PHASE 1 DESK STUDY

Site

29-31 HIGH STREET, HAMPTON WICK, KINGSTON UPON THAMES, GREATER LONDON KT1 4DA

Client

ALLAN & ELIZABETH FROST

Consulting Engineer

TCS LTD

Report Ref

20/11967/KJC REV 2

Issued

NOVEMBER 2020

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DOCUMENT CONTROL			
Report Title	Phase 1 Desk Study		
Contract	High Street, Hampton Wick		
Report Reference	20/11967/KJC		
Client	Allan & Elizabeth Frost		
Prepared by	**K J Clark** BSc Hons Director		
Reviewed by	**G C D Owens** BSc MSc FGS MIEnvSc Director		
Revision No.	Status	Date of Issue	Final Issue Check
0	Final	17/11/2020	
1	Final	26/11/2020	
2	Final	01/02/2021	

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This Report is prepared for the specific purpose stated and in relation to the development proposals or usage indicated to Albury S.I. Limited at the time of preparation. The recommendations should not be used for adjacent schemes and may not be appropriate for alternative proposals.

The recommendations made and opinions expressed in this Report are based on the strata conditions revealed by the fieldworks as indicated on the exploratory records, together with an assessment of the data from in situ and laboratory tests. No liability can be accepted for conditions which have not been revealed by the fieldworks, for example, between exploratory positions. While this Report may offer opinions on the possible configuration of strata, both between the excavations and below the maximum depth achieved by the investigation, these comments are for guidance only and no liability can be accepted for their accuracy. The data obtained relate to the conditions which are relevant at the time of the investigation.

The groundwater observations entered on exploratory records are those noted at the time of the investigation. The normal rate of progress does not usually permit the recording of any equilibrium water level for any one water strike. It should be noted that groundwater levels are prone to seasonal variation and to changes in local drainage conditions. The word 'none' indicates that groundwater was sealed off by the borehole casing or that no water was observed in the exploratory hole upon completion.

REPORT REF: 20/11967/KJC REV 2
CONTRACT: HIGH STREET, HAMPTON WICK

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1 INTRODUCTION

1.1 Objectives

The Desk Study comprises a review of the readily available geological, historical and environmental sources for information about the site, together with a walkover survey of the area. This includes the commissioning of an Enviro+Geo Insight report supplied by Groundsure Ltd. This report presents the findings of the Desk Study together with an outline Conceptual Site Model and preliminary risk assessment, based upon identified potential sources of contamination which may pose a significant risk to receptors or end-users of the site.

In preparing this report reference has been made to relevant guidance which includes the 'Investigation of potentially contaminated sites. Code of Practice.' (BSI, 2011) and updated Land Contamination: risk management (LCRM) guidance (2020).

1.2 Proposed Development

The Client proposes to redevelop the site at 29-31 High Street, Hampton Wick, Kingston upon Thames ("the site"). The majority of the existing structures will be demolished. 31 High Street, Hampton Wick, will be retained. A Class E redevelopment will be completed at ground and basement level and residential units will be provided at first and second floor level.

2 THE SITE

2.1 Site Location

The site covers an area of 900m^2, is roughly rectangular in shape and is located at Ordnance Survey National grid reference 517534, 169497. The site comprises commercial units, on the northern part of the site and a number of outbuildings. An access road leads to the rear of the site to parking areas within the site and to the rear of a number of the properties on the High Street.

2.2 Site Topography

Recent OS mapping (2003) indicates levels of 7.6m OD at the junction of the High Street, Hampton Court Road and Horse Fair to the south east of the site. A level of 8.2m OD is noted in the High Street at the site entrance. The site itself appears relatively flat and level with the High Street.

3 SITE HISTORY

3.1 Historical Mapping

The historical Ordnance Survey mapping contained within the Groundsure Data has been reviewed. The maps reviewed are included in Appendix 1.

Table 1 - Historical Mapping Summary

Date	Source Scale	Relevant Information	
		On Site	Off Site
1865+	1:2500	A number of buildings are present on site. Some fall within the curtilage of the site others extend beyond the site boundaries.	Formal garden areas appear to be present on the north western boundary and to the south of the site. Buildings are noted to the north and south east of the site. A Public House is recorded opposite the site. A further establishment is noted 40m south east. A P denotes a pump within the rear of an adjoining property on the eastern boundary. The River Thames is present to the east of the site. Watercourse noted 93m south east, appears to flow to the north before turning east to the River Thames. Part culverted under road from Kingston Bridge.
1896/98	1:2500	No significant change.	Garden area to the north west now developed by four houses. Gardens to the south now longer shown. Public houses no longer recorded as such. Watercourse to south east appears to have been further culverted to the south of a new boat house.
1913+	1:2500	No significant change.	No significant change.
1915+	1:2500	A number of the buildings in the north east of the site fronting the High Street have been demolished. A number of buildings within the site have been demolished.	Buildings on the south eastern boundary have been removed. Tram lines are now shown in the High Street. Tr – trough and D Fn – drinking fountain recorded to the north of the site. Area to the south now shown to contain trees (orchard?). Both Public Houses are again recorded as such.
1934+	1:2500	No significant change.	The Public House to the south has now been redeveloped, albeit with another Public House. A third Public House is now recorded to the north of the site. Building now present to the south of the site. Tram lines now removed.

1955	1:1250	The structures on the High Street are now numbered 29 and 31. 29 is now part of an engineering works.	Engineering works now shown 15m from the south west corner of the site. A garage is now shown 90m north of the site. Timber yards are recorded 65m east and 95m north east. Boat houses and a boat builders are present on the bank of the River Thames to the south east.
1965	1:2500	No significant change.	No significant change.
1969*	1:2500	Engineering works no longer shown as being present.	Drinking fountain and trough no longer present.
1991	1:2500	No discernible change.	Buildings to the north replaced by St Johns Place. Garage to north of site no longer shown as present. A timber yard to the north east has been redeveloped by housing known as Becketts Place.
1994*	1:1250	No change.	Boat house and boat builders replaced by Riverview House.
2003	1:1250	No change.	Public house to the south now a hotel. Building now extended. Building on southern boundary no longer present. Remaining timber yards to the east and south east no longer present.

*indicates partial mapping coverage +outline of site misaligned ^ poor quality imaging

At the time of the earliest mapping the site was already developed with a number of buildings being present. An engineering works was noted to present c1955-1969 in the middle portion of the site.

3.2 Aerial Imagery/Street View Imagery

Consideration of the modern aerial imagery contained within Google Earth indicates that the site remained largely unchanged from the first viewable image c2003 until 2012, when the land to the south of the access road was redeveloped.

Google Street View has also been examined. This confirms that 29 and 31 have remained in the current format since the earliest imagery c2008. 29 High Street has been occupied by Show Print and 31 has been occupied by The Kingston Laser Centre. The site to the south of the access road was redeveloped with commercial usage at ground floor level with residential accommodation at first floor level. Initially occupied by the Electric Bike Co. and most recently Kenward & Son (Monumental Stone Masons) occupy the building.

3.3 Bomb Damage Maps

The following is considered a non-specialist preliminary UXO assessment in accordance with CIRIA C681. Reference has been made to the digital resource Bomb Sight, which records a high explosive bomb strike approximately 125m to the south west at Church Grove. The site generally comprised buildings and hard cover. Therefore, it is very unlikely that an unexploded bomb strike would have gone unnoticed and it is considered that there is a low UXO risk.

4 GEOLOGY

4.1 Published Geology

An examination of the 1:50,000 British Geological Survey (BGS) mapping and Enviro+Geo Insight report indicates that the Kempton Park Gravel Member of Recent age underlies the site. This superficial deposit overlies the London Clay Formation of Eocene age.

4.2 Historical Borehole Records

The records of the BGS have been reviewed. A borehole has been noted 40m south east of the site. This record notes the presence of made ground overlying soft grey and brown clay to 12ft (3.65m). Flint gravel was present at this depth extending to 18.5ft (5.64m) before the London Clay Formation was encountered. Water was struck at 4.5ft (1.37m) and a standing water level of 5ft (1.52m) was noted.

4.3 Hydrogeology

The site is underlain by a Principal aquifer of medium vulnerability associated with the underlying Kempton Park Gravel Member. The London Clay Formation at depth is classed as an unproductive strata. However, the site is not underlain by a drinking water Source Protection Zone [SPZ].

A surface water abstraction point is recorded 246m north east of the site from the River Thames at the former Kingston Power Station.

4.4 Radon

The Enviro+Geo Insight report indicates that the site is not in a radon affected area as less than 1% of properties are above the action level. Moreover, no protective measures as described in BRE report BR211 are necessary in the construction of new properties or extensions.

5 ENVIRONMENTAL SETTING

5.1 Hydrology & Flood Risk

There is an inland river 93m south east of the site. The historic mapping suggests that it flowed northwards before turning east to the River Thames (130m east and south east). There is a low risk of flooding on the southern, northern and eastern boundaries.

5.2 Landfill Data

There are no active or inactive registered landfill sites listed in the Enviro+Geo Insight report within 1km of the site.

5.3 Recent & Current Land Use

There are historical records in the Enviro+Geo Insight report with respect to the former use of the site. The existing buildings are currently occupied commercially by a print company, a design and manufacturing company and a medical company. The historic mapping indicates that an engineering works was present on site in the 1950/1960's.

A number of historic industrial use sites are listed in the above report, including timber yards and boat builders. All these sites have been redeveloped prior to 2003.

5.4 Ecologically Sensitive Receptors

The following are considered to be sensitive environmental or ecological receptors and are highlighted within the Enviro+Geo Insight report. Bushy Park and Home Park 126m south and 377m west are SSSI. No other relevant sites are recorded within 1000m of the site.

6 SITE RECONNAISSANCE

A visit to site was made on 6th November 2020 using the procedures outlined in CLR 2. At the time of the survey the conditions were dry and overcast.

The site comprises a number of two storey buildings fronting the High Street. An access road leads to parking areas in the southern part of the site and to the rear of a number of the properties in the High Street. Single storey buildings are present on the southern boundary used for storage. An above ground tank is present within the structures.

Two single storey outbuildings are present to the south of the main area of buildings that front the High Street. 29 High Street is an active print shop and 29 A is occupied by Frozen Fish Design, a design and manufacturing company. No access was possible to 31 High Street as COVID-19 restrictions meant that The Kingston Laser Clinic was closed. It is understood that this building includes a small basement area.

The existing site layout, which has been annotated with specific features of interest, is presented as Figure 1 and the proposed layout plans are included in Figure 2. During the visit a number of photographs were taken, which include areas of concern, and these are presented in Figure 3 to this report.

7 PRELIMINARY RISK ASSESSMENT

7.1 Conceptual Site Model

In accordance with the report CLR 11 a Conceptual Model has been prepared for this site. The model prepared for the site in tabular format below lists potential sources of contamination, identified receptors on and within the immediate vicinity of the site, together with the pathways between them. A pathway must exist for an identified source to pose a risk to a receptor, thereby forming an active pollutant linkage. The primary receptors are considered to be future residents (human health), surrounding ecology (plants and animals), controlled waters and proposed buildings.

A qualitative assessment of the risk of each potential pollutant linkage is given based upon the CIRIA guidance document 'Contaminated Land Risk Assessment: A Guide to Good Practice' (Rudland, Lancefield and Mayell, 2001). The risk is a combination of the probability or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

Table 2 - Preliminary Conceptual Site Model

Source(s)	Potential Pathway(s)	Receptor(s)	Risk Level
ACM within existing buildings	Inhalation of dust	Site Workers Neighbours	Low – an appropriate building survey should be completed prior to demolition to identify control measures to be put in place during demolition

Previous historical use of the site, i.e. engineering works *Made ground associated with demolition of former structures on site* *Fuel storage* *- Petroleum Hydrocarbons, Heavy Metals, PAH, ACM*	Dermal Contact, Ingestion and Inhalation Leaching	Future Residents Site Workers Potable Water Supply Pipes Principal Aquifer	Low to moderate

A print shop is present at 29 High Street, which uses laser printing. It is considered that this usage will not pose a risk to the proposed redevelopment.

7.2 Groundwater

The anticipated regional groundwater flow within the superficial aquifer is thought to be towards the River Thames to the east.

7.3 Geotechnical Hazards

The Enviro+Geo Insight report indicates that there are no significant geotechnical hazards.

7.4 Further Investigation

An intrusive investigation of the site is recommended to prove the underlying natural strata and absence of any made ground. The proposed scope of testing should include for contaminants identified within the CSM, which includes heavy metals, PAH's and TPH. It is also recommended that the near surface soils are subjected to PID meter monitoring to assess the levels of volatile compounds.

7.5 Conclusions & Recommendations

A number of potential sources of contamination have been identified on and in within the immediate vicinity of the site, which may pose a risk to the proposed development. An intrusive ground investigation should be carried out to assess the identified risks. This work could be combined with a geotechnical investigation in order to provide suitable parameters to enable foundation design.

The proposed scope of investigation should be agreed with the Local Authority Contaminated Land Officer and, if necessary, the warranty provider in order to ensure that it meets with their approval.

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LIST OF ABBREVIATIONS

AOD	-	Above Ordnance Datum
ACM	-	Asbestos-containing Material
AST	-	Above-ground Storage Tank
BGS	-	British Geological Survey
BH	-	Borehole
BRE	-	Building Research Establishment
BSI	-	British Standards Institution
BS	-	British Standard
C4SL	-	Category Four Screening Level
CIRIA	-	Construction Industry Research and Information Association
CP	-	Cable Percussive
DPH	-	Dynamic Probing Heavy
DPSH	-	Dynamic Probing Super Heavy
EA	-	Environment Agency
GAC	-	Generic Assessment Criteria
LL	-	Liquid Limit
mAOD	-	Metres Above Ordnance Datum
mBGL	-	Metres Below Ground Level
mOD	-	Metres Ordnance Datum
OS	-	Ordnance Survey
PAH	-	Polycyclic Aromatic Hydrocarbons
PCB	-	Polychlorinated Biphenyl
PID	-	Photo Ionisation Detector
PL	-	Plastic Limit
PSD	-	Particle Size Distribution
SGV	-	Soil Guideline Value
SOM	-	Soil Organic Matter
SPT	-	Standard Penetration Test
SPZ	-	Source Protection Zone
SVOC	-	Semi-volatile Organic Compounds
TPH	-	Total Petroleum Hydrocarbon
UST	-	Underground Storage Tank
UXB	-	Unexploded Bombs
UXO	-	Unexploded Ordnance
VOC	-	Volatile Organic Compound

FIGURE 1

SITE LAYOUT PLAN

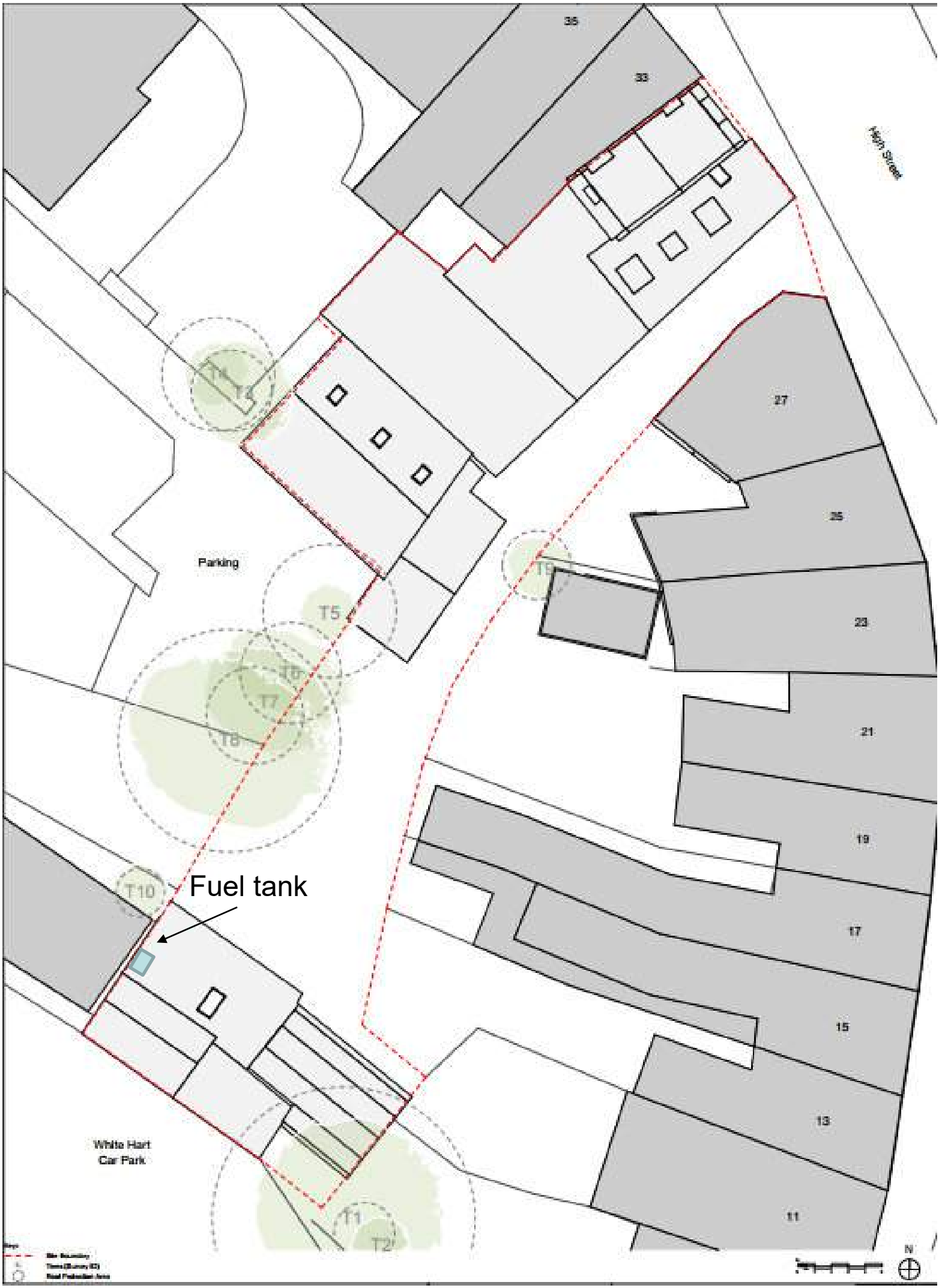

35
33
High Street
27
25
23
21
19
17
15
13
11
Parking
T5
T6
T7
T8
T9
T10
Fuel tank
White Hart
Car Park
T1
T2
N

FIGURE 2

PROPOSED LAYOUT

Fletcher Crane Architects Ltd
3rd Home Park Parade, Hampton Wick, Kingston upon Thames, Surrey, KT1 4AY
T +44 (0)20 8977 4693
www.fletchercranearchitects.com

Rev	Description	Drawn	Checked	Date

Client's name
Liz & Allan Frost

Scale:
1:100 @ A1 1:200 @ A3
Note: To print at A3, set print scale to 50%

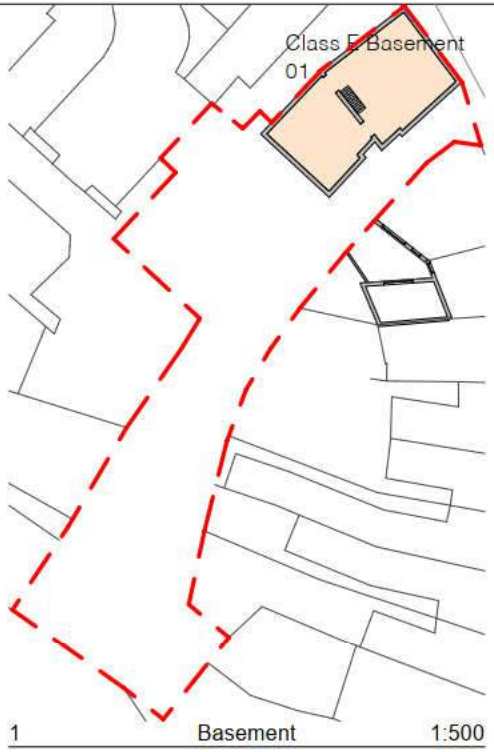
Drawn Checked Date
12/01/2021

Job title
Hampton Wick High Street

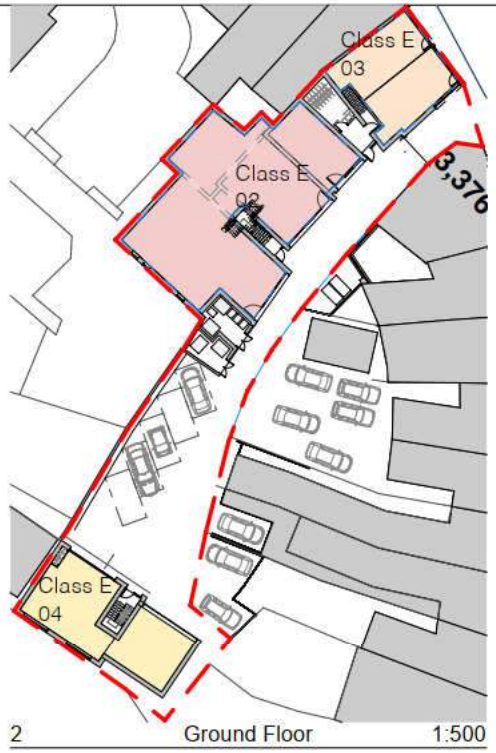
Drawing title
Proposed Ground Floor Plan

Job No	Drawing No	Status:	Rev
1911	TP(10)21	PLANNING	

FLETCHER CRANE ARCHITECTS

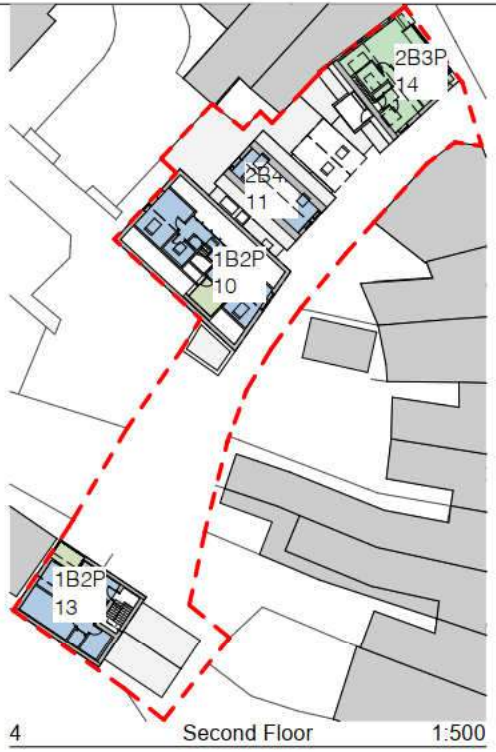


1 Basement 1:500



2 Ground Floor 1:500

3 First Floor 1:500



4 Second Floor 1:500

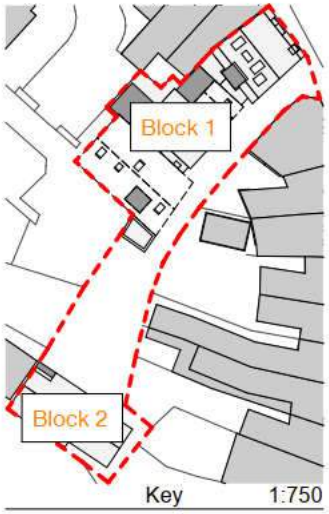
Net GIA		
#	Room Name	Area m2
01	Class E Basement	135
02	Class E	233
03	Class E	76
04	Class E	90
07	1B2P	50
08	1B2P	50
09	1B2P	50
10	1B2P	56
11	2B4P	85
12	3B5P Duplex	110
13	1B2P Duplex	50
14	2B3P	61
		1,046 m²

Gross GIA		
	Level	Area m2
Block 01		
	Basement	135
	Ground Floor	377
	First Floor	304
	Second Floor	65
	Second Floor	44
	Second Floor	59
Block 02		
	Ground Floor	101
	First Floor	60
	Second Floor	60
		1,205 m²

Overall GEA	
Level	Area
Basement	
	156
Ground Floor	
	120
	412
First Floor	
	72
	335
Second Floor	
	53
	72
	72
	76
	1,368 m²

Existing GIA Retained	
Level	Area m²
Basement	36
Ground Floor	46
First Floor	38
Second Floor	34
Total	154 m²

= 1,051m² New Build



Key 1:750

Fletcher Crane Architects Ltd
3-4 Home Park Parade, Hampton Wick, Kingston upon Thames, Surrey, KT1 4BY
T +44 (0)20 8977 4693
www.fletchercranearchitects.com

Rev	Description	Drawn	Checked	Date
C	Retained GIA added	SD	IC	01.12.2020
B	Basement extended	SD	IC	24.10.2020
A	GEA added	SD	IC	10.11.2020

Client's name: Liz & Allan Frost

Scale: 1:500, 1:750 @ A3

Drawn | Checked | Date: 01/12/2020

Job title: Hampton Wick High Street

Drawing title: Schedule of Accommodation - Proposed

Job No	Drawing No	Status	Rev
1911	SK 003		C

FLETCHER CRANE ARCHITECTS

FIGURE 3

SITE PHOTOGRAPHS

Access to rear of site

29 & 31 High Street

Title:	Site Photographs
Dwg No:	20/11967/1
Drawn by:	KJC
Client:	Allan & Elizabeth Frost
Contract:	High Street, Hampton Wick
Job Ref:	20/11967/KJC
Scale:	NTS
Revision:	0
Issue Date:	11/11/2020

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Internal view of area occupied by Frozen Fish Design

Internal views of Show Print

Title:	Site Photographs
Dwg No:	20/11967/2
Drawn by:	KJC
Client:	Allan & Elizabeth Frost
Contract:	High Street, Hampton Wick
Job Ref:	20/11967/KJC
Scale:	NTS
Revision:	0
Issue Date:	11/11/2020

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Outbuildings to the rear of 29 High Street

Title:	Site Photographs
Dwg No:	20/11967/3
Drawn by:	KJC
Client:	Allan & Elizabeth Frost
Contract:	High Street, Hampton Wick
Job Ref:	20/11967/KJC
Scale:	NTS
Revision:	0
Issue Date:	11/11/2020

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Parking area

View looking north with outbuildings to the rear of 29 High Street on left

Title:	Site Photographs
Dwg No:	20/11967/4
Drawn by:	KJC
Client:	Allan & Elizabeth Frost
Contract:	High Street, Hampton Wick
Job Ref:	20/11967/KJC
Scale:	NTS
Revision:	0
Issue Date:	11/11/2020

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Buildings at southern end of site

Title:	Site Photographs
Dwg No:	20/11967/5
Drawn by:	KJC
Client:	Allan & Elizabeth Frost
Contract:	High Street, Hampton Wick
Job Ref:	20/11967/KJC
Scale:	NTS
Revision:	0
Issue Date:	11/11/2020

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APPENDIX 1

GROUNDSURE DATA

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

29-31, HIGH STREET, HAMPTON WICK, KT1 4DA

Order Details

Date: 29/10/2020

Your ref: 20_11967_KJC_13821

Our Ref: GS-7208302

Client: Albury S.I. Ltd

Site Details

Location: 517534 169497

Area: 0.09 ha

Authority: London Borough of Richmond upon Thames

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	0	1	50	108	-
19	1.2	Historical tanks	0	0	1	30	-
21	1.3	Historical energy features	0	0	1	24	-
22	1.4	Historical petrol stations	0	0	0	0	-
22	1.5	Historical garages	0	0	2	2	-
23	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
24	2.1	Historical industrial land uses	0	1	74	155	-
33	2.2	Historical tanks	0	0	1	59	-
35	2.3	Historical energy features	0	0	5	64	-
38	2.4	Historical petrol stations	0	0	0	0	-
38	2.5	Historical garages	0	0	6	3	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
40	3.1	Active or recent landfill	0	0	0	0	-
40	3.2	Historical landfill (BGS records)	0	0	0	0	-
41	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
41	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
41	3.5	Historical waste sites	0	0	0	0	-
41	3.6	Licensed waste sites	0	0	0	0	-
41	3.7	Waste exemptions	0	0	1	3	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
43	4.1	Recent industrial land uses	1	1	28	-	-
45	4.2	Current or recent petrol stations	0	0	0	0	-
46	4.3	Electricity cables	0	0	0	0	-
46	4.4	Gas pipelines	0	0	0	0	-
46	4.5	Sites determined as Contaminated Land	0	0	0	0	-

46	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
46	4.7	Regulated explosive sites	0	0	0	0	-
47	4.8	Hazardous substance storage/usage	0	0	0	0	-
47	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
47	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
47	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	1	0	-
48	4.12	Radioactive Substance Authorisations	0	0	0	0	-
48	**4.13**	**Licensed Discharges to controlled waters**	0	0	2	7	-
49	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
49	4.15	Pollutant release to public sewer	0	0	0	0	-
50	4.16	List 1 Dangerous Substances	0	0	0	0	-
50	4.17	List 2 Dangerous Substances	0	0	0	0	-
50	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	6	5	-
51	4.19	Pollution inventory substances	0	0	0	0	-
52	4.20	Pollution inventory waste transfers	0	0	0	0	-
52	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
53	**5.1**	**Superficial aquifer**	Identified (within 500m)				
55	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
56	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
57	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
57	**5.5**	**Groundwater vulnerability- local information**	Identified (within 0m)				
58	**5.6**	**Groundwater abstractions**	0	0	0	0	11
61	**5.7**	**Surface water abstractions**	0	0	2	0	2
62	**5.8**	**Potable abstractions**	0	0	0	0	2
63	5.9	Source Protection Zones	0	0	0	0	-
63	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
64	**6.1**	**Water Network (OS MasterMap)**	0	0	9	-	-

65	6.2	Surface water features	0	0	6	-	-
66	6.3	WFD Surface water body catchments	1	-	-	-	-
66	6.4	WFD Surface water bodies	0	0	1	-	-
66	6.5	WFD Groundwater bodies	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
68	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	High (within 50m)				
69	7.2	Historical Flood Events	0	0	10	-	-
70	7.3	Flood Defences	0	0	0	-	-
70	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
70	7.5	Flood Storage Areas	0	0	0	-	-
71	7.6	Flood Zone 2	Identified (within 50m)				
72	7.7	Flood Zone 3	Identified (within 50m)				
Page	Section	Surface water flooding					
73	8.1	Surface water flooding	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
75	9.1	Groundwater flooding	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
76	10.1	Sites of Special Scientific Interest (SSSI)	0	0	2	1	2
77	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
77	10.3	Special Areas of Conservation (SAC)	0	0	0	0	1
78	10.4	Special Protection Areas (SPA)	0	0	0	0	0
78	10.5	National Nature Reserves (NNR)	0	0	0	0	1
78	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
78	10.7	Designated Ancient Woodland	0	0	0	0	0
79	10.8	Biosphere Reserves	0	0	0	0	0
79	10.9	Forest Parks	0	0	0	0	0
79	10.10	Marine Conservation Zones	0	0	0	0	0
79	10.11	Green Belt	0	0	0	0	0
79	10.12	Proposed Ramsar sites	0	0	0	0	0

80	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
80	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
80	10.15	Nitrate Sensitive Areas	0	0	0	0	0
80	**10.16**	**Nitrate Vulnerable Zones**	0	0	0	1	0
82	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
83	**10.18**	**SSSI Units**	0	0	1	1	5
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
87	11.1	World Heritage Sites	0	0	0	-	-
88	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
88	11.3	National Parks	0	0	0	-	-
88	**11.4**	**Listed Buildings**	0	7	13	-	-
89	**11.5**	**Conservation Areas**	1	0	5	-	-
90	11.6	Scheduled Ancient Monuments	0	0	0	-	-
90	**11.7**	**Registered Parks and Gardens**	0	0	2	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
91	**12.1**	**Agricultural Land Classification**	Urban (within 250m)				
92	12.2	Open Access Land	0	0	0	-	-
92	12.3	Tree Felling Licences	0	0	0	-	-
92	12.4	Environmental Stewardship Schemes	0	0	0	-	-
92	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
93	**13.1**	**Priority Habitat Inventory**	0	0	5	-	-
94	13.2	Habitat Networks	0	0	0	-	-
94	13.3	Open Mosaic Habitat	0	0	0	-	-
94	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
95	**14.1**	**10k Availability**	Identified (within 500m)				
96	**14.2**	**Artificial and made ground (10k)**	0	1	5	2	-
98	**14.3**	**Superficial geology (10k)**	1	0	2	2	-

99	14.4	Landslip (10k)	0	0	0	0	-
100	**14.5**	**Bedrock geology (10k)**	1	0	0	1	-
101	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
102	**15.1**	**50k Availability**	Identified (within 500m)				
103	**15.2**	**Artificial and made ground (50k)**	0	1	5	2	-
104	**15.3**	**Artificial ground permeability (50k)**	0	1	-	-	-
105	**15.4**	**Superficial geology (50k)**	1	0	2	1	-
106	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
106	15.6	Landslip (50k)	0	0	0	0	-
106	15.7	Landslip permeability (50k)	None (within 50m)				
107	**15.8**	**Bedrock geology (50k)**	1	0	0	0	-
108	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
108	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
109	**16.1**	**BGS Boreholes**	0	1	6	-	-
Page	Section	Natural ground subsidence					
111	**17.1**	**Shrink swell clays**	Negligible (within 50m)				
112	**17.2**	**Running sands**	Very low (within 50m)				
113	**17.3**	**Compressible deposits**	Very low (within 50m)				
115	**17.4**	**Collapsible deposits**	Very low (within 50m)				
116	**17.5**	**Landslides**	Very low (within 50m)				
117	**17.6**	**Ground dissolution of soluble rocks**	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
119	18.1	Natural cavities	0	0	0	0	-
120	18.2	BritPits	0	0	0	0	-
120	**18.3**	**Surface ground workings**	0	0	25	-	-
121	18.4	Underground workings	0	0	0	0	0
121	18.5	Historical Mineral Planning Areas	0	0	0	0	-

121	18.6	Non-coal mining	0	0	0	0	0
122	18.7	Mining cavities	0	0	0	0	0
122	18.8	JPB mining areas	None (within 0m)				
122	18.9	Coal mining	None (within 0m)				
122	18.10	Brine areas	None (within 0m)				
122	18.11	Gypsum areas	None (within 0m)				
123	18.12	Tin mining	None (within 0m)				
123	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
124	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
125	**20.1**	**BGS Estimated Background Soil Chemistry**	2	2	-	-	-
125	**20.2**	**BGS Estimated Urban Soil Chemistry**	2	4	-	-	-
126	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
127	21.1	Underground railways (London)	0	0	0	-	-
127	21.2	Underground railways (Non-London)	0	0	0	-	-
128	21.3	Railway tunnels	0	0	0	-	-
128	**21.4**	**Historical railway and tunnel features**	0	0	6	-	-
128	21.5	Royal Mail tunnels	0	0	0	-	-
129	21.6	Historical railways	0	0	0	-	-
129	**21.7**	**Railways**	0	0	18	-	-
130	21.8	Crossrail 1	0	0	0	0	-
130	**21.9**	**Crossrail 2**	0	0	13	13	-
131	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 29/06/2019

Site Area: 0.09ha

Recent site history - 2015 aerial photograph

Capture Date: 30/06/2015

Site Area: 0.09ha

Recent site history - 2013 aerial photograph

Capture Date: 20/04/2013

Site Area: 0.09ha

Recent site history - 1999 aerial photograph

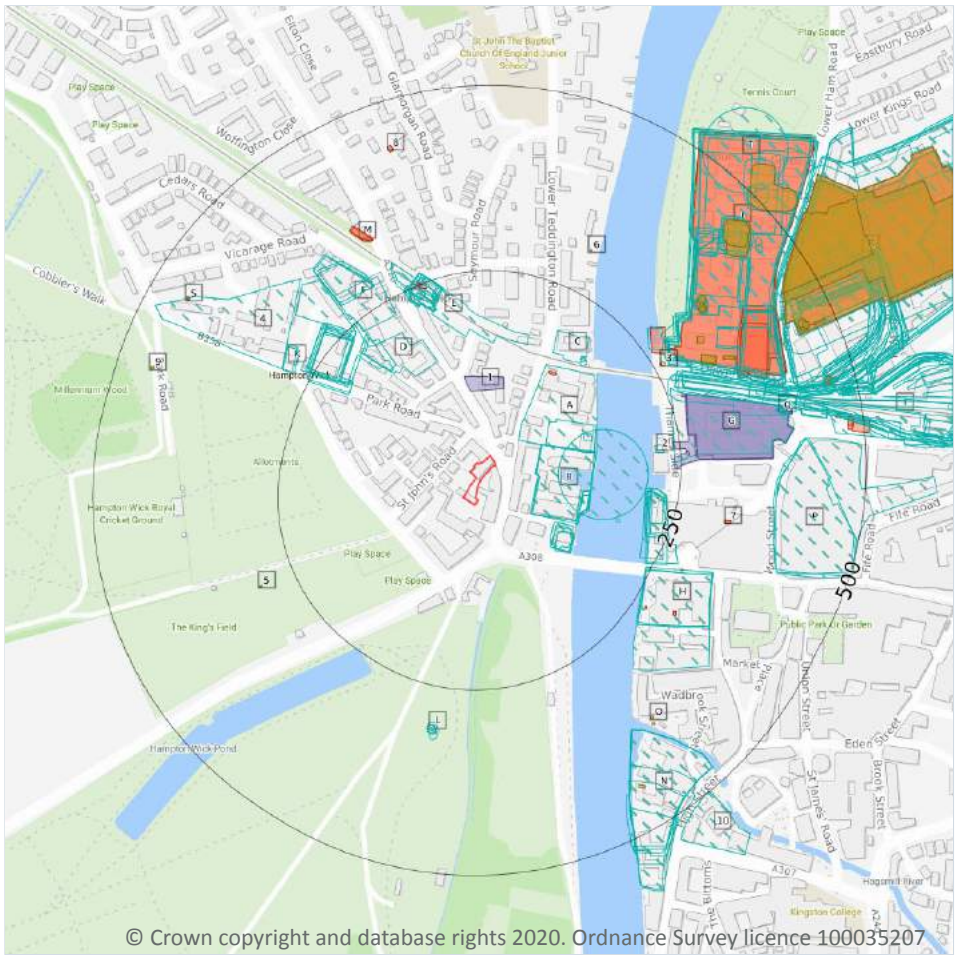
Capture Date: 04/09/1999

Site Area: 0.09ha

OS MasterMap site plan

Site Area: 0.09ha

1 Past land use



1.1 Historical industrial land uses

Records within 500m	159

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	43m NE	Timber Yard	1968 - 1974	2196251

ID	Location	Land use	Dates present	Group ID
B	55m E	Timber Yard	1968 - 1974	2195055
B	55m E	Unspecified Wharf	1962	2225566
B	56m E	Timber Yard	1985	2231372
A	73m E	Timber Yard	1985	2265251
B	85m E	Unspecified Wharf	1968	2202791
B	107m E	Boat House	1938	2251337
B	111m E	Boat House	1933 - 1938	2282426
B	112m E	Boat House	1912 - 1913	2277211
B	117m E	Boat House	1913	2189302
B	117m E	Boat House	1913	2243078
B	119m E	Wharf	1974	2160563
B	123m E	Unspecified Wharf	1985	2204543
A	124m E	Boat House	1934 - 1948	2225985
B	125m E	Unspecified Wharfs	1934	2225428
D	144m NW	Unspecified Foundry	1895	2181691
E	153m N	Railway Station	1913 - 1974	2290686
C	163m NE	Boat House	1934 - 1938	2294028
D	169m NW	Unspecified Foundry	1912	2286429
D	171m NW	Unspecified Foundry	1894	2232463
C	176m NE	Boat House	1948	2266606
B	178m SE	Boat House	1948	2146221
D	194m NW	Unspecified Foundry	1913	2283676
D	195m NW	Unspecified Foundry	1913	2191955
D	200m NW	Unspecified Foundry	1894	2273473
D	201m NW	Unspecified Foundry	1938	2241915
B	204m E	Unspecified Wharfs	1938	2269350
B	206m E	Unspecified Wharfs	1933	2293187
B	207m E	Unspecified Wharves	1938	2254514

ID	Location	Land use	Dates present	Group ID
B	209m E	Unspecified Wharfs	1948	2279495
E	209m N	Railway Station	1912 - 1913	2203038
E	210m N	Railway Station	1938	2188674
E	210m N	Railway Station	1913	2273601
B	211m E	Unspecified Wharfs	1934	2198068
B	212m E	Wharf	1974	2160564
D	213m NW	Unspecified Foundry	1899	2257901
B	214m E	Unspecified Wharf	1962 - 1968	2217492
E	214m N	Railway Station	1934 - 1985	2287729
E	216m N	Railway Station	1899	2283580
2	216m E	Unspecified Wharf	1962	2157194
E	219m N	Railway Station	1895	2205090
D	220m NW	Unspecified Foundry	1933	2227149
E	222m N	Railway Station	1865	2284473
E	222m N	Railway Station	1894	2188522
E	224m N	Railway Station	1894	2211670
F	228m NW	Engineering Works	1912	2229952
F	233m NW	Engineering Works	1913	2142085
G	242m E	Garage	1968	2168504
H	243m E	Tannery	1894	2282515
H	245m E	Tannery	1899	2223739
H	246m E	Tannery	1895	2213207
I	252m E	Railway Sidings	1913	2230570
J	258m NE	Power Station	1974	2279293
I	263m NE	Railway Sidings	1938	2264434
I	263m NE	Railway Sidings	1913	2198234
I	264m E	Railway Sidings	1948	2175214
I	265m E	Railway Sidings	1934 - 1938	2215139

ID	Location	Land use	Dates present	Group ID
J	268m NE	Sewage Works	1913	2170502
J	269m NE	Sewage Works	1912	2235982
J	269m NE	Sewage Works	1933 - 1948	2242397
J	270m NE	Electricity Works	1913	2288193
K	273m NW	Unspecified Foundry	1934	2269454
I	274m E	Railway Sidings	1912 - 1938	2241422
I	274m E	Railway Sidings	1913	2269599
J	275m NE	Sewage Works	1899	2203772
F	275m NW	Engineering Works	1934 - 1938	2218852
J	275m NE	Sewage Works	1894	2221028
J	275m NE	Sewage Works	1895	2170350
I	276m NE	Railway Sidings	1933	2232691
F	276m NW	Engineering Works	1913	2276215
K	276m NW	Unspecified Foundry	1948	2208074
J	276m NE	Sewage Works	1894	2223165
F	289m NW	Engineering Works	1933	2217189
4	290m NW	Engineering Works	1948	2142084
L	298m S	Ice House	1894	2142782
L	302m S	Old Ice House	1913 - 1974	2252445
L	303m S	Old Ice House	1899	2260050
L	303m S	Old Ice House	1933	2268875
J	333m NE	Sewage Works	1913	2219647
J	337m NE	Electricity Works	1913	2247028
J	339m NE	Electricity Works	1912 - 1913	2244273
J	340m NE	Unspecified Tank	1934 - 1948	2224381
J	340m NE	Unspecified Tank	1912	2191280
J	340m NE	Unspecified Tank	1938	2196134
J	342m NE	Unspecified Tank	1913	2227140

ID	Location	Land use	Dates present	Group ID
J	343m NE	Unspecified Tank	1899 - 1913	2181878
J	343m NE	Unspecified Tank	1933	2234995
J	349m NE	Unspecified Tank	1894 - 1895	2255622
J	350m NE	Unspecified Tank	1894	2206157
J	353m NE	Filter Beds	1894	2143304
I	353m E	Railway Sidings	1894 - 1895	2287721
I	364m E	Railway Sidings	1899	2275773
N	370m SE	Brewery	1899 - 1938	2198034
N	370m SE	Brewery	1912 - 1913	2217109
N	370m SE	Brewery	1895	2224072
N	370m SE	Brewery	1938	2282479
I	370m E	Railway Sidings	1962	2267560
I	376m E	Railway Sidings	1894 - 1985	2247913
P	378m E	Unspecified Stores	1938	2257909
P	381m E	Unspecified Stores	1938	2178895
P	381m E	Unspecified Stores	1933	2175924
Q	385m E	Railway Building	1913	2216883
Q	387m E	Railway Building	1913	2225107
Q	387m E	Railway Building	1938	2263802
J	391m NE	Unspecified Tank	1913	2154080
J	392m NE	Unspecified Pit	1912 - 1913	2178961
J	392m NE	Unspecified Heap	1913	2216385
J	392m NE	Unspecified Heap	1948	2178239
J	392m NE	Unspecified Pit	1913	2294729
J	398m NE	Power Station	1968	2208332
J	398m NE	Power Station	1985	2265532
N	410m SE	Brewery	1894 - 1948	2265917
R	411m NE	Gas Works	1913	2201551

ID	Location	Land use	Dates present	Group ID
I	411m E	Railway Sidings	1938	2203278
R	413m E	Unspecified Commercial/Industrial	1938	2219286
I	414m E	Railway Sidings	1968	2193035
J	416m NE	Unspecified Tanks	1938 - 1948	2181102
R	417m E	Gas Works	1912	2283136
J	418m NE	Unspecified Tanks	1938	2263346
J	418m NE	Unspecified Tanks	1933 - 1938	2222709
R	418m E	Corporation Depot	1933	2191085
I	421m E	Unspecified Commercial/Industrial	1974	2240710
R	421m E	Unspecified Works	1968	2159558
R	421m E	Unspecified Commercial/Industrial	1948 - 1962	2274406
R	422m E	Gas Works	1895	2185687
J	422m NE	Unspecified Tanks	1913	2282975
I	423m E	Railway Sidings	1868	2262795
N	425m SE	Brewery	1894	2243001
J	428m NE	Unspecified Tanks	1912 - 1913	2259828
R	436m NE	Unspecified Commercial/Industrial	1934	2265722
I	438m E	Railway Sidings	1899 - 1913	2183377
R	445m E	Gas Works	1913	2201145
I	447m NE	Unspecified Tank	1938	2288959
I	447m E	Railway Sidings	1933	2283298
R	447m NE	Gas Works	1899	2237715
I	448m NE	Unspecified Tank	1933	2225902
I	449m NE	Unspecified Tank	1913	2192071
I	449m NE	Gasometer	1912 - 1913	2224370
I	449m NE	Unspecified Tank	1938	2235960
I	450m NE	Gasometer	1913	2239804
I	450m NE	Unspecified Tank	1934 - 1948	2261128

ID	Location	Land use	Dates present	Group ID
J	454m NE	Chimney	1974 - 1985	2295303
R	458m NE	Gas Works	1894	2279037
J	458m NE	Chimney	1968	2172899
N	460m SE	Brewery	1934	2216118
R	466m NE	Gas Works	1868	2209418
I	469m E	Railway Building	1894	2195978
I	471m E	Railway Building	1938	2210178
I	475m E	Railway Building	1912	2208232
I	477m E	Railway Building	1934	2214875
I	478m E	Railway Building	1938	2189406
I	478m E	Railway Building	1913	2278408
T	479m NE	Chimney	1985	2269235
I	480m E	Railway Building	1948	2189407
J	482m NE	Unspecified Tanks	1938	2215699
J	487m NE	Unspecified Tanks	1933 - 1948	2259568
J	489m NE	Unspecified Tank	1938	2154077
T	495m NE	Unspecified Ground Workings	1913	2211980
10	498m SE	Police Station	1974	2295159

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**31**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
B	222m E	Unspecified Tank	1994	362164
3	260m NE	Unspecified Tank	1896	362165
H	267m SE	Tanks	1868	406465
H	286m SE	Unspecified Tank	1994	362197
5	297m SW	Tanks or Trough	1865	374623
6	307m NE	Unspecified Tank	1915 - 1934	408301
J	309m NE	Tanks	1986	392813
J	311m NE	Tanks	1955 - 1999	405359
J	317m NE	Unspecified Tank	1968 - 1992	387646
J	338m NE	Tanks	1986	402030
J	339m NE	Tanks	1968 - 1999	382090
J	342m NE	Unspecified Tank	1915	382683
J	344m NE	Unspecified Tank	1932	395082
J	345m NE	Unspecified Tank	1898 - 1913	401743
J	350m NE	Unspecified Tank	1896	400357
O	372m SE	Unspecified Tank	1896	362194
O	379m SE	Unspecified Tank	1932	362195
J	421m NE	Tanks	1932	391085
J	429m NE	Tanks	1913 - 1915	389043
R	434m NE	Gas Works	1913 - 1915	387558
N	438m SE	Unspecified Tank	1955 - 1969	386331
R	446m NE	Gas Works	1896 - 1898	388684
9	449m W	Unspecified Tank	1954 - 1955	389863
R	449m NE	Gas Works	1868	388750
I	450m NE	Gasometer	1913 - 1915	398578
I	450m NE	Unspecified Tank	1932	402646
I	455m NE	Unspecified Tank	1955	392833
I	459m E	Unspecified Tank	1898	362163

ID	Location	Land use	Dates present	Group ID
I	462m E	Unspecified Tank	1896	362161
I	469m NE	Tanks	1932	375803
J	489m NE	Tanks	1932	375812

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**25**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
C	137m NE	Electricity Substation	1986 - 1999	291866
J	258m NE	Power Station	1968 - 1991	267451
J	282m NE	Power Station	1986	283357
H	303m SE	Electricity Substation	1986 - 1994	280832
7	317m E	Electricity Substation	1955 - 1986	268212
M	331m NW	Electricity Substation	1991 - 1993	276409
M	332m NW	Electricity Substation	1954 - 1988	282589
J	349m E	Electricity Works	1913	251202
J	350m E	Corporation Electricity Works	1915	249980
J	353m E	Electric Station	1896 - 1898	282706
8	432m N	Electricity Substation	1969 - 1993	278176
R	434m NE	Gas Works	1915	252285
S	444m NW	Electricity Substation	1991 - 1993	280589
S	445m NW	Electricity Substation	1954 - 1988	268817
R	446m NE	Gas Works	1896 - 1898	292132

ID	Location	Land use	Dates present	Group ID
R	447m NE	Gas Works	1913	253398
R	449m NE	Gas Works	1868	275922
I	450m NE	Gasometer	1913 - 1915	286555
I	464m E	Electricity Substation	1991 - 1999	268552
I	467m E	Electricity Substation	1973	266152
I	468m E	Electricity Substation	1991 - 1999	277234
I	470m E	Electricity Substation	1987	254875
I	478m E	Electricity Substation	1955	265701
I	478m E	Electricity Substation	1954 - 1987	268586
I	484m E	Electricity Substation	1954 - 1955	289740

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	4

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
1	89m N	Garage	1955 - 1968	81346

ID	Location	Land use	Dates present	Group ID
G	241m E	Garage	1955 - 1968	81466
G	262m E	Garage	1986	79213
G	264m E	Garage	1955	84349

This data is sourced from Ordnance Survey / Groundsure.

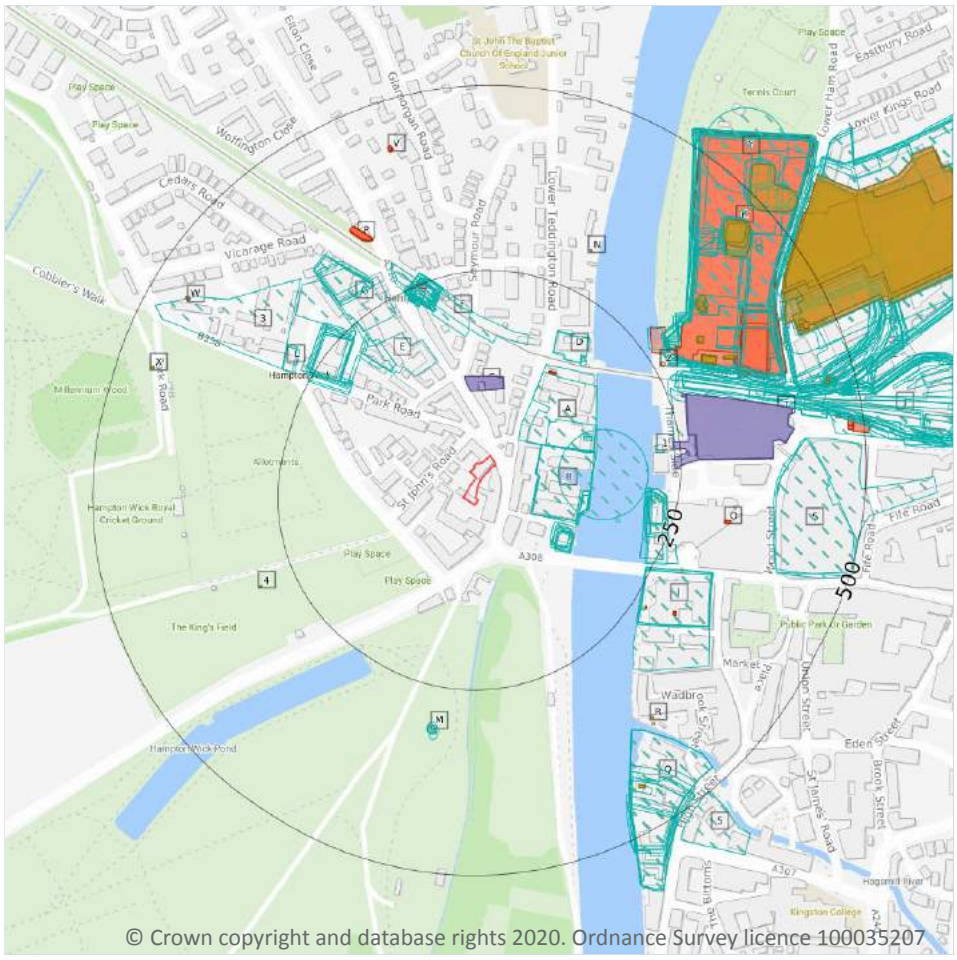
1.6 Historical military land

Records within 500m	**0**

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m	230

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
A	43m NE	Timber Yard	1974	2196251
A	51m NE	Timber Yard	1968	2196251
B	55m E	Timber Yard	1974	2195055

ID	Location	Land Use	Date	Group ID
B	55m E	Timber Yard	1968	2195055
B	55m E	Unspecified Wharf	1962	2225566
B	56m E	Timber Yard	1985	2231372
A	73m E	Timber Yard	1985	2265251
B	85m E	Unspecified Wharf	1968	2202791
B	107m E	Boat House	1938	2251337
B	111m E	Boat House	1933	2282426
B	112m E	Boat House	1938	2282426
B	112m E	Boat House	1912	2277211
B	115m E	Boat House	1934	2282426
B	117m E	Boat House	1913	2189302
B	117m E	Boat House	1938	2282426
B	117m E	Boat House	1913	2243078
B	119m SE	Boat House	1913	2277211
B	119m E	Wharf	1974	2160563
B	123m E	Unspecified Wharf	1985	2204543
A	124m E	Boat House	1938	2225985
A	124m E	Boat House	1934	2225985
B	125m E	Unspecified Wharfs	1934	2225428
B	125m E	Unspecified Wharfs	1934	2225428
A	125m E	Boat House	1948	2225985
E	144m NW	Unspecified Foundry	1895	2181691
F	153m N	Railway Station	1974	2290686
D	163m NE	Boat House	1938	2294028
D	164m NE	Boat House	1934	2294028
F	164m N	Railway Station	1913	2290686
E	169m NW	Unspecified Foundry	1912	2286429
E	171m NW	Unspecified Foundry	1894	2232463

ID	Location	Land Use	Date	Group ID
D	176m NE	Boat House	1948	2266606
B	178m SE	Boat House	1948	2146221
E	194m NW	Unspecified Foundry	1913	2283676
E	195m NW	Unspecified Foundry	1913	2191955
E	199m NW	Unspecified Foundry	1913	2191955
E	200m NW	Unspecified Foundry	1894	2273473
E	201m NW	Unspecified Foundry	1938	2241915
B	204m E	Unspecified Wharfs	1938	2269350
B	204m E	Unspecified Wharfs	1938	2269350
B	206m E	Unspecified Wharfs	1933	2293187
B	207m E	Unspecified Wharves	1938	2254514
B	209m E	Unspecified Wharfs	1948	2279495
F	209m N	Railway Station	1913	2203038
F	210m N	Railway Station	1938	2188674
F	210m N	Railway Station	1913	2273601
B	211m E	Unspecified Wharfs	1934	2198068
B	211m E	Unspecified Wharfs	1934	2198068
B	212m E	Unspecified Wharves	1938	2254514
B	212m E	Wharf	1974	2160564
E	213m NW	Unspecified Foundry	1899	2257901
B	214m E	Unspecified Wharf	1968	2217492
B	214m E	Unspecified Wharf	1962	2217492
F	214m N	Railway Station	1934	2287729
F	216m N	Railway Station	1899	2283580
1	216m E	Unspecified Wharf	1962	2157194
F	217m N	Railway Station	1968	2287729
F	217m N	Railway Station	1962	2287729
F	218m NW	Railway Station	1985	2287729

ID	Location	Land Use	Date	Group ID
F	218m N	Railway Station	1938	2287729
F	218m N	Railway Station	1912	2203038
F	218m N	Railway Station	1948	2287729
F	219m N	Railway Station	1895	2205090
E	220m NW	Unspecified Foundry	1933	2227149
F	222m N	Railway Station	1865	2284473
F	222m N	Railway Station	1894	2188522
F	223m NW	Railway Station	1938	2287729
F	224m N	Railway Station	1894	2211670
G	228m NW	Engineering Works	1912	2229952
G	233m NW	Engineering Works	1913	2142085
H	242m E	Garage	1968	2168504
I	243m E	Tannery	1894	2282515
I	244m E	Tannery	1894	2282515
I	245m E	Tannery	1899	2223739
I	246m E	Tannery	1895	2213207
J	252m E	Railway Sidings	1913	2230570
K	258m NE	Power Station	1974	2279293
J	263m NE	Railway Sidings	1938	2264434
J	263m NE	Railway Sidings	1913	2198234
J	264m E	Railway Sidings	1948	2175214
J	265m E	Railway Sidings	1934	2215139
K	268m NE	Sewage Works	1913	2170502
K	269m NE	Sewage Works	1912	2235982
K	269m NE	Sewage Works	1938	2242397
K	269m NE	Sewage Works	1938	2242397
K	270m NE	Sewage Works	1933	2242397
K	270m NE	Sewage Works	1913	2170502

ID	Location	Land Use	Date	Group ID
K	270m NE	Electricity Works	1913	2288193
K	270m NE	Sewage Works	1934	2242397
K	270m NE	Sewage Works	1934	2242397
K	271m NE	Sewage Works	1938	2242397
K	272m NE	Sewage Works	1948	2242397
L	273m NW	Unspecified Foundry	1934	2269454
J	274m E	Railway Sidings	1938	2241422
J	274m E	Railway Sidings	1913	2269599
K	275m NE	Sewage Works	1899	2203772
G	275m NW	Engineering Works	1934	2218852
K	275m NE	Sewage Works	1894	2221028
K	275m NE	Sewage Works	1895	2170350
J	276m NE	Railway Sidings	1933	2232691
G	276m NW	Engineering Works	1938	2218852
G	276m NW	Engineering Works	1913	2276215
L	276m NW	Unspecified Foundry	1948	2208074
K	276m NE	Sewage Works	1894	2223165
G	278m NW	Engineering Works	1913	2276215
G	289m NW	Engineering Works	1933	2217189
3	290m NW	Engineering Works	1948	2142084
M	298m S	Ice House	1894	2142782
M	302m S	Old Ice House	1974	2252445
M	303m S	Old Ice House	1933	2268875
M	303m S	Old Ice House	1899	2260050
M	311m S	Old Ice House	1913	2252445
K	333m NE	Sewage Works	1913	2219647
K	337m NE	Electricity Works	1913	2247028
K	339m NE	Electricity Works	1913	2244273

ID	Location	Land Use	Date	Group ID
K	340m NE	Unspecified Tank	1938	2224381
K	340m NE	Unspecified Tank	1938	2196134
K	340m NE	Unspecified Tank	1912	2191280
K	342m NE	Unspecified Tank	1913	2227140
K	343m NE	Unspecified Tank	1938	2224381
K	343m NE	Unspecified Tank	1913	2181878
K	343m NE	Unspecified Tank	1933	2234995
K	344m NE	Unspecified Tank	1934	2224381
K	345m NE	Unspecified Tank	1948	2224381
K	346m E	Electricity Works	1912	2244273
K	346m NE	Unspecified Tank	1899	2181878
K	349m NE	Unspecified Tank	1894	2255622
K	349m NE	Unspecified Tank	1895	2255622
K	350m NE	Unspecified Tank	1894	2206157
K	353m NE	Filter Beds	1894	2143304
J	353m E	Railway Sidings	1894	2287721
J	364m E	Railway Sidings	1899	2275773
Q	370m SE	Brewery	1938	2282479
Q	370m SE	Brewery	1912	2217109
Q	370m SE	Brewery	1895	2224072
J	370m E	Railway Sidings	1962	2267560
J	376m E	Railway Sidings	1894	2247913
S	378m E	Unspecified Stores	1938	2257909
S	381m E	Unspecified Stores	1938	2178895
S	381m E	Unspecified Stores	1933	2175924
T	385m E	Railway Building	1913	2216883
T	387m E	Railway Building	1913	2225107
T	387m E	Railway Building	1938	2263802

ID	Location	Land Use	Date	Group ID
K	391m NE	Unspecified Tank	1913	2154080
K	392m NE	Unspecified Pit	1912	2178961
K	392m NE	Unspecified Pit	1913	2178961
K	392m NE	Unspecified Heap	1913	2216385
K	392m NE	Unspecified Heap	1948	2178239
K	392m NE	Unspecified Pit	1913	2294729
K	398m NE	Power Station	1968	2208332
K	398m NE	Power Station	1985	2265532
Q	410m SE	Brewery	1894	2265917
U	411m NE	Gas Works	1913	2201551
J	411m E	Railway Sidings	1938	2203278
U	413m E	Unspecified Commercial/Industrial	1938	2219286
J	414m E	Railway Sidings	1968	2193035
K	416m NE	Unspecified Tanks	1938	2181102
Q	417m SE	Brewery	1948	2265917
U	417m E	Gas Works	1912	2283136
K	418m NE	Unspecified Tanks	1948	2181102
K	418m NE	Unspecified Tanks	1938	2263346
J	418m E	Railway Sidings	1912	2241422
K	418m NE	Unspecified Tanks	1938	2222709
U	418m E	Corporation Depot	1933	2191085
K	419m NE	Unspecified Tanks	1933	2222709
U	419m E	Unspecified Commercial/Industrial	1938	2219286
K	420m NE	Unspecified Tanks	1934	2222709
U	421m E	Unspecified Commercial/Industrial	1938	2219286
J	421m E	Unspecified Commercial/Industrial	1974	2240710
U	421m E	Unspecified Works	1968	2159558
U	421m E	Unspecified Commercial/Industrial	1948	2274406

ID	Location	Land Use	Date	Group ID
U	421m E	Unspecified Commercial/Industrial	1962	2274406
U	422m E	Gas Works	1895	2185687
K	422m NE	Unspecified Tanks	1913	2282975
K	423m NE	Unspecified Tanks	1913	2282975
J	423m E	Railway Sidings	1868	2262795
Q	425m SE	Brewery	1938	2265917
Q	425m SE	Brewery	1913	2265917
Q	425m SE	Brewery	1894	2243001
Q	426m SE	Brewery	1899	2198034
K	428m NE	Unspecified Tanks	1912	2259828
K	429m NE	Unspecified Tanks	1913	2259828
J	432m E	Railway Sidings	1895	2287721
U	436m NE	Unspecified Commercial/Industrial	1934	2265722
J	438m E	Railway Sidings	1899	2183377
Q	440m SE	Brewery	1913	2265917
Q	442m SE	Brewery	1938	2198034
U	445m E	Gas Works	1913	2201145
J	445m E	Railway Sidings	1985	2247913
J	447m NE	Unspecified Tank	1938	2288959
U	447m NE	Gas Works	1913	2201145
J	447m E	Railway Sidings	1933	2283298
U	447m NE	Gas Works	1899	2237715
J	448m NE	Unspecified Tank	1933	2225902
J	449m NE	Gasometer	1912	2224370
J	449m NE	Unspecified Tank	1938	2235960
J	449m NE	Unspecified Tank	1913	2192071
J	450m NE	Unspecified Tank	1938	2261128
J	450m NE	Gasometer	1913	2239804

ID	Location	Land Use	Date	Group ID
J	450m NE	Unspecified Tank	1948	2261128
J	450m NE	Gasometer	1913	2224370
J	450m NE	Unspecified Tank	1934	2261128
J	451m E	Railway Sidings	1913	2183377
Q	451m SE	Brewery	1933	2198034
K	454m NE	Chimney	1985	2295303
K	455m NE	Chimney	1974	2295303
Q	456m SE	Brewery	1913	2217109
U	458m NE	Gas Works	1894	2279037
K	458m NE	Chimney	1968	2172899
U	459m NE	Gas Works	1894	2279037
Q	460m SE	Brewery	1934	2216118
U	466m NE	Gas Works	1868	2209418
J	469m E	Railway Building	1894	2195978
J	471m E	Railway Building	1938	2210178
J	471m E	Railway Building	1894	2195978
J	475m E	Railway Building	1912	2208232
J	477m E	Railway Building	1934	2214875
J	478m E	Railway Building	1938	2189406
J	478m E	Railway Building	1913	2278408
J	478m E	Railway Building	1913	2278408
Y	479m NE	Chimney	1985	2269235
J	480m E	Railway Building	1948	2189407
K	482m NE	Unspecified Tanks	1938	2215699
K	487m NE	Unspecified Tanks	1938	2259568
K	489m NE	Unspecified Tanks	1934	2259568
K	489m NE	Unspecified Tank	1938	2154077
K	489m NE	Unspecified Tanks	1948	2259568

ID	Location	Land Use	Date	Group ID
K	490m NE	Unspecified Tanks	1933	2259568
Y	495m NE	Unspecified Ground Workings	1913	2211980
5	498m SE	Police Station	1974	2295159

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**60**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
B	222m E	Unspecified Tank	1994	362164
2	260m NE	Unspecified Tank	1896	362165
I	267m SE	Tanks	1868	406465
I	267m SE	Tanks	1868	406465
I	286m SE	Unspecified Tank	1994	362197
4	297m SW	Tanks or Trough	1865	374623
N	307m NE	Unspecified Tank	1915	408301
N	307m NE	Unspecified Tank	1934	408301
K	309m NE	Tanks	1986	392813
K	311m NE	Tanks	1995	405359
K	311m NE	Tanks	1992	405359
K	311m NE	Tanks	1999	405359
K	311m NE	Tanks	1991	405359
K	311m NE	Tanks	1968	405359
K	311m NE	Tanks	1955	405359
K	311m NE	Tanks	1955	405359
K	311m NE	Tanks	1955	405359

ID	Location	Land Use	Date	Group ID
K	317m NE	Unspecified Tank	1992	387646
K	317m NE	Unspecified Tank	1991	387646
K	317m NE	Unspecified Tank	1986	387646
K	319m NE	Unspecified Tank	1968	387646
K	338m NE	Tanks	1986	402030
K	339m NE	Tanks	1968	382090
K	339m NE	Tanks	1995	382090
K	339m NE	Tanks	1992	382090
K	339m NE	Tanks	1999	382090
K	339m NE	Tanks	1991	382090
K	342m NE	Unspecified Tank	1915	382683
K	344m NE	Unspecified Tank	1932	395082
K	345m NE	Unspecified Tank	1898	401743
K	345m NE	Unspecified Tank	1913	401743
K	350m NE	Unspecified Tank	1896	400357
R	372m SE	Unspecified Tank	1896	362194
R	379m SE	Unspecified Tank	1932	362195
K	421m NE	Tanks	1932	391085
K	429m NE	Tanks	1915	389043
K	430m NE	Tanks	1913	389043
U	434m NE	Gas Works	1915	387558
Q	438m SE	Unspecified Tank	1955	386331
Q	438m SE	Unspecified Tank	1955	386331
Q	438m SE	Unspecified Tank	1955	386331
Q	438m SE	Unspecified Tank	1969	386331
U	446m NE	Gas Works	1898	388684
U	447m NE	Gas Works	1913	387558
X	449m W	Unspecified Tank	1955	389863

ID	Location	Land Use	Date	Group ID
X	449m W	Unspecified Tank	1955	389863
U	449m NE	Gas Works	1868	388750
U	449m NE	Gas Works	1868	388750
X	450m W	Unspecified Tank	1954	389863
J	450m NE	Gasometer	1913	398578
J	450m NE	Unspecified Tank	1932	402646
J	450m NE	Gasometer	1915	398578
J	455m NE	Unspecified Tank	1955	392833
J	455m NE	Unspecified Tank	1955	392833
J	455m NE	Unspecified Tank	1955	392833
U	456m NE	Gas Works	1896	388684
J	459m E	Unspecified Tank	1898	362163
J	462m E	Unspecified Tank	1896	362161
J	469m NE	Tanks	1932	375803
K	489m NE	Tanks	1932	375812

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m **69**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
D	137m NE	Electricity Substation	1986	291866
D	138m NE	Electricity Substation	1995	291866
D	138m NE	Electricity Substation	1992	291866
D	138m NE	Electricity Substation	1999	291866
D	138m NE	Electricity Substation	1991	291866

ID	Location	Land Use	Date	Group ID
K	258m NE	Power Station	1968	267451
K	282m NE	Power Station	1986	283357
K	282m NE	Power Station	1991	267451
I	303m SE	Electricity Substation	1986	280832
I	304m SE	Electricity Substation	1994	280832
I	304m SE	Electricity Substation	1991	280832
O	317m E	Electricity Substation	1986	268212
O	318m E	Electricity Substation	1955	268212
O	318m E	Electricity Substation	1969	268212
O	319m E	Electricity Substation	1955	268212
O	319m E	Electricity Substation	1955	268212
P	331m NW	Electricity Substation	1993	276409
P	331m NW	Electricity Substation	1991	276409
P	332m NW	Electricity Substation	1955	282589
P	332m NW	Electricity Substation	1955	282589
P	332m NW	Electricity Substation	1954	282589
P	332m NW	Electricity Substation	1969	282589
P	333m NW	Electricity Substation	1988	282589
P	333m NW	Electricity Substation	1988	282589
K	349m E	Electricity Works	1913	251202
K	350m E	Corporation Electricity Works	1915	249980
K	353m E	Electric Station	1898	282706
K	356m E	Electric Station	1896	282706
V	432m N	Electricity Substation	1993	278176
V	432m N	Electricity Substation	1991	278176
V	433m N	Electricity Substation	1969	278176
V	433m N	Electricity Substation	1988	278176
U	434m NE	Gas Works	1915	252285

ID	Location	Land Use	Date	Group ID
W	444m NW	Electricity Substation	1993	280589
W	444m NW	Electricity Substation	1991	280589
W	445m NW	Electricity Substation	1955	268817
W	445m NW	Electricity Substation	1955	268817
W	445m NW	Electricity Substation	1954	268817
W	445m NW	Electricity Substation	1969	268817
U	446m NE	Gas Works	1898	292132
W	447m NW	Electricity Substation	1988	268817
W	447m NW	Electricity Substation	1988	268817
U	447m NE	Gas Works	1913	253398
U	449m NE	Gas Works	1868	275922
U	449m NE	Gas Works	1868	275922
J	450m NE	Gasometer	1913	286555
J	450m NE	Gasometer	1915	286555
U	456m NE	Gas Works	1896	292132
J	464m E	Electricity Substation	1997	268552
J	464m E	Electricity Substation	1997	268552
J	464m E	Electricity Substation	1995	268552
J	464m E	Electricity Substation	1992	268552
J	464m E	Electricity Substation	1999	268552
J	465m E	Electricity Substation	1991	268552
J	467m E	Electricity Substation	1973	266152
J	468m E	Electricity Substation	1997	277234
J	468m E	Electricity Substation	1997	277234
J	468m E	Electricity Substation	1995	277234
J	468m E	Electricity Substation	1992	277234
J	468m E	Electricity Substation	1999	277234
J	468m E	Electricity Substation	1991	277234

ID	Location	Land Use	Date	Group ID
J	470m E	Electricity Substation	1987	254875
J	478m E	Electricity Substation	1955	265701
J	478m E	Electricity Substation	1955	265701
J	478m E	Electricity Substation	1987	268586
J	478m E	Electricity Substation	1954	268586
J	478m E	Electricity Substation	1973	268586
J	484m E	Electricity Substation	1954	289740
J	484m E	Electricity Substation	1955	289740

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	**9**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

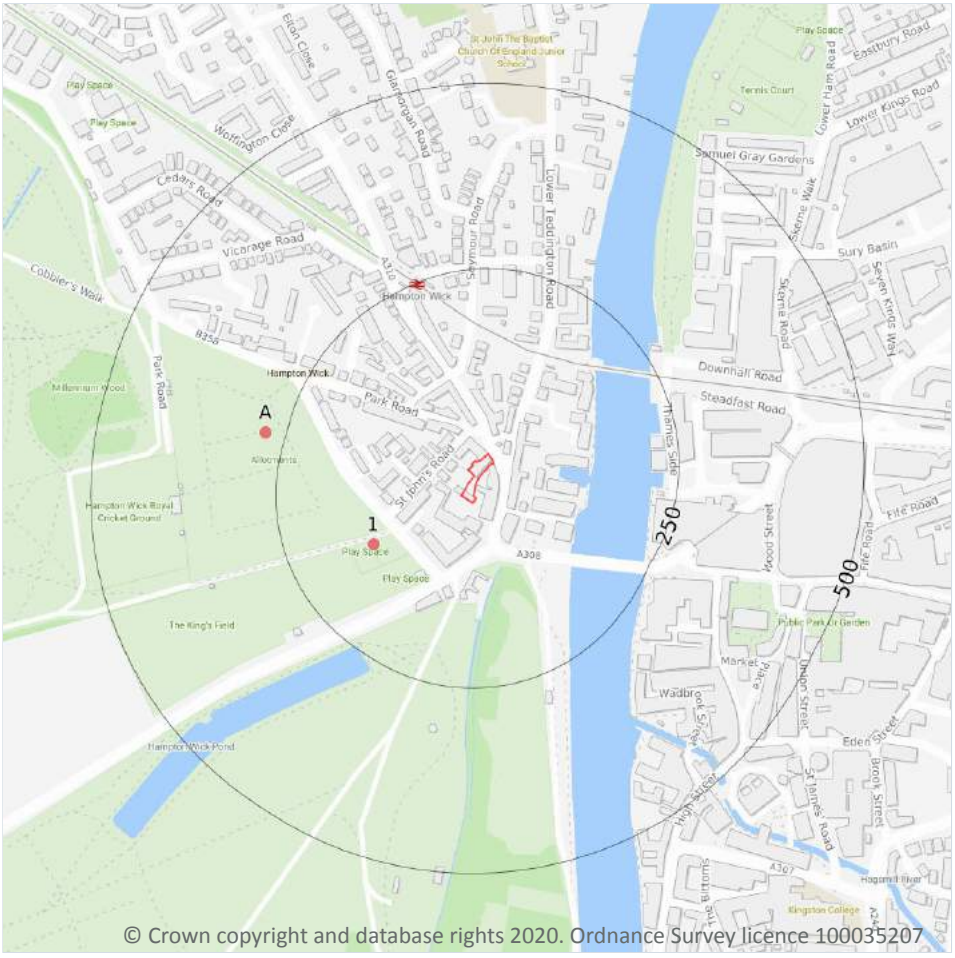
Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
C	89m N	Garage	1955	81346
C	89m N	Garage	1955	81346
C	89m N	Garage	1968	81346
C	89m N	Garage	1955	81346
H	241m E	Garage	1968	81466

ID	Location	Land Use	Date	Group ID
H	241m E	Garage	1955	81466
H	262m E	Garage	1986	79213
H	264m E	Garage	1955	84349
H	264m E	Garage	1955	84349

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	4

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

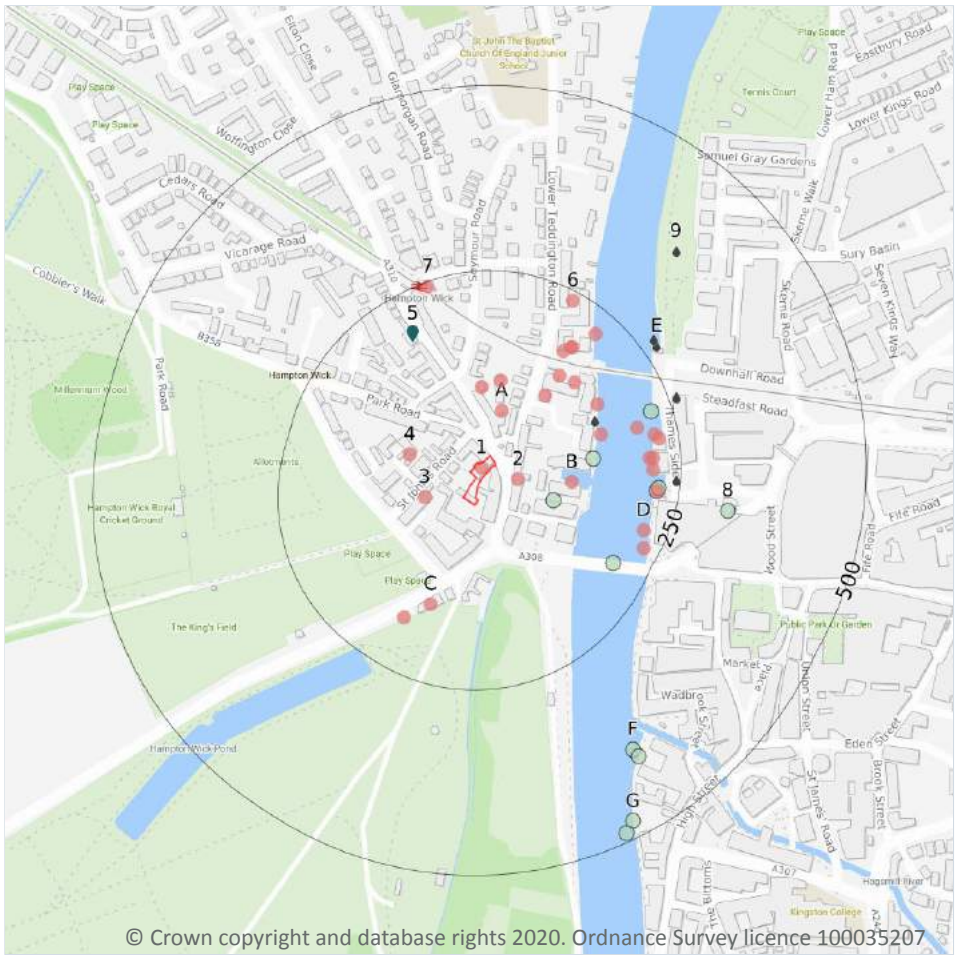
Features are displayed on the Waste and landfill map on **page 40**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	137m SW	Hampton Court Palace Golf Club Homepark KT1 4AL	EPR/CE5889PD/A001	Disposing of waste exemption	Non-Agricultural Waste Only	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
A	278m W	-	WEX199586	Treating waste exemption	Not on a farm	Aerobic composting and associated prior treatment
A	278m W	-	WEX199586	Using waste exemption	Not on a farm	Use of mulch
A	278m W	-	WEX199586	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m	30

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 43**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Show Print**	**29, High Street, Hampton Wick, Kingston upon Thames, Greater London, KT1 4DA**	**Published Goods**	**Industrial Products**
2	35m SE	CoPak Packaging Consultancy Ltd	12, High Street, Hampton Wick, Kingston upon Thames, Greater London, KT1 4DB	Cosmetics, Toiletries and Perfumes	Consumer Products

ID	Location	Company	Address	Activity	Category
3	52m W	Mission Entertainment Group Ltd	Fairlight Mews 15, St. Johns Road, Hampton Wick, Kingston upon Thames, Greater London, KT1 4AN	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
A	63m N	Works	Greater London, KT1	Unspecified Works Or Factories	Industrial Features
4	86m W	Works	Greater London, KT1	Unspecified Works Or Factories	Industrial Features
A	94m N	Daabon UK Ltd	Navigator House 60 High Street, Hampton Wick, Kingston upon Thames, Greater London, KT1 4DB	Agricultural Machinery and Goods	Industrial Products
A	103m N	Teetotal Ltd	Unit 3 60, High Street, Hampton Wick, Greater London, KT1 4DB	Clothing, Components and Accessories	Consumer Products
B	105m E	Wharf	Greater London, KT1	Moorings and Unloading Facilities	Water
B	110m NE	Chartersphere	1 Becketts Place, Hampton Wick, Kingston upon Thames, Greater London, KT1 4EQ	Aircraft Charters	Contract Services
B	142m NE	Burgoine Quay	Greater London, KT1	Moorings and Unloading Facilities	Water
C	147m SW	Safetycare	11, Hampton Court Road, Kingston upon Thames, Greater London, KT1 4AE	Special Purpose Machinery and Equipment	Industrial Products
B	149m E	Wharf	Greater London, KT1	Moorings and Unloading Facilities	Water
B	152m NE	Electricity Sub Station	Greater London, KT1	Electrical Features	Infrastructure and Facilities
B	159m NE	Wharf	Greater London, KT1	Moorings and Unloading Facilities	Water
B	173m NE	Air Shaft	Greater London, KT1	Unspecified Quarries Or Mines	Extractive Industries
C	179m SW	Electricity Sub Station	Greater London, KT1	Electrical Features	Infrastructure and Facilities
B	183m NE	Vikingston	8a, Lower Teddington Road, Kingston upon Thames, Greater London, KT1 4ER	Vehicle Hire and Rental	Hire Services
B	184m NE	Burgoine Quay	Greater London, KT1	Moorings and Unloading Facilities	Water
B	198m E	Landing Stage	Greater London, KT1	Moorings and Unloading Facilities	Water

ID	Location	Company	Address	Activity	Category
B	208m E	Kingston Turks Pier	Greater London, KT1	Ferries and Ferry Terminals	Water
B	213m E	Kingston Turks Pier	Greater London, KT1	Ferries and Ferry Terminals	Water
B	213m E	Kingston Turks Pier	Greater London, KT1	Ferries and Ferry Terminals	Water
D	218m SE	Buckland's Wharf	Greater London, KT1	Moorings and Unloading Facilities	Water
B	218m NE	Burgoine Quay	Greater London, KT1	Moorings and Unloading Facilities	Water
B	219m E	Slipway	Greater London, KT1	Moorings and Unloading Facilities	Water
B	220m E	Pumping Station	Greater London, KT1	Water Pumping Stations	Industrial Features
B	224m E	Kingston Turks Pier	Thames Side, Kingston, Greater London, KT1	Ferries and Ferry Terminals	Water
D	228m SE	Bridge Wharf	Greater London, KT1	Moorings and Unloading Facilities	Water
6	238m NE	Burgoine Quay	Greater London, KT1	Moorings and Unloading Facilities	Water
7	244m N	Hampton Wick Rail Station	Greater London, KT1	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	1

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 43**

ID	Location	Address	Details	
5	195m NW	Wick Dy Cleaners, 68 High Street, Hampton Wick, KT1 4DQ	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	9

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 43**

ID	Location	Address	Details	
B	145m E	SPINNAKER COURT BECKETTS PLACE, BEC, SPINNAKER COURT BECKETTS PLACE , BECKETTS WHARF LOWER TEDDINGTON, ROAD, HAM	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTWC.3300 Permit Version: 1 Receiving Water: RIVER THAMES	Status: REVOKED - UNSPECIFIED Issue date: 08/06/1989 Effective Date: 08/06/1989 Revocation Date: 25/04/1991
B	243m E	SWS, BUCKLANDS WHARF, KINGSTON UPON, SWS BUCKLANDS WHARF KINGSTON U, PON THAMES SURREY	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTCR.1940 Permit Version: 1 Receiving Water: THAMES	Status: REVOKED - UNSPECIFIED Issue date: 20/12/1982 Effective Date: 20/12/1982 Revocation Date: 30/06/1991
B	259m E	Kingston Main	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1273 Permit Version: 1 Receiving Water: THAMES	Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02/11/1989 Revocation Date: 02/09/2010
B	259m E	Kingston Main	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: TEMP.1273 Permit Version: 2 Receiving Water: Thames	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: -
B	259m E	Down Hall Road, Kingston, Down Hall Road, Kingston	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2554 Permit Version: 1 Receiving Water: THAMES	Status: TEMPORARY CONSENTS (WATER ACT 1989, SECTION 113) Issue date: 02/11/1989 Effective Date: 02/11/1989 Revocation Date: 02/09/2010

ID	Location	Address	Details	
B	259m E	Down Hall Road, Kingston, Down Hall Road, Kingston	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: TEMP.2554 Permit Version: 2 Receiving Water: Thames	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 13/10/2015
E	268m NE	FORMER KINGSTON POWER STATION, HENRY MACAULEY AVENUE, KINGSTON UPON THAMES, SURREY, KT2 5UT	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: EPRUP3728GE Permit Version: 1 Receiving Water: RIVER THAMES	Status: NEW ISSUED UNDER EPR 2010 Issue date: 06/06/2012 Effective Date: 06/06/2012 Revocation Date: -
E	270m NE	SWS, DOWN HALL ROAD, KINGSTON UPON, SWS DOWN HALL ROAD KINGSTON UP, ON THAMES SURREY	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTCR.1939 Permit Version: 1 Receiving Water: THAMES	Status: REVOKED - UNSPECIFIED Issue date: 20/12/1982 Effective Date: 20/12/1982 Revocation Date: 30/06/1991
9	372m NE	KINGSTON GENERATING STATION, DOWNHA, KINGSTON GENERATING STATION DOW, NHALL ROAD KINGSTON SURREY	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTCP.0444 Permit Version: 1 Receiving Water: THAMES	Status: REVOKED - UNSPECIFIED Issue date: 16/11/1964 Effective Date: 18/09/1973 Revocation Date: 12/10/1990

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	11

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 43**

ID	Location	Details	
B	90m SE	Incident Date: 24/09/2001 Incident Identification: 32523 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	132m E	Incident Date: 10/03/2003 Incident Identification: 142245 Pollutant: Sewage Materials Pollutant Description: Final Effluent	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
D	200m SE	Incident Date: 04/06/2003 Incident Identification: 163305 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	220m E	Incident Date: 14/05/2003 Incident Identification: 158369 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
B	221m E	Incident Date: 21/05/2003 Incident Identification: 159835 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	222m E	Incident Date: 12/11/2001 Incident Identification: 42420 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	318m E	Incident Date: 20/07/2001 Incident Identification: 17730 Pollutant: Oils and Fuel Pollutant Description: Insulating and Cable Oils	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
F	392m SE	Incident Date: 07/09/2003 Incident Identification: 188116 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
F	404m SE	Incident Date: 23/11/2001 Incident Identification: 44658 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	477m SE	Incident Date: 11/06/2002 Incident Identification: 84163 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	487m SE	Incident Date: 26/08/2003 Incident Identification: 185100 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

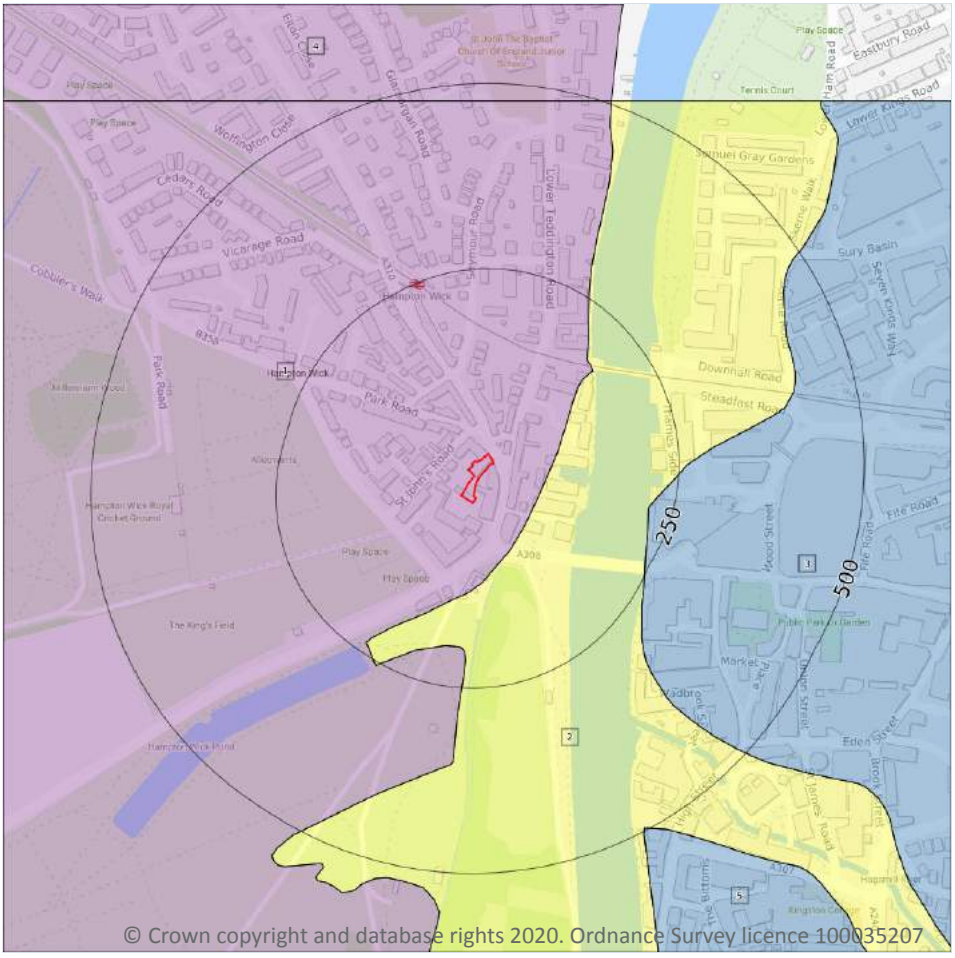
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

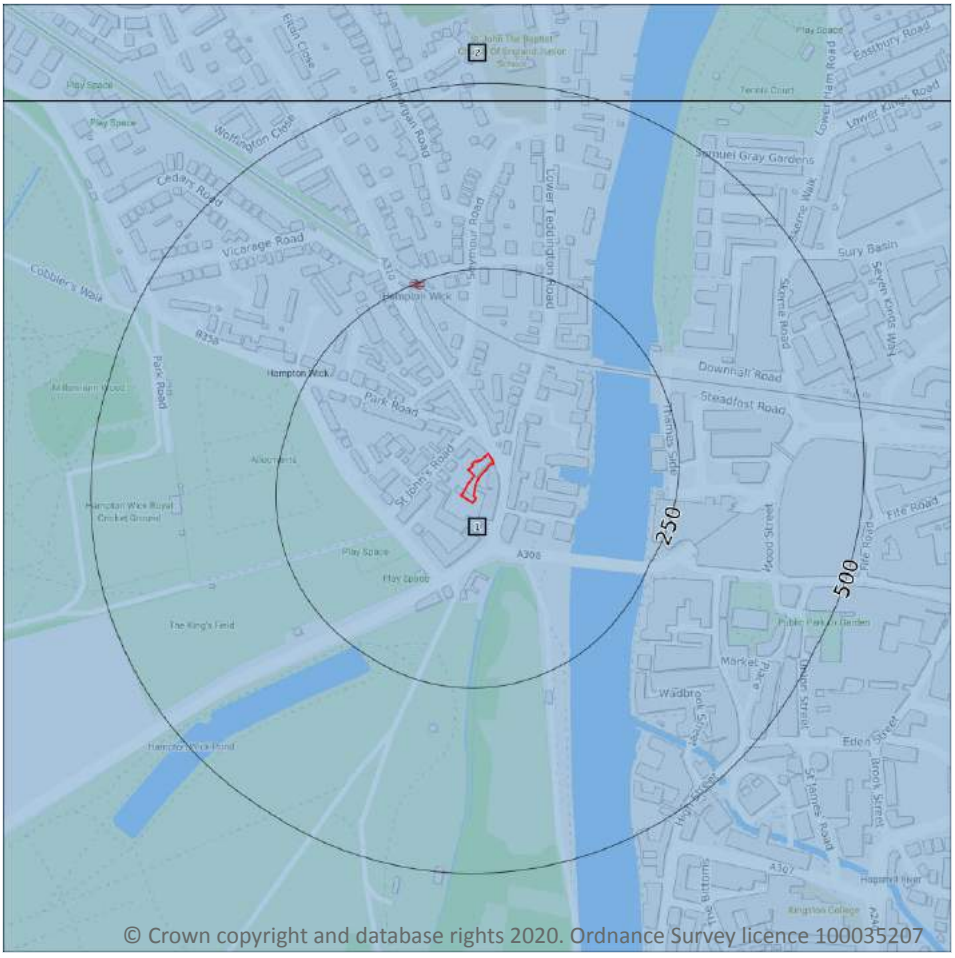
Features are displayed on the Hydrogeology map on **page 53**

ID	Location	Designation	Description
1	**On site**	**Principal**	**Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers**
2	73m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	217m E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	476m N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
5	497m SE	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m **2**

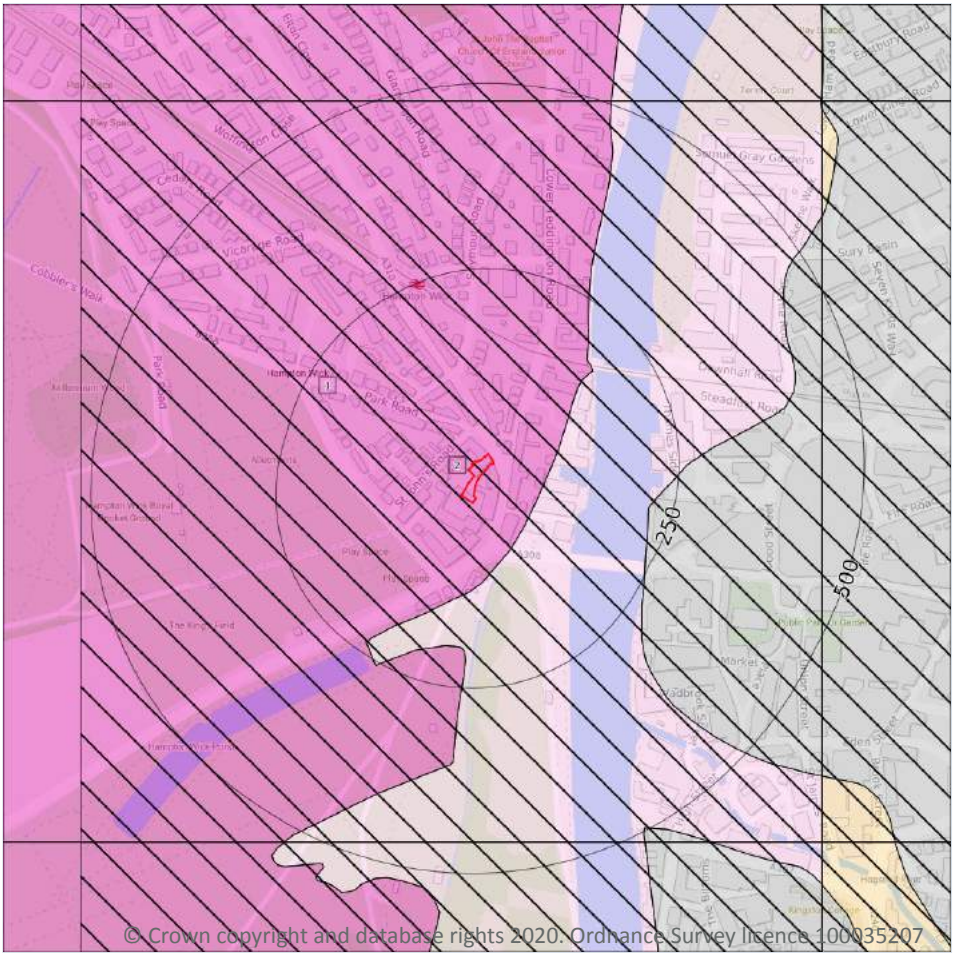
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 55**

ID	Location	Designation	Description
1	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
2	476m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 56**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	**Summary Classification: Principal superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: Medium Aquifer type: Principal Thickness: 3-10m Patchiness value: >90% Recharge potential: Medium**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site	**1**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

ID	Summary	Additional information
2	**Highly vulnerable Principal superficial aquifer present in river terrace gravels**	**Principal superficial aquifer in river terrace gravels with only a thin cover of low permeability silts and/or alluvium (shown as unproductive)**

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	11

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 58**

ID	Location	Details	
-	1811m N	Status: Historical Licence No: 28/39/34/0007 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: LENSBURY LIMITED Easting: 517024 Northing: 171257	Annual Volume (m^3): 7000 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 28/11/1986 Expiry Date: - Issue No: 104 Version Start Date: 29/02/2016 Version End Date: -
-	1811m N	Status: Active Licence No: 28/39/34/0007 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: LENSBURY LIMITED Easting: 517024 Northing: 171257	Annual Volume (m^3): 12,000 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 28/11/1986 Expiry Date: - Issue No: 105 Version Start Date: 15/02/2019 Version End Date: -
-	1811m N	Status: Active Licence No: 28/39/34/0007 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: LENSBURY LIMITED Easting: 517024 Northing: 171257	Annual Volume (m^3): 12,000 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 28/11/1986 Expiry Date: - Issue No: 105 Version Start Date: 15/02/2019 Version End Date: -
-	1815m N	Status: Historical Licence No: 28/39/34/0007 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: LENSBURY LIMITED Easting: 517020 Northing: 171260	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 28/11/1986 Expiry Date: - Issue No: 101 Version Start Date: 22/12/2000 Version End Date: -
-	1815m N	Status: Historical Licence No: 28/39/34/0007 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: LENSBURY LIMITED Easting: 517020 Northing: 171260	Annual Volume (m^3): 7000 Max Daily Volume (m^3): 100 Original Application No: - Original Start Date: 28/11/1986 Expiry Date: - Issue No: 102 Version Start Date: 23/11/2001 Version End Date: -

ID	Location	Details	
-	1848m S	Status: Active Licence No: 28/39/31/0125 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: HAMPTON COURT PALACE GOLF CLUB-BOREHOLE Data Type: Point Name: Crown Golf Operations Limited Easting: 517092 Northing: 167662	Annual Volume (m^3): 11,000 Max Daily Volume (m^3): 159.20 Original Application No: - Original Start Date: 12/10/1970 Expiry Date: - Issue No: 104 Version Start Date: 13/04/2016 Version End Date: -
-	1850m S	Status: Historical Licence No: 28/39/31/0125 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: HAMPTON COURT PALACE GOLF CLUB-BOREHOLE Data Type: Point Name: BENNELONG GOLF PARTNERS SUBSIDIARY LIMITED Easting: 517090 Northing: 167660	Annual Volume (m^3): 15911 Max Daily Volume (m^3): 159.2 Original Application No: - Original Start Date: 12/10/1970 Expiry Date: - Issue No: 103 Version Start Date: 21/01/2005 Version End Date: -
-	1850m S	Status: Historical Licence No: 28/39/31/0125 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: HAMPTON COURT PALACE GOLF CLUB-BOREHOLE Data Type: Point Name: BENNELONG GOLF PARTNERS SUBSIDIARY LIMITED Easting: 517090 Northing: 167660	Annual Volume (m^3): 15911 Max Daily Volume (m^3): 159.2 Original Application No: - Original Start Date: 12/10/1970 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2012 Version End Date: -
-	1924m NW	Status: Active Licence No: 28/39/34/0010 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: THE CATHOLIC EDUCATION SERVICE Easting: 516680 Northing: 171240	Annual Volume (m^3): 3,000 Max Daily Volume (m^3): 45.45 Original Application No: - Original Start Date: 22/12/2000 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -

ID	Location	Details	
-	1924m NW	Status: Active Licence No: 28/39/34/0010 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT LENSBURY CLUB, TEDDINGTON Data Type: Point Name: THE CATHOLIC EDUCATION SERVICE Easting: 516680 Northing: 171240	Annual Volume (m^3): 3,000 Max Daily Volume (m^3): 45.45 Original Application No: - Original Start Date: 22/12/2000 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2008 Version End Date: -
-	1931m S	Status: Historical Licence No: 28/39/31/0125 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: TUBEWELL 'O' AT HOME PARK GOLF CLUB, HAMPTON WICK Data Type: Point Name: AMERICAN GOLF (UK) LTD Easting: 517000 Northing: 167600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 12/10/1970 Expiry Date: - Issue No: 101 Version Start Date: 01/09/2001 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**4**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 58**

ID	Location	Details	
A	246m NE	Status: Historical Licence No: TH/039/0033/002 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT FORMER KINGSTON POWER STATION Data Type: Point Name: NHP Leisure Development Limited Easting: 517752 Northing: 169665	Annual Volume (m^3): 4,800,000 Max Daily Volume (m^3): 13200 Original Application No: - Original Start Date: 06/06/2012 Expiry Date: 31/3/2036 Issue No: 2 Version Start Date: 05/10/2012 Version End Date: -

ID	Location	Details	
A	246m NE	Status: Active Licence No: TH/039/0033/002 Details: Heat Pump Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT FORMER KINGSTON POWER STATION Data Type: Point Name: Kingston Heights Energy Management Company Limited Easting: 517752 Northing: 169665	Annual Volume (m^3): 4,800,000 Max Daily Volume (m^3): 13,200 Original Application No: - Original Start Date: 06/06/2012 Expiry Date: 31/03/2036 Issue No: 3 Version Start Date: 05/05/2015 Version End Date: -
-	1971m S	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 SURBITON INTAKE T26 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 517300 Northing: 167500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1971m S	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 SURBITON INTAKE T26 Data Type: Point Name: Thames Water Utilities Ltd Easting: 517300 Northing: 167500	Annual Volume (m^3): 665,388,000 Max Daily Volume (m^3): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	**2**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 58**

ID	Location	Details	
-	1971m S	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 SURBITON INTAKE T26 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 517300 Northing: 167500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1971m S	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 SURBITON INTAKE T26 Data Type: Point Name: Thames Water Utilities Ltd Easting: 517300 Northing: 167500	Annual Volume (m^3): 665,388,000 Max Daily Volume (m^3): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	**0**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

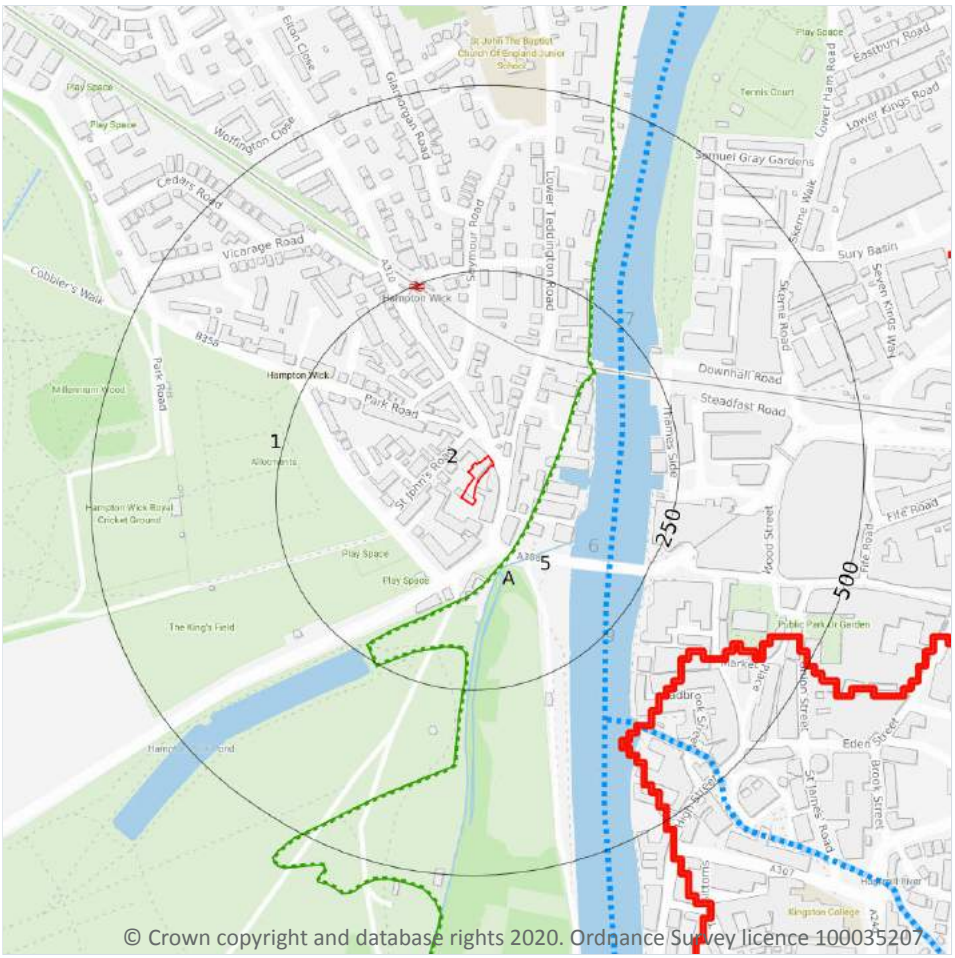
5.10 Source Protection Zones (confined aquifer)

Records within 500m	**0**

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m	9

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 64**

ID	Location	Type of water feature	Ground level	Permanence	Name
5	93m SE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	93m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	97m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	97m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	142m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	157m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Thames
A	158m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	161m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	167m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Thames

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**6**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 64**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 64**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
2	**On site**	**River WB catchment**	**Thames (Egham to Teddington)**	**GB106039023232**	**Lower Thames**	**Maidenhead and Sunbury**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 64**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
10	168m E	River	Thames (Egham to Teddington)	GB106039023232	Poor	Good	Poor	2016

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1

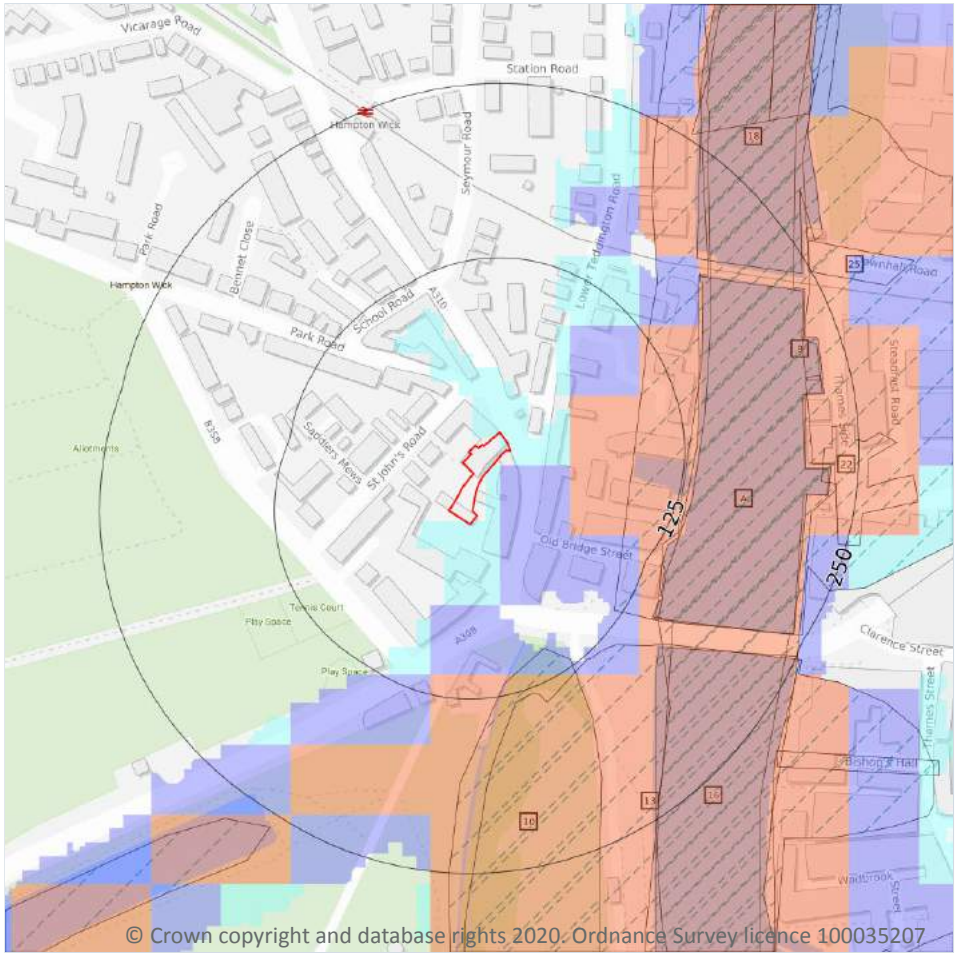
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 64**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	**On site**	**Lower Thames Gravels**	**GB40603G000300**	**Good**	**Good**	**Good**	**2015**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

Environment Agency river and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m	**5**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 68**

Distance	RoFRaS flood risk
On site	**Low**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	**10**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

Features are displayed on the River and coastal flooding map on **page 68**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
8	88m E	06marchspring1947	1947-01-01 1947-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
10	103m SE	Ea06winter13-14	2013-11-23 2014-02-28	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	127m E	Ea06winter13-14	2013-11-23 2014-02-28	Main river	Channel capacity exceeded (no raised defences)	Fluvial
13	128m SE	06marchspring1947	1947-01-01 1947-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	128m SE	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
A	134m E	06decemberwinter2000	2000-01-01 2000-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
16	161m SE	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
18	188m NE	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
22	224m E	06septemberautumn1968	1968-01-01 1968-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
25	248m NE	06septemberautumn1968	1968-01-01 1968-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on **page 68**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

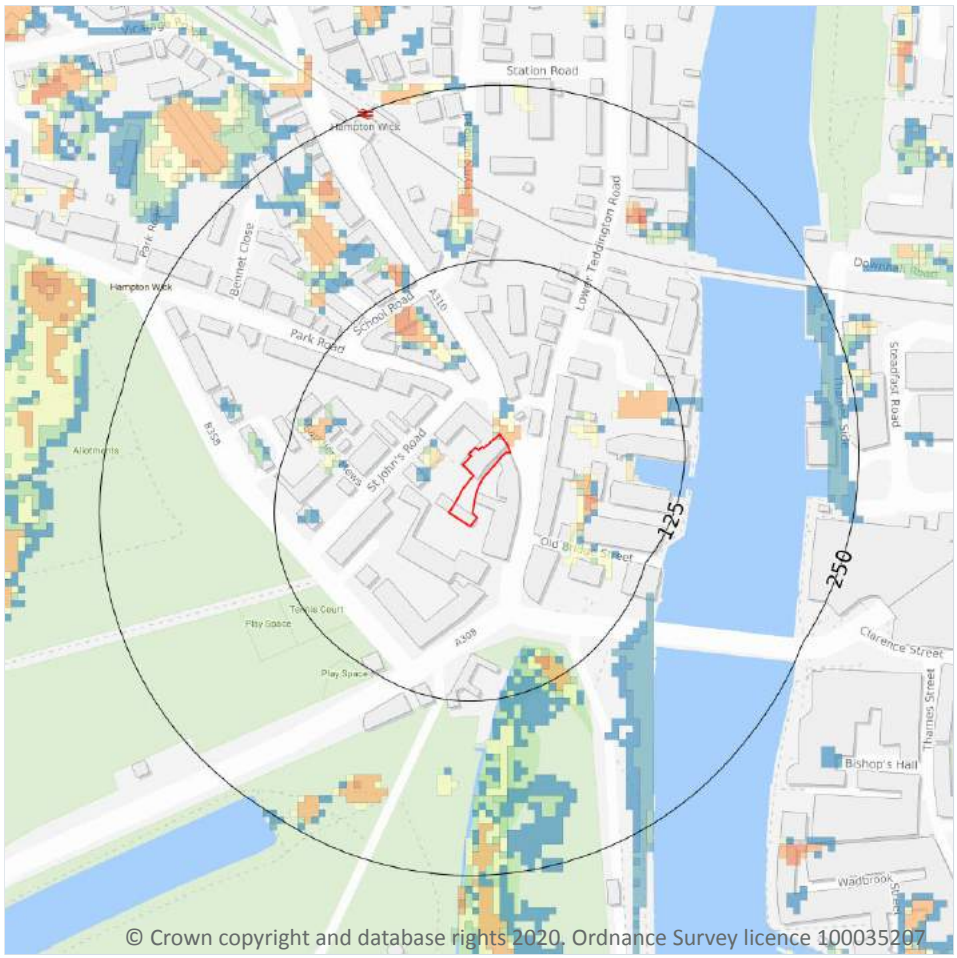
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 68**

Location	Type
46m SE	Zone 3 - (Fluvial Models)

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.1m - 0.3m**
Highest risk within 50m	**1 in 30 year, 0.1m - 0.3m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 73**

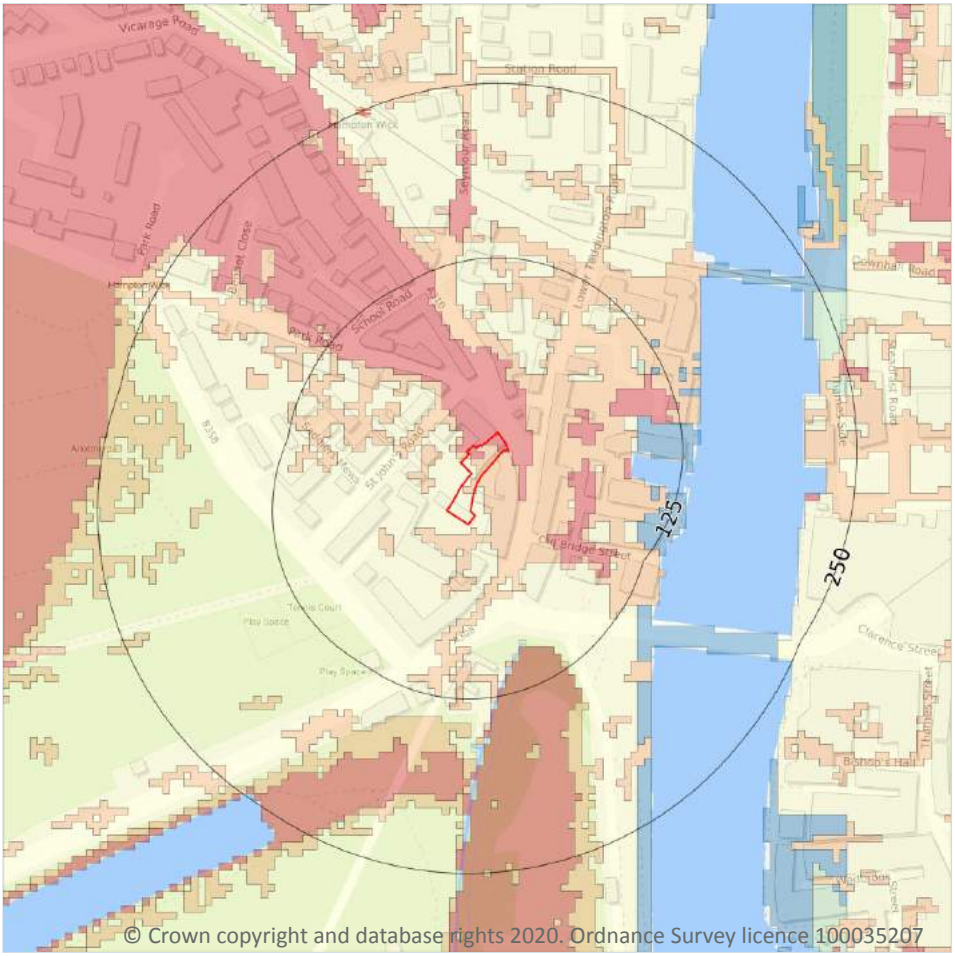
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Between 0.1m and 0.3m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

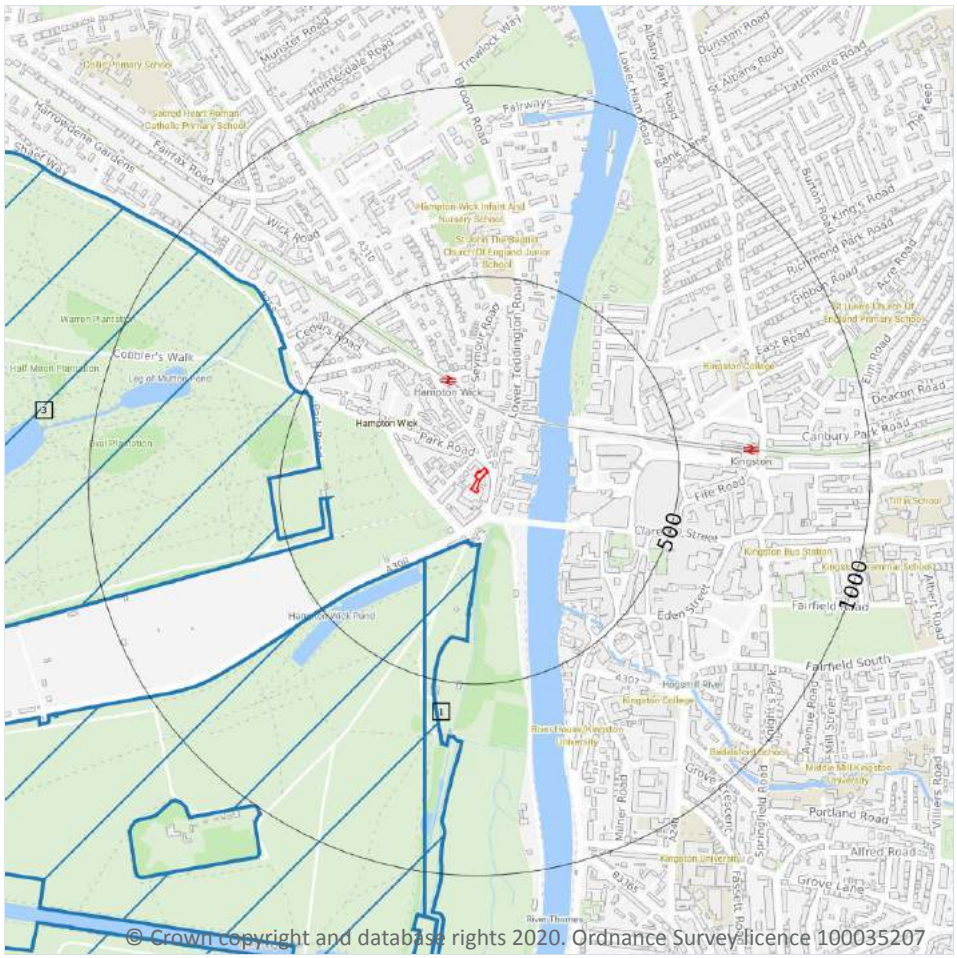
Highest risk on site	**High**
Highest risk within 50m	**High**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 75**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	5

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on **page 76**

ID	Location	Name	Data source
1	126m S	Bushy Park and Home Park	Natural England

ID	Location	Name	Data source
2	219m SW	Bushy Park and Home Park	Natural England
3	377m W	Bushy Park and Home Park	Natural England
-	1651m W	Bushy Park and Home Park	Natural England
-	1908m NE	Richmond Park	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	**0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	**1**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

Features are displayed on the Environmental designations map on **page 76**

ID	Location	Name	Features of interest	Habitat description	Data source
-	1908m NE	Richmond Park	Stag beetle.	Dry grassland, Steppes; Broad-leaved deciduous woodland; Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	1

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

Features are displayed on the Environmental designations map on **page 76**

ID	Location	Name	Data source
-	1908m NE	Richmond Park	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

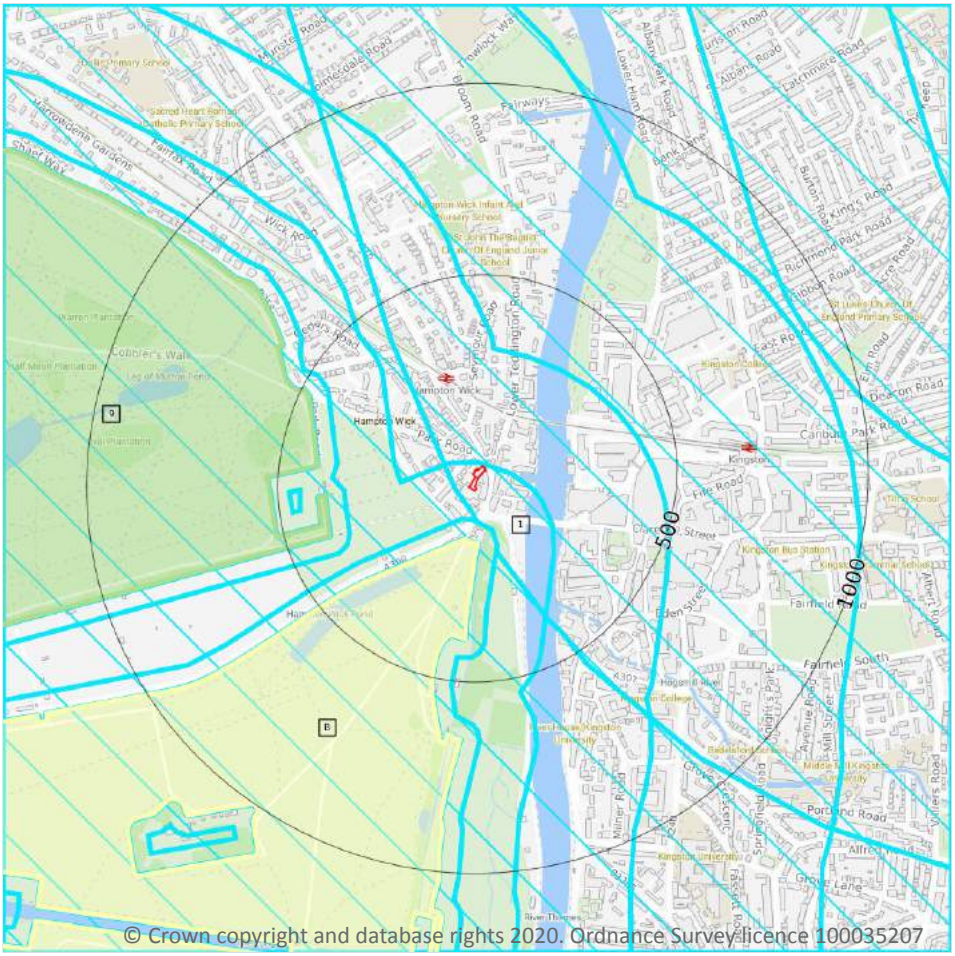
Records within 2000m	1

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
382m SE	Hogsmill NVZ	Surface Water	S450	Existing

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

Not recorded

Favourable

Unfavourable - Recovering

Unfavourable - No change

Unfavourable - Declining

Partially destroyed

Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 82**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons/manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location) Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**7**

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 82**

ID: B
Location: 126m S
SSSI name: Bushy Park and Home Park
Unit name: Home Park North
Broad habitat: Acid Grassland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U1b,c,d,f)	Favourable	16/06/2014
Population of veteran trees	Unfavourable - Recovering	16/06/2014

ID: 9
Location: 377m W
SSSI name: Bushy Park and Home Park
Unit name: East Bushy Park
Broad habitat: Acid Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U1b,c,d,f)	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

ID: 16
Location: 1307m S
SSSI name: Bushy Park and Home Park
Unit name: Hampton Court Golf Course
Broad habitat: Acid Grassland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U1b,c,d,f)	Favourable	16/06/2014
Population of veteran trees	Unfavourable - Recovering	16/06/2014

ID: -
Location: 1651m W
SSSI name: Bushy Park and Home Park
Unit name: Woodland Gardens & Court Field
Broad habitat: Acid Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014

Feature name	Feature condition	Date of assessment
Population of veteran trees	Favourable	28/03/2017

ID: -
Location: 1780m W
SSSI name: Bushy Park and Home Park
Unit name: N.p.l Woodland
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	28/02/2014
Population of veteran trees	Unfavourable - Recovering	28/02/2014

ID: -
Location: 1898m W
SSSI name: Bushy Park and Home Park
Unit name: North Bushy Park
Broad habitat: Acid Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

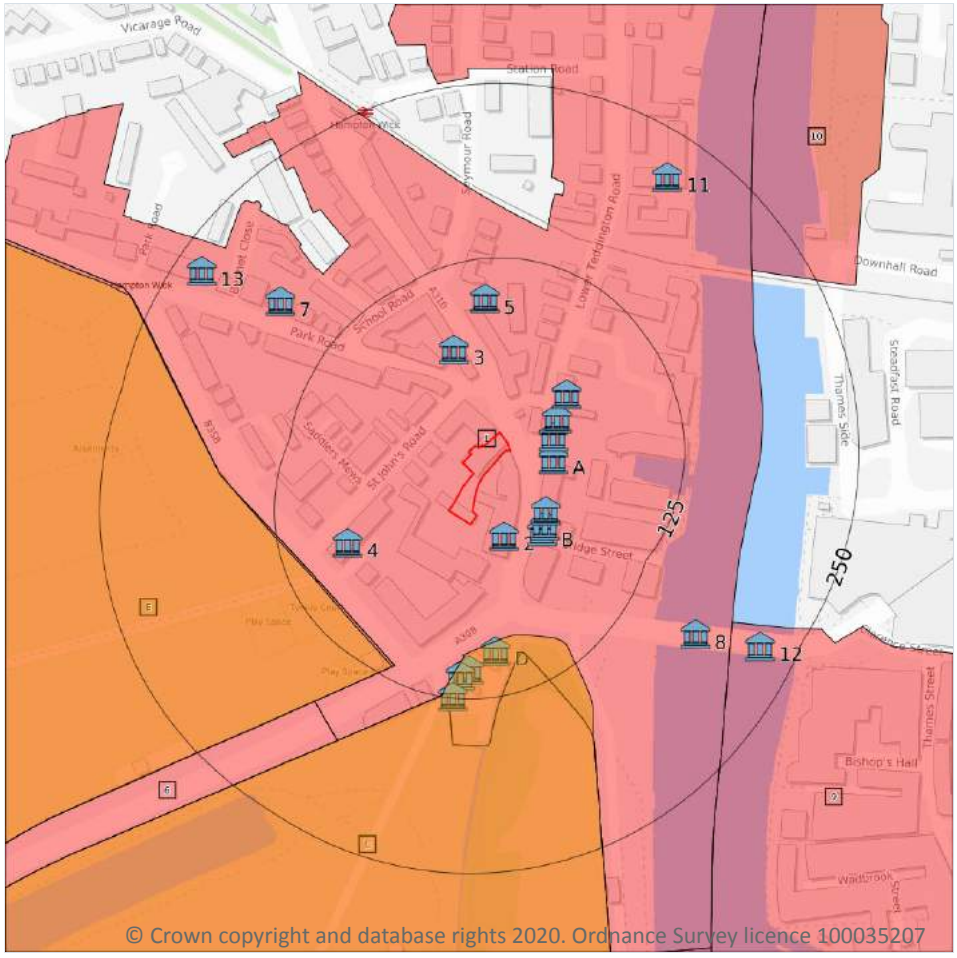
ID: -
Location: 1908m NE
SSSI name: Richmond Park
Unit name: King Clump To Ham Cross
Broad habitat: Acid Grassland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A211 heartwood decay	Favourable	27/10/2010

Feature name	Feature condition	Date of assessment
Invert. assemblage A212 bark and sapwood decay	Favourable	27/10/2010
Invert. assemblage A213 fungal fruiting body	Favourable	27/10/2010
Lowland dry acid grassland (U1b,c,d,f)	Unfavourable - Recovering	27/10/2010
Lowland dry acid grassland (U4/20)	Unfavourable - Recovering	27/10/2010
S1083 Stag beetle, Lucanus cervus	Favourable	27/10/2010

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	20

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 87**

ID	Location	Name	Grade	Reference Number	Listed date
2	24m SE	9, High Street, Richmond Upon Thames, London, KT1	II	1357704	25/06/1983
A	32m E	16, High Street, Richmond Upon Thames, London, KT1	II	1065424	16/04/1971
A	32m E	River Cottage, Richmond Upon Thames, London, KT1	II	1285694	14/01/1974
A	40m NE	4, Lower Teddington Road, Richmond Upon Thames, London, KT1	II	1065385	25/06/1983
B	48m E	2, High Street, Richmond Upon Thames, London, KT1	II	1065421	25/06/1983

ID	Location	Name	Grade	Reference Number	Listed date
B	49m E	4, High Street, Richmond Upon Thames, London, KT1	II	1065422	25/06/1983
B	50m E	6 And 8, High Street, Richmond Upon Thames, London, KT1	II	1065423	25/06/1983
A	55m NE	6, Lower Teddington Road, Richmond Upon Thames, London, KT1	II	1357724	25/06/1983
3	68m NW	Former Hampton Wick Local Board Offices And Udc Office, Richmond Upon Thames, London, KT1	II	1412912	22/02/2013
4	76m W	Church Of St John, Richmond Upon Thames, London, KT1	II	1080843	25/06/1983
D	93m S	Hampton Wick War Memorial, Richmond Upon Thames, London, KT1	II	1430664	19/11/2015
5	96m N	60, High Street, Richmond Upon Thames, London, KT1	II	1065425	25/06/1983
D	104m S	The Gatehouse, Richmond Upon Thames, London, KT1	II	1193021	06/01/1977
D	109m S	Home Park House, Richmond Upon Thames, London, KT1	II	1080803	06/01/1977
D	124m S	Lodge To Hampton Court Park, Richmond Upon Thames, London, KT1	II	1358102	25/06/1983
7	173m NW	24-30, Park Road, Richmond Upon Thames, London, KT1	II	1065365	25/06/1983
8	178m SE	Kingston Bridge, Richmond Upon Thames, London, KT1	II*	1065378	02/09/1952
11	219m NE	Riverside, Richmond Upon Thames, London, KT1	II	1194424	25/06/1983
12	223m SE	Kingston Bridge, Kingston Upon Thames, London, KT1	II*	1300232	30/07/1951
13	231m NW	40, Park Road, Richmond Upon Thames, London, KT1	II	1180634	25/06/1983

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	**6**

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

Features are displayed on the Visual and cultural designations map on **page 87**

ID	Location	Name	District	Date of designation
1	**On site**	**Hampton Wick**	**Richmond upon Thames**	**11/11/1969**
C	98m S	Hampton Court Park	Richmond upon Thames	29/01/1991
E	103m SW	Bushy Park	Richmond upon Thames	29/01/1991
6	167m SW	Hampton Court Green	Richmond upon Thames	14/01/1969
9	198m SE	Kingston Old Town	Kingston upon Thames	04/03/1971
10	214m NE	Riverside North	Kingston upon Thames	16/11/2004

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	**0**

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m	**2**

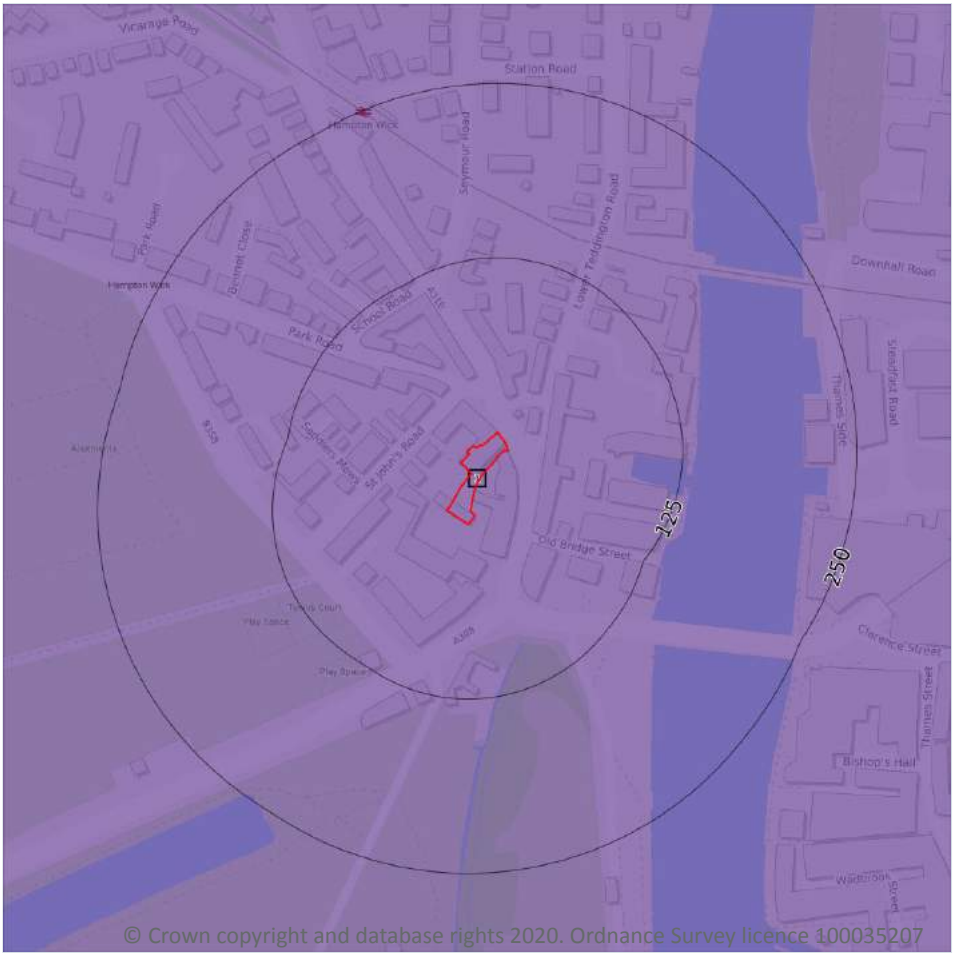
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

Features are displayed on the Visual and cultural designations map on **page 87**

ID	Location	Name	Grade
C	85m S	Hampton Court	I
E	105m SW	Bushy Park	I

This data is sourced from English Heritage, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 91**

ID	Location	Classification	Description
1	**On site**	**Urban**	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	**5**

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 93**

ID	Location	Main Habitat	Other habitats
1	98m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	154m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	160m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	212m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
A	221m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

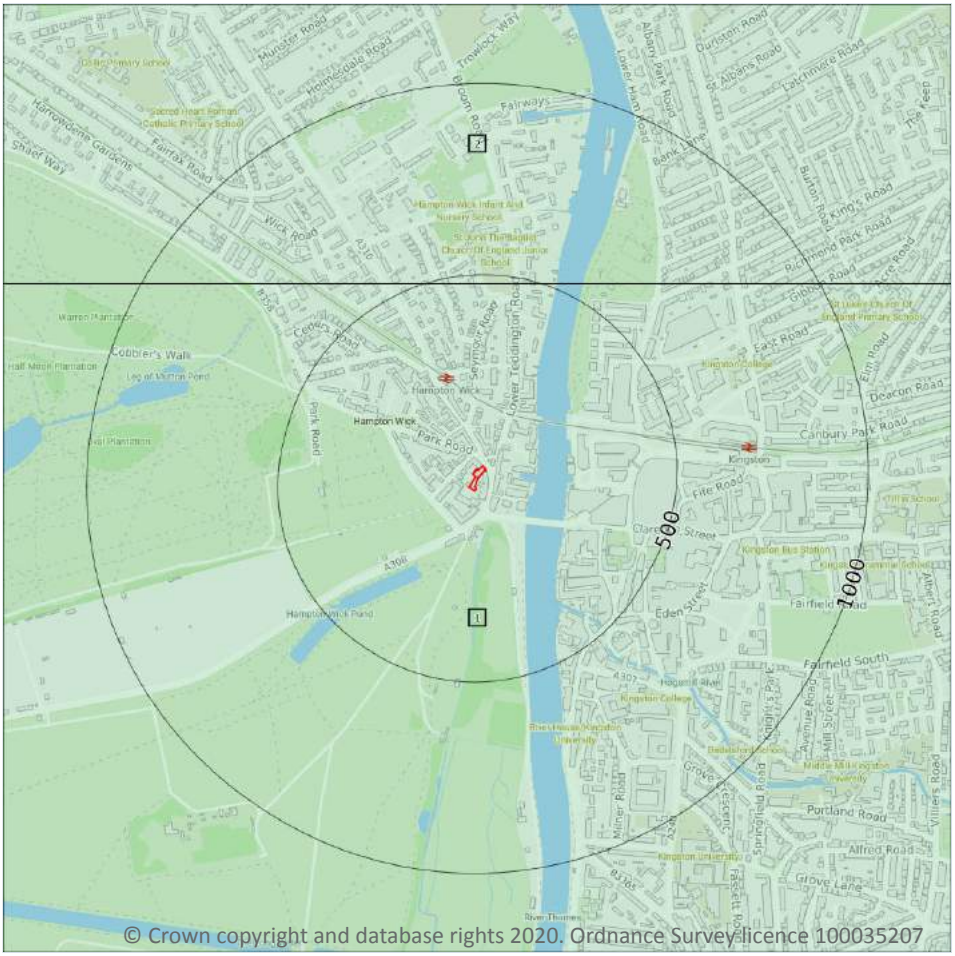
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 95**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ16NE**
2	476m N	Full	Full	Full	Full	TQ17SE

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	8

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

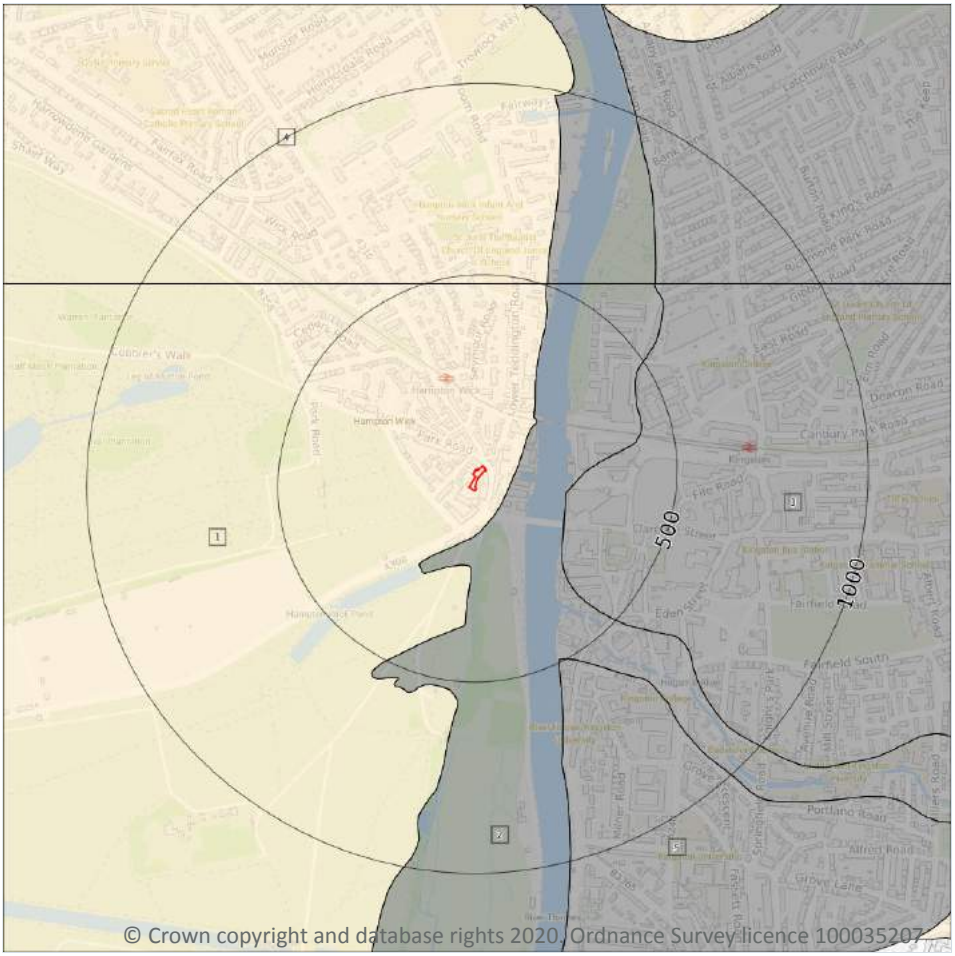
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 96**

ID	Location	LEX Code	Description	Rock description
1	34m SE	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
A	131m NE	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
A	134m NE	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
2	170m N	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

ID	Location	LEX Code	Description	Rock description
3	213m E	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
4	233m NE	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
5	293m NW	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
6	415m E	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m **5**

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 98**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**KPGR-XSV**	**Kempton Park Gravel Formation - Sand And Gravel**	**Sand And Gravel**
2	73m SE	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
3	217m E	LASI-Z	Langley Silt Member - Silt (unlithified Deposits Coding Scheme)	Silt

ID	Location	LEX Code	Description	Rock description
4	476m N	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel
5	493m SE	LASI-Z	Langley Silt Member - Silt (unlithified Deposits Coding Scheme)	Silt

This data is sourced from the British Geological Survey.

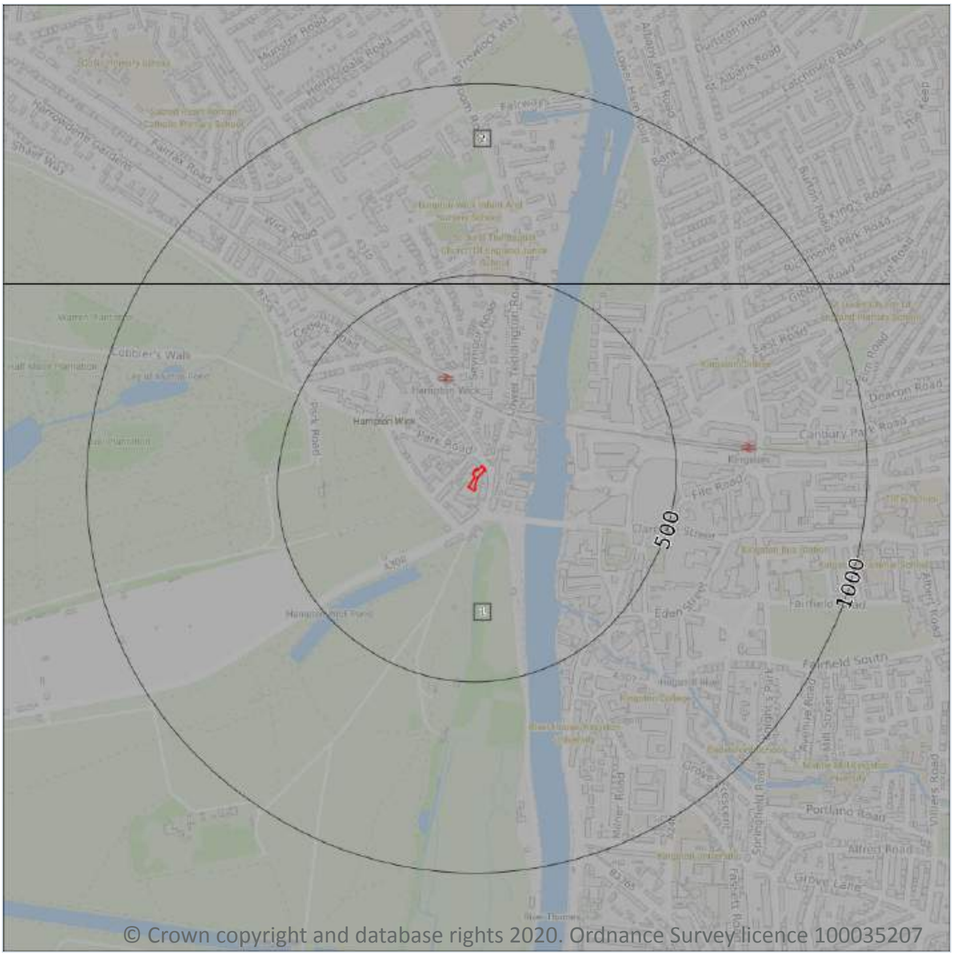
14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m	2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 100**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLAY**	**London Clay Formation - Clay**	**Eocene Epoch**
2	476m N	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

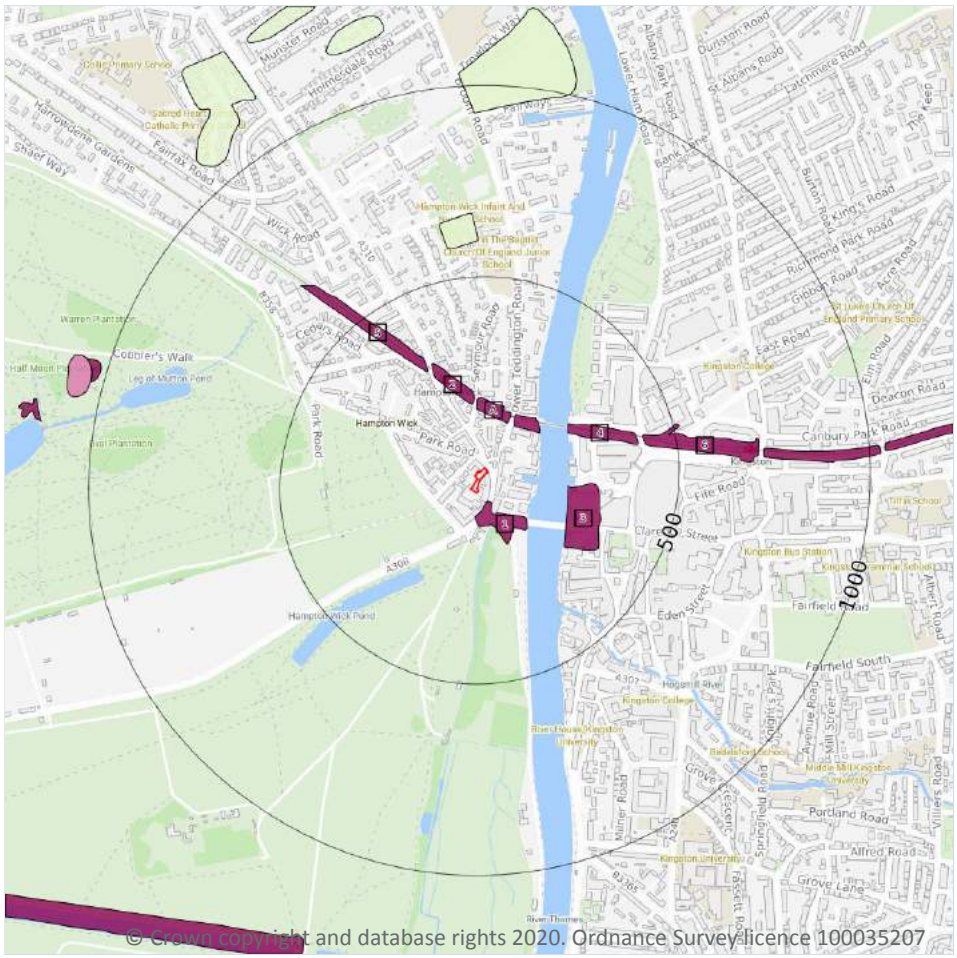
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 102**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW270_south_london_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	8

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 103**

ID	Location	LEX Code	Description	Rock description
1	34m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	131m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	134m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	170m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
3	213m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	233m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
5	293m NW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	416m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

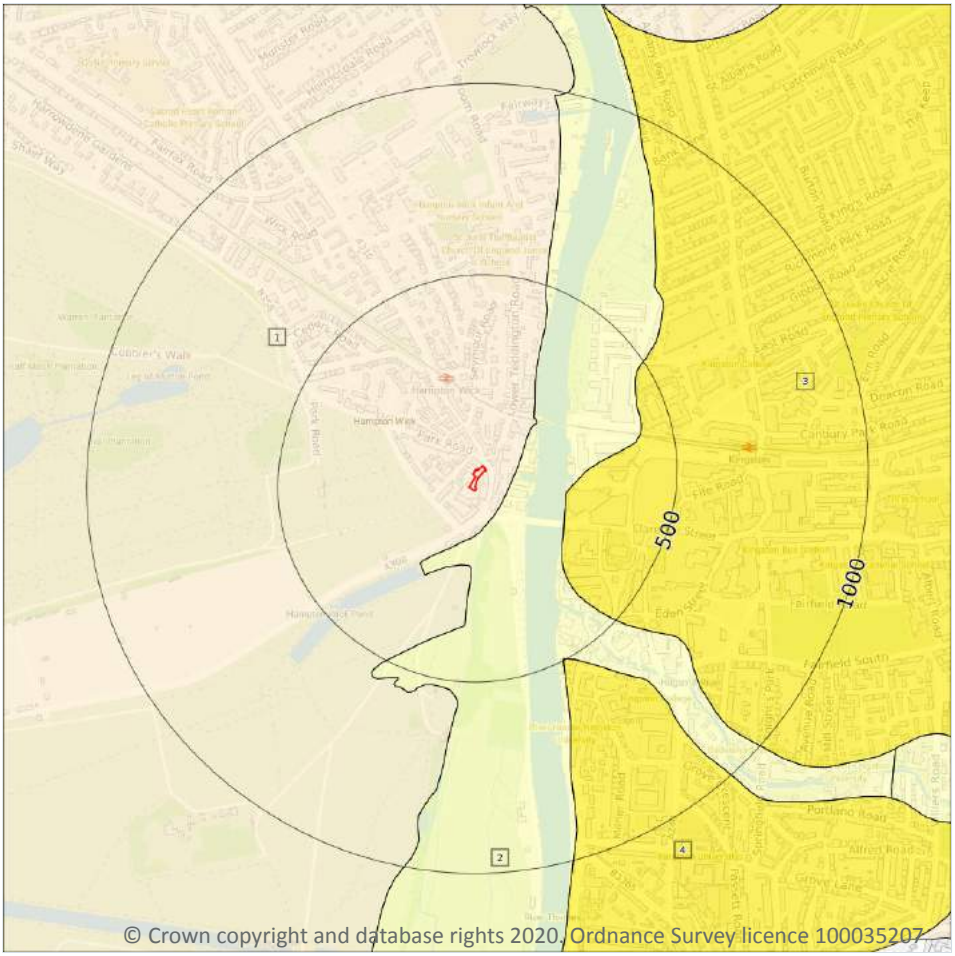
Records within 50m	**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
34m SE	Mixed	Very High	Low

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **4**

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 105**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**KPGR-XSV**	**KEMPTON PARK GRAVEL MEMBER**	**SAND AND GRAVEL**
2	73m SE	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
3	217m E	LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT
4	497m SE	LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**High**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

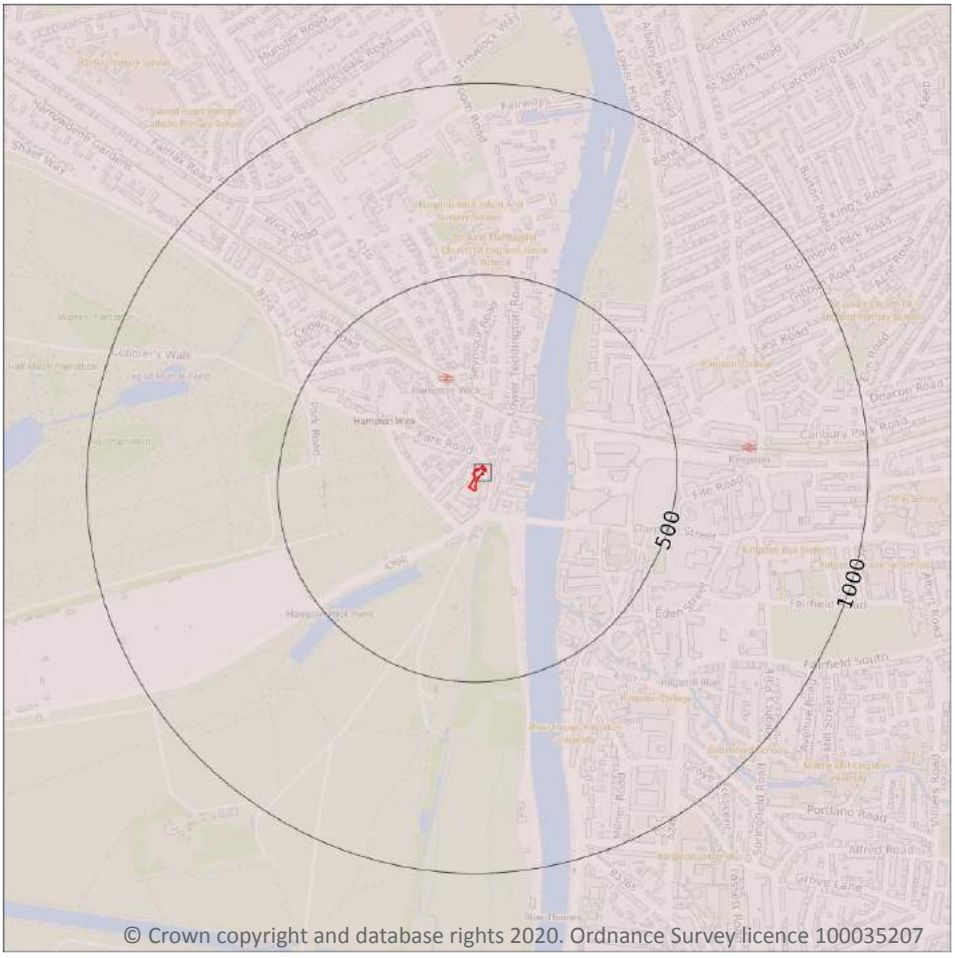
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m	1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 107**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-XCZ**	**LONDON CLAY FORMATION - CLAY AND SILT**	**YPRESIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Low**	**Very Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes

Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m **7**

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

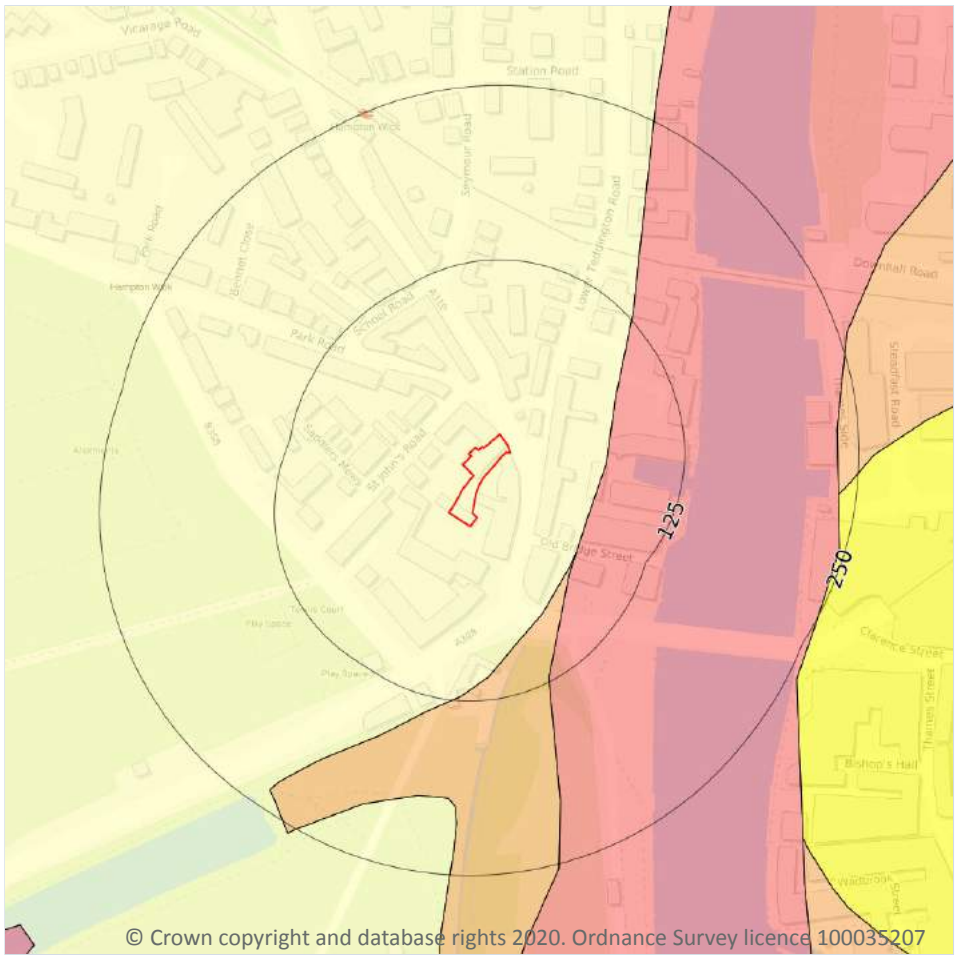
Features are displayed on the Boreholes map on **page 109**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	45m SE	517590 169480	HAMPTON WICK 1	6.4	N	580057
2	136m NE	517670 169590	TRIAL BORE HAMPTON WICK	6.7	N	579947
A	238m E	517790 169460	KINGSTON RING RD STAGE I 8	18.0	N	579971

ID	Location	Grid reference	Name	Length	Confidential	Web link
3	243m E	517800 169500	BENTALLS LTD WATER LANE	6.15	N	580016
A	243m E	517790 169440	KINGSTON RING RD STAGE I 9	36.0	N	579972
A	248m E	517800 169460	KINGSTON RING RD STAGE I TP 3	0.65	N	579978
4	249m E	517790 169600	REDEVELOPMENT OF STEADFAST SEA CADETS HQ THAMES SIDE KINGSTON UPON THAMES 1	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	1

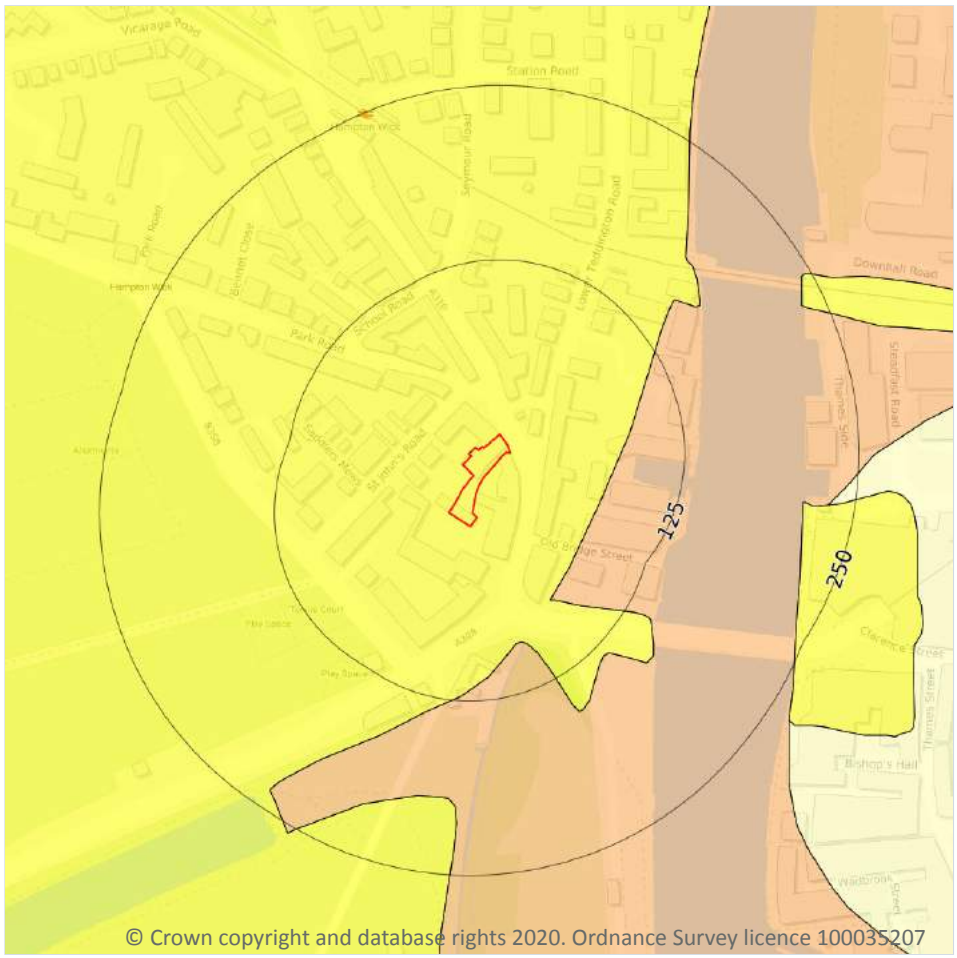
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 111**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 112**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits

17.3 Compressible deposits

Records within 50m	2

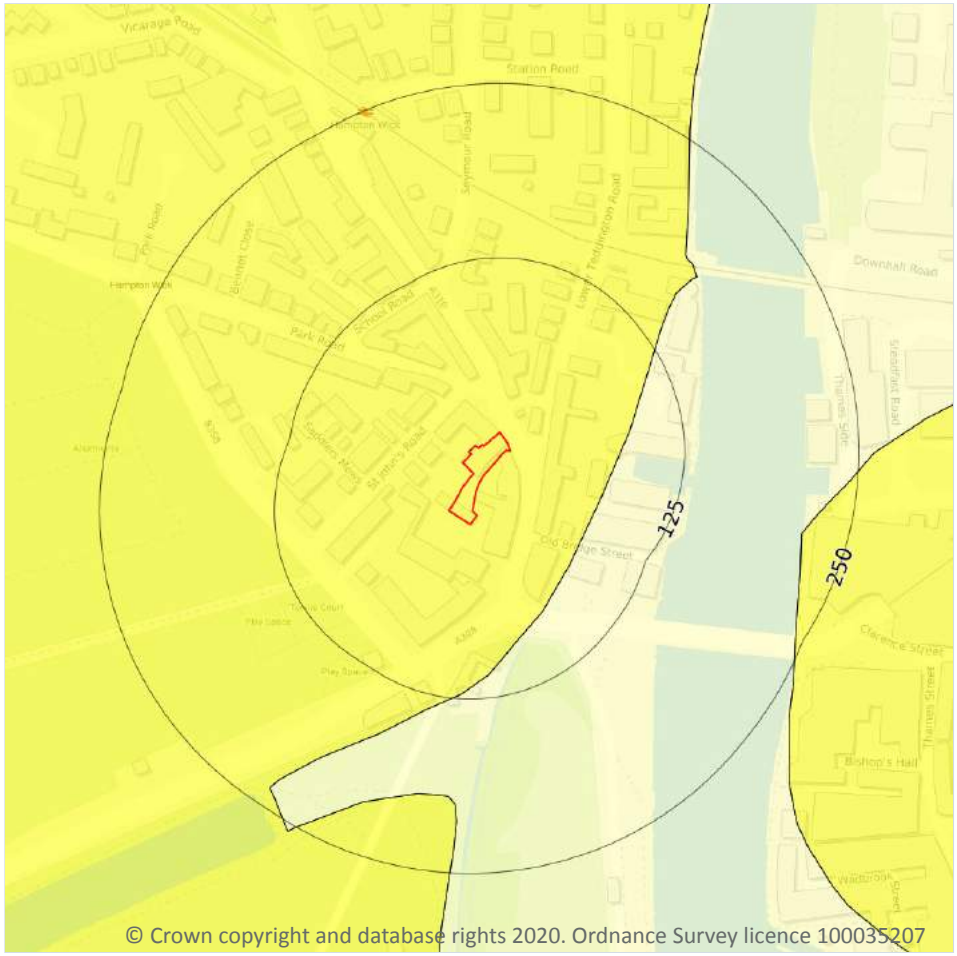
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 113**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
34m SE	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	1

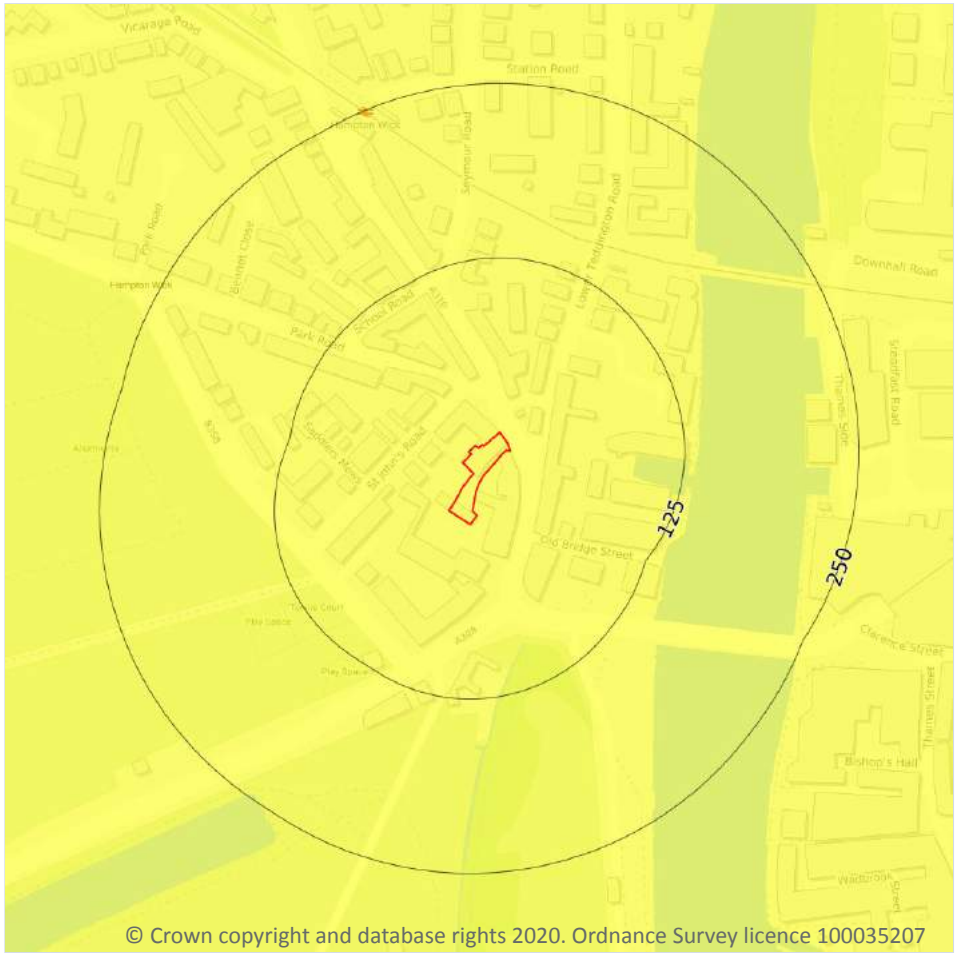
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 115**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 116**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks

Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

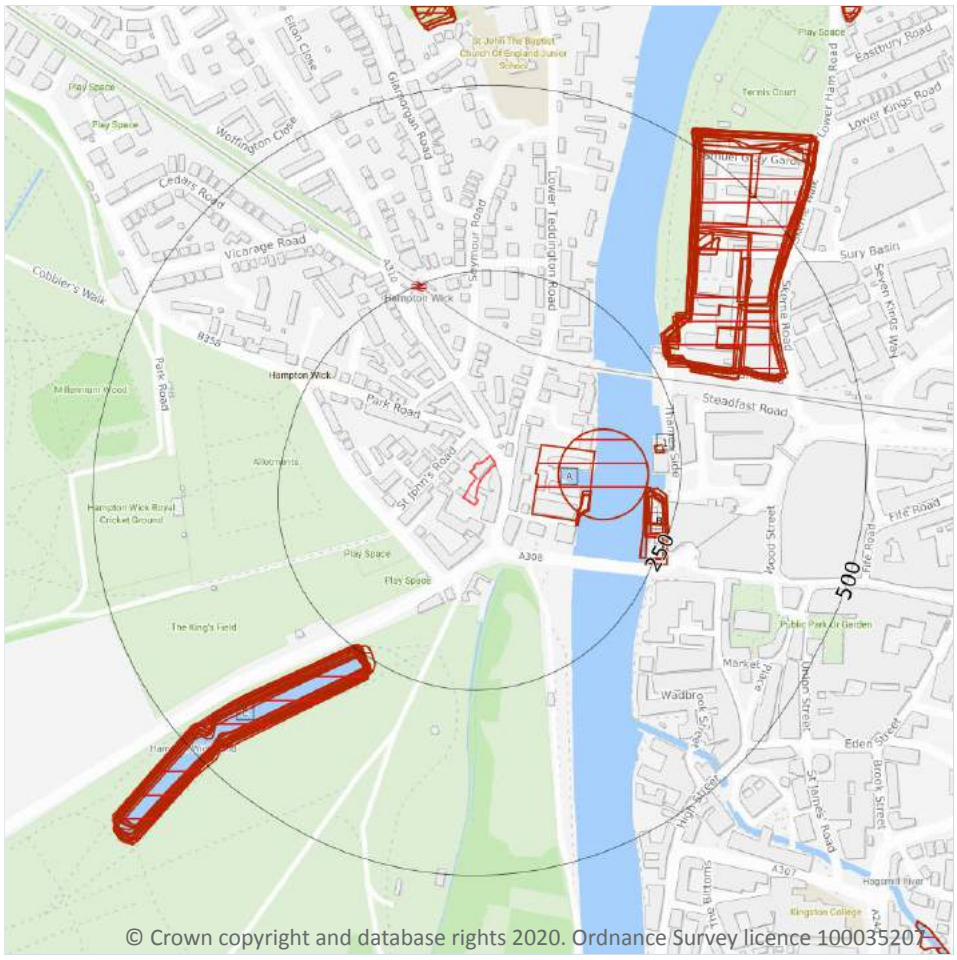
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 117**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	25

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 119**

ID	Location	Land Use	Year of mapping	Mapping scale
A	55m E	Unspecified Wharf	1962	1:10560
A	85m E	Unspecified Wharf	1968	1:10560
A	123m E	Unspecified Wharf	1985	1:10000
A	125m E	Unspecified Wharfs	1934	1:10560
A	125m E	Unspecified Wharfs	1934	1:10560
B	204m E	Unspecified Wharfs	1938	1:10560
B	204m E	Unspecified Wharfs	1938	1:10560
B	206m E	Unspecified Wharfs	1933	1:10560
B	207m E	Unspecified Wharves	1938	1:10560
B	209m E	Unspecified Wharfs	1948	1:10560
B	211m E	Unspecified Wharfs	1934	1:10560
B	211m E	Unspecified Wharfs	1934	1:10560
B	212m E	Unspecified Wharves	1938	1:10560
B	214m E	Unspecified Wharf	1968	1:10560
B	214m E	Unspecified Wharf	1962	1:10560
1	216m E	Unspecified Wharf	1962	1:10560
C	239m SW	Ponds	1865	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
C	244m SW	Fish Pond	1894	1:10560
C	245m SW	Pond	1912	1:10560
C	245m SW	Fish Pond	1895	1:10560
C	246m SW	Fish Pond	1894	1:10560
C	247m SW	Pond	1974	1:10000
C	248m SW	Pond	1899	1:10560
C	248m SW	Pond	1938	1:10560
C	249m SW	Pond	1985	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	**0**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

18.13 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon

Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 124**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None****

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m **4**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**
On site	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**
13m SW	No data	No data	No data	No data	No data	No data	No data
23m NW	No data	No data	No data	No data	No data	No data	No data

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m **6**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**20**	**3.5**	**403**	**277**	**0.8**	**66**	**78**	**36**	**29**
On site	**20**	**3.5**	**294**	**202**	**0.6**	**62**	**58**	**29**	**22**
13m SW	20	3.5	282	194	0.6	62	53	29	20
23m NW	20	3.5	263	181	0.5	58	44	24	18
43m NE	21	3.7	288	198	0.7	63	65	31	24

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
44m E	20	3.5	451	310	0.8	67	88	38	32

This data is sourced from the British Geological Survey.

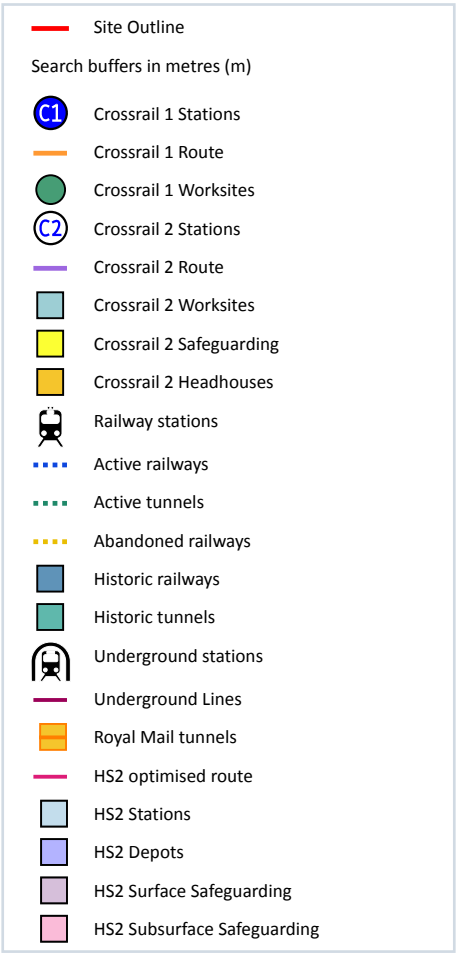
20.3 BGS Measured Urban Soil Chemistry

Records within 50m	**0**

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



21.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	6

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 127**

Location	Land Use	Year of mapping	Mapping scale
136m N	Railway	1915	-
141m N	Railway	1870	-
146m N	Railway	1936	-
147m N	Railway	1914	-
174m NE	Railway	1932	-
178m NE	Railway	1879	-

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	18

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 127**

Location	Name	Type
146m N	Kingston Loop Line	rail
147m NE	Kingston Loop Line	rail
149m NE	Kingston Loop Line	rail
150m N	Kingston Loop Line	rail
150m N	Not given	Multi Track
151m NE	Kingston Loop Line	rail
153m NE	Kingston Loop Line	rail
160m N	Kingston Loop Line	rail
163m N	Kingston Loop Line	rail
167m NE	Kingston Loop Line	rail
170m NE	Kingston Loop Line	rail
171m NE	Not given	Multi Track
176m N	Not given	Multi Track
188m N	Not given	Multi Track
193m N	Kingston Loop Line	rail
196m N	Kingston Loop Line	rail
244m NW	Kingston Loop Line	rail
245m NW	Kingston Loop Line	rail

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	26

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

Features are displayed on the Railway infrastructure and projects map on **page 127**

Location	Route Type	Name	Under consultation
152m N	Network Rail Regional Branch	Kingston Loop Line	No
153m NE	Network Rail Regional Branch	Kingston Loop Line	No
155m NE	Network Rail Regional Branch	Kingston Loop Line	No
156m N	Network Rail Regional Branch	Kingston Loop Line	No
157m NE	Network Rail Regional Branch	Kingston Loop Line	No
159m NE	Network Rail Regional Branch	Kingston Loop Line	No
166m N	Network Rail Regional Branch	Kingston Loop Line	No
170m N	Network Rail Regional Branch	Kingston Loop Line	No
173m NE	Network Rail Regional Branch	Kingston Loop Line	No
176m NE	Network Rail Regional Branch	Kingston Loop Line	No
199m N	Network Rail Regional Branch	Kingston Loop Line	No
202m N	Network Rail Regional Branch	Kingston Loop Line	No
249m NW	Network Rail Regional Branch	Kingston Loop Line	No
250m NW	Network Rail Regional Branch	Kingston Loop Line	No
264m NE	Network Rail Regional Branch	Kingston Loop Line	No
266m NE	Network Rail Regional Branch	Kingston Loop Line	No

Location	Route Type	Name	Under consultation
282m NW	Network Rail Regional Branch	Kingston Loop Line	No
283m NW	Network Rail Regional Branch	Kingston Loop Line	No
306m NW	Network Rail Regional Branch	Kingston Loop Line	No
308m NW	Network Rail Regional Branch	Kingston Loop Line	No
388m E	Network Rail Regional Branch	Kingston Loop Line	No
405m E	Network Rail Regional Branch	Kingston Loop Line	No
407m E	Network Rail Regional Branch	Kingston Loop Line	No
426m E	Network Rail Regional Branch	Kingston Loop Line	No
427m E	Network Rail Regional Branch	Kingston Loop Line	No
451m E	Network Rail Regional Branch	Kingston Loop Line	No

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	**0**

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

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