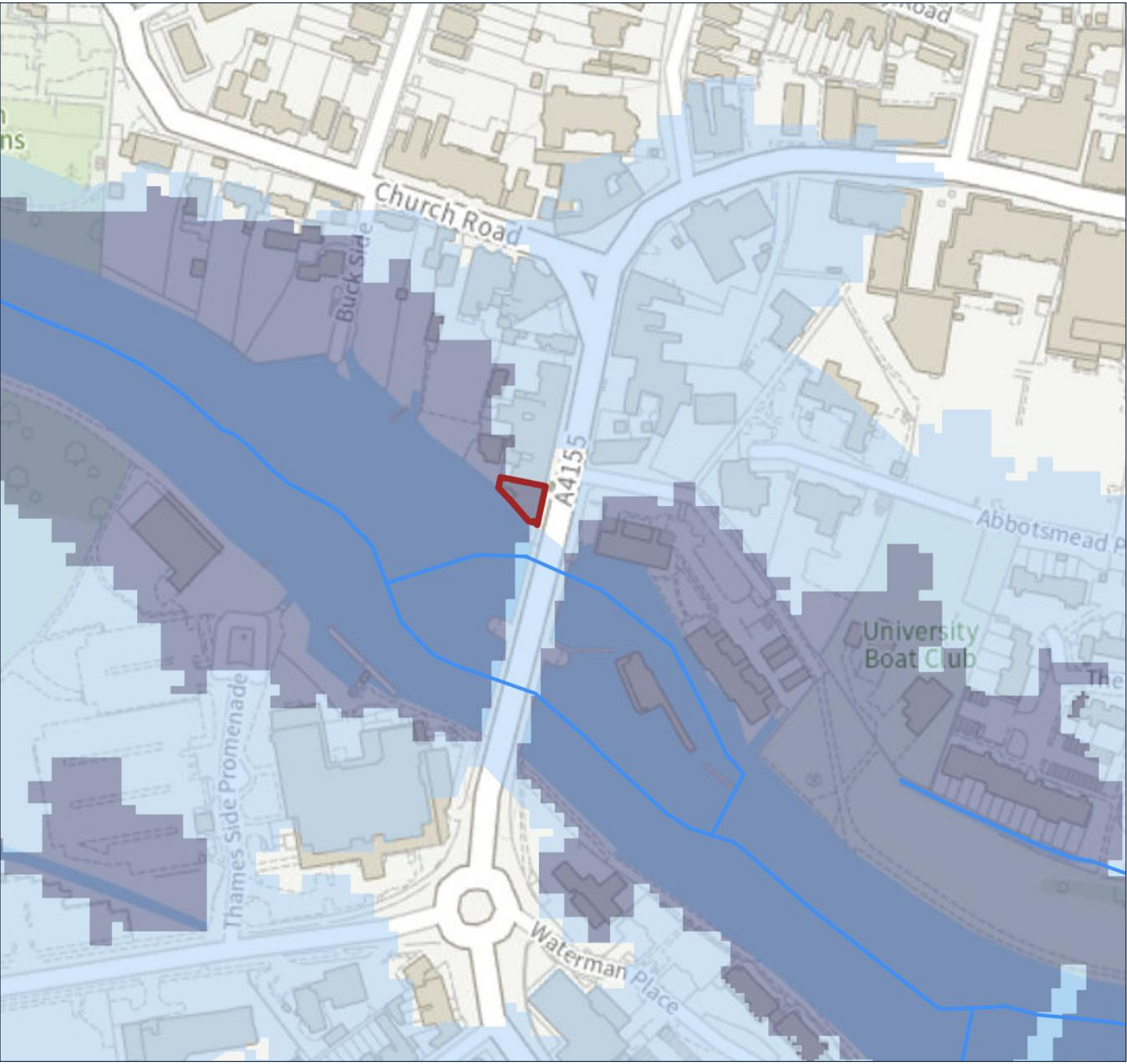
Photo of the terrace area, facing south east



Appendix - Site Photos

Description

Photo of composite decking used for the base of the terrace

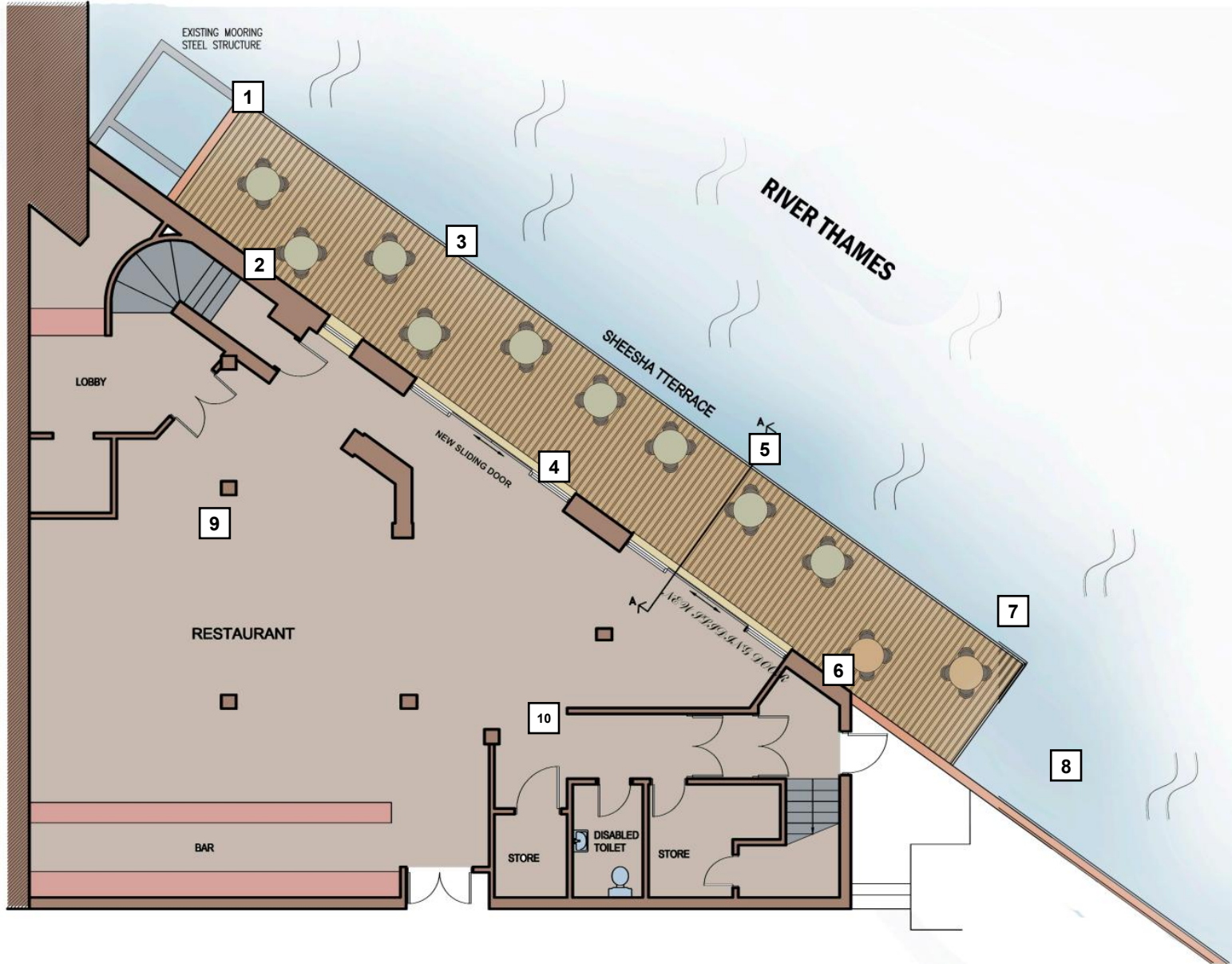


Appendix – Flood Risk Maps	
Description	
Flood zone map for planning	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	Flood Zone 1
	Flood Zone 2
	Flood Zone 3
	Main river
	Flood defence
	North



Appendix - Flood Risk Maps

Description	
Modelled extent of the 5% AEP event, denoted as Flood Zone 3b	
Sources	
Environment Agency Google	
Key	
	Site boundary
	5% AEP extent (Flood Zone 3b)
	North



Appendix - Flood Risk Maps

Description

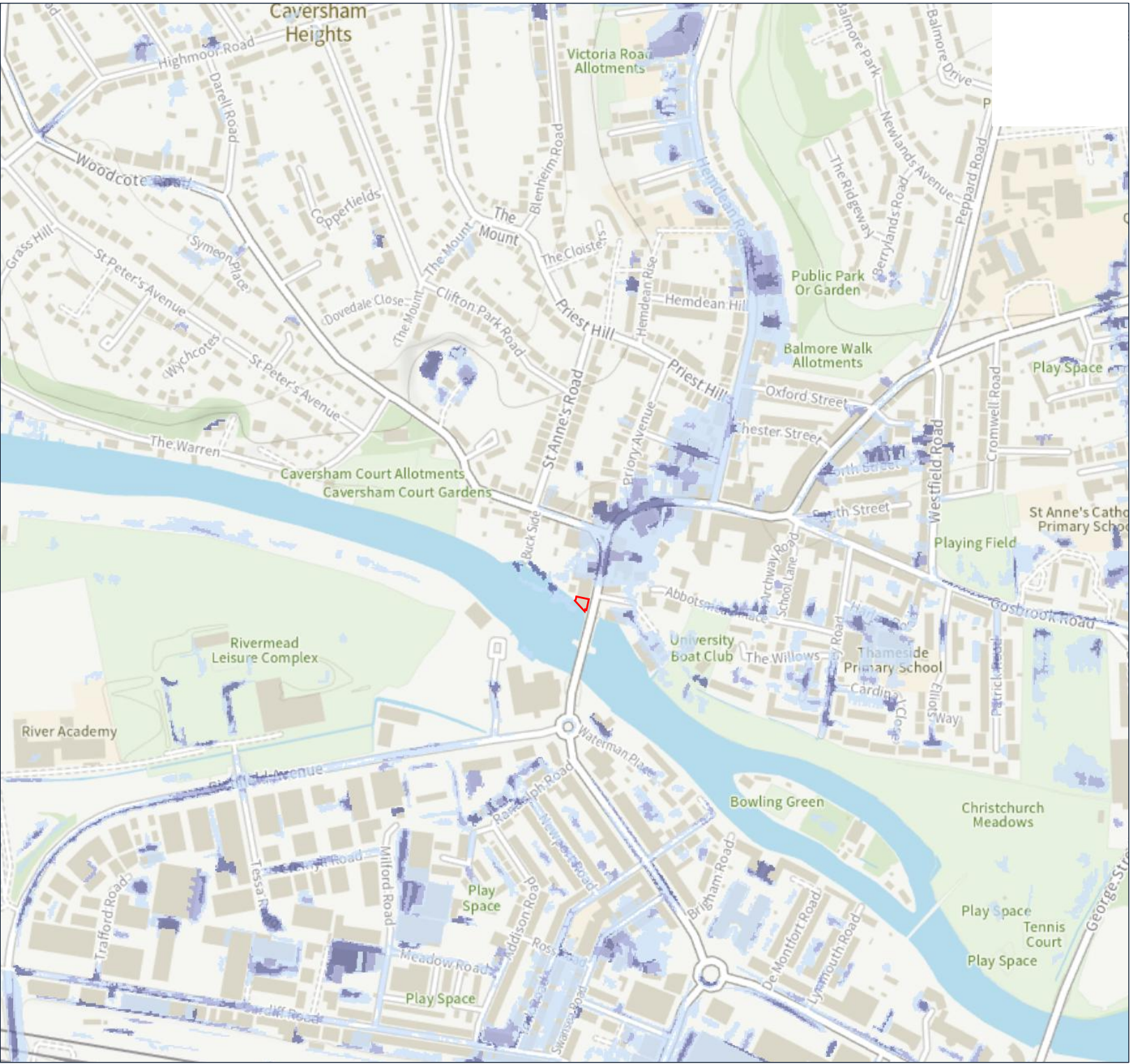
Node map showing maximum modelled river flood levels in a 1% AEP event

Sources

Environment Agency
Pioneer Designs

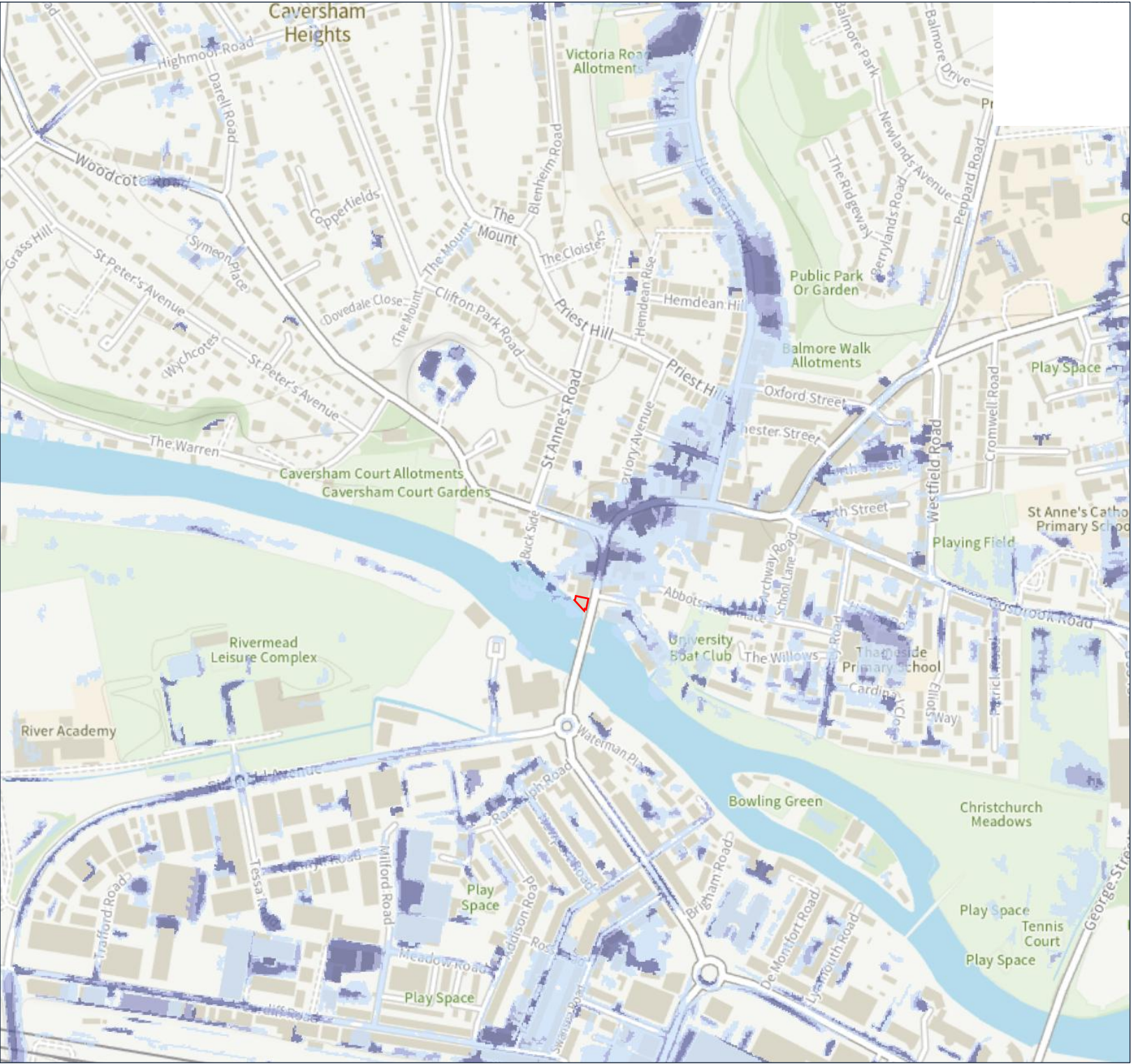
Key

	Site boundary
1	38.149mAOD
2	38.149mAOD
3	38.151mAOD
4	38.151mAOD
5	38.153mAOD
6	38.153mAOD
7	38.154mAOD
8	38.155mAOD
9	Outside maximum flood extent
10	Outside maximum flood extent
▲	North

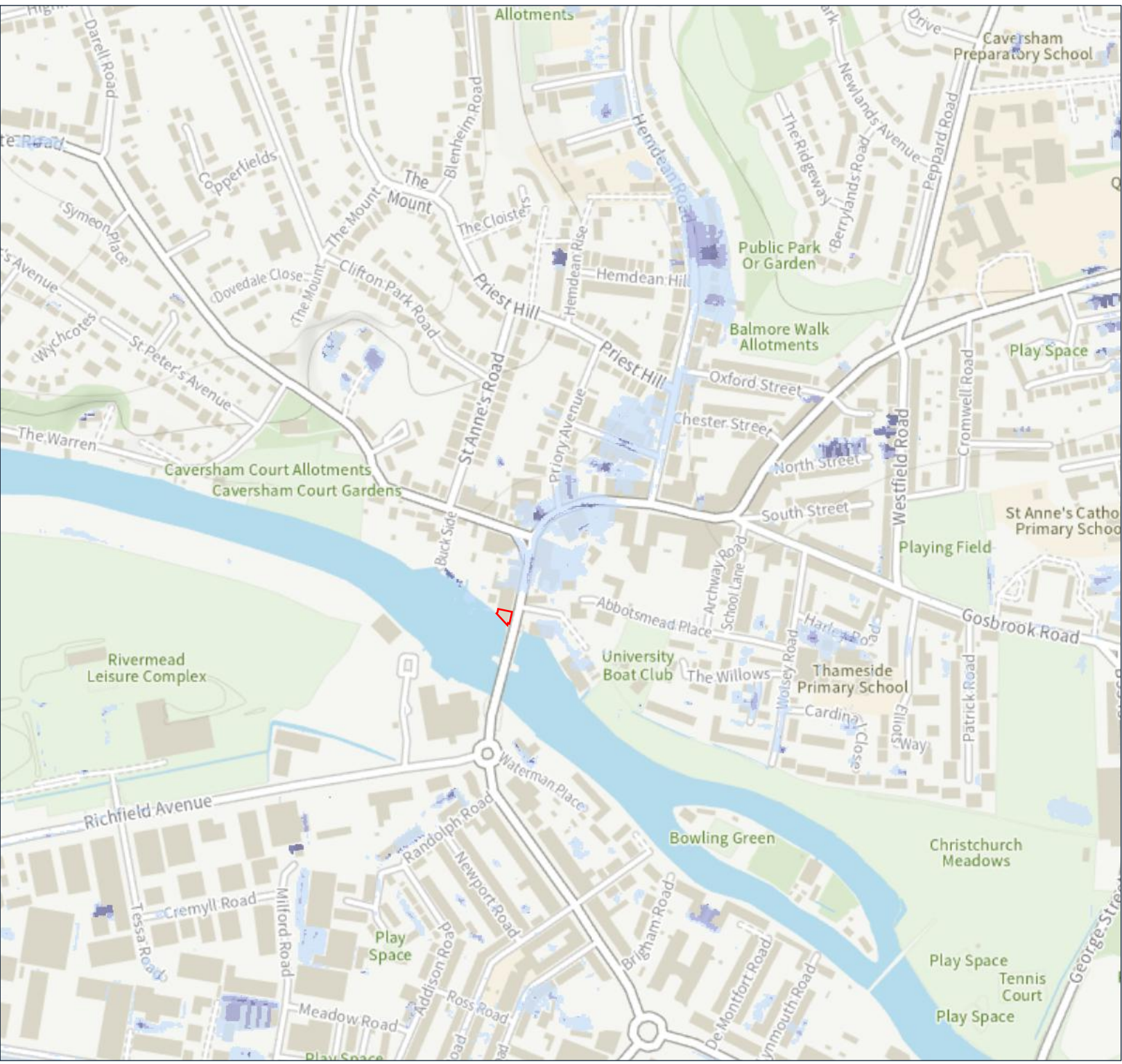


Appendix - Flood Risk Maps

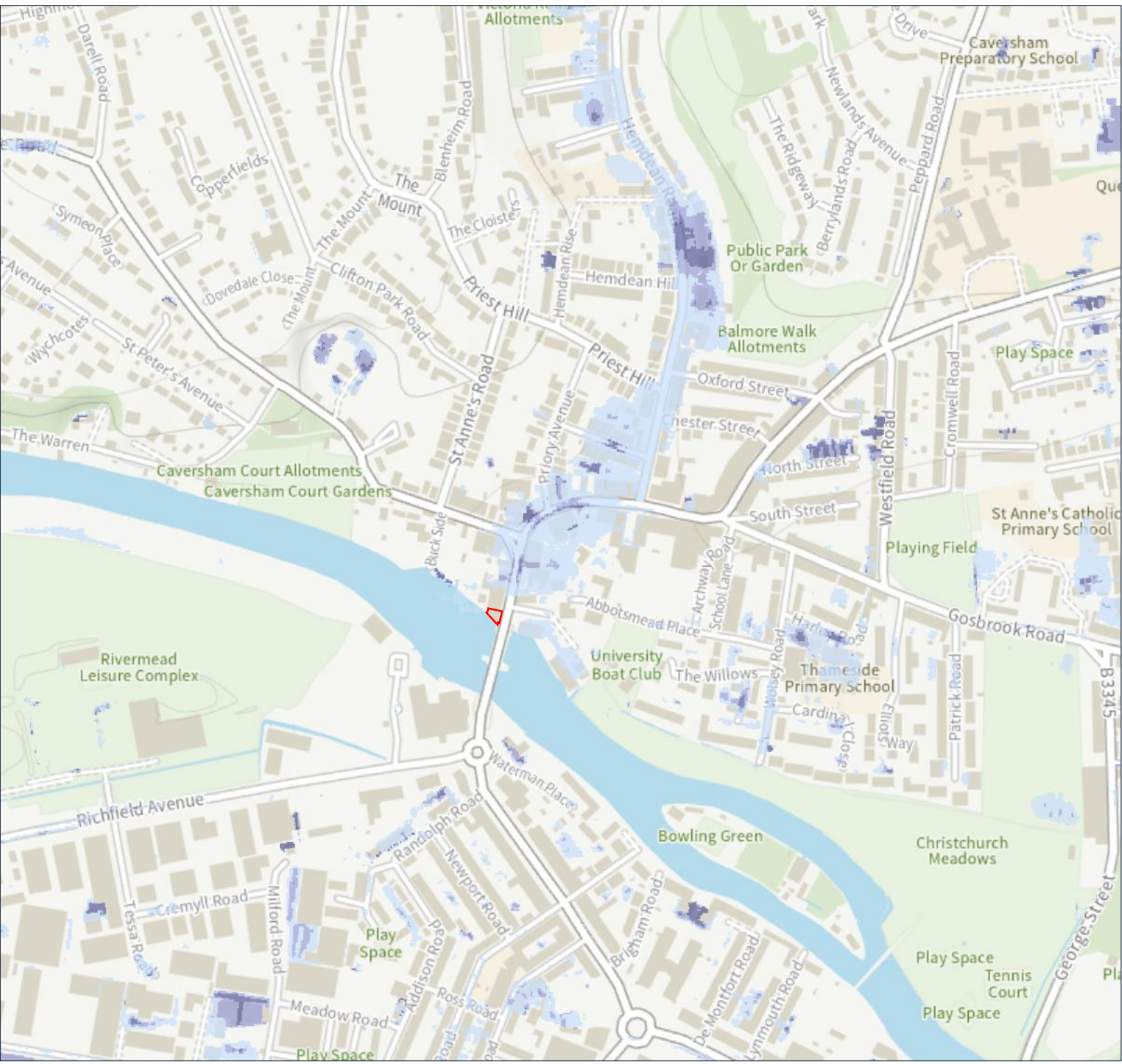
Description	
Environment Agency map showing the extent of flooding from surface water for a range of flood events	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	0.1% AEP (Low)
	1% AEP (Medium)
	3.33% AEP (High)
	North



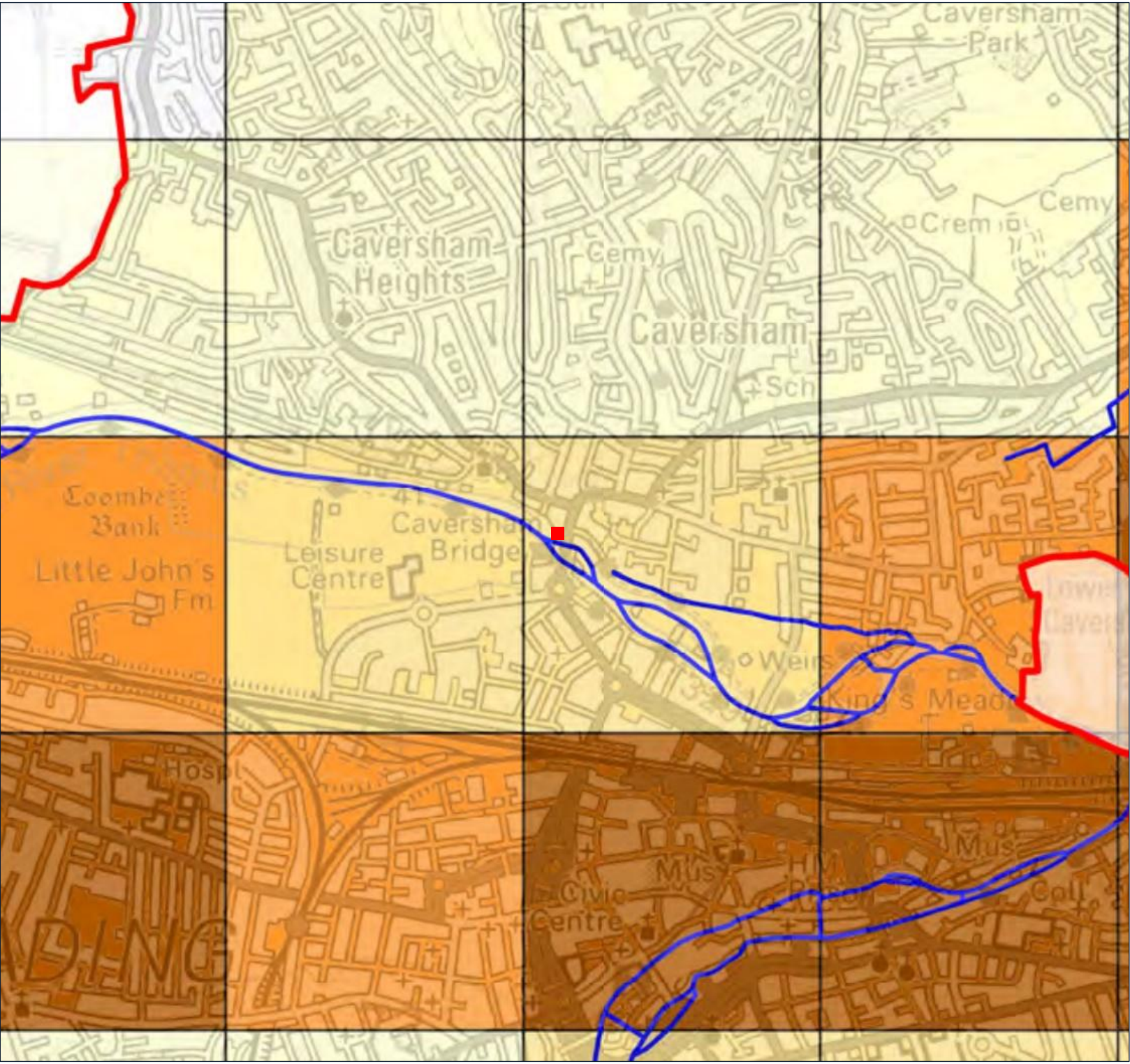
Appendix - Flood Risk Maps	
Description	
Environment Agency map showing the extent of flooding from surface water for a range of flood events between 2040 and 2060	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	0.1% AEP (Low)
	1% AEP (Medium)
	3.33% AEP (High)
	North



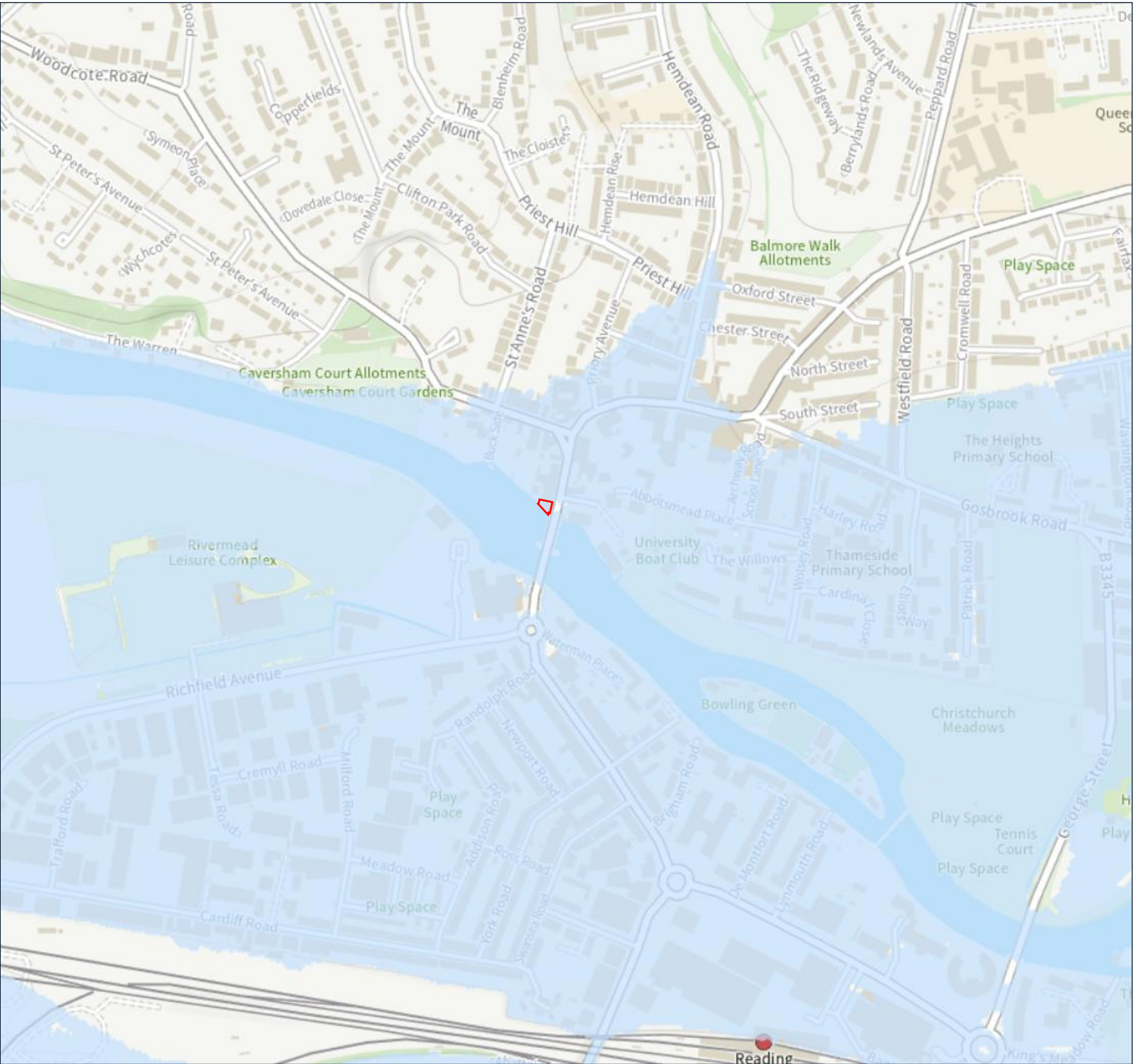
Appendix - Flood Risk Maps	
Description	
Environment Agency map showing the likelihood of surface water flooding to a depth of up to 0.2m for a range of flood events	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	0.1% AEP (Low)
	1% AEP (Medium)
	3.33% AEP (High)
	North



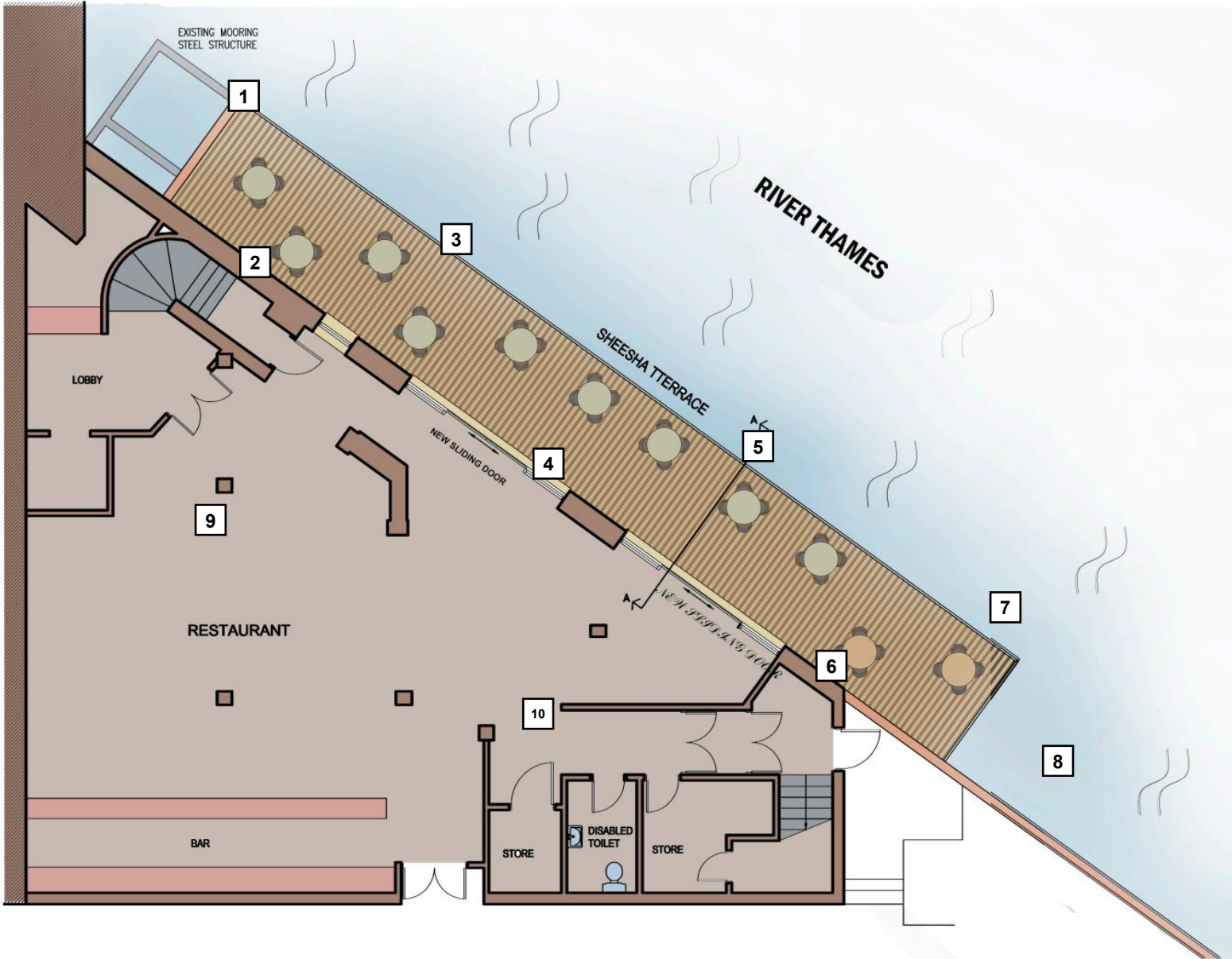
Appendix - Flood Risk Maps	
Description	
Environment Agency map showing the likelihood of surface water flooding to a depth of up to 0.2m for a range of flood events between 2040 and 2060	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	0.1% AEP (Low)
	1% AEP (Medium)
	3.33% AEP (High)
	North



Appendix - Flood Risk Maps	
Description	
Areas Susceptible to Groundwater Flooding map from Reading Borough Council SFRA	
Sources	
Peter Brett Associates OS data © Crown copyright and database rights	
Key	
	Site location
	< 25%
	≥ 25% < 50%
	≥ 50% < 75%
	≥ 75%
	North



Appendix - Flood Risk Maps	
Description	
Environment Agency map showing the modelled extent of flooding from reservoirs	
Sources	
Environment Agency OS data © Crown copyright and database rights	
Key	
	Site boundary
	When river levels normal
	When there is river flooding
	North



Appendix - Flood Risk Maps

Description

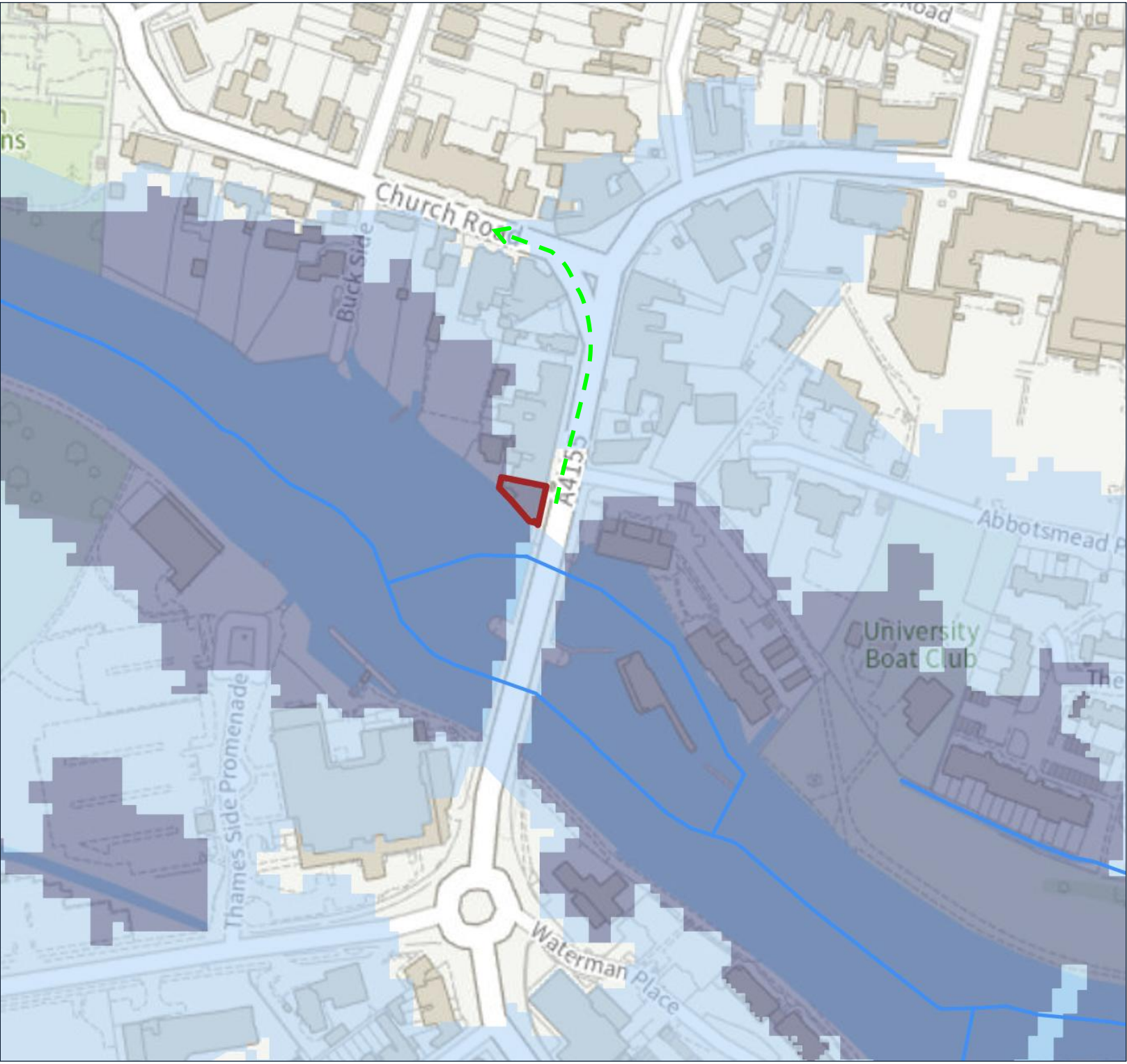
Node map showing maximum modelled river flood levels in a 1% AEP event, including a 35% allowance for climate change

Sources

Environment Agency
The KEEN Partnership

Key

	Site boundary
1	38.601mAOD
2	38.602mAOD
3	38.604mAOD
4	38.605mAOD
5	38.607mAOD
6	38.608mAOD
7	38.610mAOD
8	38.611mAOD
9	Outside maximum flood extent
10	38.606mAOD
▲	North



Appendix – Evacuation Plan	
Description	
Flood zone map for planning showing proposed evacuation route	
Sources	
Environment Agency 2025 OS data © Crown copyright and database rights	
Key	
	Site boundary
	Flood Zone 1
	Flood Zone 2
	Flood Zone 3
	Main river
	Evacuation route
	North