

TECHNICAL NOTE

Job No: 332612234

Note No: TN001

Date: January 2025

Prepared By: Hugh Leekam

Approved By: Richard Fisher

Subject: **Flood Risk Assessment –Thameside Primary School – Proposed Play Area**

This Flood Risk Assessment (FRA) Technical Note has been prepared by Stantec to support a planning application for a proposed play area and external climbing equipment, at Thameside Primary School, Reading.

This assessment has been prepared in accordance with the National Planning Policy Framework (NPPF), updated December 2024, and the associated Planning Practice Guidance (PPG) 'Flood Risk and Coastal Change' section.

The analysis is based on publicly available Environment Agency (EA) 'Opendata' and detailed EA 'Product 4' FRA data (EA ref: THM390147, received 02/01/2025), which includes reference to the EA River Thames (Pangbourne to Sonning) 2019 1D-2D hydraulic modelling that has been interrogated at the site, and the Reading Borough Council (RBC) Level 1 Strategic Flood Risk Assessment (SFRA), June 2017.

Stantec has many years of experience in, amongst other areas, the assessment of flood risk, hydrology, flood defence and river engineering. The authors and reviewers of this FRA are experienced engineers and are members of the Chartered Institution of Water and Environmental Management (CIWEM).

1 – Site Setting and Proposals

The new play area is proposed to be located in the south-east corner of an existing school, to replace an existing play area consisting of softwood bark chippings at Thameside Primary School, Harley Road, Caversham, Reading (postcode: RG4, 8DB, OS grid reference: 471, 600m E, 174, 600m N) – see appended location plans and **Figure 1**.

Figure 1: Site Location



The River Thames is the dominant watercourse in the area and flows west to east approximately 170m south of the site.

The Gos Brook is located approximately 120m south from the site, flowing eastwards between Christchurch Meadows and the Lower Caversham residential area. The Brook provides land drainage for the surrounding meadows and discharges into the main channel of the River Thames further to the east, close to Caversham Lock.

The appended LiDAR Opendata indicates that ground levels over the location of the proposed play area are at approximately 38.50m AOD – see [Appendix A](#).

The proposal is for a new play area and external climbing equipment - see [Appendix C](#).

2 – EA Opendata Flood Maps

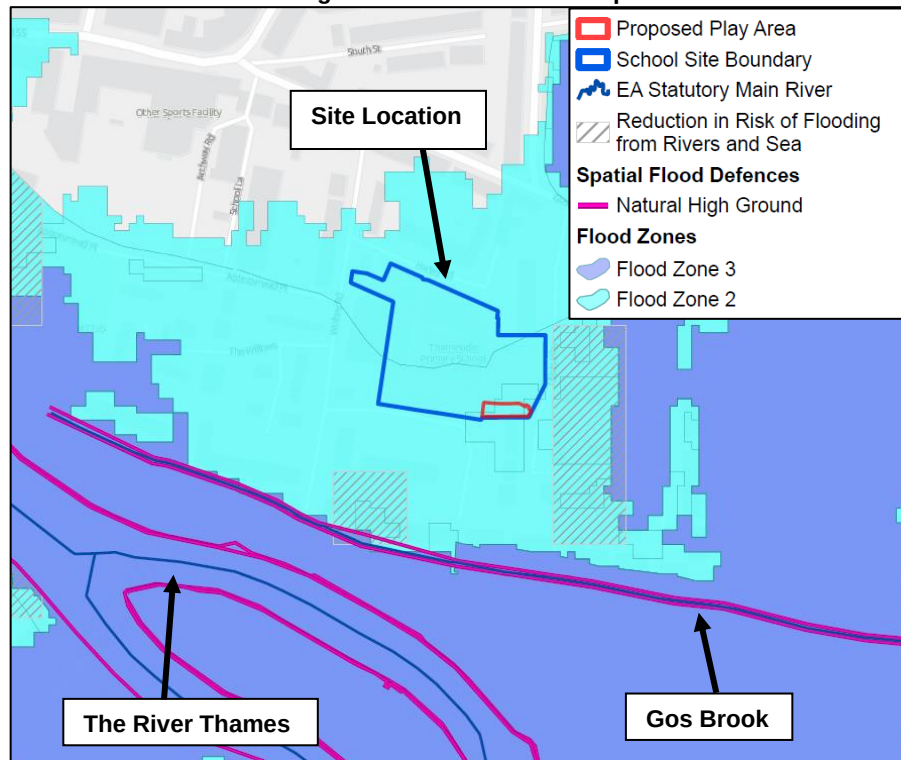
The following maps have been taken from the attached Stantec GIS Flood Maps. These maps are based on the (EA) 'Opendata' datasets available online and reproduced with OS mapping under licence to Stantec.

Flood Zone

The first phase in identifying whether a site is potentially at risk of flooding is to consult the EA's Flood Zone maps, available on the EA's website. The Flood Zones are defined under Table 1 of the NPPF PPG 'Flood Risk and Coastal Change'.

A review of the EA online 'Flood Map for Planning' in [Figure 2](#) shows the entirety of the site is located in **Flood Zone 2 'Medium Probability'** (Land between 1 in 100 (1.0%) and 1 in 1000 (0.1%) annual probability (AP) of river flooding). The site is shown to not benefit from flood defences, this is consistent with the EA P4 Flood Data.

Figure 2: EA Flood Zone Map



Reservoir Flood Risk

The EA provides maps showing the risk of flooding in the event of a reservoir failure and show two flooding scenarios, a 'dry-day' and a 'wet-day.' The 'dry-day' scenario predicts the flooding that would occur if the dam or reservoir failed when rivers are at normal levels. The 'wet day' scenario predicts how much worse the flooding might be if a river is already experiencing an extreme natural flood.

The mapping confirms the site is at risk of reservoir breach during a 'wet-day' scenario.

It should be emphasised that the risk of flooding from a reservoir breach is very small. The EA is the enforcement authority for the Reservoirs Act (1975). For all large, raised reservoirs (where greater than 25,000m³ of water is stored above natural ground level) there is a mandatory requirement to be inspected and supervised by reservoir panel engineers, and the reservoir owner has a duty of care under the Health and Safety at Work Act 1974 to ensure others are not placed at risk from their assets or actions.

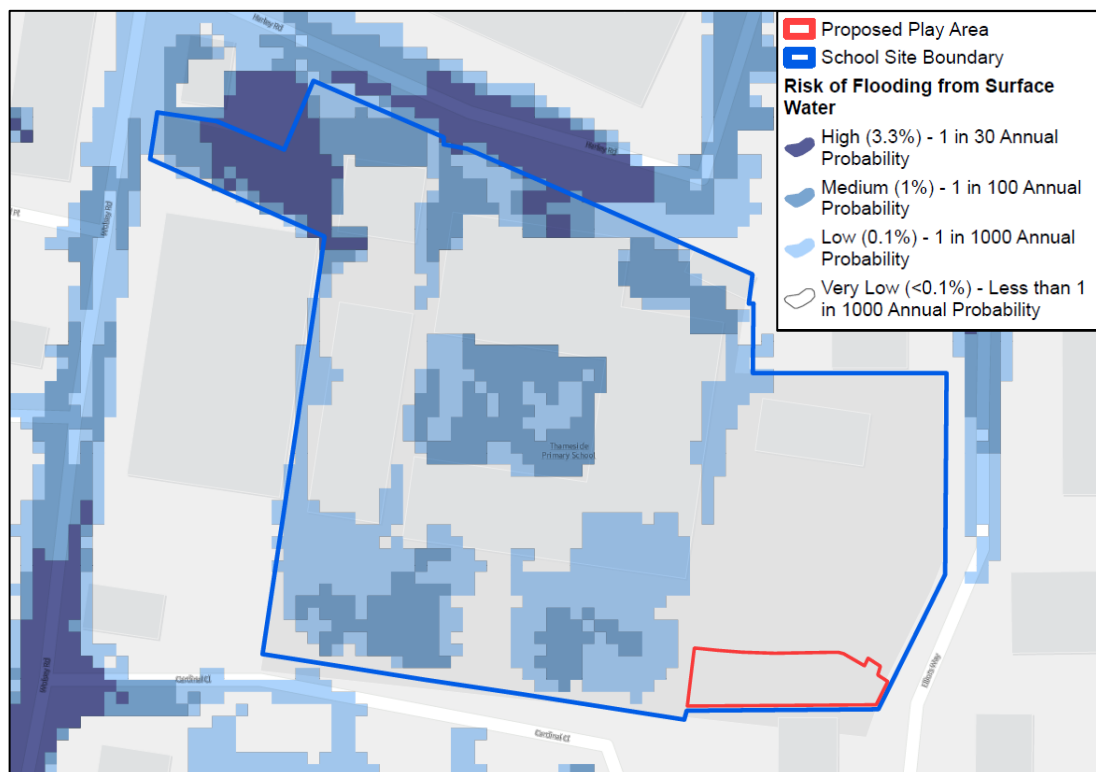
Whilst the consequences of a reservoir breach could be severe, the probability of such an occurrence is therefore considered to be very low.

Surface Water Flood Risk

The EA 'Risk of Flooding from Surface Water' ('RFfSW') shows areas that could potentially be susceptible to surface water flooding in an extreme rainfall event; see **Figure 3** and **Appendix A**. This shows all of the proposed play area is at a 'Very Low' risk (land at lower than a 1 in 1000 (0.1%) annual probability ('AP')) of surface water flooding.

There are localised areas at higher risk of surface water flooding across the wider school site.

Figure 3: EA Flood Map for Surface Water



Historic Flooding

The available mapping from the EA Opendata '**Historic Flood Extent**' map (appended Stantec **Figure 08** in **Appendix A**) shows that the Lower Caversham area has been impacted by historical flooding.

The recorded flood data indicates that the site was impacted by the Spring 1947 historic fluvial flood event, caused by the River Thames channel capacity exceedance. The Spring 1947 flooding event was part of widespread flooding across the River Thames catchment area, this was the worst flood on the River Thames in the 20th Century and one of the worst floods on record. This is consistent with the EA P4 Flood Data.

3 – Reading Borough Council Strategic Flood Risk Assessment

The RBC Level 1 Strategic Flood Risk Assessment (L1 SFRA) June 2017 provides an overview of flood risk across the area to inform new development. In terms of the fluvial and surface water data, this is informed by the relevant EA modelling and the latest iteration of this is outlined in **Section 2** (EA Opendata) and **Section 4** (detailed EA modelling). The SFRA does provide further area-specific data in relation to groundwater and sewer flood risk, as detailed further below:

Groundwater Flood Risk

- The L1 SFRA Appendix C '*Areas Susceptible to Groundwater Flooding*' mapping (map F8) shows the site to be located on an area of land identified as having 'Between 25% and 50%' susceptible to groundwater flooding. This mapping provides a broad scale analysis to identified areas where there is potential for groundwater emergence based on the topography and underlying geology – but it should be noted this is not based on detailed modelling, or on any recorded evidence of such flooding.
- The L1 SFRA Appendix C '*RBC Historic Flooding Records*' mapping (map F3) shows there to have been no historic groundwater flooding incidents recorded at the site. Therefore, the risk of groundwater flooding is considered to be low.

Sewer Flood Risk

- The L1 SFRA Appendix C '*Recorded Incidents of Sewer Flooding Overview*' mapping shows the site is located in an area (postcode area: RG4) identified as having 101+ previously recorded flood incidents.
- The SFRA Appendix C '*RBC Historic Flooding Records*' mapping shows there to have been no recorded sewer flooding incidents recorded close to or at the site. Therefore, the risk of sewer flooding is considered to be low.

4 – EA Detailed Hydraulic Modelling - River Thames (Pangbourne to Sonning) 2019

The EA River Thames (Pangbourne to Sonning) 2019 1D-2D hydraulic modelling has been interrogated at the site.

Present Day - Fluvial Flood Risk

The site is shown to lie outside of the modelled 1 in 100 (1%) AP floodplain, but the area is impacted in the 1 in 1000 (0.1%) AP floodplain. This is consistent with the designation of the site as **Flood Zone 2 'Medium Probability'** – 'Land between 1 in 100 (1.0%) and 1 in 1000 (0.1%) annual probability (AP) of river flooding' - see **Figure 4** and the figures in the **Appendix B**.

When considered at a site level, the detailed topographic data confirms the majority of the school site is impacted to shallow depths in the present-day 1 in 1000 (0.1%) AP flood event, but the proposed play area in the south-eastern corner is located just above this floodplain.

Modelled present-day flood levels for the 1 in 100 AP and 1 in 1000 AP flood extents are outlined in **Table 1**.

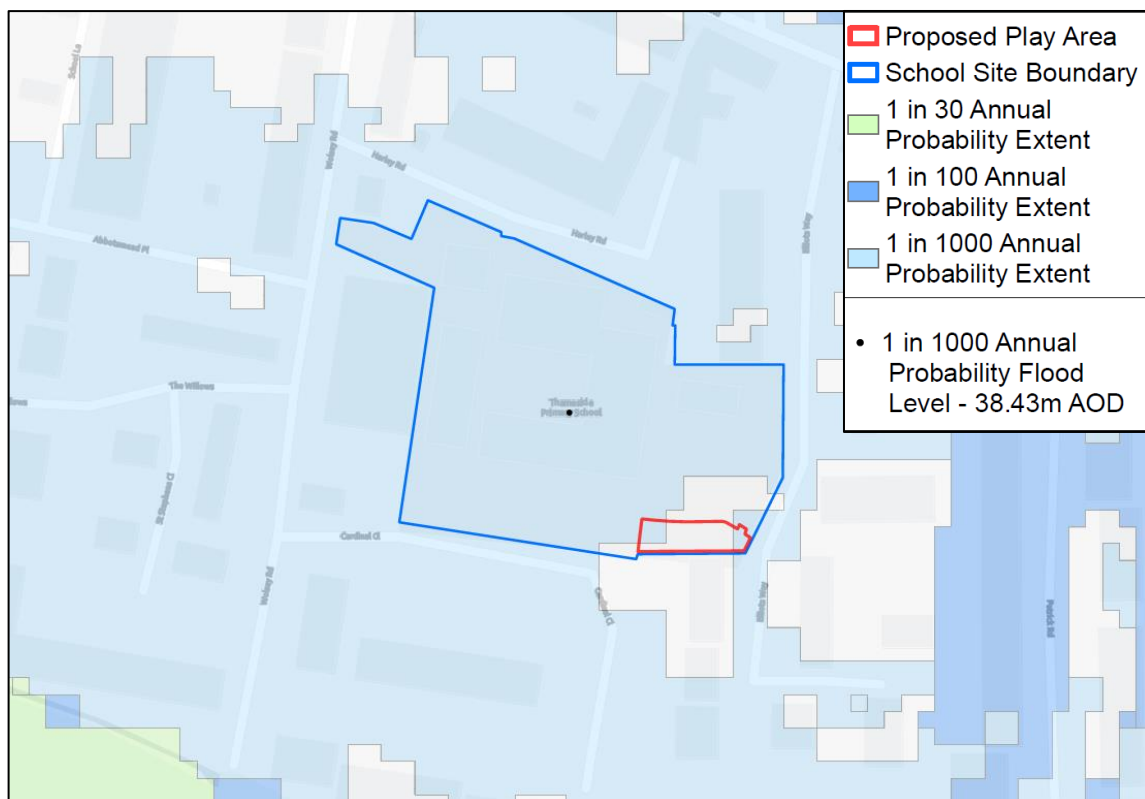
Table 1: EA Present Day EA River Thames (Pangbourne to Sonning) 2019 Model Flood Levels

Modelled Flood Event (Annual Probability)	Flood Levels
1 in 100 (1%)	Site not impacted
1 in 1000 (0.1%)	38.43m AOD

Based on an approximate ground level of 38.50m AOD across the location of the proposed play equipment, a review of the modelled flood extents shows maximum flood depths impacts at the play area are provided below:

- **1 in 100 (1%) AP flood level – Site not impacted.**
- **1 in 1000 (0.1%) AP flood level – The south-eastern corner of the School site is not impacted; the proposed play area is marginally (70mm) above maximum flood levels.**

Figure 4: River Thames – EA Modelled Present Day Flood Extents



Climate Change - Fluvial Flood Risk

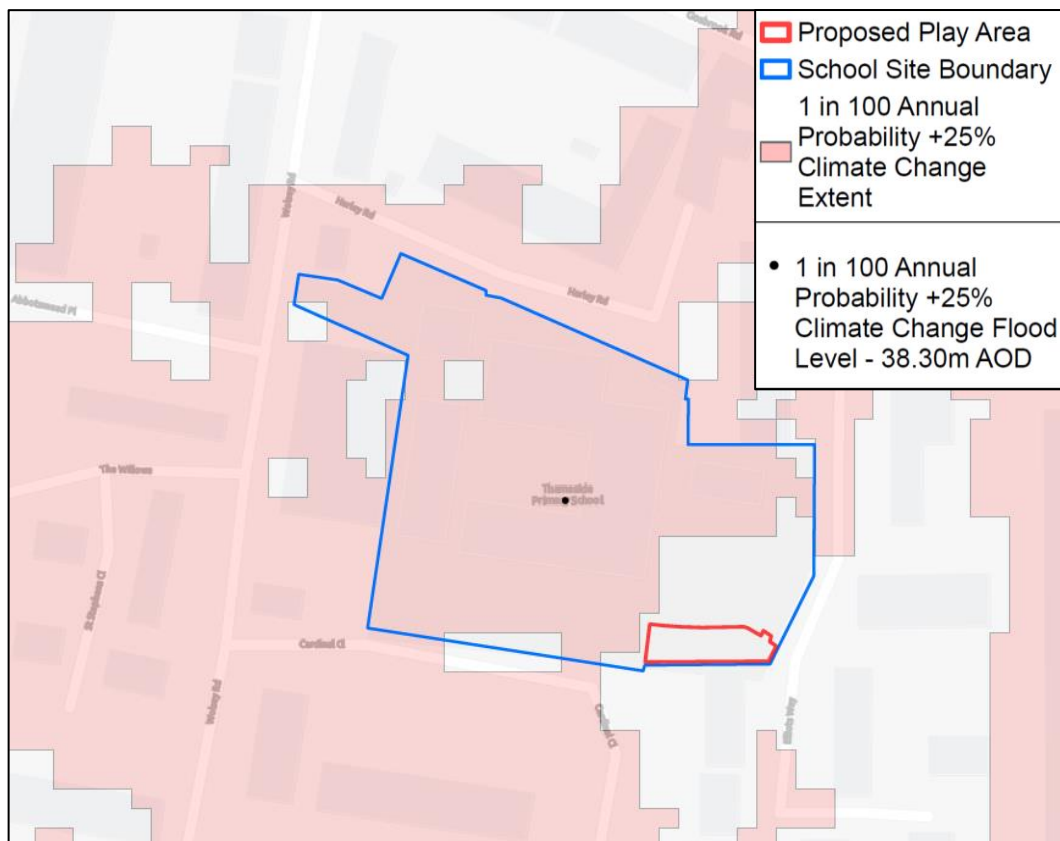
The current EA guidance on climate change (<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>) indicates the site is located within the 'Thames and South Chilterns Management Catchment'. The Central allowance is identified as the design standard for most forms of proposed development. For this location the following allowances are applicable:

- Central climate change allowance (2050s epoch – to year 2069) = +14%

The design life of the proposed play area and climbing equipment is not anticipated to exceed 45 years. As such, the +14% scenario is considered the most applicable (and remains a conservative allowance as it is based on a design life of up to 45 years).

The EA River Thames (Pangbourne to Sonning) detailed modelling has provided a 1 in 100 AP +25% climate change scenario (this provides a conservative proxy for the applicable +14% scenario). The school site and wider area is impacted in the 25% climate change uplift scenario – see **Figure 5** and **Appendix B**.

Figure 5: River Thames – EA Modelled Climate Change Flood Extents



The modelled maximum flood level for the 1 in 100 annual probability +25% climate change uplift scenario is 38.30m AOD. The proposed play area is located on ground levels at approximately 38.50m AOD. As such, the play area will be above the modelled 1 in 100 AP +25% climate change scenario flood level by 200mm and will not be impacted by flooding.

5 – NPPF Sequential Test & Flood Mitigation

Sequential Test

NPPF Annex 3: 'Flood Risk Vulnerability Classification' confirms the development is defined as '*Water-compatible development*' ('*outdoor sports and recreation*'- school play area and climbing frame facilities).

NPPF Table 2 'Flood Risk Vulnerability Classification and Flood Zone 'Incompatibility' states that this type of proposed use is acceptable in Flood Zone 2.

It should be noted that the location of the proposed play area, in the south-east corner of the site, is shown to be at lowest risk and would be considered as Flood Zone 1, as ground levels are above extracted maximum flood levels in the present day 1 in 1000 AP flood event. As the proposals constitute a 'minor development' in relation to flood risk; a Sequential Test and an Exception Test is not required in any case.

Freeboard and Flood Resistance

The proposed play area and climbing equipment are robust structures, and suitable to withstand adverse weather conditions. The play equipment will only be used at the primary school during school working hours and in non-flood conditions, use of the play equipment would be outside any time when there is a risk of flooding to the site.

The play area, on land at 38.50m AOD, will not be impacted by flooding in the reference +25% climate change scenario (proxy for the applicable +14% scenario). The design of the play equipment is fully floodable and would not be impacted in any extreme flood event.

Floodplain Storage and Flow Routes

The components of the proposed play area lie outside the present day 1 in 1000 AP floodplain and the reference 1 in 100 AP +25% climate change floodplain.

Even in a more extreme flood event the proposed play equipment structures are small, open and fully floodable. As such, the proposals will not impede existing flow routes and will have a negligible impact on floodplain storage capacity.

Surface Water Drainage

The proposed play area will be surfaced with a 'Wetpour' permeable surface that is durable and intended to mimic existing surface water drainage arrangements. The play area will be excavated by 140mm and laid with a compacted MOT Type 1 stone base, with the top layer laid with permeable 'Wetpour' surfacing. This will assist with drainage and prevent surface water runoff from the play area to discharge into the surrounding playground land.

The proposed drainage arrangements will manage surface water runoff across the play area; there will be no impacts on surface water runoff.

6 – Summary

This proposed play area development is a '*Water-compatible development*' that is located within Flood Zone 2. However, an assessment of extracted modelled maximum flood levels shows the location of the proposed play area, in the south-east corner, is outside the present day 1 in 1000 annual probability (AP) floodplain and likely located in Flood Zone 1. The proposals constitute a 'minor development' in relation to flood risk. A Sequential Test is not required for 'minor' developments and an Exception Test is not applicable.

The components of the proposed play area development lie outside the present day 1 in 100 AP floodplain and the reference 1 in 100 AP +25% climate change floodplain.

The total footprint of the components is negligible and will have no impacts on existing flow routes or on floodplain storage capacity.

The proposed 'Wetpour' permeable surface drainage arrangements will suitably manage surface water runoff across the play area and mimic the existing permeable surfacing. There will be no detrimental impacts on surface water runoff.

The proposed play area and climbing equipment are fully floodable robust structures, designed suitably to withstand adverse weather conditions and would not be impacted in any extreme flood event.

The play equipment will only be used during school working hours and in safe non-flood conditions.

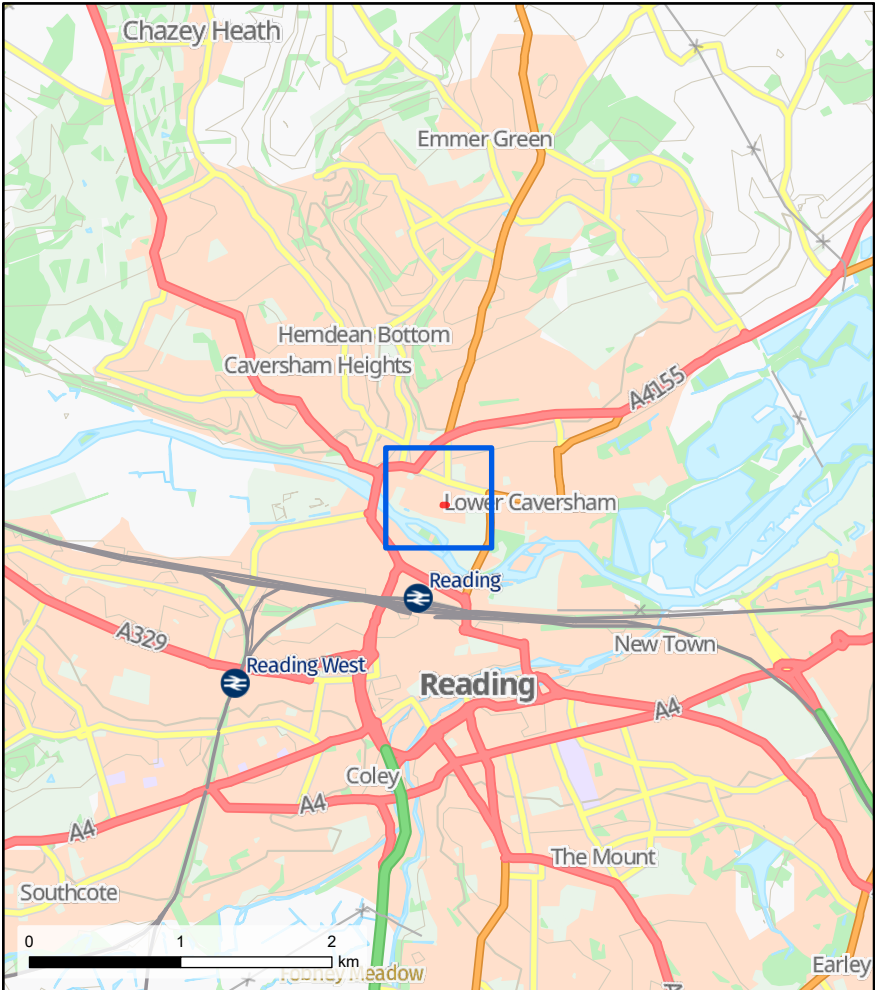
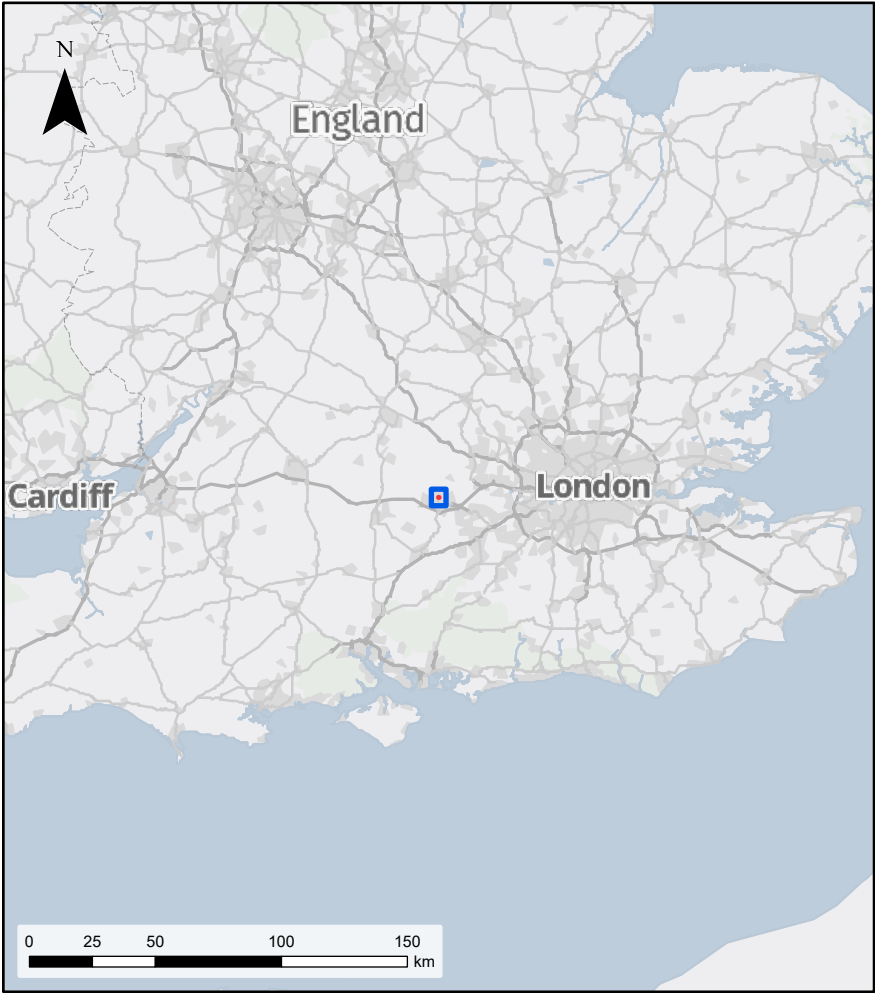
In conclusion, the future users of the proposed development will be safe from flooding and there will be no detrimental impact on third parties. The proposal complies with the National Planning Policy Framework (NPPF) and local planning policy with respect to flood risk and is an appropriate development at this location.

Appendices

- A. OpenData Flood Maps**
- B. EA River Thames (Pangbourne to Sonning) 2019 1D-2D hydraulic model outputs (Present Day and Climate Change Extents)**
- C. Development Proposals by RBC Property Services**
- D. Environment Agency Product 4 Flood Data (EA ref: THM390147)**

Appendix A – Opendata Flood Maps

- Site Location Plan
- Site Location (Aerial Photography)
- Area Topography (LiDAR)
- EA Flood Zone Map
- Watercourse Location
- EA Surface Water Flood Risk
- EA Groundwater Source Protection Zones
- Reservoir Flood Map
- EA Historic Flood Map





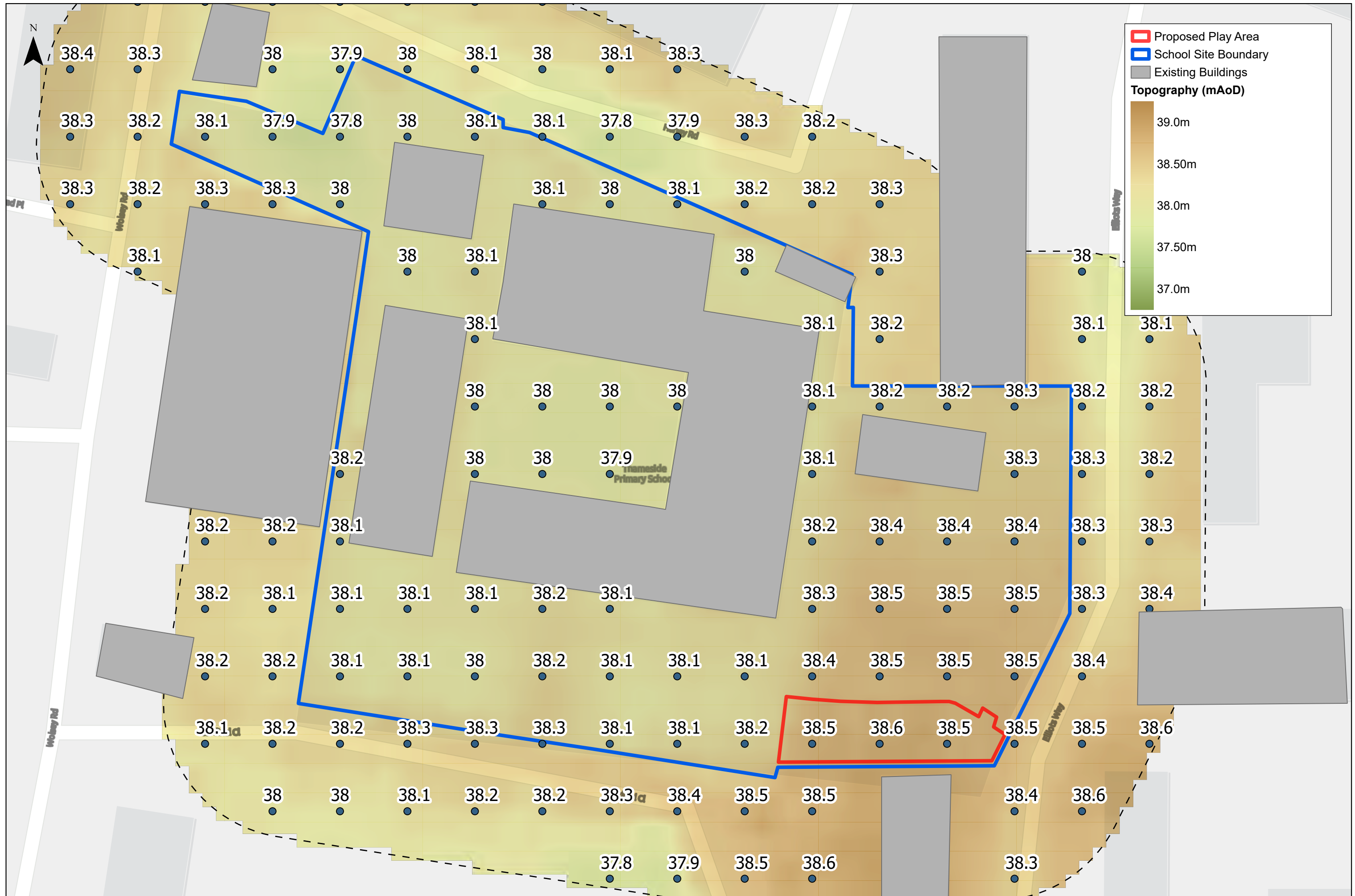
Proposed Play Area

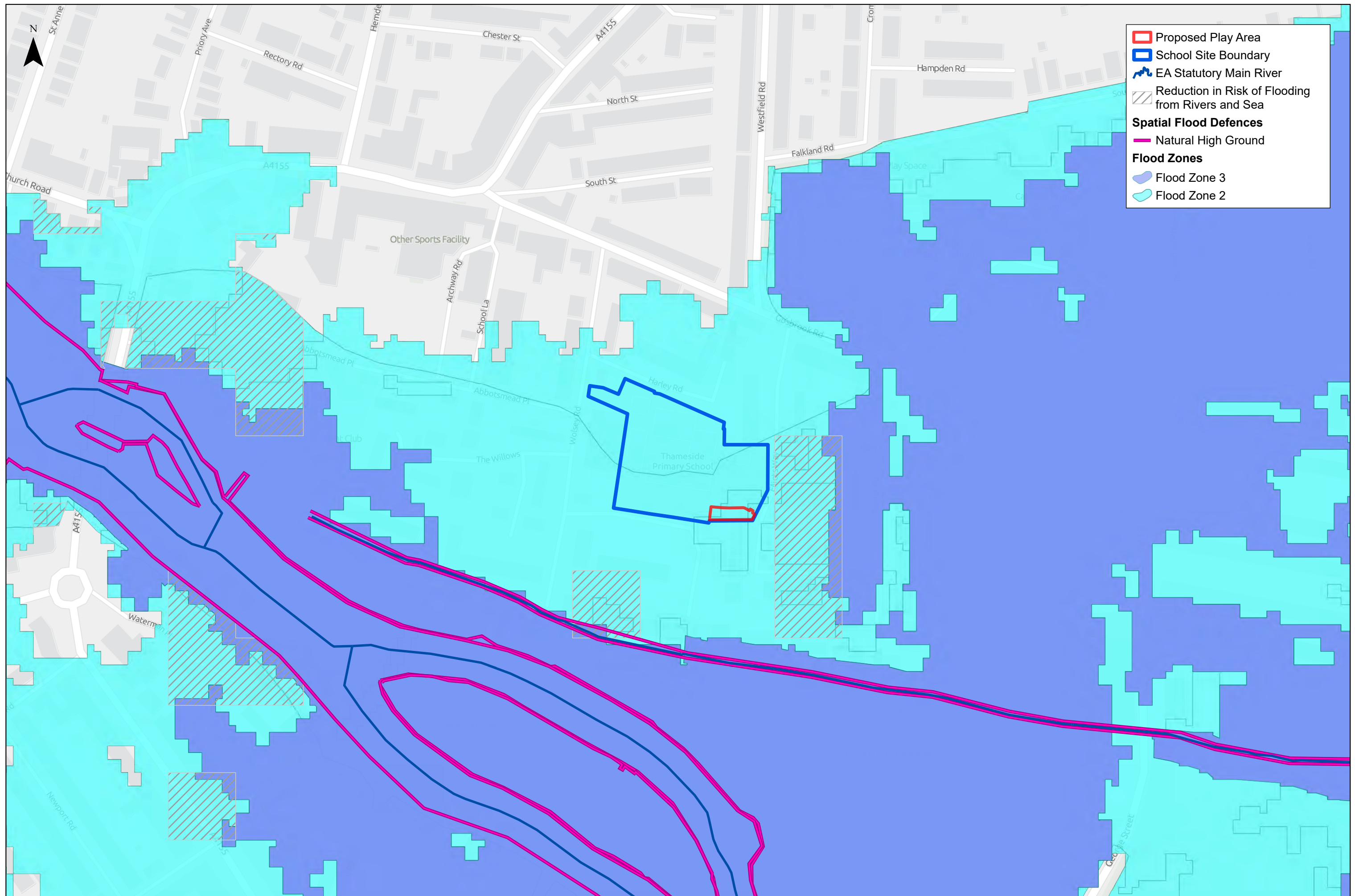
School Site Boundary

Stantec	Client Reading Borough Council Working better with you	THAMESIDE PRIMARY SCHOOL, READING Site Location (Detailed)	0125250 m Contains OS data © Crown Copyright and database right 2023 Contains data from OS Zoomstack	1:2,500 @ A3	Date: 13/01/2025
				Drawn: HL	Checked: RF
				Figure: 01.1	Rev: A



	Client				THAMESIDE PRIMARY SCHOOL, READING		0 125 250 m		1:2,500 @ A3		Date: 13/01/2025	
					Site Location - Aerial		Esri Community Maps Contributors, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Maxar, Microsoft		Drawn: HL		Checked: RF	
									Figure: 02		Rev: A	





Proposed Play Area

School Site Boundary

EA Statutory Main River

Reduction in Risk of Flooding from Rivers and Sea

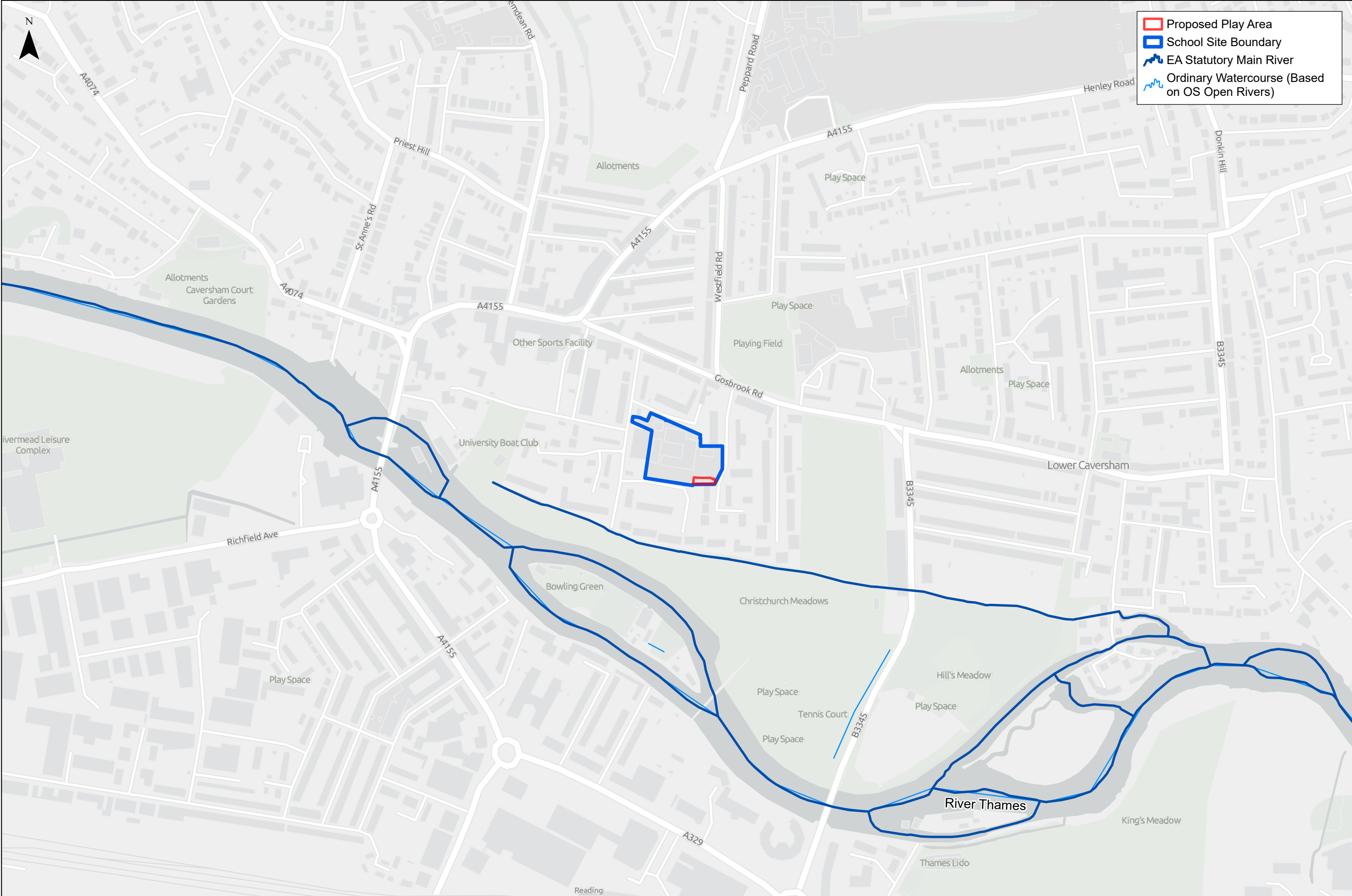
Spatial Flood Defences

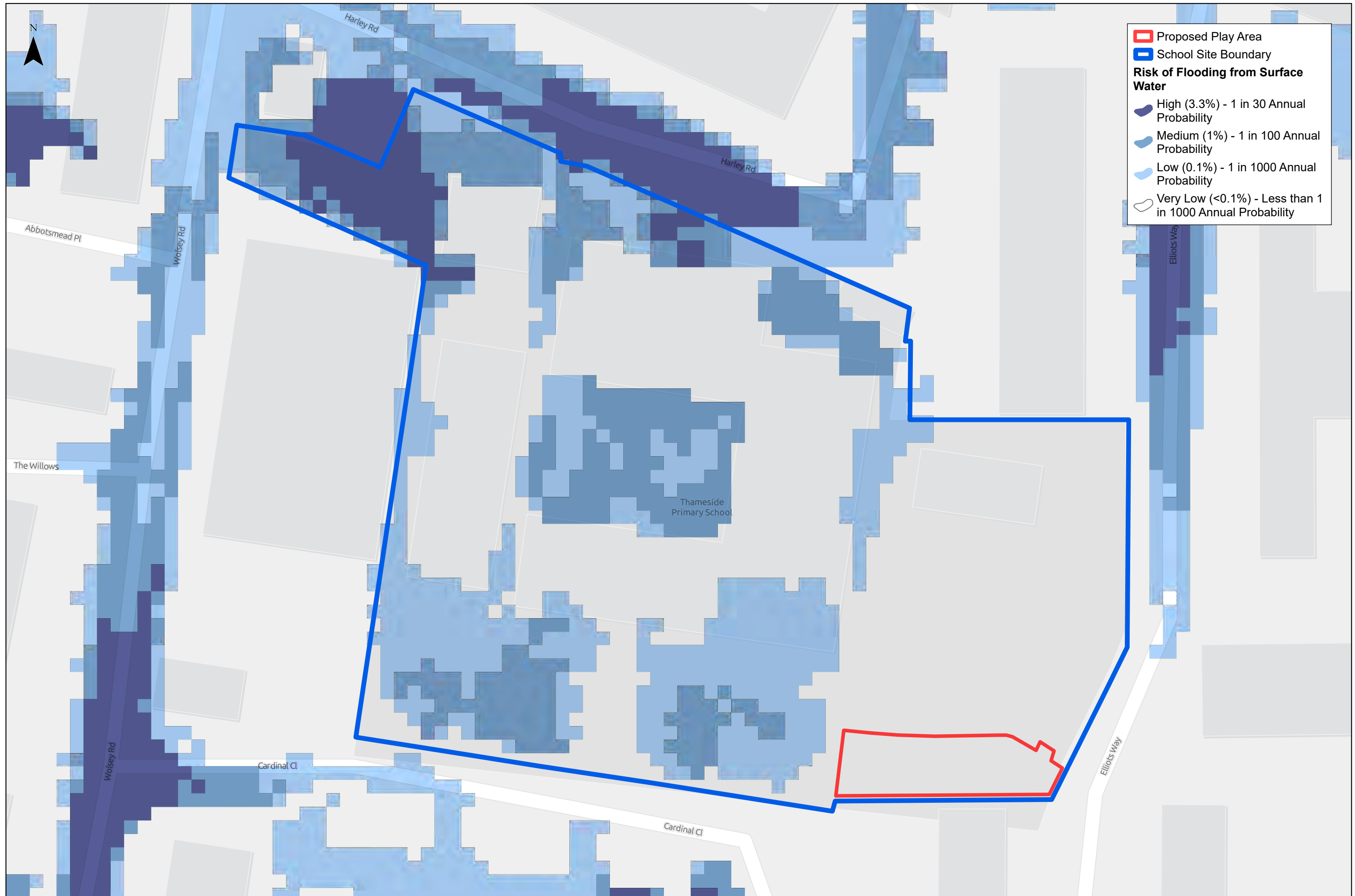
Natural High Ground

Flood Zones

Flood Zone 3

Flood Zone 2





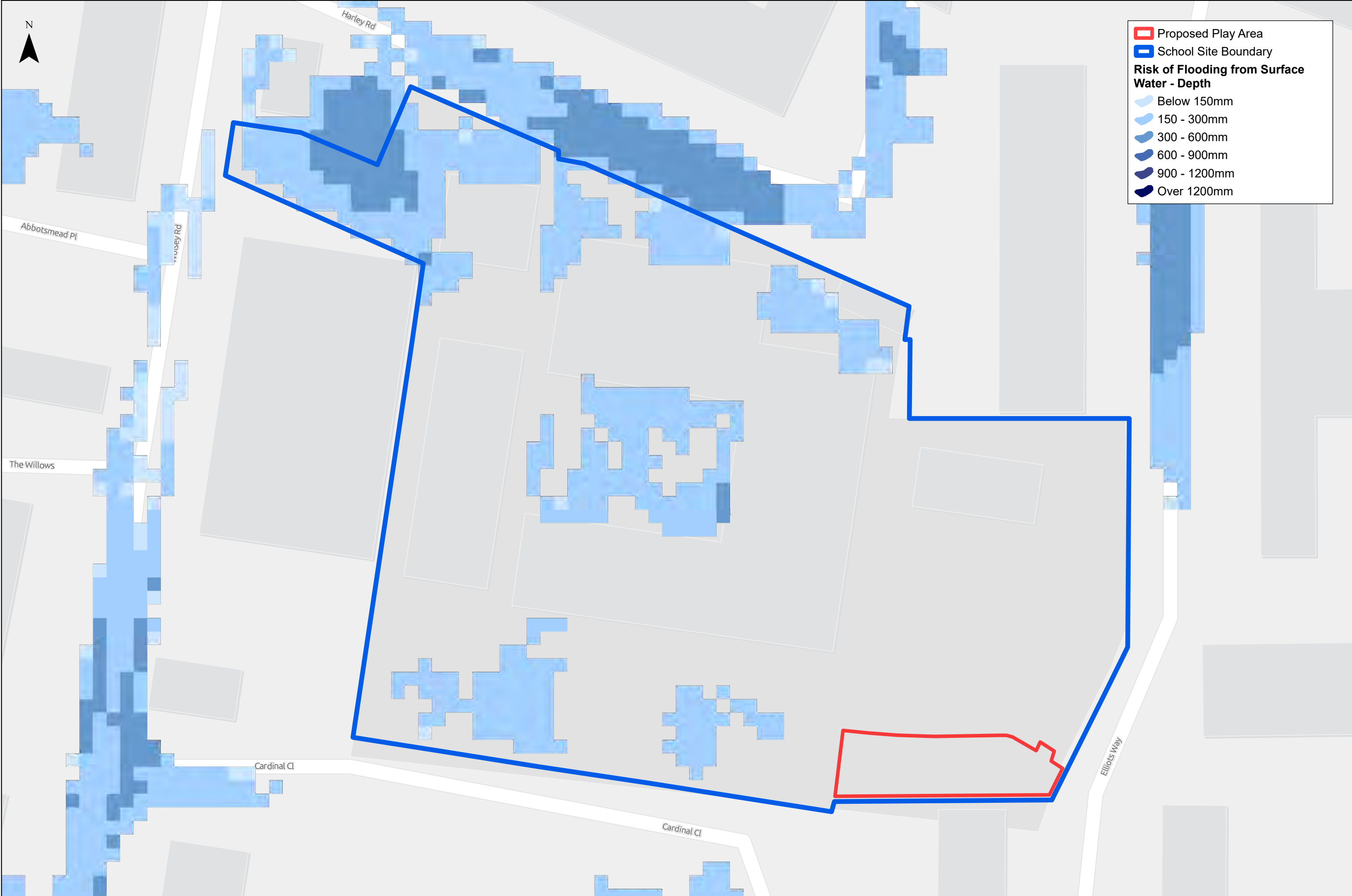
Proposed Play Area

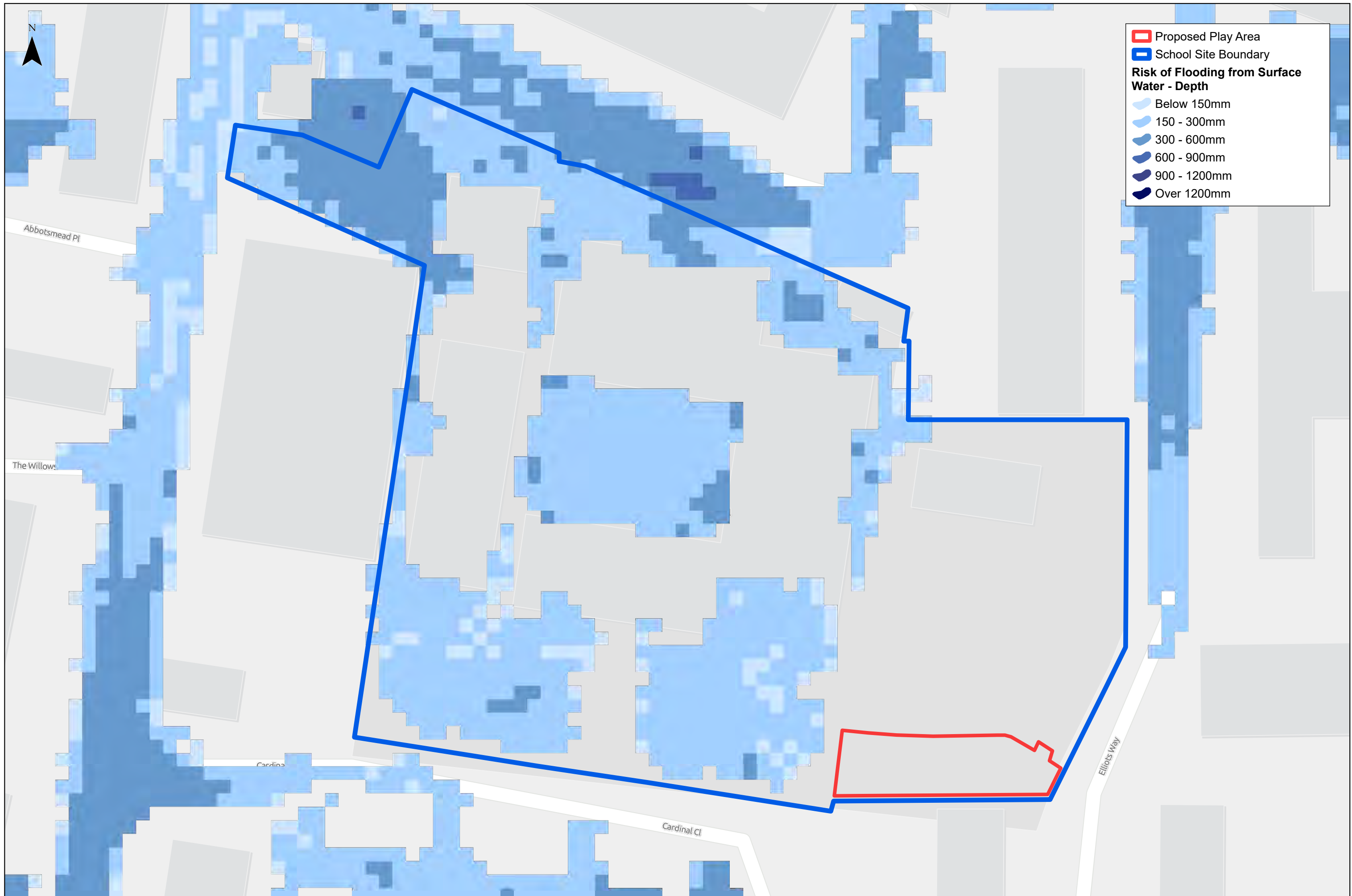
School Site Boundary

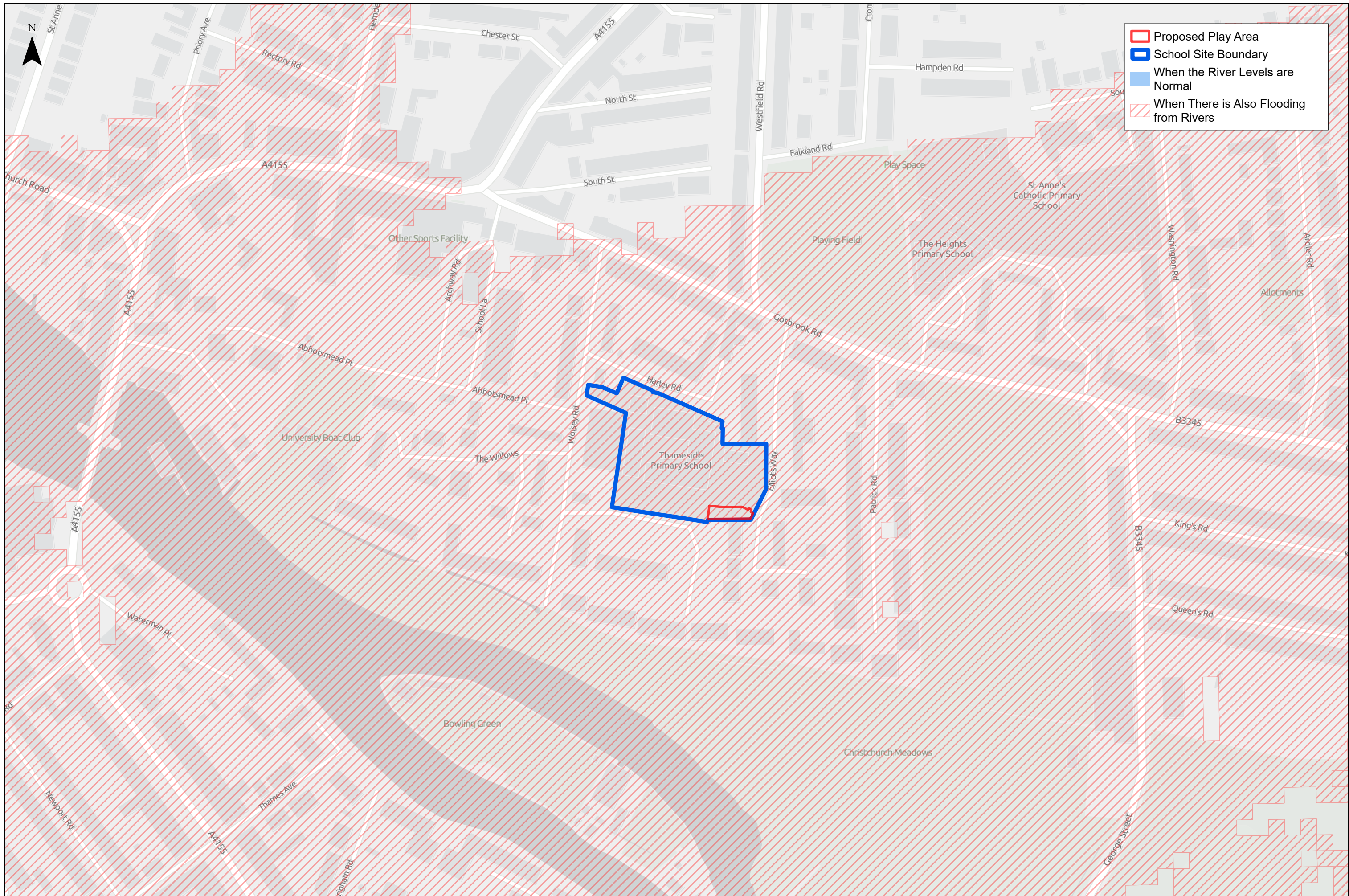
Risk of Flooding from Surface Water

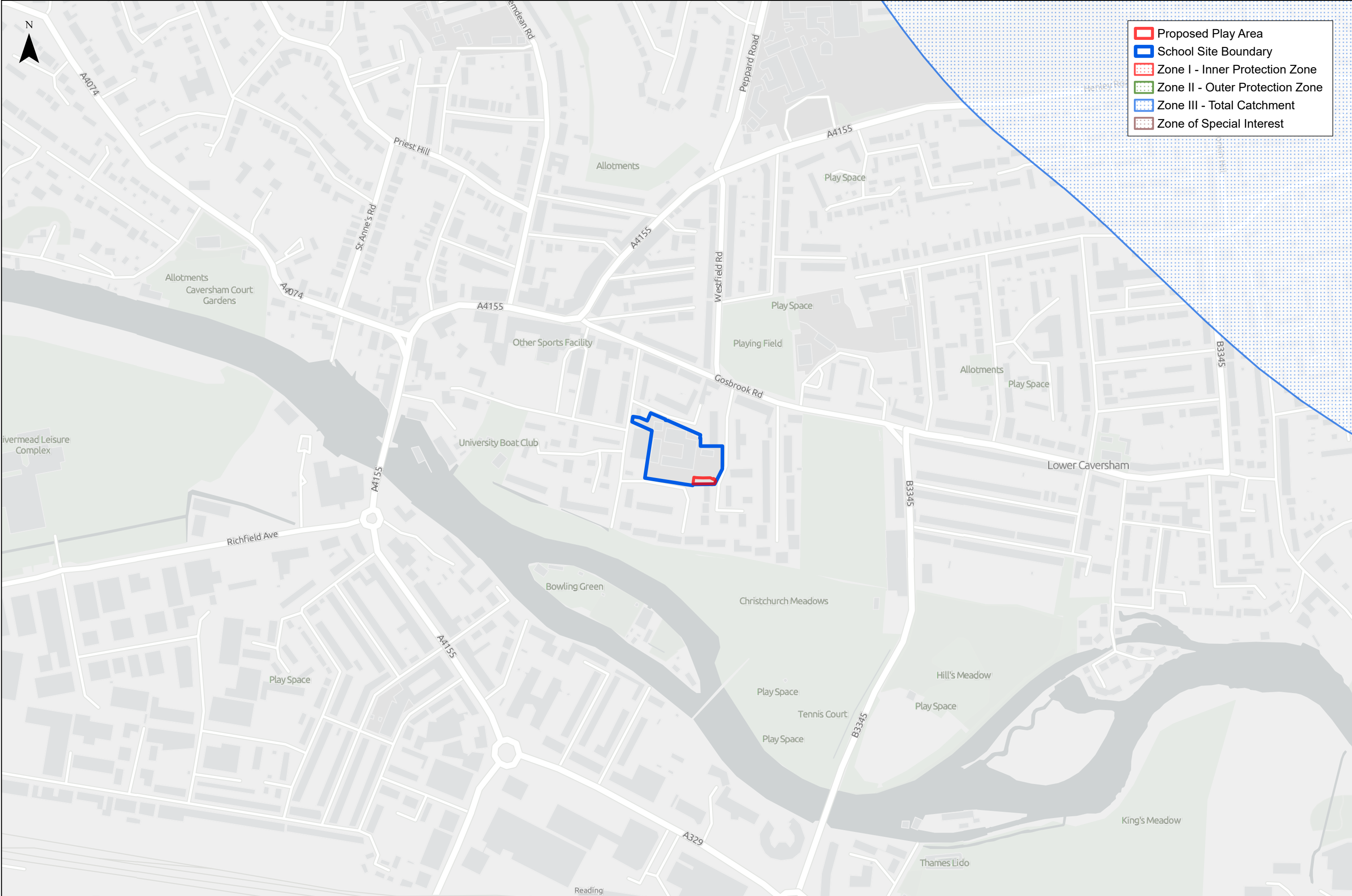
- High (3.3%) - 1 in 30 Annual Probability
- Medium (1%) - 1 in 100 Annual Probability
- Low (0.1%) - 1 in 1000 Annual Probability
- Very Low (<0.1%) - Less than 1 in 1000 Annual Probability

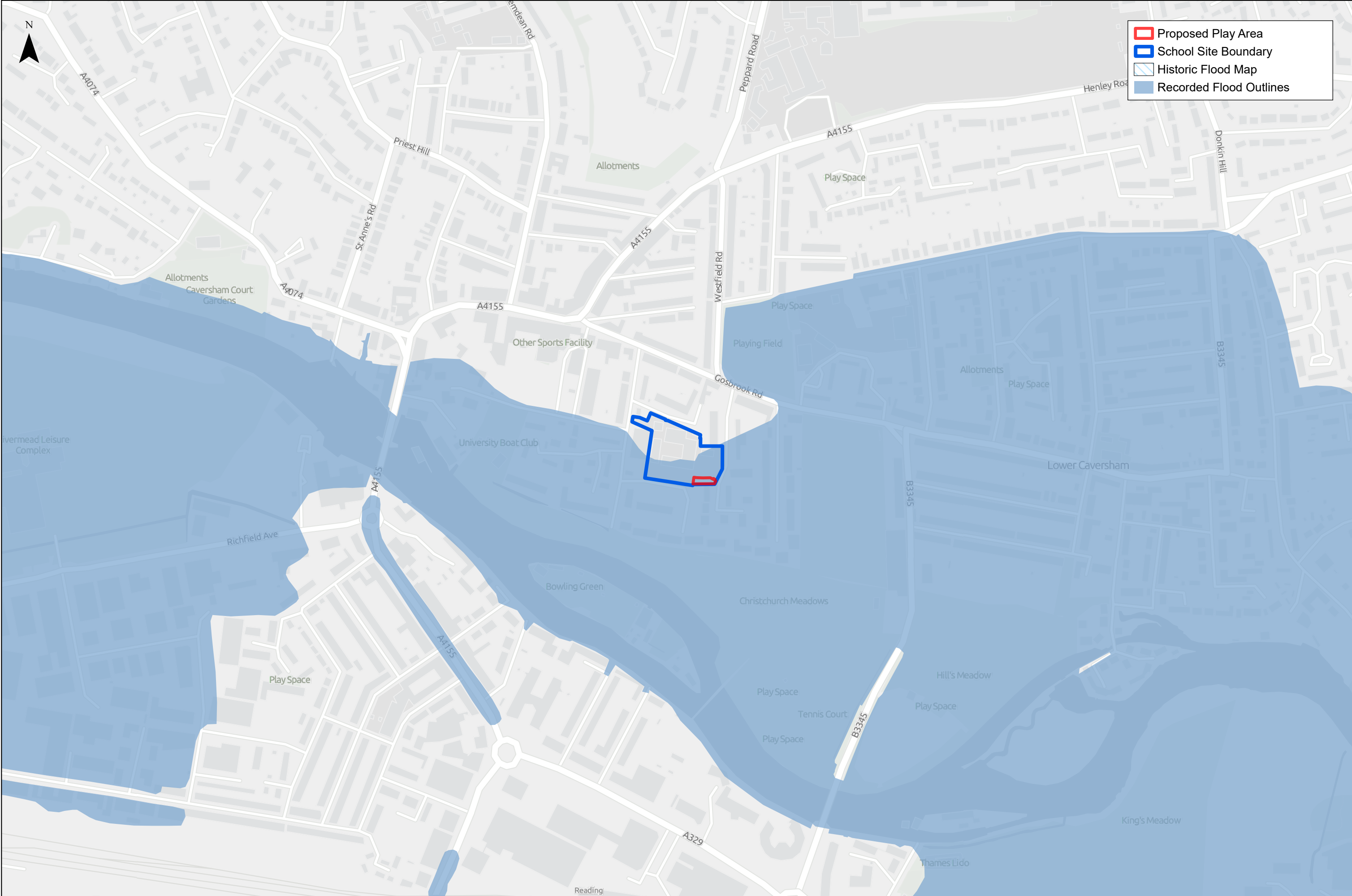






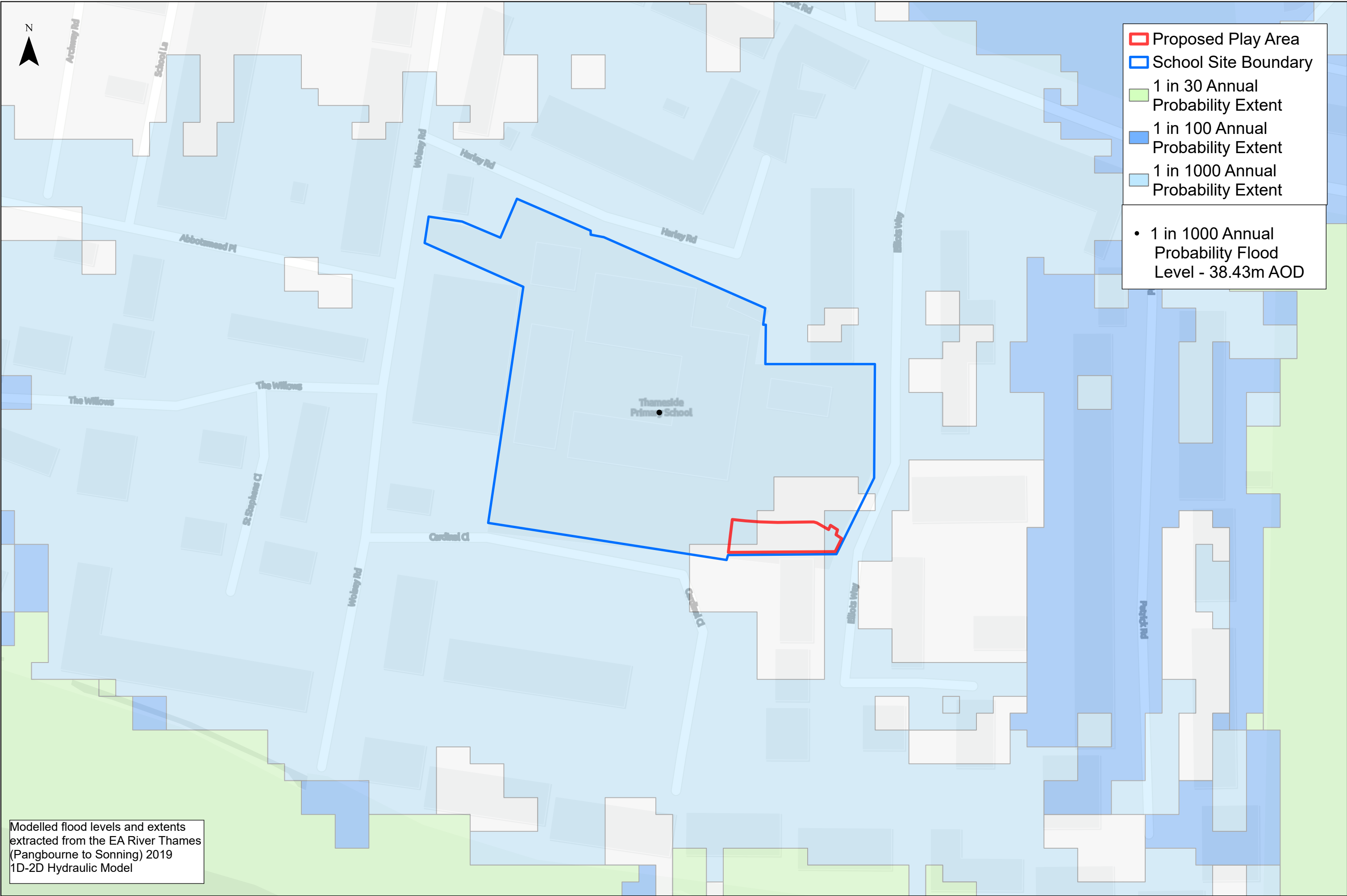


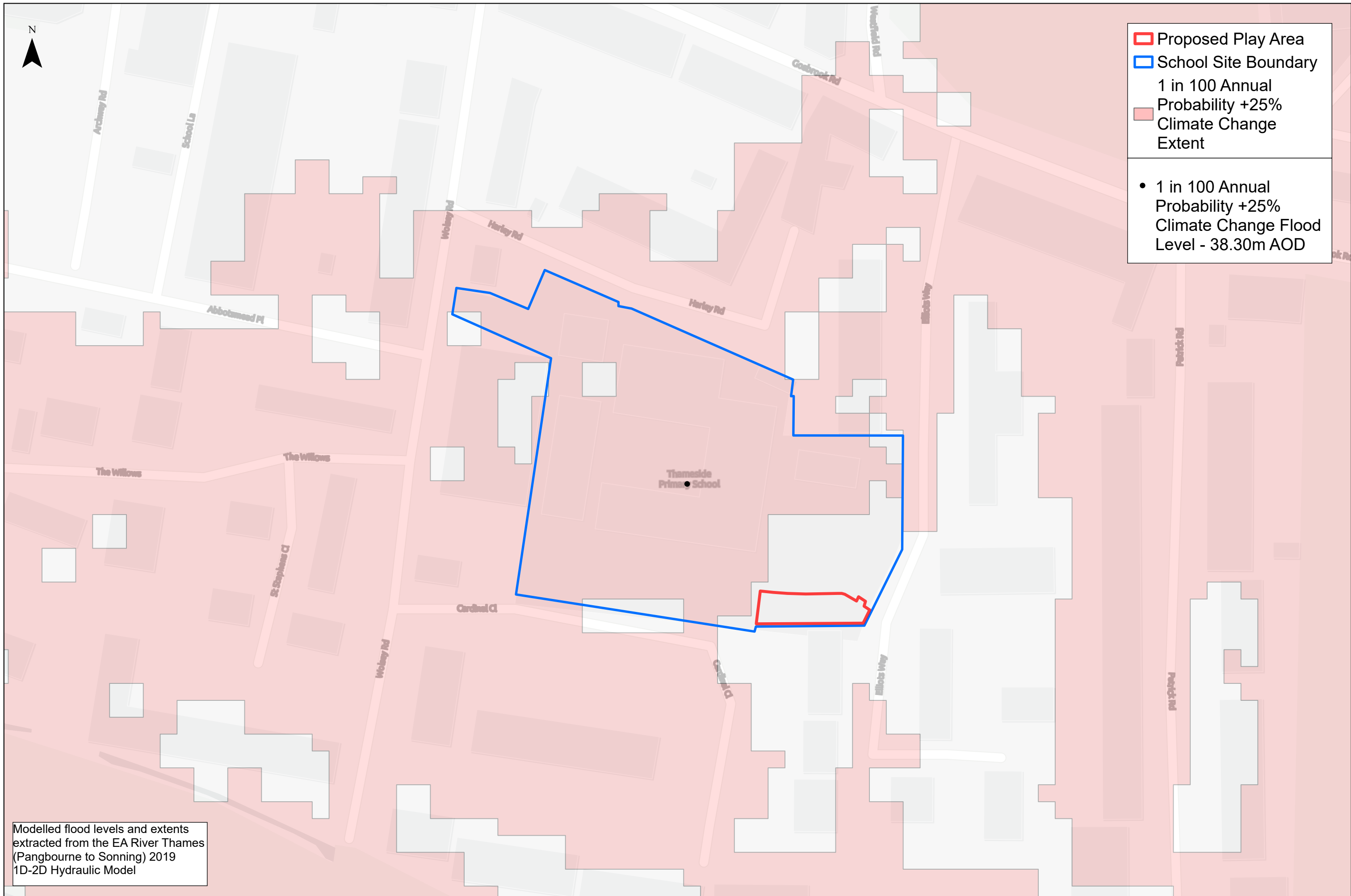




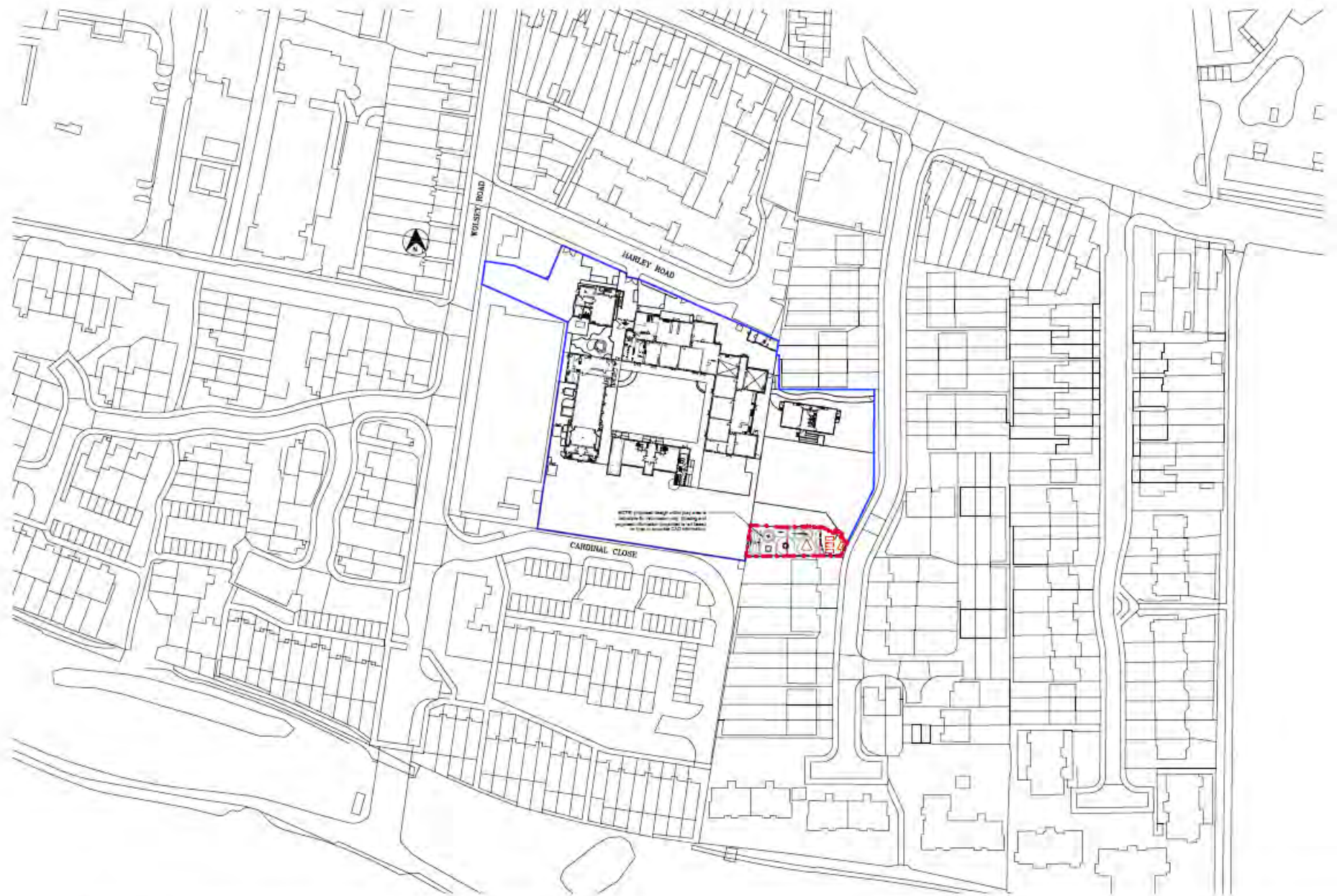
Appendix B - EA River Thames (Pangbourne to Sonning) 2019 1D-2D Hydraulic Model Output Figures

- **Figure 1: Modelled Present Day Extents**
- **Figure 2: Modelled Climate Change Extents**





Appendix C - Development Proposals by RBC Property Services



Scale Bar:



Key:

- ownership boundary
- site boundary
- existing landscaping to be removed

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Rev

A

Note

DRAFT Design Issue for Information

Date

07.01



PROPERTY SERVICES

Civic Offices, Bridge Street,
Reading
RG1 2LU
Tel 0118 937 3980

Thameside Primary School
2024 SEND Space

Proposed Location Plan

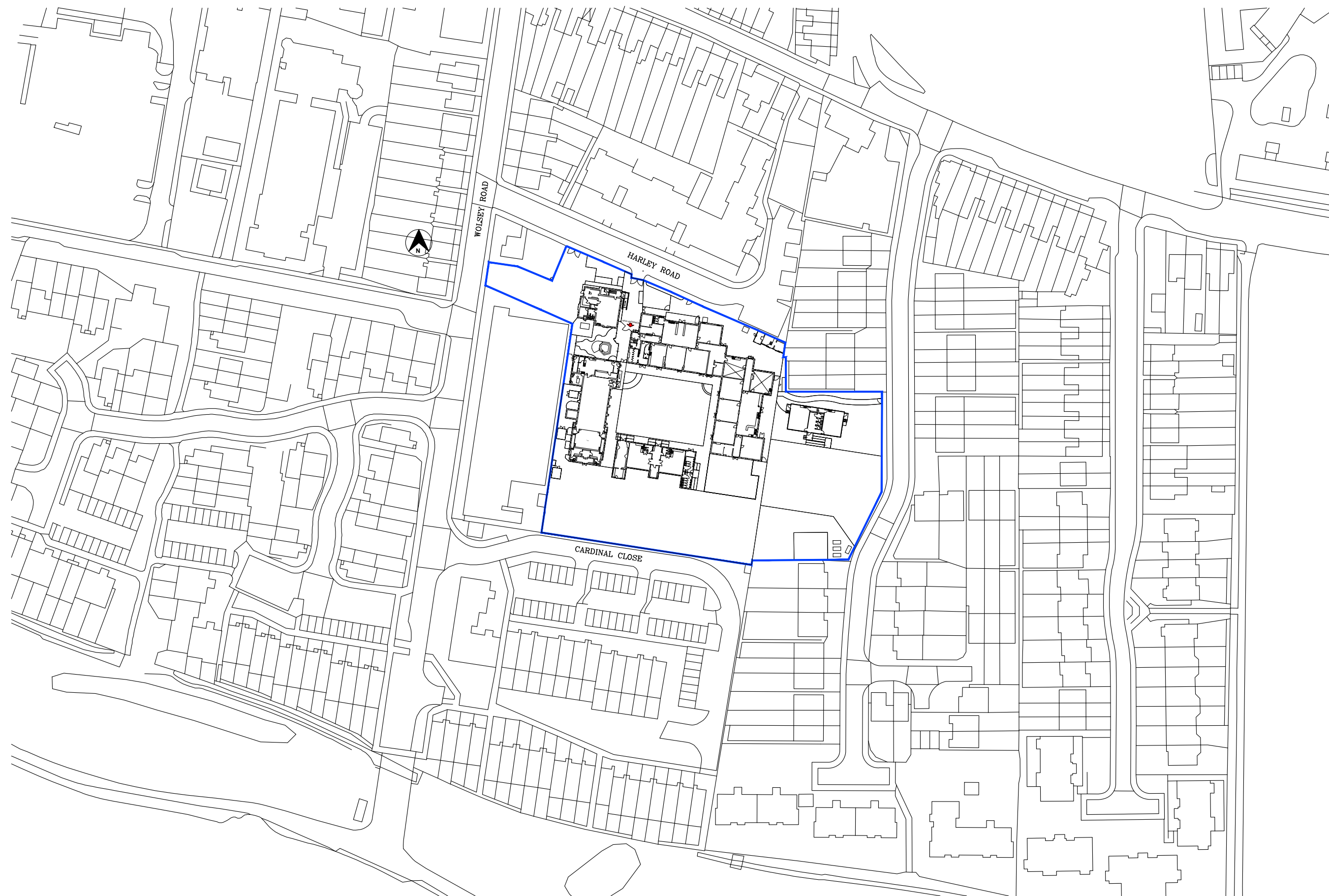
Drawn by: MK

Checked by: 07 Jan 2025

Date: 1:1250 @ 43

Scale: Drawing No: 2061-2024-sk-06

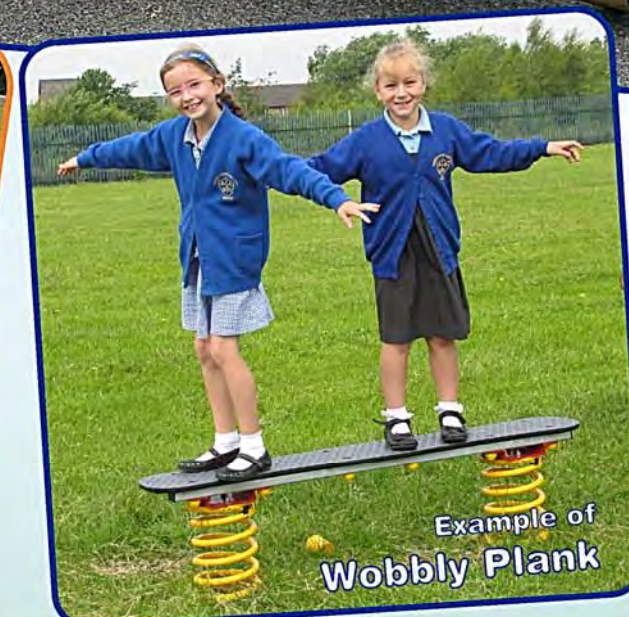
Revision: A



Rev	Note	Date	 PROPERTY SERVICES Civic Offices, Bridge Street, Reading RG1 2LU Tel 0118 937 3980	Thameside Primary School 2024 SEND Space Location Plan	Drawn by: 00
-	-	-			Checked by: Date: Feb 2024 Scale: 1:1250 @ A3 Drawing No: 2061-2024-SK-00 Revision: -

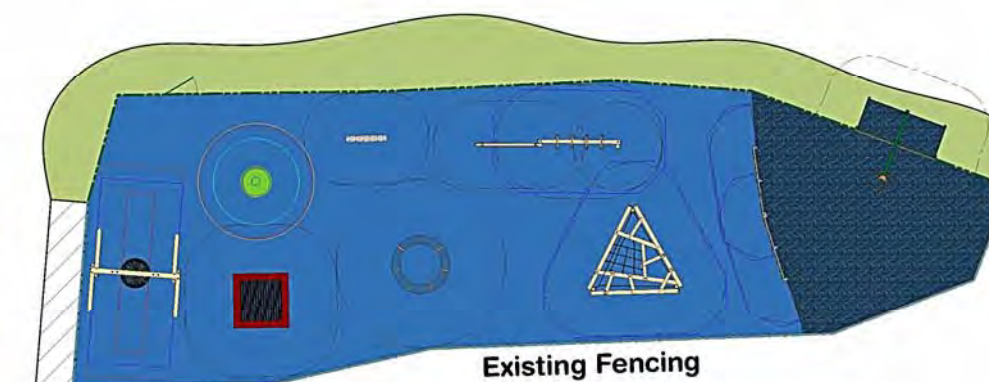
THAMESIDE PRIMARY SCHOOL

PROPOSED PLAY AREA



SEN Play Area Option One:

- 2.4m Birds Nest Swing
- 1.5m Trampoline
- Rock'n'Bowl
- Supernova
- Wobbly Plank
- Balance Beam
- Log Traverse
- Log Step
- Pick Up Sticks 14
- Single-sided Bouldering Wall x2
- Sports Goals & Basketball
- 2m High Fencing inc. 1x Gate:
Length = 33.9 m
- Wetspour Surfacing (Blue):
Perimeter = 69.4m
Area = 241.2m²
- Wetspour Surfacing (Black/Blue):
Perimeter = 31.5m
Area = 53.9m²



Drawing No: PHQ6877_B
 Drawn By: DO 4
 Scale: 1:200 @ A1
 Date: 27-10-23
 Page: 1 of 1



**Appendix D - Environment Agency Product 4 Flood Data (EA ref:
THM390147)**

From: Enquiries_THM
To: Leekam, Hugh
Subject: THM390147_DC EA P4 / P5 / P6 / P7 / P8 Flood Data Request - Thameside Primary School, Reading (Confirmation of EA River Thames (Pangbourne to Sonning) 2019 1D-2D Hydraulic Model Latest Model)
Date: 02 January 2025 11:57:58
Attachments: image003.png
THM_FRA Checklist Mar 2021.docx

You don't often get email from enquiries_thm@environment-agency.gov.uk. [Learn why this is important](#)

Dear Hugh,

Reference: THM390147

Thank you for your enquiry which was received on 13 December 2024.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

Please note that we have changed our process for responding to modelled data requests, please read the information within this email for further details.

You have requested a Product 4. Please see below table detailing each product:

Product 4	Detailed Flood Risk Assessment Map, including flood zones, defences and storage areas, areas benefiting from defences, statutory main river designations, historic flood event outlines and more detailed information from hydraulic models (including model extents and 2D flood level data for specific points)
Product 5	Reports, including flood modelling reports, model user logs and guides, hydrology reports, etc
Product 6	Model Output Data, including product 5. • flood outlines usually provided in shapefile format • 2D grids (level (h), depth (d) velocity (v) and hazard ZKU0) usually provided in ASCII format • 1D flow and level data Requires GIS software such as ArcGIS, MapInfo, QGIS or similar.
Product 7	Calibrated and Verified Model Input Data (CaVMID), including product 5. Enables customer to re-run and/or make changes to a hydraulic model. Requires specific hydraulic modelling software such as Flood Modeller, TUFLOW, or ICM InfoWorks.
Product 8	Breach Hazard Map Provides a hazard map of breaches in PDF format including, maximum flood depth, maximum flood velocity and maximum flood hazard. Please note product 8 is not available for fluvial models.

Your request for a Product 4 falls under the exemption in provision 6(1)(a) and (b) of the Environmental Information Regulations 2004 (EIR) which states that '.....6.—(1) Where an applicant requests that the information be made available in a particular form or format, a public authority shall make it so available, unless—
(a) it is reasonable for it to make the information available in another form or format; or
(b) the information is already publicly available and easily accessible to the applicant in another form or format.....'

On this occasion we are not providing the information in the Product 4 format for the following reasons:

- Complying with the preference would incur a significant cost, which the public authority [The Environment Agency] cannot pass on to the requester;
- Using a Product 5/6/7 allows us to make the information available at a lower cost; and
- The impact on the available resources of the public authority [The Environment Agency], of supplying a Product 5/6/7, is therefore much less.

Please find below a Sharefile link where you can download the Product 5, 6 and 7 data:

Thames (Pangbourne to Sonning) 2019 **	5, 6, 7	https://ea.sharefile.com/d-s183a315531b8493696fc3771e1c9e6cb	The full extent of this model is from Pangbourne to Henley-on-Thames, however the Environment Agency have made the decision to only use this model from Pangbourne to Sonning. If you need data downstream of Sonning, please use the Thames (Sonning to Hurley) 2019 model. Please see the folder within the P6 marked as 'Extent of the model as used by the EA' to access all model outputs that have been clipped to the model extent used by the Environment Agency.
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Please refer to the tables below for the permitted use of the supplied information. The following information is not available under the Open Government Licence but we may be able to license it to you under the Environment Agency Conditional Licence.

However, you MUST first check the supporting information and the link to determine if the conditions on use are suitable for your purposes. If they aren't, this information is not provided with a licence for use, and the data is provided for read right only.

Name	Product 5
Description	Report for Thames (Pangbourne to Sonning) 2019
Licence	Environment Agency Conditional Licence
Information Warnings	Any mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply.
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2017 Ordnance Survey 100024198.

Name	Product 6
Description	Model Output Data for Thames (Pangbourne to Sonning) 2019
Name	Product 7
Description	Calibrated and Verified Model Input Data for Thames (Pangbourne to Sonning) 2019
Licence	Environment Agency Conditional Licence
Conditions	1. You may use the Information for your internal or personal purposes and may only sublicense others to use it if you do so under a written licence which includes the terms of these conditions and the agreement and in particular may not allow any period of use longer than the period licensed to you. 2. Notwithstanding the fact that the standard wording of the Environment Agency Conditional Licence indicates that it is perpetual, this Licence has a limited duration of 5 years at the end of which it will terminate automatically without notice. 3. We have restricted use of the Information as a result of legal restrictions placed upon us to protect the rights or confidentiality of others. In this instance it is because of third party data. If you contact us in writing (this includes email) we will, as far as confidentiality rules allow, provide you

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Information Warnings	Please be aware that model data is not raw, factual or measured but comprises of estimations or modelled results based on the data available to us.
Attribution	Contains Environment Agency information © Environment Agency and/or database rights.

Product 4 data is derived from the Product 6 supplied above and the following open data sources;

Flood Zone 3 <https://data.gov.uk/dataset/flood-map-for-planning-rivers-and-sea-flood-zone-3>

Flood Zone 2 <https://data.gov.uk/dataset/flood-map-for-planning-rivers-and-sea-flood-zone-2>

Historic Flood Map <https://data.gov.uk/dataset/historic-flood-map1>

Please note, that the Flood Map for Planning is available to view and export maps for your site at: <https://flood-map-for-planning.service.gov.uk/>.

Using modelling for flood risk assessments provides information regarding the use of modelling in flood risk assessments when applying for planning permission. You can view more information at: <https://www.gov.uk/guidance/using-modelling-for-flood-risk-assessments>

Please note that our historic flood event maps may not be comprehensive. We would therefore advise that you make further enquiries locally with specific reference to flooding at your location. You should consider contacting the relevant Local Planning Authority and/or water/sewerage undertaker for the area.

Please be aware that flooding can come from different sources. Examples of these are:

- from rivers or the sea
- surface water (i.e. rainwater flowing over or accumulating on the ground before it is able to enter rivers or the drainage system)
- overflowing or backing up of sewer or drainage systems which have been overwhelmed
- groundwater rising up from underground aquifers

Flood defence information / any other useful information

There are no formal defences that affect the site.

According to the historic flood map, the land at which the site is located on has flooded in 1947. Please note the Environment Agency maps flooding to land not individual properties. Floodplain extents are an indication of the geographical extent of a historic flood. They do not provide information regarding levels of individual properties, nor do they imply that a property has flooded internally. We would recommend contacting the Lead Local Flood Authority, Landowner and Local Town Parish to see if they hold any additional records of flooding.

Flood Risk Assessment Checklist

If you are planning on using this data within a Flood Risk Assessment, we recommend that you take the time to fill in the attached FRA checklist, and to read the attachments which contain information relevant to the area that interests you.

We would like to stress the importance of filling in the Flood Risk Assessment check list, and providing up-to-date and correct data. The data will be checked against our records when we review the Flood Risk Assessment in our role as statutory consultee.

It is important that you provide a map in section 2 of the FRA checklist (See Appendix A), including the highest and most representative flood levels for your site. We recommend using a number of nodes that provide a fair representation of the modelled data across your site. For example, if it is a small extension (< 250 square metres) then approximately 5-10 nodes would be sufficient. For larger sites, approximately 10 to 20 nodes would be appropriate.

Please be aware that from 20th July 2021 the climate change allowances required in flood risk assessments have been updated. Please see <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#contents> for more information.

Please contact our Sustainable Places team at Planning_THM@environment-agency.gov.uk if you have any further enquiries regarding the planning process and Flood Risk Assessments.

If you have a new enquiry or would like us to review the information we have provided under the Freedom of Information Act 2000 and Environmental Information Regulations 2004 please contact us within two months by email at enquiries_THM@environment-agency.gov.uk

Kind regards,

Customers & Engagement Team - **Thames**



External: 0203 0259 804



enquiries_THM@environment-agency.gov.uk



Environment Agency | Red Kite House, Howbery Park, Wallingford, OX10 8BD

ARE YOU AT RISK FROM FLOODING?
Check your flood risk today



From: Leekam, Hugh <Hugh.Leekam@stantec.com>

Sent: 13 December 2024 14:04

To: Enquiries, Unit <enquiries@environment-agency.gov.uk>

Cc: Fisher, Richard <richard.fisher@stantec.com>

Subject: EA P4 / P5 / P6 / P7 / P8 Flood Data Request - Thameside Primary School, Reading (Confirmation of EA River Thames (Pangbourne to Sonning) 2019 1D-2D Hydraulic Model Latest Model)

To whom it may concern,

Hopefully, you can be of assistance. Stantec has been commissioned to undertake a flood risk assessment for external play equipment at Thameside Primary School, Reading. The approximate grid reference for the site is Grid Reference: **471 596 E, 174 596 N**; and post code: **RG4 8DB**. The site location plans are attached.

We currently have the EA River Thames (Pangbourne to Sonning) 2019 1D-2D Hydraulic Model for the adjacent River Thames. Would you be able to confirm if this is the latest EA model for the site area?

We would also be grateful for Product 4 /P5 / P6 and P7 / P8 information as available, specifically any existing hydraulic model of the nearby River Thames watercourse, as well as including the following:

- Modelled flood level information where available including node locations and information regarding the nature of the modelling work, who owns it and what the licensing cost would be.
- Any records of flooding in the vicinity of the site.
- Any information regarding groundwater flood risk.
- Details of fluvial and tidal flood risk to the site, and who is responsible for the maintenance of any watercourses near to the site in terms of its condition and maintenance.
- Any surface water management criteria that may apply at this location (over and above NPPF).
- Any information about any flood alleviation measures already in place, their state of maintenance and their performance.
- Any plans for future flood alleviation measures.
- Information regarding critical drainage areas, if relevant.
- Anything else you feel is relevant that an FRA would need to consider.

We would also greatly appreciate if you can confirm who the Planning Liaison Officer will be for the site attached. We look forward to your reply at your earliest convenience. Meanwhile, if you have any queries, please do not hesitate to get in touch using the contact details below.

Many thanks,

Hugh Leekam
Assistant Flood Risk Engineer

The Stills, 1st Floor, 80 Turnmill Street, London EC1M 5QU
Direct: +44 20 3824 6623
Mobile:
Hugh.Leekam@stantec.com

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