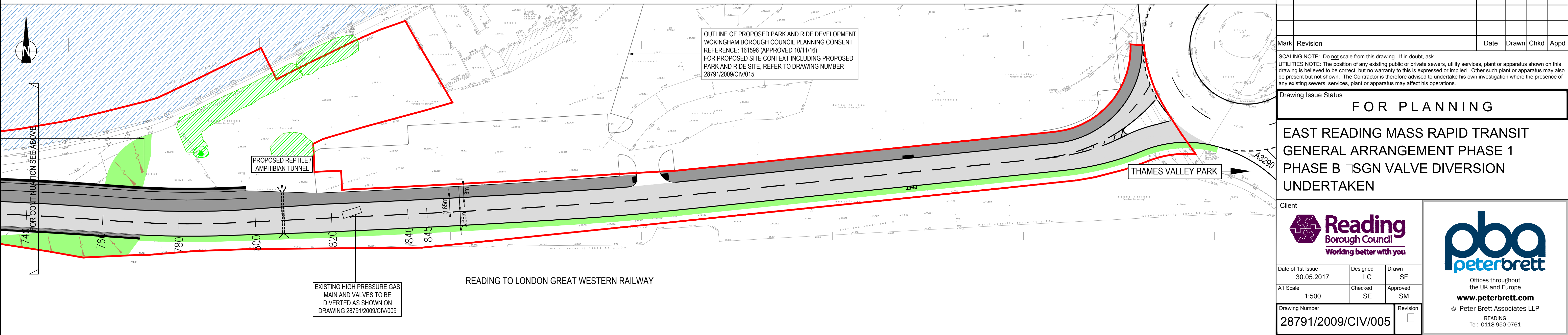
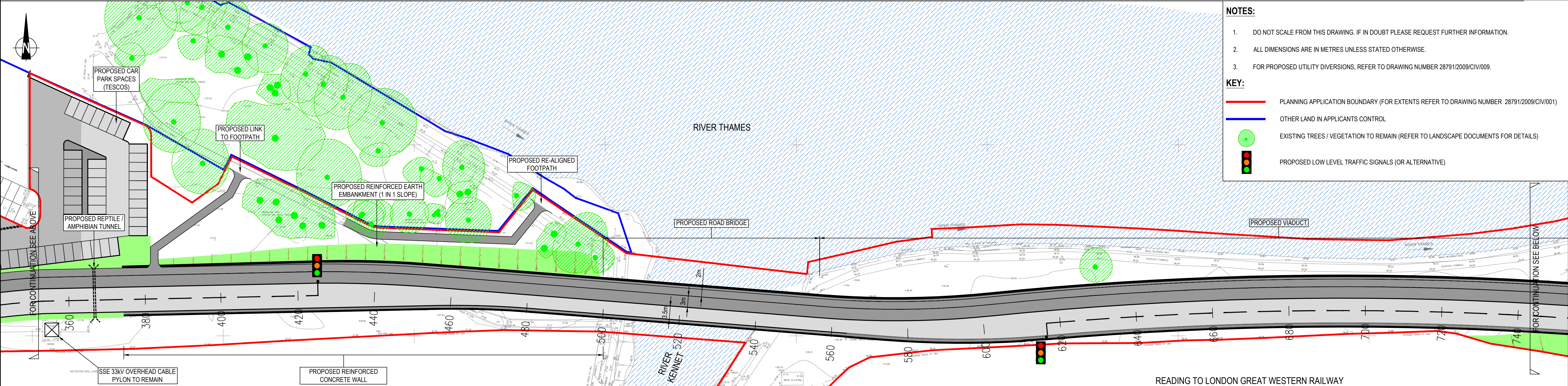
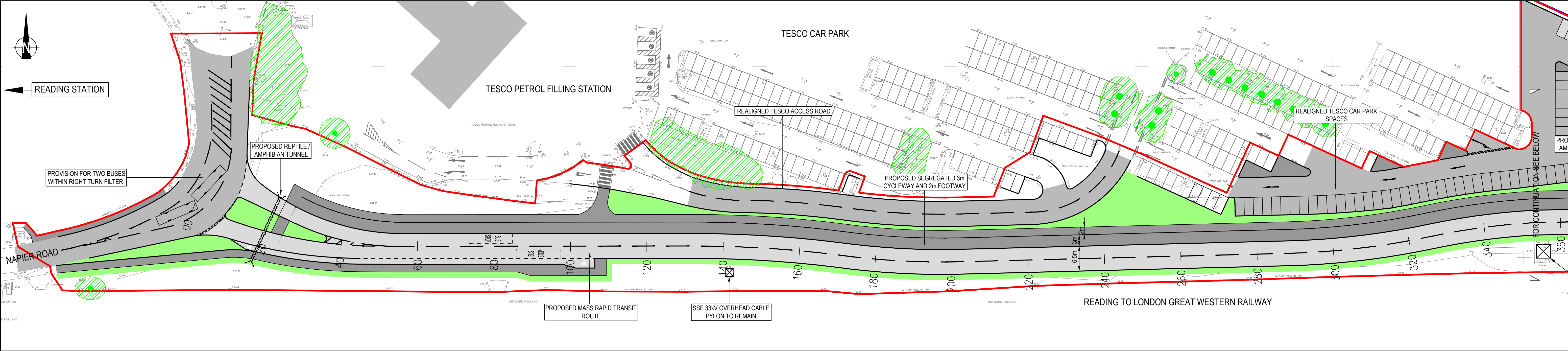


Appendix B - Proposed Development

- **PBA Drawing 28791/2009/CIV/004 – General Arrangement Phase 1 – Phase A**
- **PBA Drawing 28791/2009/CIV/005 – General Arrangement Phase 1 – Phase B**



- NOTES:**
- DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT PLEASE REQUEST FURTHER INFORMATION.
 - ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 - FOR PROPOSED UTILITY DIVERSIONS, REFER TO DRAWING NUMBER 28791/2009/CIV/009.
- KEY:**
- PLANNING APPLICATION BOUNDARY (FOR EXTENTS REFER TO DRAWING NUMBER 28791/2009/CIV/001)
 - OTHER LAND IN APPLICANTS CONTROL
 - EXISTING TREES / VEGETATION TO REMAIN (REFER TO LANDSCAPE DOCUMENTS FOR DETAILS)
 - PROPOSED LOW LEVEL TRAFFIC SIGNALS (OR ALTERNATIVE)

Mark	Revision	Date	Drawn	Chkd	Appd
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SCALING NOTE: Do not scale from this drawing. If in doubt, ask.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake his own investigation where the presence of any existing sewers, services, plant or apparatus may affect his operations.

Drawing Issue Status
FOR PLANNING

**EAST READING MASS RAPID TRANSIT
GENERAL ARRANGEMENT PHASE 1
PHASE B SGN VALVE DIVERSION
UNDERTAKEN**



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Date of 1st Issue 30.05.2017	Designed LC	Drawn SF
A1 Scale 1:500	Checked SE	Approved SM
Drawing Number 28791/2009/CIV/005		Revision ☐

Appendix C - EA Product 4 Flood Data

EA Product 4 flood data (reference BE_1310_01):

- Flood defence information
- Hydraulic model information
- Historic flood map
- Historic flood data
- Flood Zone map

Product 4 (Detailed Flood Risk) for Reading RG1 3LX

Our Ref: BE_1310_01

Product 4 is designed for developers where Flood Risk Standing Advice FRA (Flood Risk Assessment) Guidance Note 3 Applies. This is:

- i) "all applications in Flood Zone 3, other than non-domestic extensions less than 250 sq metres; and all domestic extensions", and
- ii) "all applications with a site area greater than 1 ha" in Flood Zone 2.

Product 4 includes the following information:

Ordnance Survey 1:25k colour raster base mapping;
Flood Zone 2 and Flood Zone 3;
Relevant model node locations and unique identifiers (for cross referencing to the water levels, depths and flows table);
Model extents showing *defended* scenarios;
FRA site boundary (where a suitable GIS layer is supplied);
Flood defence locations (where available/relevant) and unique identifiers; (supplied separately)
Flood Map areas benefiting from defences (where available/relevant);
Flood Map flood storage areas (where available/relevant);
Historic flood events outlines (where available/relevant, not the Historic Flood Map) and unique identifiers;
Statutory (Sealed) Main River (where available within map extents);

A table showing:

- i) Model node X/Y coordinate locations, unique identifiers, and levels and flows for *defended* scenarios.
- ii) Flood defence locations unique identifiers and attributes; (supplied separately)
- iii) Historic flood events outlines unique identifiers and attributes; and
- iv) Local flood history data (where available/relevant).

Please note:

If you will be carrying out computer modelling as part of your Flood Risk Assessment, please read the enclosed guidance which sets out our requirements and best practice for computer river modelling.

This information is based on that currently available as of the date of this letter. You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements have been made. Should you re-contact us after a period of time, please quote the above reference in order to help us deal with your query.

This information is provided subject to the enclosed notice which you should read.

This letter is not a Flood Risk Assessment. The information supplied can be used to form part of your Flood Risk Assessment. Further advice and guidance regarding Flood Risk Assessments can be found on our website at

<http://www.environment-agency.gov.uk/research/planning/82584.aspx>

If you would like advice from us regarding your development proposals you can complete our pre application enquiry form which can be found at

<http://www.environment-agency.gov.uk/research/planning/33580.aspx>

Defence information

Defence Location: No defences on Main River

Description: This location is not currently protected by any formal defences and we do not currently have any flood alleviation works planned for the area. However we continue to maintain certain watercourses and the schedule of these can be found on our internet pages.

Model information

BE_1310_01

Model: Kennet (Tyle Mill to Thames Confluence) 2007

Description: The information provided is taken from the Kennet (Tyle Mill to Thames confluence) 2007. The study was carried out using 2D modelling software (ISIS-Tuflow).

Model design runs:

1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 100 / 1% AEP and 1 in 100+20% / 1% AEP with climate change

Mapped Outputs:

1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 100 / 1% AEP and 1 in 100+20% / 1% AEP with climate change

Model accuracy:

Levels $\pm$ 250mm

Model information

BE_1310_01

Model: Thames (Mapledurham to Sonning) 2011

Description: The information provided is taken from the Thames (Reading Complex Change) Flood Alleviation Study completed in June 2011. The study was carried out using 2D modelling software (ISIS-Tuflow).

Model design runs:

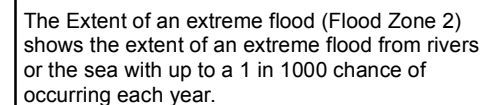
1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 50 / 2% AEP; 1 in 100 / 1% AEP; 1 in 1000 / 0.1% AEP and 1 in 100+20% / 1% AEP with climate change

Mapped Outputs:

1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 50 / 2% AEP; 1 in 100 / 1% AEP; 1 in 1000 / 0.1% AEP and 1 in 100+20% / 1% AEP with climate change

Model accuracy:

Levels $\pm$ 250mm

[illegible]

Historic flood data

BE_1310_01

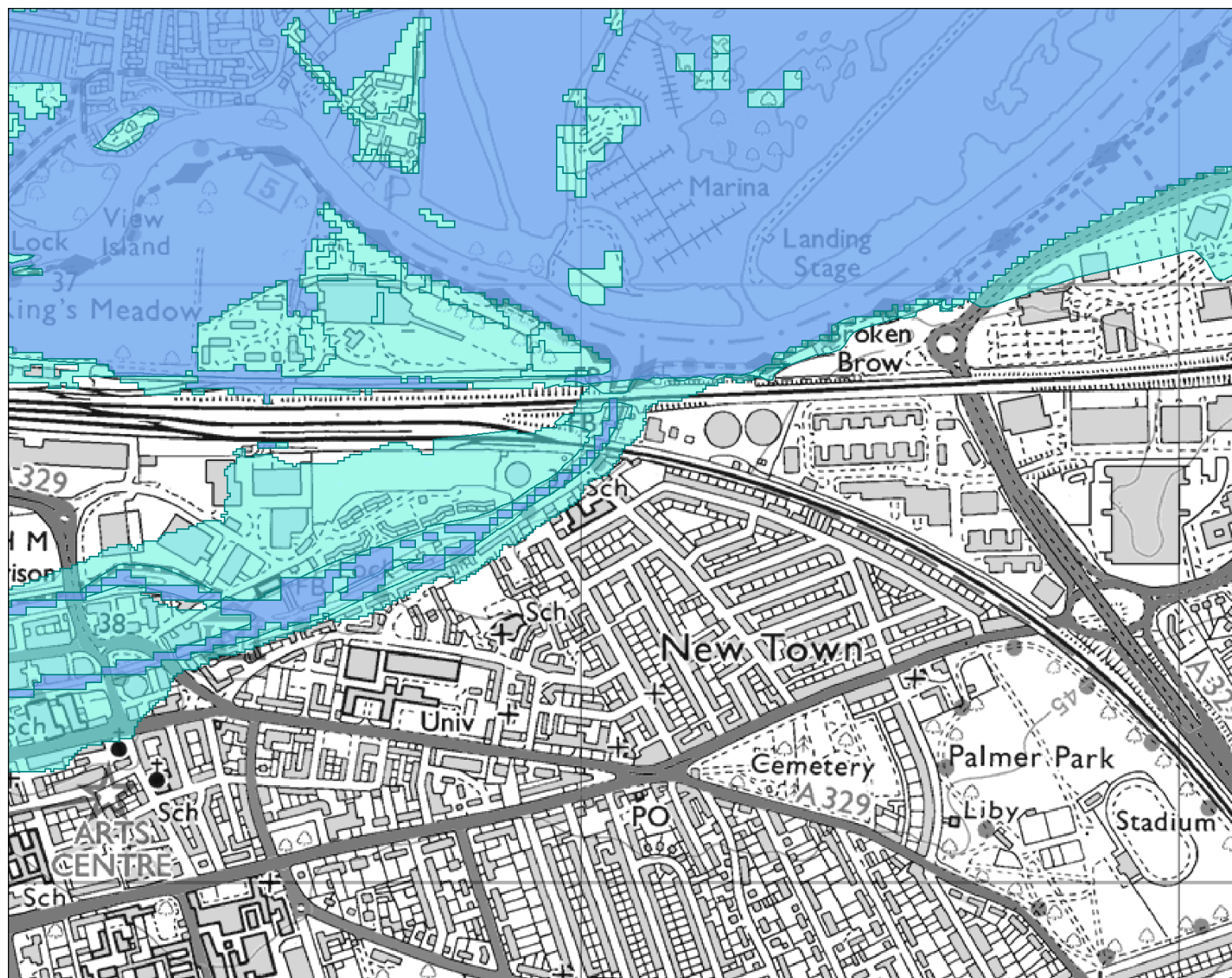
Our records show that the area of your site has been affected by flooding.
Information on the floods that have affected your site is provided in the table below:

Flood Event Code	Flood Event Name	Start Date	End Date	Source of Flooding	Cause of Flooding
EA0619470300429	06MarchSpring1947	01/01/1947	12/12/1947	main river	channel capacity exceeded (no raised defences)
EA0619741100405	06NovemberAutumn1974	01/01/1974	12/12/1974	main river	channel capacity exceeded (no raised defences)
EA0619770800427	06AugustSummer1977	01/01/1977	12/12/1977	main river	channel capacity exceeded (no raised defences)
EA0620001201005	06DecemberWinter2000	01/01/2000	12/12/2000	main river	channel capacity exceeded (no raised defences)
EA0620030101899	06JanuaryNewYear2003	23/12/2002	12/01/2003	main river	channel capacity exceeded (no raised defences)
ea061231477	Shiplake CP_Fluvial Water	19/07/2007	29/07/2007	main river	channel capacity exceeded (no raised defences)

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.

Start and End Dates shown above may represent a wider range where the exact dates are not available.

Map centred on RG1 3XL



Scale 1:10,001



Flood Map for Planning (Rivers and Sea)

- Flood Map - Defences
- Areas Benefiting from Flood Defences
- Flood Map - Flood Storage Areas
- Flood Map - Flood Zone 3
- Flood Map - Flood Zone 2

Flood Map for Planning (Rivers and Sea) (assuming no defences)

Flood Zone 3 shows the area that could be affected by flooding:

- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

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