



Basement Impact Assessment - Desktop Study

Project: 121 Lowdell Close, West Drayton, UB7 8BA

Reference: 117

Prepared for: Adam Pissar

28 June 2026

Project number: 117



EXECUTIVE SUMMARY

Item	Summary
Site	121 Lowdell Close, West Drayton, Hillingdon, UB7 8BA. A two-storey detached dwelling occupying the western (Lowdell Close) end of a wedge-shaped plot of approximately 270 m ² , with a long rear garden extending east. Centred on National Grid reference 506518, 181184, within the London Borough of Hillingdon.
Proposed development	Erection of a detached single-storey garden outbuilding (ancillary to the dwelling) at the far eastern end of the rear garden, with a single basement level of matching footprint beneath. Each floor has a gross internal area of approximately 33 m ² . The ground floor accommodates a home bar and store; the basement accommodates a gym and office, reached by an internal stair. The basement formation level is assumed at approximately 3.0 m below existing ground level (not dimensioned on the current drawings).
Geology	Superficial deposits of the Lynch Hill Gravel Member (sand and gravel – a river terrace deposit) overlying the London Clay Formation (clay, silt and sand). BGS mapping records Worked/Made Ground on and immediately adjacent to the Site, consistent with the historical gravel-bearing character of the West Drayton river terrace.
Hydrogeology / groundwater	The superficial gravels form a Principal aquifer, classified by the Environment Agency as a highly vulnerable Principal superficial aquifer in river terrace gravels with only a thin low-permeability cover. The London Clay bedrock is Unproductive. The Site is not within a Source Protection Zone and there are no groundwater abstractions within 500 m. Two BGS boreholes approximately 250–325 m to the south recorded no groundwater (to 2.0 m and ~6.0 m respectively), indicating that groundwater is likely to lie below the proposed basement formation.
Flood risk	Environment Agency Flood Zone 1 (low fluvial and tidal risk). Groundsure records surface water (pluvial) flood risk at the Site (1 in 30-year, 0.1–0.3 m, increasing to 0.3–1.0 m within 50 m) and a Moderate groundwater-flooding susceptibility. These are the principal flood considerations for a below-ground structure.
Ground stability	Natural ground-subsidence hazards are low: shrink–swell Negligible, running sands Very low, compressible deposits Negligible, collapsible deposits Very low and ground dissolution Negligible. No coal or other mining hazard is identified; historical (non-coal) gravel working is indicated in the locality.



Radon and UXO	Less than 1% of properties in the area are at or above the radon Action Level, so no radon protective measures are required. A review of Zetica UXO mapping indicates the Site lies within an area of Low unexploded-ordnance risk; no UXO mitigation is considered necessary.
Basement impact	The works comprise a new, self-contained basement box within the rear garden, detached and physically separated from the host dwelling and from neighbouring buildings. Potential impacts on ground stability, groundwater flow and neighbouring land are assessed as manageable subject to detailed design by a suitably qualified Structural Engineer, appropriate temporary works and excavation support, groundwater control during construction, and a waterproofing design to BS 8102 appropriate to the Moderate groundwater-flooding setting.
Conclusion	No constraints have been identified that cannot be managed through detailed design and construction controls. The proposals are considered to accord with Policy DMHD 3 (Basement Development) of the Hillingdon Local Plan Part 2 (2020), subject to the recommendations set out in Section 8.



1 INTRODUCTION

Air & Flood Consultants (AFC) was commissioned by Adam Pisar ("the Client") to prepare a Basement Impact Assessment (BIA) in support of a planning application for a proposed garden outbuilding with basement at 121 Lowdell Close, West Drayton, UB7 8BA ("the Site"). This report has been prepared to satisfy the basement-related policy requirements of the London Borough of Hillingdon, in particular Policy DMHD 3 (Basement Development) of the Hillingdon Local Plan Part 2 (2020) and the Council's validation requirement for a Basement Impact Assessment for all schemes proposing a basement.

Development Proposal

The proposed development comprises the erection of a detached, single-storey garden outbuilding at the far (eastern) end of the rear garden, together with a single basement level of matching footprint beneath. Each floor has a gross internal area of approximately 33 m². The ground floor provides a home bar and store; the basement provides a gym and office, served by an internal staircase. The outbuilding is ancillary to the dwelling house. The proposed drawings, prepared by Planning by Design (April 2026), are reproduced in Appendix A.

The basement scope therefore comprises:

- (i) a single basement storey of approximately 33 m² beneath the outbuilding footprint;
- (ii) excavation to an assumed formation level of approximately 3.0 m below existing ground level;
- (iii) permanent retaining walls forming the basement box; and
- (iv) waterproofing of the completed structure. Detailed temporary works and structural design will be undertaken by the appointed Structural Engineer in advance of construction.

Objective

The London Borough of Hillingdon has not published its own preferred methodology for the production of Basement Impact Assessments. In common with comparable schemes determined in the borough, this assessment is therefore based on the widely adopted London Borough of Camden framework for subterranean development (Camden Planning Guidance: Basements), which is generally accepted as providing the best available guidance on how to undertake a BIA and is structured around three themes: land stability, groundwater movement, and surface water flow and flooding. The objectives of this assessment are to:

- confirm the nature and extent of the proposed basement works;
- characterise the ground and groundwater conditions beneath and around the Site from desk-based sources;
- assess the potential for the works to cause harm to adjoining land and property, the water environment and any third-party assets;
- identify appropriate mitigation and recommendations to support the design and construction of the basement; and
- provide the evidence base necessary to support the planning application.



Scope of Works

This desktop study comprises a review of the following information sources:

- the architect's proposed and existing drawings (Planning by Design, revision V2, April 2026);
- the Groundsure Insight Report (ref. GS-FQV-DIB-HCO-MI4, 28 June 2026) and the accompanying Groundsure historical mapping (ref. GS-4T4-FWA-FPL-LK4);
- British Geological Survey (BGS) 1:10,000 and 1:50,000 mapping (Sheet 255, Beaconsfield);
- Environment Agency flood mapping and groundwater datasets reproduced within the Groundsure report; and
- a screening and scoping assessment using the Camden land-stability, groundwater and surface-water decision matrices.

In accordance with the agreed scope, this commission does not include a Flood Risk Assessment, sustainable drainage (SuDS) strategy or an intrusive ground investigation. No intrusive ground investigation or site walkover has been undertaken to inform this report, which is therefore based solely on desktop data sources; the findings should be interpreted accordingly. Site-specific parameters identified as to be confirmed should be verified at the detailed design stage.

Constraints and Limitations

The copyright of this report is vested in Air & Flood Consultants and the Client. The Client, or their appointed representatives, may copy the report for purposes connected with the development described herein. It shall not be copied by any other party or used for any other purpose without the written consent of Air & Flood Consultants or the Client.

Air & Flood Consultants accepts no responsibility to other parties to whom this report, or any part thereof, is made known. Any such parties rely upon the report at their own risk.

Air & Flood Consultants has endeavoured to assess all information available during the preparation of this report. Should additional information become available which may affect the opinions expressed herein, Air & Flood Consultants reserves the right to review such information and, where warranted, to modify the findings and recommendations accordingly.

This report summarises information from a number of external sources and cannot offer guarantees or warranties for the completeness or accuracy of that information. Data from third parties has not been independently verified by Air & Flood Consultants unless otherwise stated.

The risks identified in this report are perceived risks based on information available at the time of writing. The actual risks associated with the Site can only be fully characterised following a physical investigation.

The conclusions of this study are not necessarily indicative of future conditions or operating practices at or adjacent to the Site.



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2 SOURCES OF INFORMATION

The information contained in this report is based on a review of readily available data pertaining to the Site and surrounding area.

Records Review

Key documents, datasets and websites reviewed as part of this assessment are detailed in Table below.

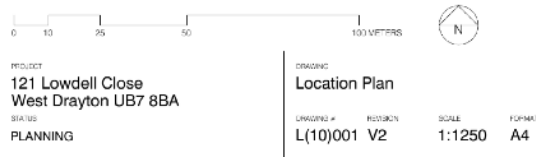
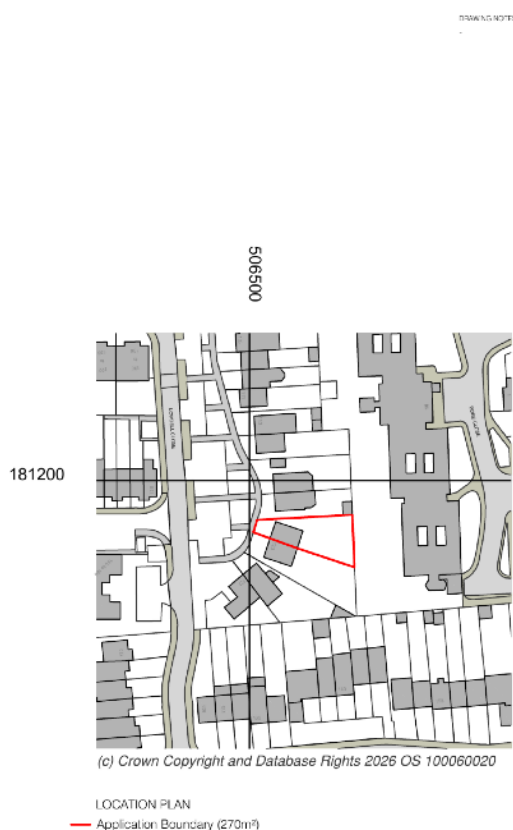
Document / dataset	Author / publisher	Date
Groundsure Insight Report (GS-FQV-DIB-HCO-MI4)	Groundsure	Jun 2026
Groundsure historical mapping (GS-4T4-FWA-FPL-LK4)	Groundsure / Ordnance Survey	Jun 2026
Proposed and existing drawings (rev V2)	Planning by Design	Apr 2026
1:10,000 and 1:50,000 geological mapping	British Geological Survey	2026
Flood map for planning / surface-water and groundwater flood data	Environment Agency / Ambiental (via Groundsure)	2026
Hillingdon Local Plan Part 2 – Policy DMHD 3 (Basement Development)	LB Hillingdon	2020
Local Planning Validation Checklist	LB Hillingdon	Feb 2024
Camden Planning Guidance: Basements (BIA methodology)	LB Camden	2021
National Planning Policy Framework	MHCLG	2025



3 SITE LOCATION AND DESCRIPTION

Site Location

The Site is located at 121 Lowdell Close, West Drayton, within the administrative boundary of the London Borough of Hillingdon. It lies within an established residential area of West Drayton / Yiewsley, characterised by mid-to-late twentieth-century housing with private gardens. The Site is centred at National Grid reference 506518, 181184. West Drayton railway station lies approximately 0.7 miles to the south. The application boundary extends to approximately 270 m². The site location is shown in Figure below.





Site Description

The agreed scope includes consideration of the proximity of any protected trees or other constraints relevant to excavation design. A mature tree is present to the south-east, approximately 5 m from the foundation of the proposed garden outbuilding, and is therefore likely to lie within influencing distance of the excavation. As the superficial deposits are granular (with a Negligible shrink–swell rating), the tree does not present a shrink–swell ground-movement risk to the proposed structure; the principal consideration is the protection of the tree, and its roots, during construction. The presence, species and exact proximity of this and any other trees within the garden, and the existence of any Tree Preservation Order, should be confirmed. The implications for the works are considered in Sections 6 and 8.

Surrounding properties

The Site is bounded on all sides by residential dwellings and their rear gardens, including nos. 119 and 123 Lowdell Close and properties fronting adjoining streets. There is no railway, canal or other transport infrastructure immediately adjacent to the Site. The proposed outbuilding sits within the garden, separated from neighbouring buildings by intervening garden ground and boundary fencing.



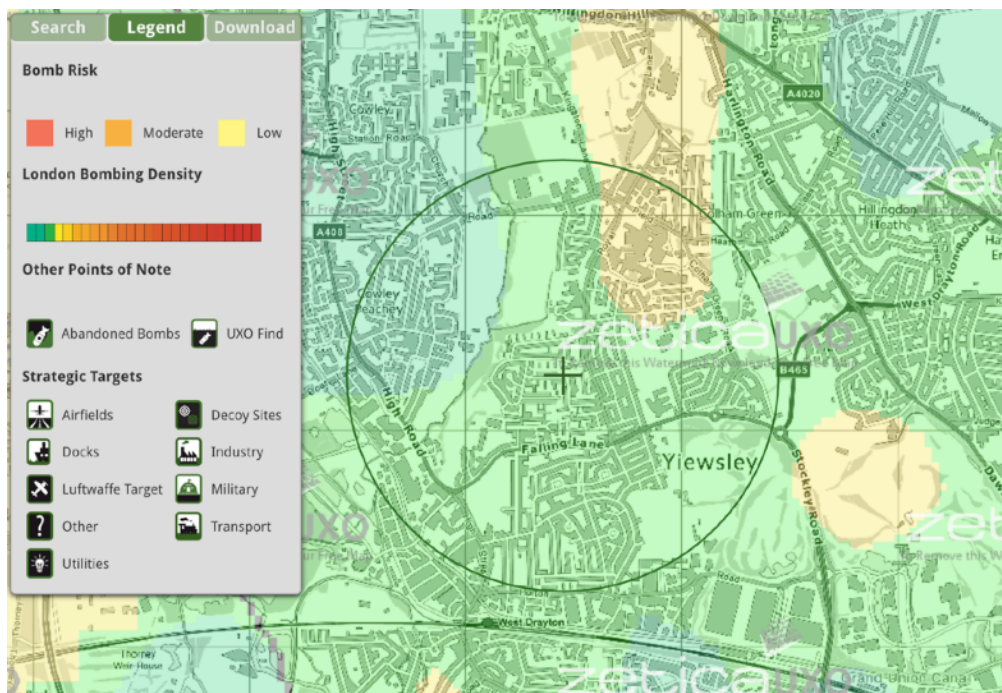
4 DESK STUDY

Geology

BGS 1:10,000 and 1:50,000 mapping reproduced in the Groundsure Insight Report indicates that the Site is directly underlain by superficial deposits of the Lynch Hill Gravel Member (sand and gravel), a river terrace deposit of the Quaternary. These superficial deposits overlie bedrock of the London Clay Formation (clay, silt and sand, of Ypresian age). Nearby superficial deposits include the Langley Silt Member (69 m north-east) and Alluvium (419 m north-west), reflecting the river terrace and floodplain setting of the wider West Drayton area. Two BGS borehole records approximately 250 m and 325 m to the south (TQ08SE199 and TQ08SE198, drilled for the Yiewsley Bypass investigation) confirm this sequence, proving Made Ground over very dense flint gravel and sand consistent with the Lynch Hill Gravel; neither borehole reached the underlying London Clay.

Unexploded Ordnance (UXO)

A review of the Zetica UXO risk map indicates that the Site lies within an area of Low unexploded-ordnance risk. The nearest areas of Moderate risk are associated with the historic Yiewsley town centre and transport corridors to the north of the Site. On the basis of the Low risk rating, no further UXO risk assessment or mitigation (such as a detailed risk assessment to CIRIA C681) is considered necessary for the proposed basement excavation. In the unlikely event that a suspected ordnance item is encountered during excavation, works should stop and appropriate specialist advice be sought.





Radon

The Groundsure report records that less than 1% of properties in the area are at or above the radon Action Level. No radon protective measures are required for the proposed development in accordance with BR 211.

Hydrogeology

The superficial Lynch Hill Gravel is designated a Principal aquifer – geology of high intergranular permeability capable of supporting water supply or river base flow on a strategic scale. The Environment Agency groundwater-vulnerability dataset records the Site as a “highly vulnerable Principal superficial aquifer in river terrace gravels with only a thin cover of low-permeability silts and/or alluvium”.

The underlying London Clay bedrock is designated Unproductive. The Site is not located within a Source Protection Zone, and there are no groundwater or potable abstractions within 500 m (the nearest licensed abstractions are historical and lie over 1.2 km distant). The Site overlies a Water Framework Directive groundwater body. The combination of a highly vulnerable Principal aquifer at shallow depth is the key hydrogeological sensitivity for the proposed basement.

Hydrology and flood risk

Hydrology and flood risk

The Groundsure report confirms that the Site lies within Environment Agency Flood Zone 1, with no Flood Zone 2 or 3 and no risk of flooding from rivers or the sea within 50 m, and no recorded historical flood events. The flood risk to the Site is summarised below.

Flood source	Risk to the Site (Groundsure)
Fluvial (rivers)	Low – Flood Zone 1; no Flood Zone 2/3 or watercourse within 50 m.
Tidal (sea)	Low – the Site is not within a tidal floodplain.
Surface water (pluvial)	Elevated – highest risk on Site of 1 in 30-year, 0.1–0.3 m, increasing to 0.3–1.0 m within 50 m; modelled depths of 0.3–1.0 m for the 1 in 100, 1 in 250 and 1 in 1000-year events.
Groundwater	Moderate susceptibility on Site (1 in 100-year, 5 m DTM). Nearby boreholes recorded no groundwater to ~6 m (see Groundwater, above); BS 8102 waterproofing provides resilience.
Artificial (reservoir)	No reservoir flood risk identified in the Groundsure report.

The surface-water (pluvial) and groundwater flood mechanisms are the principal flood considerations for the proposed basement and are carried forward to the screening and impact assessment.



Made and worked ground

BGS artificial-ground mapping records Worked Ground (Undivided) on the Site, with Infilled Ground recorded approximately 3 m to the south and further worked and infilled ground in the surrounding area. This is consistent with the historical extraction of the river terrace gravels in the West Drayton area. The presence of Made/Worked Ground introduces the potential for variable engineering conditions, localised soft or loose fill and a low-to-moderate potential for contamination within the near-surface horizon. The depth, extent and composition of this material on the Site are not quantified by the desktop data and should be established during construction. The nearby Yiewsley Bypass boreholes (TQ08SE198 and TQ08SE199) encountered 2.0–4.2 m of Made Ground associated with the former road scheme; this is not necessarily representative of conditions at the Site, where any Made/Worked Ground is likely to be thinner.

Groundwater

The Groundsure data provides aquifer designations and a groundwater-flooding susceptibility but does not include a measured rest groundwater level for the Site. The nearest direct observations are two BGS borehole records approximately 250 m and 325 m to the south. Neither recorded groundwater: borehole TQ08SE199 (BGS 576532), hand-dug to 2.0 m, is logged as having “remained dry”; and borehole TQ08SE198 (BGS 576531), percussion-bored to approximately 6.0 m through the gravel, records “no seepage into [the] hole” (water having been added to aid penetration of the dense gravel). These records indicate that groundwater is likely to lie below the proposed basement formation level of approximately 3.0 m below ground level.

Ecology

Based on data from the environmental database report and DEFRA Magic Map, there are no SSSIs, National Nature Reserves, Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Areas of Outstanding Natural Beauty (AONBs) within 500 metres of the Site. The Site is not classified as falling within an environmentally sensitive designation. The Site is not identified as lying within a Nitrate Vulnerable Zone (NVZ).

Ground stability and subsidence

The Groundsure natural-ground-subsidence dataset records the following hazard ratings for the Site:

Hazard	Rating (on Site)	Note
Shrink–swell clays	Negligible	Predominantly non-plastic (granular)
Running sands	Very low	Unlikely unless the water table rises rapidly
Compressible deposits	Negligible	Compressible strata not thought to occur
Collapsible deposits	Very low	Collapse on loading/saturation unlikely
Landslides / slope instability	Negligible	No landslip recorded; level ground
Ground dissolution (soluble rock)	Negligible	No soluble-rock risk



No coal, tin, clay or other mining hazard is identified, and no mining cavities are recorded. A non-coal “researched mining” record on the Site reflects the historical gravel working noted above rather than deep mineral extraction. The granular nature of the superficial deposits means that natural shrink–swell and compressibility hazards are negligible; the principal ground-stability consideration is the temporary stability of excavations in granular, potentially water-bearing deposits, addressed in Sections 7 and 8.

Environmental setting and contamination

The Groundsure report identifies one historical industrial land use on the Site (associated with the historical worked/made ground), with further historical industrial uses in the surrounding area. The Site is not determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990; there are no recorded pollution incidents within 500 m, and no active or historical licensed landfill on the Site (one historical EA-recorded landfill lies between 250 m and 500 m). Taken together, the contamination potential is considered low to moderate and is associated principally with the near-surface Made/Worked Ground. This is not considered a constraint to the principle of development and can be managed through standard construction controls (safe handling of excavated material, appropriate personal protective equipment and a watching brief), consistent with the agreed scope, which excludes intrusive ground investigation.

Historical Development

The Groundsure historical mapping (Ordnance Survey County Series 1866, 1895, 1914 and 1935; National Grid editions 1965–1993; and LandLine 2003 onwards) records the wider area developing from open and worked ground, reflecting the gravel-bearing river terrace landscape of West Drayton, to the present residential character. The Lowdell Close residential layout is present on the later twentieth-century editions. This history is consistent with the Worked/Made Ground mapped on and around the Site.

Listed buildings and conservation areas

The Site is not within the Metropolitan Green Belt (the nearest Green Belt lies approximately 304 m to the north-west). There are no Sites of Special Scientific Interest, Ramsar sites or Ancient Woodland within the search radius, and no listed buildings or Conservation Areas within 250 m of the Site. No heritage constraints relevant to the basement works have been identified.



5 GROUND MODEL

In the absence of intrusive ground investigation data for the Site, an indicative ground model has been developed from the BGS mapping and the Groundsure data. The model is summarised below and should be confirmed at the detailed design stage.

Stratum	Indicative status	Description
Made / Worked Ground	Variable	Worked Ground (Undivided) mapped on Site; variable granular/cohesive fill associated with historical gravel working. Depth and composition to be confirmed.
Lynch Hill Gravel Member	Principal aquifer	Sand and gravel (river terrace deposit). Granular, permeable; the primary shallow aquifer at the Site. Likely to control local groundwater flow and the proposed basement formation horizon.
London Clay Formation	Unproductive	Firm to stiff clay, silt and sand (bedrock). Low permeability; acts as a base to the gravel aquifer. Depth to rockhead to be confirmed.
Groundwater	Below formation	Not encountered in nearby BGS boreholes to ~6 m (TQ08SE198/199); anticipated below the proposed formation. Seasonal or perched water cannot be excluded.

With the basement excavated to an assumed formation level of approximately 3.0 m below ground level, the formation is anticipated to sit within the Lynch Hill Gravel and, on the basis of the nearby borehole records, above the groundwater table. Geotechnical design parameters (shear strength, permeability, bearing capacity) and the depth to the London Clay should be derived at the detailed design stage. The parameters above are indicative and suitable for screening only.



6 SCREENING AND SCOPING ASSESSMENT

A screening assessment has been carried out using the decision matrices set out in the London Borough of Camden guidance, which is widely adopted by London boroughs as a structured approach to BIA screening. The matrices address three themes: land stability, groundwater movement and seepage, and surface flow and flooding.

Land stability

Screening question	Answer	Action
Does the proposal involve a new basement (or lowering of an existing slab by more than 0.5 m)?	Yes	Scope
Is the Site on land with a gradient exceeding 7°?	No	No further action
Is the geology known to have high volume-change (shrink–swell) potential?	No (Negligible)	No further action
Is a mature tree present within influencing distance of the excavation?	Yes (≈5 m SE)	Scope
Is the Site within influencing distance of a London Underground or railway tunnel?	No	No further action
Are there historical records of slope instability, landslip or subsidence?	No	No further action
Are nearby buildings listed, historic or structurally sensitive?	No	No further action

The land-stability screening carries forward:

- (i) the new basement excavation in granular, potentially water-bearing deposits;
- (ii) protection of the mature tree to the south-east (approximately 5 m from the proposed foundation) during excavation, together with confirmation of its species, exact proximity and any Tree Preservation Order; and
- (iii) the proximity of the works to site boundaries and neighbouring land. These are addressed in Sections 7 and 8.

**Groundwater movement and seepage**

Screening question	Answer	Action
Is the Site on a Principal aquifer?	Yes	Scope
Will the basement extend below the anticipated groundwater level?	Unlikely (boreholes dry)	No further action
Is the Site within a Source Protection Zone?	No	No further action
Is there a groundwater abstraction within 500 m that could be affected?	No	No further action
Could the works cut off a known spring, seepage or flow path?	Unlikely	No further action
Could the works dam or divert groundwater flow within a granular horizon?	Possibly	Scope

The superficial gravels are a Principal aquifer; however, the nearby BGS boreholes recorded no groundwater to approximately 6 m, indicating that the proposed formation is likely to sit above the groundwater table. As a precaution, temporary groundwater control during excavation (should any be encountered) and a permanent design that avoids materially diverting groundwater flow within the gravels are carried forward to the impact assessment in Section 8.



Surface flow and flooding

Screening question	Answer	Action
Is the Site within Flood Zone 2 or 3?	No (FZ1)	No further action
Is the Site in an area of elevated surface-water flood risk?	Yes	Scope
Is the Site within 100 m of a main river or ordinary watercourse?	No	No further action
Will the proposals result in a net change in impermeable area?	Minor	Scope
Is the Site in an area of Moderate groundwater-flooding susceptibility?	Yes	Scope
Are there recorded historical floods from sewers or surface water?	No	No further action

Surface-water (pluvial) and groundwater flooding are carried forward as flood-resilience considerations for the outbuilding and basement (Section 8). In accordance with the agreed scope, no SuDS strategy is provided; the existing surface-water drainage regime is to be maintained.

Scoping summary

On the basis of the screening, the following are carried forward to detailed consideration in Sections 7 and 8:

- ground movement associated with the basement excavation and temporary works in granular deposits (Section 7);
- temporary groundwater control during excavation and avoidance of long-term obstruction of groundwater flow in the Principal gravel aquifer (Section 8);
- surface-water and groundwater flood resilience, including waterproofing to BS 8102 (Section 8);
- management of Made/Worked Ground arisings (Section 8); and
- protection of the mature tree to the south-east (≈ 5 m) and confirmation of its species and TPO status, together with the boundary/structure offsets, basement formation depth and groundwater level (flagged throughout).



7 GROUND MOVEMENT ASSESSMENT

This Stage 1 BIA is a desk-based assessment. A detailed ground movement assessment, where required, will be undertaken by the appointed Structural Engineer at the detailed design stage. This section sets out the principles on which that assessment will be based and the qualitative outcome expected.

Scope and methodology

Any quantitative ground movement assessment will be undertaken with reference to CIRIA C760 (Guidance on embedded retaining wall design) and CIRIA C580, using the Burland (1977), Boscardin and Cording (1989) building-damage classification framework. Vertical and horizontal ground displacements are estimated as a function of excavation depth and retaining-wall type and assessed against the damage categories summarised below.

Category	Typical damage	Approx. crack width
0 – Negligible	Hairline cracks, generally not visible.	< 0.1 mm
1 – Very slight	Fine cracks easily treated during normal decoration.	< 1 mm
2 – Slight	Cracks easily filled; redecoration likely; some external repointing.	< 5 mm
3 – Moderate	Cracks require patching and some masonry replacement; services may fracture.	5–15 mm

Sources of ground movement and qualitative assessment

The principal sources of ground movement are the installation of the basement retaining walls, the excavation of the basement box, and any temporary dewatering of the granular deposits. Two factors substantially limit the potential for damage to third-party structures:

- the outbuilding and its basement are detached and located at the far end of the rear garden, physically separated from the host dwelling and from neighbouring buildings by intervening garden ground and boundary fencing; and
- the excavation is of limited plan area (approximately 33 m²) and depth (assumed approximately 3.0 m).

On this basis, and subject to appropriate excavation support and groundwater control, ground movement at neighbouring structures is expected to be negligible and to remain within Burland Category 0–1 (negligible to very slight). The principal ground-stability control is the temporary support of excavations in granular, potentially water-bearing gravels to prevent loss of ground or running-sand conditions. Where any neighbouring structure, boundary wall or buried service is found to lie within the zone of influence of the excavation, a quantitative ground movement assessment and a pre-construction condition survey should be undertaken by the appointed Structural Engineer.



Monitoring

Where required by the proximity of third-party structures, ground and structural movement should be monitored during excavation and construction by means of settlement markers, crack gauges and, where appropriate, vibration monitoring, with pre-construction baseline surveys and agreed trigger and action values.



8 BASEMENT IMPACT ANALYSIS AND MITIGATION

This section considers the potential impacts of the basement works during construction and in service. Impacts are classified as Major, Moderate, Minor or Negligible using the significance framework routinely adopted in BIAs. The headline assessment is set out below.

Receptor	Potential effect	Significance	Residual
Neighbouring land and structures	Ground movement from excavation and temporary works; the works are detached and separated from neighbouring buildings.	Minor	Negligible
Groundwater (Principal superficial aquifer)	Potential interception during excavation (no groundwater encountered in nearby boreholes); minor local obstruction of flow by the basement box.	Minor	Negligible
Surface water / flooding	Surface-water flood exposure of the structure; minor change in impermeable area.	Minor	Minor / Negligible
Ground stability	Stability of excavations in granular, potentially water-bearing deposits (running-sand risk).	Moderate	Minor
Contamination / Made Ground	Disturbance of Made/Worked Ground arisings during excavation.	Minor	Negligible
Trees (mature tree ≈5 m to the SE)	Damage to roots or loss of ground within the Root Protection Area during excavation.	Minor	Negligible
Statutory utilities	Potential damage to buried services during excavation.	Minor	Negligible

The mitigation measures set out below are proposed to reduce residual impacts to the levels indicated. They should be secured through the detailed design and a Construction Environmental Management Plan (CEMP).

Mitigation measures and construction methodology

The mitigation measures set out below are proposed to reduce residual impacts to the levels indicated. They should be secured through the detailed design and a Construction Environmental Management Plan (CEMP).



Temporary works and underpinning

- Detailed temporary works and retaining design by the appointed Structural Engineer in accordance with BS EN 1997-1 and CIRIA C760, appropriate to granular, water-bearing ground (for example a fully embedded retaining solution such as contiguous piling, or a sequential reinforced-concrete box), with the basement constructed bottom-up.
- Excavation support designed to prevent loss of ground and running-sand conditions in the gravels; temporary propping retained until the permanent works provide restraint.
- Where personnel enter excavations of 1.2 m depth or greater, precautionary gas monitoring and safe support/battering of sides in accordance with health-and-safety requirements.

Groundwater control

- Temporary groundwater control during excavation by sump and pump within the excavation footprint, designed to limit drawdown and the migration of fines from the surrounding gravels; discharge to be managed and consented as required.
- The permanent basement to be designed so as not to dam or materially divert groundwater flow within the Principal gravel aquifer, noting the limited footprint of the works.
- Groundwater levels are expected to return to equilibrium following completion.

Waterproofing and flood resilience

- Waterproofing of the completed basement to BS 8102, with the system and grade selected for the habitable (gym/office) use and the Moderate groundwater-flooding setting – for example a combination of an integral (Type A/B) barrier and a drained (Type C) cavity with appropriate drainage and, where used, a sump and pump.
- Finished floor levels and any external basement access set above surrounding ground, with flood-resilient detailing to address the on-Site surface-water (pluvial) flood risk; the existing surface-water drainage regime to be maintained (no SuDS strategy within this commission).
- Below-ground concrete specified for ground and groundwater aggressivity in accordance with BS 8500, to be confirmed once ground conditions are established.

Contamination, utilities and construction management

- Made/Worked Ground arisings to be handled with standard controls (dust suppression, appropriate PPE) and classified for off-site disposal as required; a watching brief during excavation to identify any unexpected contamination.
- Service records to be obtained and a CAT scan / trial-holing undertaken to locate buried services in advance of excavation.
- Control of noise, dust and vibration during construction, and compliance with the Construction (Design and Management) Regulations 2015, secured through the CEMP.



Trees and arboricultural protection

A mature tree is present approximately 5 m to the south-east of the proposed foundation. Because the superficial deposits are granular (shrink–swell Negligible), the tree does not present a shrink–swell ground-movement risk to the structure; the principal consideration is the protection of the tree and its roots during construction. Subject to confirmation of its species, exact position and any Tree Preservation Order, an arboricultural assessment and tree-protection method statement should be prepared in accordance with BS 5837 and Hillingdon Policy DMHB 14, including root-protection measures (such as hand-digging or a no-dig approach within the Root Protection Area) and, where required, a suitable foundation or retaining solution to the elevation nearest the tree.

Party Wall etc. Act 1996

As the outbuilding is detached and set within the garden, the relationship of the excavation to neighbouring structures should be confirmed. Section 6 of the Party Wall etc. Act 1996 (excavation within 3 m of, and to a greater depth than the foundations of, a neighbouring structure) may be engaged depending on the final position of the works relative to the site boundaries and any neighbouring buildings or structures. Where engaged, notices should be served and pre-construction condition surveys undertaken prior to commencement.



9 CONCLUSIONS & RECOMMENDATIONS

Conclusions

This Basement Impact Assessment has been prepared in support of a planning application for a detached single-storey garden outbuilding with a single basement level at 121 Lowdell Close, West Drayton, UB7 8BA. On the basis of the desk-based assessment and screening undertaken:

- there are no identified constraints to the basement development that cannot be satisfactorily managed through detailed design, mitigation and construction controls;
- the works are detached and physically separated from the host dwelling and neighbouring buildings, and the anticipated ground-movement impact on third-party structures is expected to be negligible (Burland Category 0–1), subject to appropriate excavation support;
- nearby BGS boreholes (approximately 250–325 m south) recorded no groundwater to depths of up to approximately 6 m, indicating that the basement formation is likely to sit above the water table; the principal residual sensitivities – the highly vulnerable Principal gravel aquifer, the Moderate groundwater-flooding susceptibility and the on-Site surface-water flood risk – are addressed through groundwater control, a robust BS 8102 waterproofing and drainage design, and flood-resilient detailing;
- natural ground-stability hazards (shrink–swell, compressibility, running sands, dissolution) are negligible to very low, radon protective measures are not required, and the Site is within an area of Low unexploded-ordnance (UXO) risk; and
- no heritage, Green Belt or designated ecological constraints relevant to the basement works have been identified.

Recommendations

- Detailed temporary works, excavation support and (where required) ground-movement design to be prepared by the appointed Structural Engineer in accordance with CIRIA C760 and BS EN 1997-1.
- The basement formation level to be confirmed; the groundwater regime – indicated by the nearby borehole records to lie below formation – to be verified by site monitoring if required for detailed design; and the waterproofing designed to BS 8102 with drainage appropriate to the Moderate groundwater-flooding setting.
- Flood-resilient detailing and finished levels to address the on-Site surface-water flood risk; the existing surface-water drainage regime to be maintained.
- The mature tree approximately 5 m to the south-east to be protected during construction in accordance with BS 5837 and Policy DMHB 14 (root protection / arboricultural method statement), and its species, exact proximity and any TPO confirmed.
- The offsets of the works to boundaries and neighbouring structures to be confirmed, and Party Wall notices served where Section 6 of the Party Wall etc. Act 1996 is engaged.
- A Construction Environmental Management Plan to be implemented, incorporating control of noise, dust and vibration, management of Made/Worked Ground arisings and a watching brief.
- This BIA to be updated if the scheme changes materially or if ground/groundwater information becomes available that differs from the assumptions made.



Statement of compliance

Subject to the recommendations above being carried forward into the detailed design, the proposals are considered to comply with Policy DMHD 3 (Basement Development) of the Hillingdon Local Plan Part 2 (2020) and with the Council's validation requirement for a Basement Impact Assessment, demonstrating that the basement can be constructed safely and without unacceptable impact on the surrounding ground, the water environment or neighbouring property.



REFERENCES

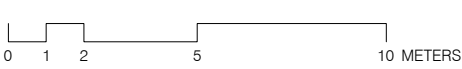
London Borough of Hillingdon – Local Plan Part 2: Development Management Policies (2020), Policy DMHD 3.
London Borough of Hillingdon – Local Planning Validation Checklist (February 2024).
London Borough of Camden – Camden Planning Guidance: Basements.
National Planning Policy Framework (MHCLG, 2024).
CIRIA C760 – Guidance on embedded retaining wall design.
CIRIA C580 – Embedded retaining walls: guidance for economic design.
BS EN 1997-1 – Geotechnical design, Part 1: General rules.
BS 8102 – Protection of below-ground structures against water from the ground.
BS 8500 – Concrete: complementary British Standard to BS EN 206.
BS 5837 – Trees in relation to design, demolition and construction.
BR 211 – Radon: guidance on protective measures for new buildings (BRE).
Burland, J. B. et al. (1977); Boscardin, M. D. and Cording, E. J. (1989) – building damage classification.
Groundsure Insight Report ref. GS-FQV-DIB-HCO-MI4 (2026) and historical mapping ref. GS-4T4-FWA-FPL-LK4 (2026).



APPENDIX A – EXISTING AND PROPOSED DEVELOPMENT DRAWINGS



EXISTING BLOCK PLAN



DRAWING NOTES
-

REV.	NOTES
V1	-

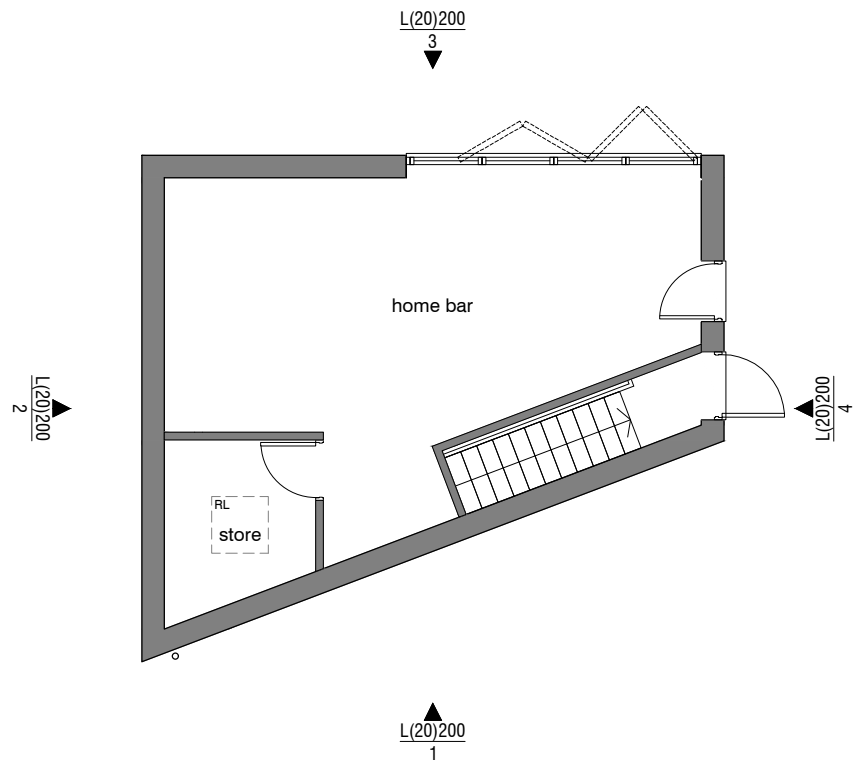
DATE	BY
15.04.26	GN

PROJECT
121 Lowdell Close West Drayton UB7 8BA

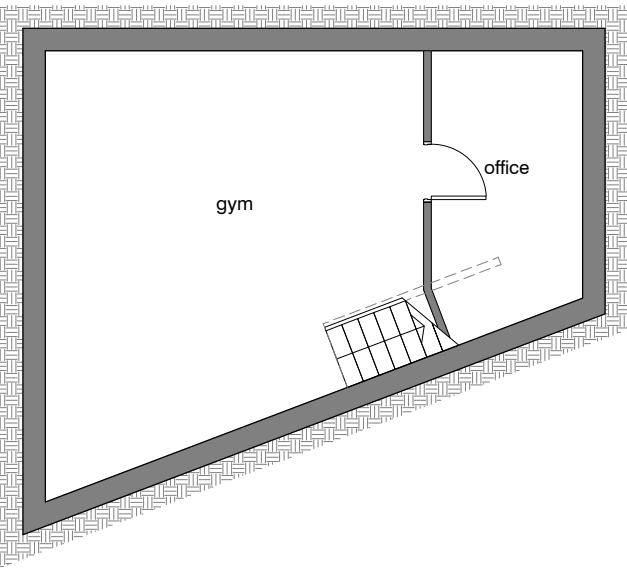
STATUS
PLANNING

DRAWING
Block Plan as Existing

DRAWING #	REVISION	SCALE	FORMAT
L(10)010	V2	1:200	A3



PROPOSED GROUND FLOOR PLAN (G.I.A. 33m²)



PROPOSED BASEMENT PLAN (G.I.A. 33m²)



DRAWING NOTES
-

REV. NOTES
V1 -

DATE BY
15.04.26 GN

PROJECT
**121 Lowdell Close
West Drayton UB7 8BA**
STATUS
PLANNING

DRAWING
Plans as Proposed
DRAWING # REVISION SCALE FORMAT
L(20)100 V2 1:100 A3



APPENDIX B – GROUNDSURE INSIGHT

121, LOWDELL CLOSE, WEST DRAYTON, HILLINGDON, UB7 8BA

Order Details

Date: 28/06/2026
Your ref: 117
Our Ref: GS-FQV-DIB-HCO-MI4

Site Details

Location: 506518 181184
Area: 0.03 ha
Authority: [London Borough of Hillingdon](#) ↗

Site plan



Quick Links

Summary of findings [p. 2](#) >
OS MasterMap site plan [p.14](#) >
Aerial image [p. 9](#) >

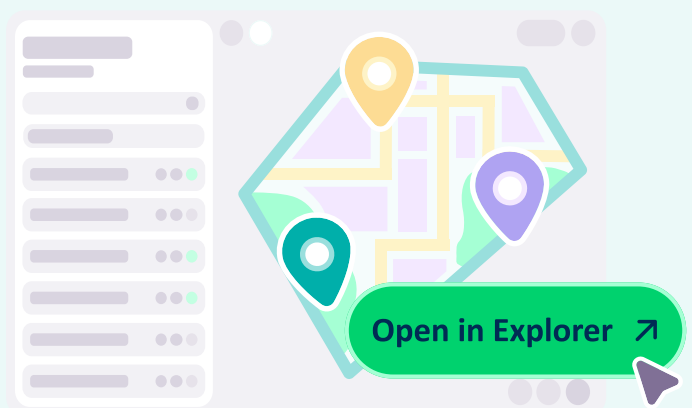
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	1	3	12	15	-
17	1.2	Historical tanks	0	0	0	0	-
17 >	1.3 >	Historical energy features >	0	0	8	5	-
18	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	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
19 >	2.1 >	Historical industrial land uses >	1	3	13	16	-
21	2.2	Historical tanks	0	0	0	0	-
21 >	2.3 >	Historical energy features >	0	0	21	17	-
23	2.4	Historical petrol stations	0	0	0	0	-
23	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
24	3.1	Active or recent landfill	0	0	0	0	-
24	3.2	Historical landfill (BGS records)	0	0	0	0	-
25	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
25 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	0	1	-
25 >	3.5 >	Historical waste sites >	0	0	0	1	-
26	3.6	Licensed waste sites	0	0	0	0	-
26 >	3.7 >	Waste exemptions >	0	0	1	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	0	0	5	-	-
28	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
28	4.3	Current or recent petrol stations	0	0	0	0	-
28	4.4	Electricity cables	0	0	0	0	-
28	4.5	Gas pipelines	0	0	0	0	-



29	4.6	Sites determined as Contaminated Land	0	0	0	0	-
29	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
29	4.8	Regulated explosive sites	0	0	0	0	-
29	4.9	Hazardous substance storage/usage	0	0	0	0	-
29	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
30 >	4.12 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	1	-
30	4.13	Radioactive Substance Authorisations	0	0	0	0	-
30	4.14	Licensed Discharges to controlled waters	0	0	0	0	-
31	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
31	4.16	Pollutant release to public sewer	0	0	0	0	-
31	4.17	List 1 Dangerous Substances	0	0	0	0	-
31	4.18	List 2 Dangerous Substances	0	0	0	0	-
31	4.19	Pollution Incidents (EA/NRW)	0	0	0	0	-
32	4.20	Pollution inventory substances	0	0	0	0	-
32	4.21	Pollution inventory waste transfers	0	0	0	0	-
32	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
33 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
35 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
36 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
37	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
37 >	5.5 >	<u>Groundwater vulnerability- local information ></u>	Identified (within 0m)				
38 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	22
43 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	3
44 >	5.8 >	<u>Potable abstractions ></u>	0	0	0	0	5
46	5.9	Source Protection Zones	0	0	0	0	-
46	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m



47	6.1	Water Network (OS NGD)	0	0	0	-	-
47	6.2	Surface water features	0	0	0	-	-
48 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
48 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
49 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
50	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
50	7.2	Historical Flood Events	0	0	0	-	-
50	7.3	Flood Defences	0	0	0	-	-
51	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
51	7.5	Flood Storage Areas	0	0	0	-	-
52	7.6	Flood Zone 2	None (within 50m)				
52	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
53 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
55 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
56	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
57	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
57	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
57	10.4	Special Protection Areas (SPA)	0	0	0	0	0
57	10.5	National Nature Reserves (NNR)	0	0	0	0	0
58	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
58	10.7	Designated Ancient Woodland	0	0	0	0	0
58	10.8	Biosphere Reserves	0	0	0	0	0
58	10.9	Forest Parks	0	0	0	0	0
59	10.10	Marine Conservation Zones	0	0	0	0	0
59 >	10.11 >	Green Belt >	0	0	0	2	16



60	10.12	Proposed Ramsar sites	0	0	0	0	0
60	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
60	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
60	10.15	Nitrate Sensitive Areas	0	0	0	0	0
61	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
62 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
63	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
64	11.1	World Heritage Sites	0	0	0	-	-
64	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
64	11.3	National Parks	0	0	0	-	-
64	11.4	Listed Buildings	0	0	0	-	-
65	11.5	Conservation Areas	0	0	0	-	-
65	11.6	Scheduled Ancient Monuments	0	0	0	-	-
65	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
67	12.2	Open Access Land	0	0	0	-	-
67	12.3	Tree Felling Licences	0	0	0	-	-
67	12.4	Environmental Stewardship Schemes	0	0	0	-	-
67	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
68	13.1	Priority Habitat Inventory	0	0	0	-	-
68	13.2	Habitat Networks	0	0	0	-	-
68	13.3	Open Mosaic Habitat	0	0	0	-	-
68	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
69 >	14.1 >	10k Availability >	Identified (within 500m)				
70 >	14.2 >	Artificial and made ground (10k) >	1	2	7	1	-



72 >	14.3 >	Superficial geology (10k) >	1	0	1	2	-
73	14.4	Landslip (10k)	0	0	0	0	-
74 >	14.5 >	Bedrock geology (10k) >	1	0	0	0	-
75	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
76 >	15.1 >	50k Availability >	Identified (within 500m)				
77 >	15.2 >	Artificial and made ground (50k) >	1	0	2	1	-
78	15.3	Artificial ground permeability (50k)	0	0	-	-	-
79 >	15.4 >	Superficial geology (50k) >	1	0	1	2	-
80 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
80	15.6	Landslip (50k)	0	0	0	0	-
80	15.7	Landslip permeability (50k)	None (within 50m)				
81 >	15.8 >	Bedrock geology (50k) >	1	0	0	0	-
82 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
82	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
83 >	16.1 >	BGS Boreholes >	0	0	1	-	-
Page	Section	Natural ground subsidence >					
84 >	17.1 >	Shrink swell clays >	Low (within 50m)				
85 >	17.2 >	Running sands >	Very low (within 50m)				
86 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
87 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
88 >	17.5 >	Landslides >	Very low (within 50m)				
89 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
91 >	18.1 >	BritPits >	0	0	3	3	-
93 >	18.2 >	Surface ground workings >	1	3	11	-	-
94	18.3	Underground workings	0	0	0	0	0
94	18.4	Underground mining extents	0	0	0	0	-

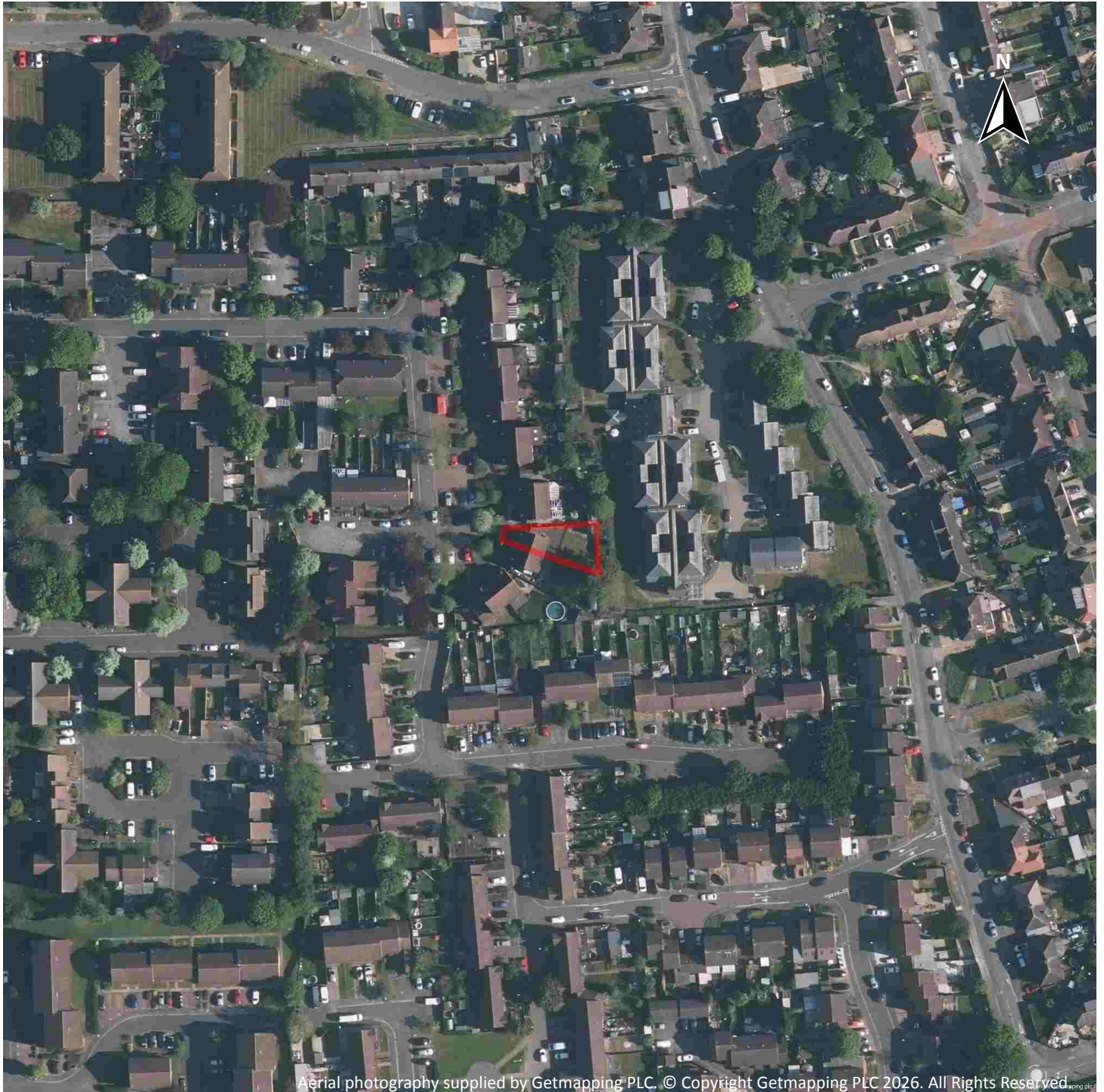


94 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	1	-
95	18.6	Non-coal mining	0	0	0	0	0
95	18.7	JPB mining areas	None (within 0m)				
95	18.8	The Coal Authority non-coal mining	0	0	0	0	-
95 >	18.9 >	Researched mining >	1	0	2	0	-
96	18.10	Mining record office plans	0	0	0	0	-
96	18.11	BGS mine plans	0	0	0	0	-
96	18.12	Coal mining	None (within 0m)				
96	18.13	Brine areas	None (within 0m)				
97	18.14	Gypsum areas	None (within 0m)				
97	18.15	Tin mining	None (within 0m)				
97	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
98	19.1	Natural cavities	0	0	0	0	-
98	19.2	Mining cavities	0	0	0	0	0
98	19.3	Reported recent incidents	0	0	0	0	-
98	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
100 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
102 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	1	-	-	-
102 >	21.2 >	BGS Estimated Urban Soil Chemistry >	1	3	-	-	-
103	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
104	22.1	Underground railways (London)	0	0	0	-	-
104	22.2	Underground railways (Non-London)	0	0	0	-	-
104	22.3	Railway tunnels	0	0	0	-	-
104	22.4	Historical railway and tunnel features	0	0	0	-	-
104	22.5	Royal Mail tunnels	0	0	0	-	-



105	22.6	Historical railways	0	0	0	-	-
105	22.7	Railways	0	0	0	-	-
105	22.8	Crossrail 2	0	0	0	0	-
105	22.9	HS2	0	0	0	0	-

Recent aerial photograph



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Capture Date: 30/04/2022

Site Area: 0.03ha



Recent site history - 2021 aerial photograph



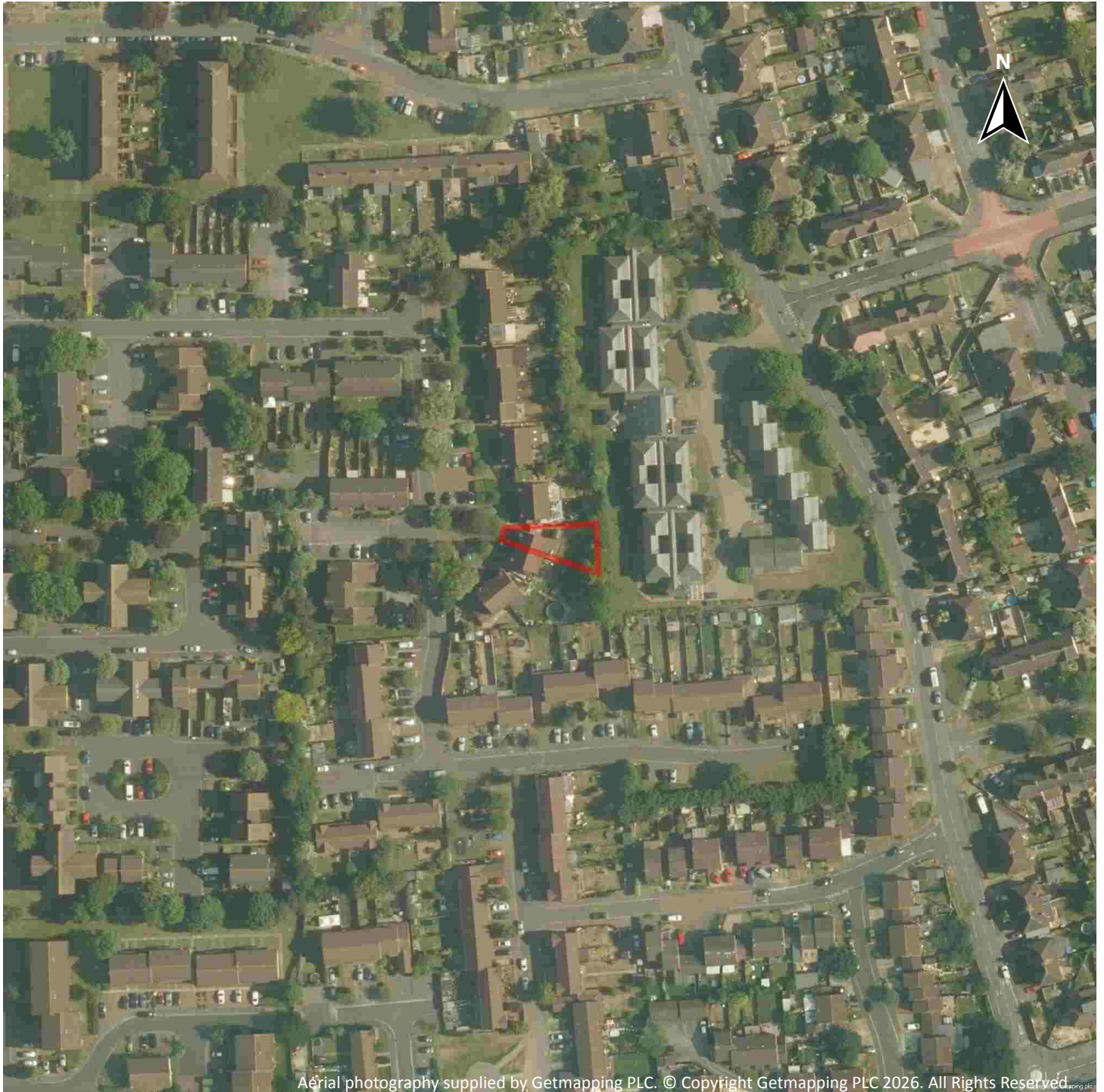
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Capture Date: 13/06/2021

Site Area: 0.03ha



Recent site history - 2017 aerial photograph



Capture Date: 21/06/2017

Site Area: 0.03ha



Recent site history - 2013 aerial photograph

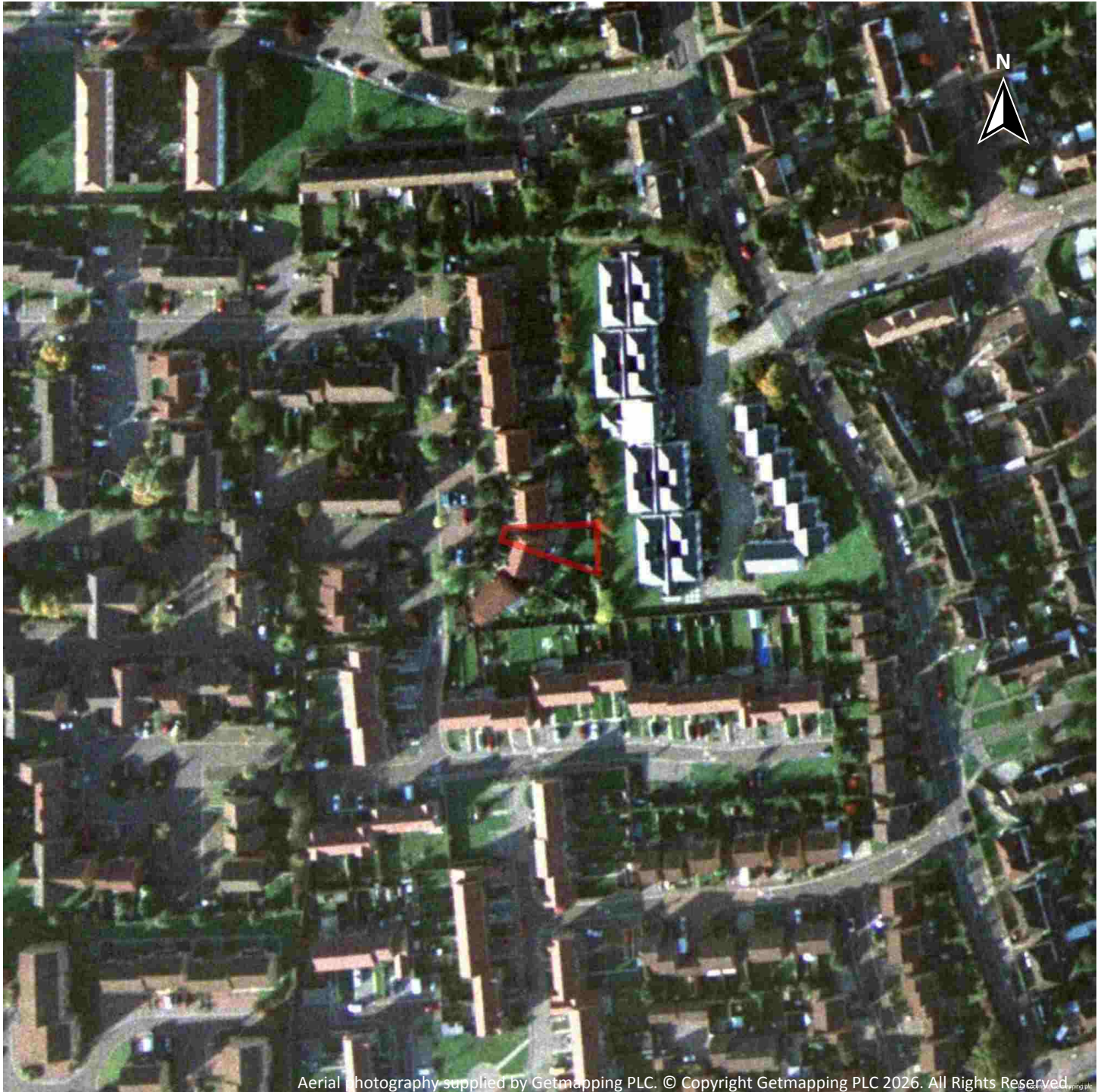


Capture Date: 20/04/2013

Site Area: 0.03ha



Recent site history - 1999 aerial photograph



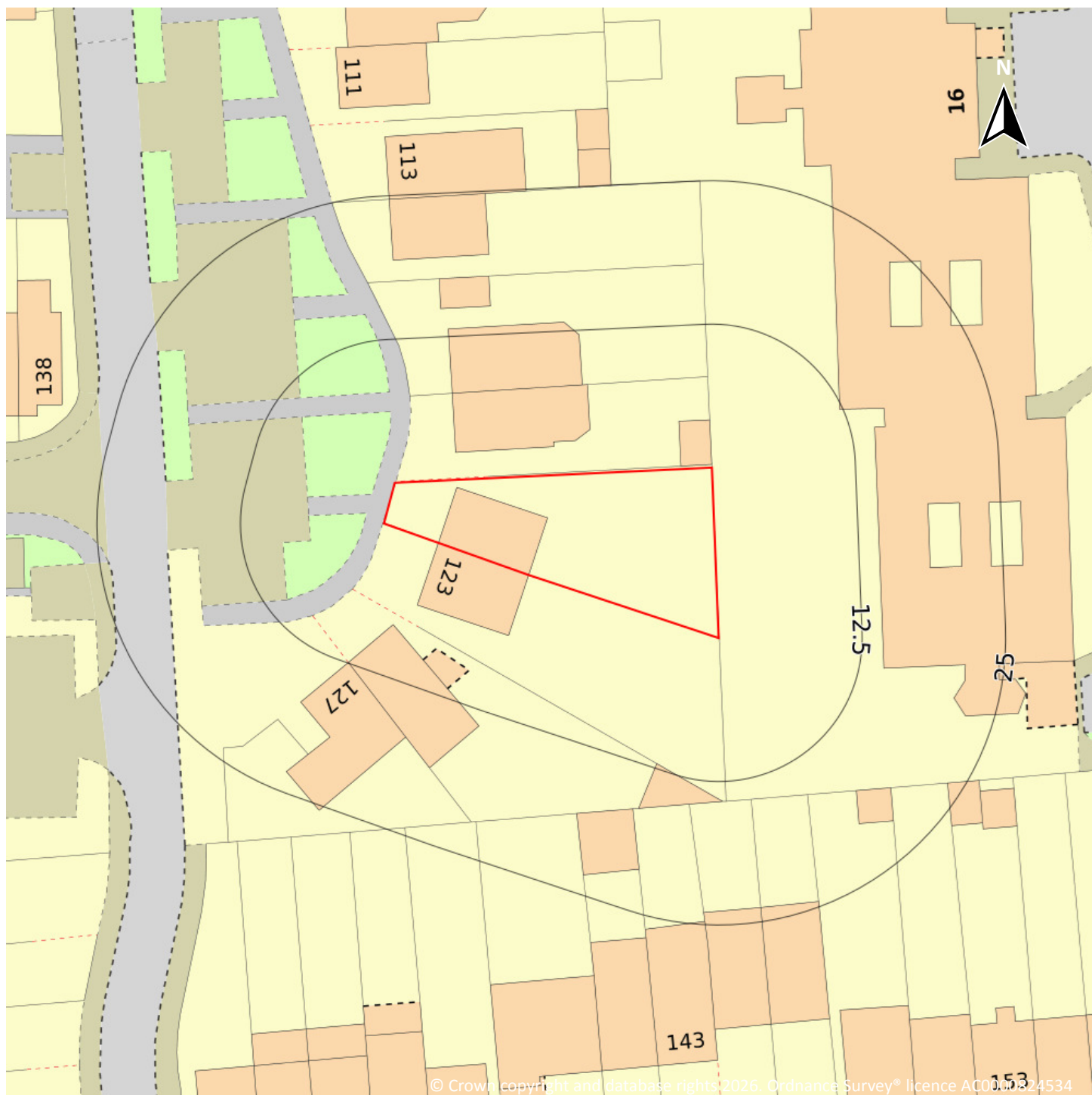
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Capture Date: 13/10/1999

Site Area: 0.03ha



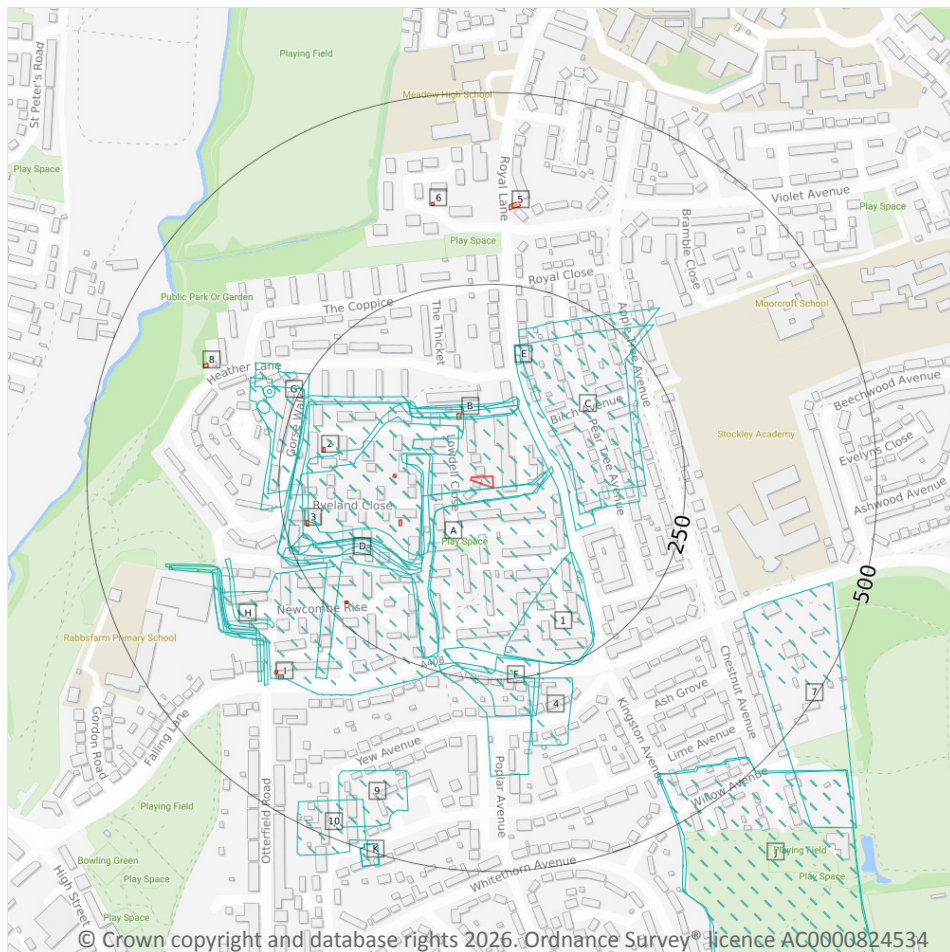
OS MasterMap site plan



Site Area: 0.03ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical energy features

1.1 Historical industrial land uses

Records within 500m

31

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 15](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Ground Workings	1970	2276752



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Pit	1932	2176608
A	1m S	Unspecified Ground Workings and Heap	1935	2188889
A	36m NW	Gravel Pit	1868	2296192
A	53m N	Gravel Pit	1881	2248498
B	79m N	Gravel Pit	1938	2272304
C	81m NE	Brick Field	1868	2297318
C	98m NE	Brick Field	1881	2305661
1	131m SE	Unspecified Pit	1975	2176607
D	132m SW	Unspecified Ground Workings	1938	2218945
E	148m N	Unspecified Mill	1868	2173484
E	170m N	Wash Mill	1881	2199295
F	211m S	Gravel Pit	1881	2300479
G	225m W	Brick Field	1881	2213681
G	228m W	Brick Field	1868	2228482
F	232m S	Gravel Pit	1868	2307524
4	251m S	Gravel Pit	1881	2223295
G	278m W	Clay Mill	1868	2169789
G	279m W	Refuse Heap	1881	2159673
G	283m NW	Clay Mill	1881	2169790
H	317m SW	Unspecified Ground Workings	1881	2209366
H	338m SW	Unspecified Ground Workings	1935	2211533
H	339m SW	Unspecified Ground Workings	1913	2313347
H	339m SW	Unspecified Ground Workings	1894	2244500
7	364m SE	Nursery	1970	2179787
9	385m S	Gravel Pit	1881	2307616
J	430m SE	Brick Field	1894	2298935
J	432m SE	Brick Field	1898	2276093
10	439m S	Gravel Pit	1868	2274525



ID	Location	Land use	Dates present	Group ID
K	487m S	Dock	1894	2168115
K	488m S	Unspecified Dock	1894	2188666

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m

0

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

13

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 ungrouped 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 15 >](#)

ID	Location	Land use	Dates present	Group ID
B	77m N	Electricity Substation	1971 - 1996	297893
A	97m W	Electricity Substation	1989 - 1996	302683
A	104m SW	Electricity Substation	1971	268639
2	193m W	Electricity Substation	1971	268637
3	218m W	Electricity Substation	1971	268638
D	225m SW	Electricity Substation	1991	296381
D	225m SW	Electricity Substation	1993 - 1996	310315
D	226m SW	Electricity Substation	1989 - 1990	319314
5	348m N	Electricity Substation	1973 - 1979	286462



ID	Location	Land use	Dates present	Group ID
I	352m SW	Electricity Substation	1973 - 1987	305860
I	353m SW	Electricity Substation	1987 - 1992	318465
6	358m N	Electricity Substation	1988 - 1992	311518
8	372m NW	Electricity Substation	1971 - 1996	313694

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 ungrouped 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

0

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

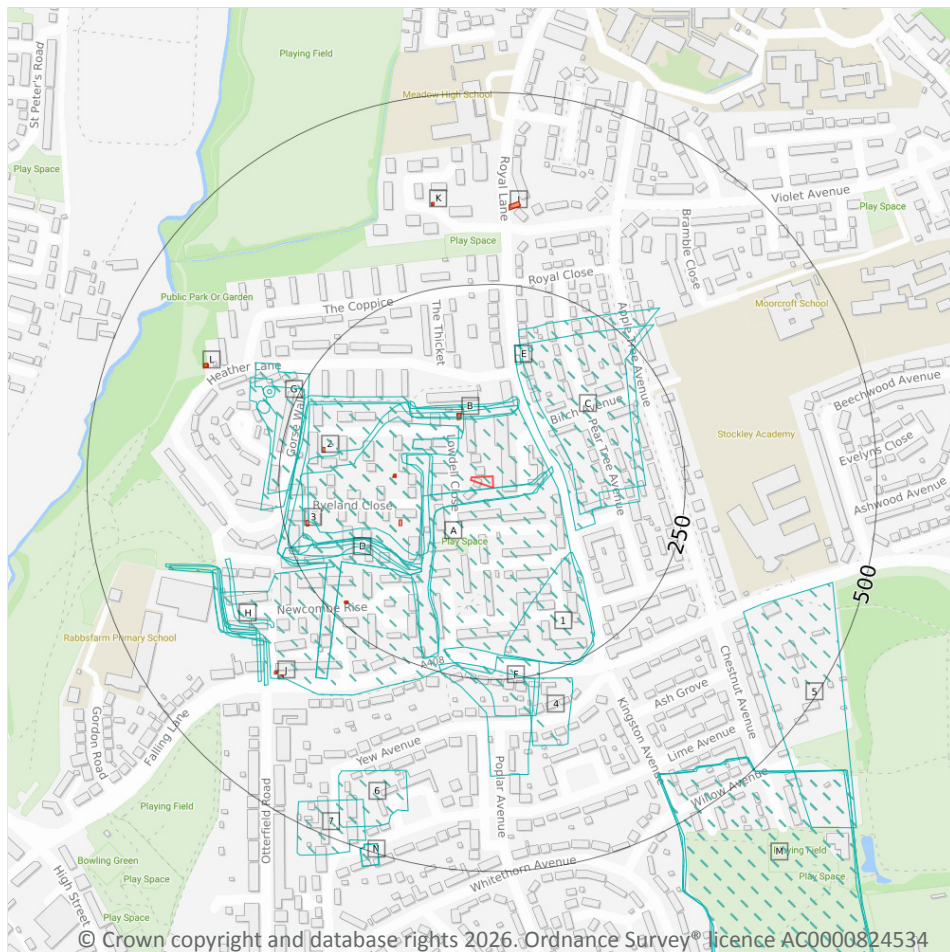
Records within 500m

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



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

33

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 19](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Ground Workings	1970	2276752
A	On site	Unspecified Pit	1932	2176608
A	1m S	Unspecified Ground Workings and Heap	1935	2188889



ID	Location	Land Use	Date	Group ID
A	36m NW	Gravel Pit	1868	2296192
A	53m N	Gravel Pit	1881	2248498
B	79m N	Gravel Pit	1938	2272304
C	81m NE	Brick Field	1868	2297318
C	98m NE	Brick Field	1881	2305661
1	131m SE	Unspecified Pit	1975	2176607
D	132m SW	Unspecified Ground Workings	1938	2218945
D	132m SW	Unspecified Ground Workings	1938	2218945
E	148m N	Unspecified Mill	1868	2173484
E	170m N	Wash Mill	1881	2199295
F	211m S	Gravel Pit	1881	2300479
G	225m W	Brick Field	1881	2213681
G	228m W	Brick Field	1868	2228482
F	232m S	Gravel Pit	1868	2307524
4	251m S	Gravel Pit	1881	2223295
G	278m W	Clay Mill	1868	2169789
G	279m W	Refuse Heap	1881	2159673
G	283m NW	Clay Mill	1881	2169790
H	317m SW	Unspecified Ground Workings	1881	2209366
H	338m SW	Unspecified Ground Workings	1935	2211533
H	339m SW	Unspecified Ground Workings	1913	2313347
H	339m SW	Unspecified Ground Workings	1894	2244500
5	364m SE	Nursery	1970	2179787
6	385m S	Gravel Pit	1881	2307616
M	430m SE	Brick Field	1894	2298935
M	431m SE	Brick Field	1894	2298935
M	432m SE	Brick Field	1898	2276093
7	439m S	Gravel Pit	1868	2274525



ID	Location	Land Use	Date	Group ID
N	487m S	Dock	1894	2168115
N	488m S	Unspecified Dock	1894	2188666

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m	0
----------------------------	----------

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'.

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m	38
----------------------------	-----------

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 19 >](#)

ID	Location	Land Use	Date	Group ID
B	77m N	Electricity Substation	1996	297893
B	77m N	Electricity Substation	1993	297893
B	78m N	Electricity Substation	1989	297893
B	78m N	Electricity Substation	1990	297893
B	78m N	Electricity Substation	1989	297893
B	79m N	Electricity Substation	1991	297893
B	79m N	Electricity Substation	1971	297893
A	97m W	Electricity Substation	1989	302683
A	97m W	Electricity Substation	1990	302683
A	97m W	Electricity Substation	1989	302683
A	98m W	Electricity Substation	1991	302683



ID	Location	Land Use	Date	Group ID
A	98m W	Electricity Substation	1996	302683
A	98m W	Electricity Substation	1993	302683
A	104m SW	Electricity Substation	1971	268639
2	193m W	Electricity Substation	1971	268637
3	218m W	Electricity Substation	1971	268638
D	225m SW	Electricity Substation	1991	296381
D	225m SW	Electricity Substation	1996	310315
D	225m SW	Electricity Substation	1993	310315
D	226m SW	Electricity Substation	1990	319314
D	226m SW	Electricity Substation	1989	319314
I	348m N	Electricity Substation	1973	286462
I	348m N	Electricity Substation	1979	286462
J	352m SW	Electricity Substation	1986	305860
J	352m SW	Electricity Substation	1986	305860
J	353m SW	Electricity Substation	1973	305860
J	353m SW	Electricity Substation	1992	318465
J	354m SW	Electricity Substation	1987	305860
J	355m SW	Electricity Substation	1987	318465
K	358m N	Electricity Substation	1988	311518
K	358m N	Electricity Substation	1992	311518
L	372m NW	Electricity Substation	1989	313694
L	372m NW	Electricity Substation	1990	313694
L	372m NW	Electricity Substation	1989	313694
L	373m NW	Electricity Substation	1996	313694
L	373m NW	Electricity Substation	1993	313694
L	373m NW	Electricity Substation	1991	313694
L	373m NW	Electricity Substation	1971	313694

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

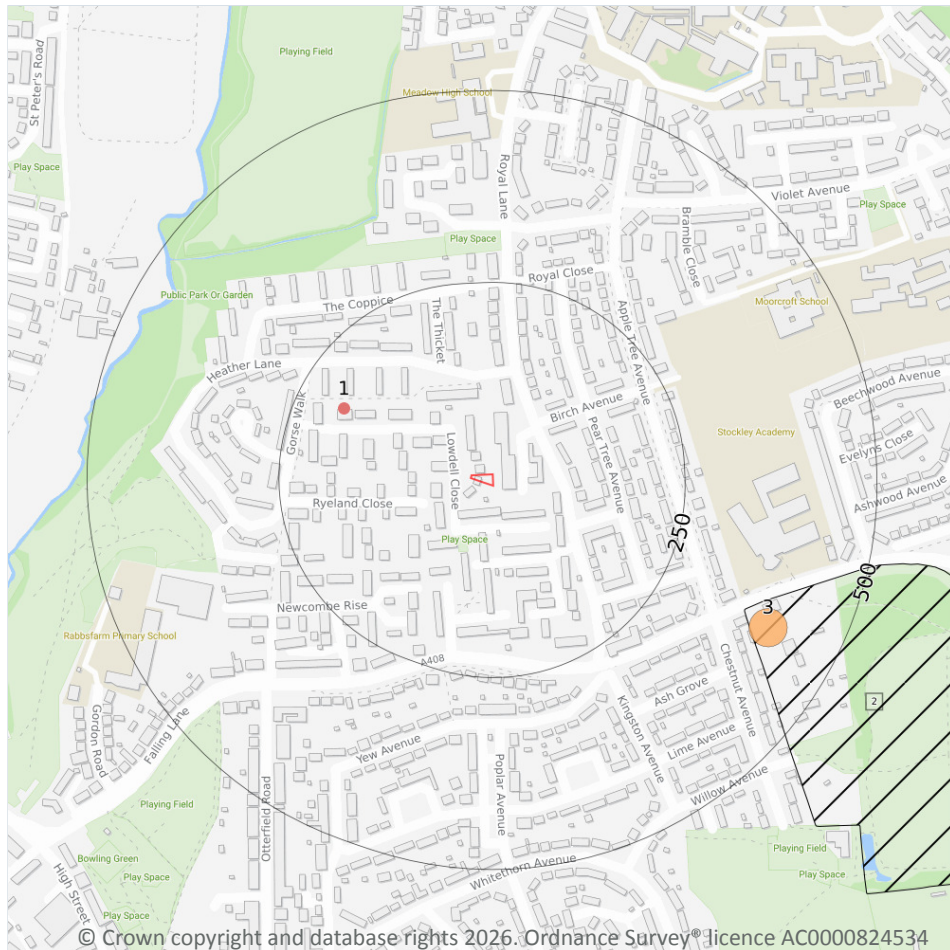
Records within 500m**0**

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'.

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical waste sites
- 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	1
---------------------	---

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.

Features are displayed on the Waste and landfill map on [page 24 >](#)

ID	Location	Details		
2	365m SE	Site Address: Stockley Park West, Stockley Park, Middlesex Licence Holder Address: -	Waste Licence: Yes Site Reference: 8HI046, DL254, HIL56A Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 25/06/1987 Licence Surrender: 15/03/1993	Operator: - Licence Holder: Stockley Park Consortium Limited First Recorded 31/12/1921 Last Recorded: 19/03/1993

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

3.5 Historical waste sites

Records within 500m	1
---------------------	---

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

Features are displayed on the Waste and landfill map on [page 24 >](#)

ID	Location	Address	Further Details	Date
3	378m SE	Site Address: Park View Road, 93A Park View Road, Hillingdon, UXBRIDGE, Hillingdon, UB8 3LN	Type of Site: Waste Transfer Station Planning application reference: 98/0299 Description: Erection of a single storey dry building materials waste transfer station with storage area, ancillary office and loading bay facility. Construction - roller shutter doors. An application (ref: 98/0299) for Detailed Planning permission was submitted to Hillingdon L.B. on 11th February 1998. Data source: Historic Planning Application Data Type: Point	-

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	1
----------------------------	----------

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.

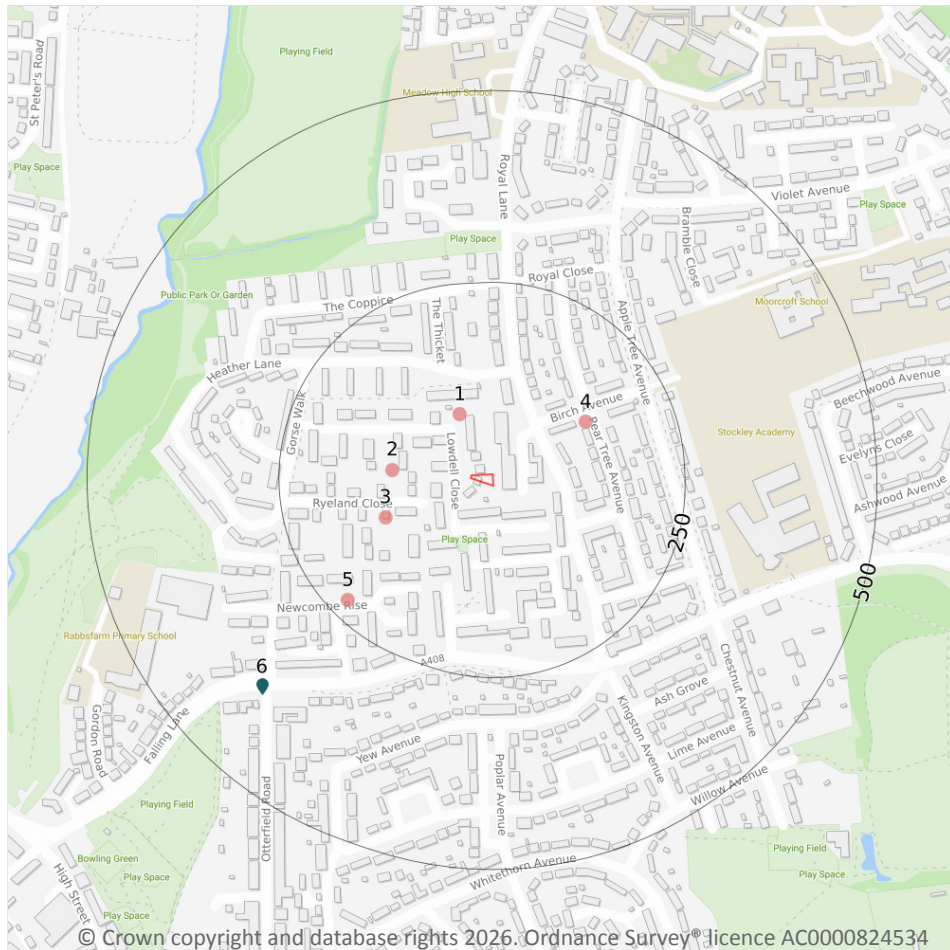
Features are displayed on the Waste and landfill map on [page 24 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
1	187m NW	45 Lowdell Close West Drayton Middlesex Ub7 8az	EPR/NF0835R W/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)

4.1 Recent industrial land uses

Records within 250m

5

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 27 >](#)

ID	Location	Company	Address	Activity	Category
1	81m N	Electricity Sub Station	Greater London, UB7	Electrical Features	Infrastructure and Facilities
2	103m W	Electricity Sub Station	Greater London, UB7	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
3	122m SW	West Drayton Clearance Service	45, Ryeland Close, West Drayton, Greater London, UB7 8AU	Clearance and Salvage Dealers	Recycling Services
4	139m NE	Electricity Sub Station	Greater London, UB7	Electrical Features	Infrastructure and Facilities
5	226m SW	Electricity Sub Station	Greater London, UB7	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	0
----------------------------	----------

Current or recent tanks identified from the Ordnance Survey® NGD.

This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

Records within 500m	0
----------------------------	----------

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0
----------------------------	----------

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0
----------------------------	----------

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 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.

4.7 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.

4.8 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.

4.9 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.

4.10 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.

4.11 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.

4.12 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 27 >](#)

ID	Location	Address	Details	
6	385m SW	TotalFinaElf, Falling Lane, Yiewsley	Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.13 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.

4.14 Licensed Discharges to controlled waters

Records within 500m

0

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

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



4.15 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.

4.16 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.

4.17 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.

4.18 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.

4.19 Pollution Incidents (EA/NRW)

Records within 500m**0**

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

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



4.20 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.

4.21 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.

4.22 Pollution inventory radioactive waste

Records within 500m

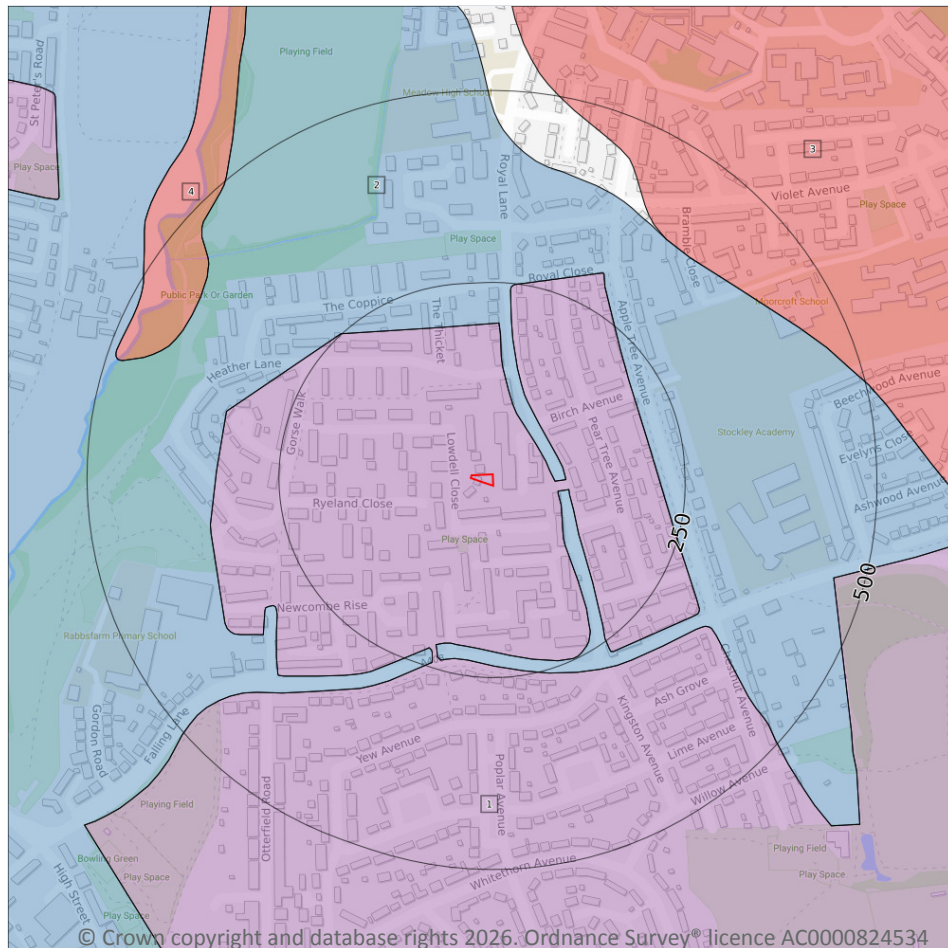
0

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

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 33](#) >

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	69m NE	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

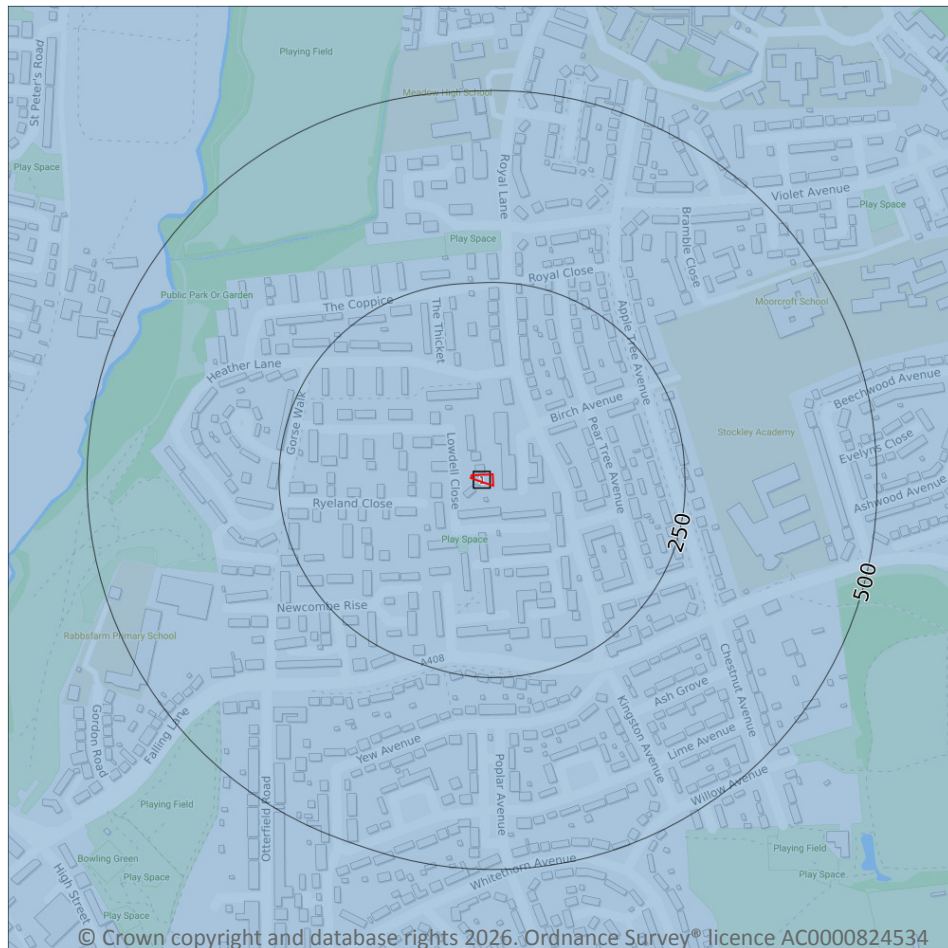


ID	Location	Designation	Description
3	381m NE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	420m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Bedrock aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

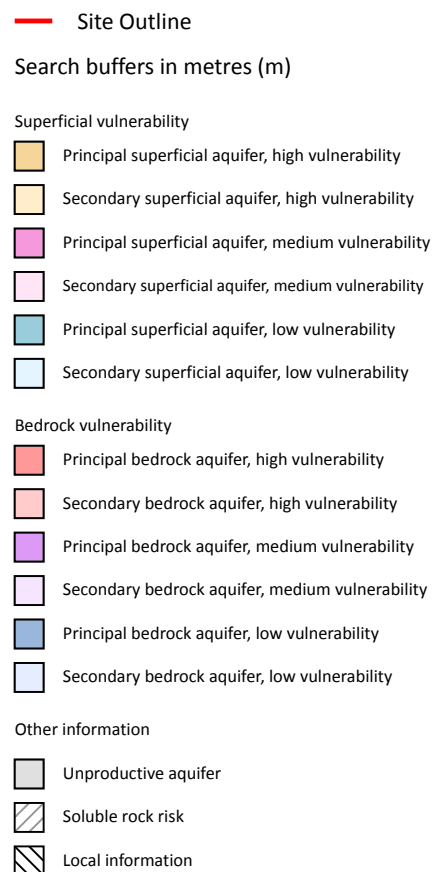
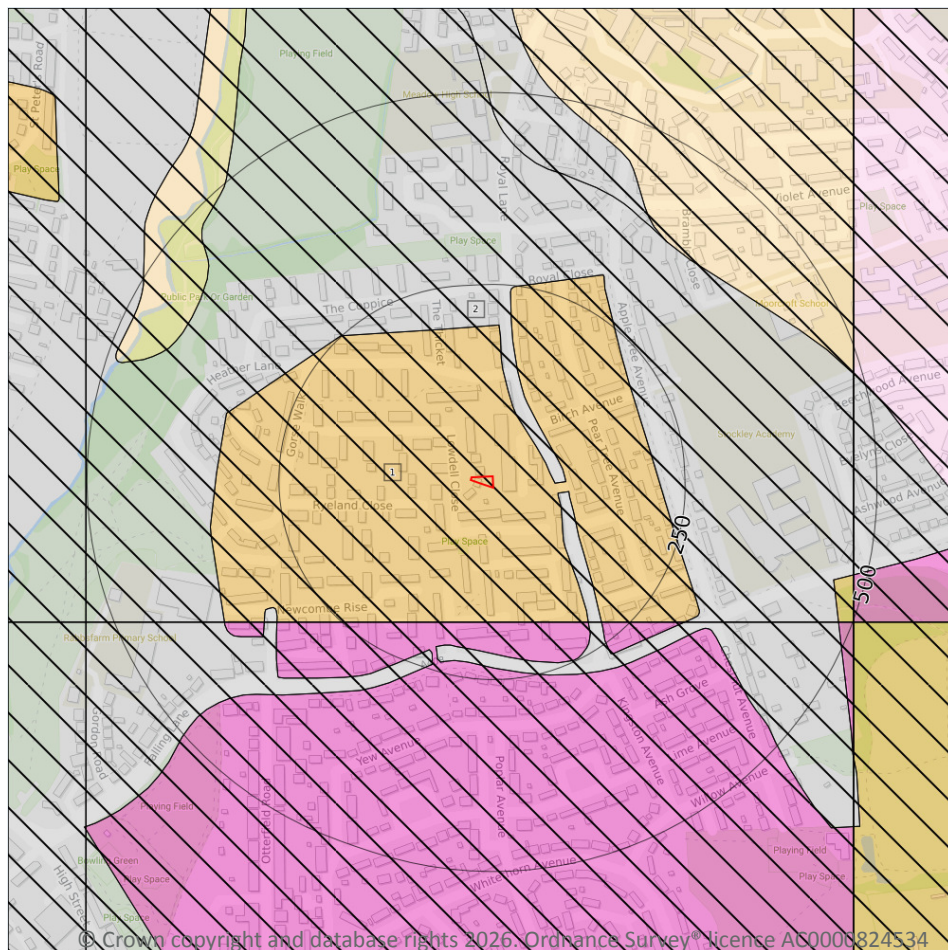
Features are displayed on the Bedrock aquifer map on [page 35](#) >

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

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



Groundwater vulnerability



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 36](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Principal superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Principal Thickness: <3m Patchiness value: >90% Recharge potential: No Data	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

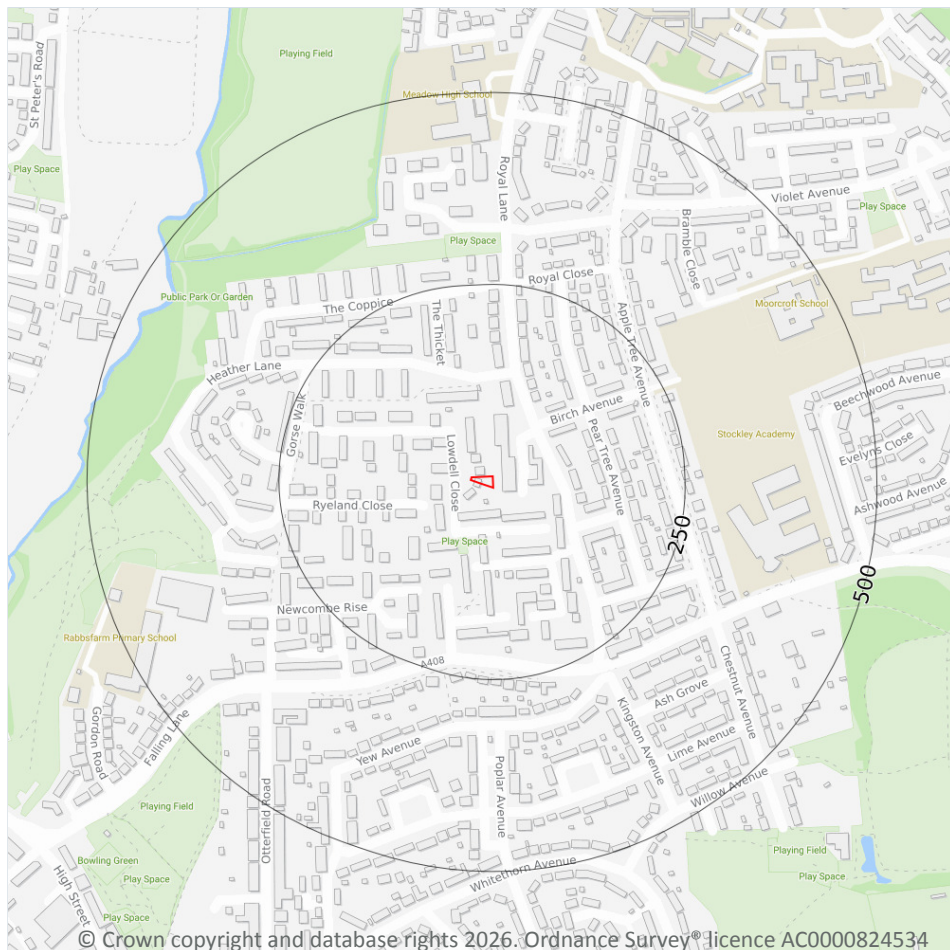
Records on site	1
------------------------	----------

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
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

22

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 38](#) >



ID	Location	Details	
-	832m NE	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: HILLINGDON HOSPITAL- BOREHOLE Data Type: Point Name: The Hillingdon Hospital NHS Trust Easting: 506910 Northing: 181930	Annual Volume (m ³): 138166 Max Daily Volume (m ³): 385.4 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 01/01/2010 Version End Date: -
-	832m NE	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE B AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506910 Northing: 181930	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -
-	1032m N	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE C AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506820 Northing: 182180	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -
-	1057m NE	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: HILLINGDON HOSPITAL - BOREHOLE Data Type: Point Name: The Hillingdon Hospital NHS Trust Easting: 506950 Northing: 182160	Annual Volume (m ³): 138166 Max Daily Volume (m ³): 385.4 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 01/01/2010 Version End Date: -



ID	Location	Details	
-	1057m NE	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE A AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506950 Northing: 182160	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -
-	1299m SE	Status: Active Licence No: TH/039/0036/012 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: Stockley Park Golf Club Limited Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: NPS/WR/009158 Original Start Date: 01/04/2013 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2025 Version End Date: -
-	1299m SE	Status: Active Licence No: TH/039/0036/012 Details: General Washing/Process Washing Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: Stockley Park Golf Club Limited Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: NPS/WR/009158 Original Start Date: 01/04/2013 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2025 Version End Date: -
-	1299m SE	Status: Historical Licence No: TH/039/0036/012 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: Stockley Park Golf Club Limited Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: NPS/WR/009158 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -
-	1299m SE	Status: Historical Licence No: TH/039/0036/012 Details: General Washing/Process Washing Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: Stockley Park Golf Club Limited Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: NPS/WR/009158 Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date: -



ID	Location	Details	
-	1299m SE	Status: Historical Licence No: 28/39/36/0066 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT STOCKLEY PARK GOLF LIMITED Data Type: Point Name: STOCKLEY PARK GOLF LIMITED Easting: 507580 Northing: 180410	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2009 Issue No: 1 Version Start Date: 11/01/2001 Version End Date: -
-	1299m SE	Status: Historical Licence No: 28/39/36/0069 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: STOCKLEY PARK GOLF LIMITED Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: - Original Start Date: 05/11/2001 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 05/11/2001 Version End Date: -
-	1299m SE	Status: Historical Licence No: 28/39/36/0069 Details: General Washing/Process Washing Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK, UXBRIDGE (BOREHOLE) Data Type: Point Name: STOCKLEY PARK GOLF LIMITED Easting: 507580 Northing: 180410	Annual Volume (m ³): 78000 Max Daily Volume (m ³): 2182 Original Application No: - Original Start Date: 05/11/2001 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 05/11/2001 Version End Date: -
-	1326m SE	Status: Historical Licence No: 28/39/36/0067 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT STOCKLEY PARK (PHASE 3) Data Type: Point Name: STOCKLEY PARK PHASE 3 LIMITED Easting: 507460 Northing: 180230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 05/03/2001 Expiry Date: 31-Dec-09 Issue No: 1 Version Start Date: 05/03/2001 Version End Date: -
-	1326m SE	Status: Historical Licence No: 28/39/36/0067 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK (PHASE 3)- BOREHOLE A Data Type: Point Name: STOCKLEY PARK WEST LIMITED Easting: 507460 Northing: 180230	Annual Volume (m ³): 45411 Max Daily Volume (m ³): 604.8 Original Application No: - Original Start Date: 05/03/2001 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: 07/12/2007 Version End Date: -



ID	Location	Details	
-	1326m SE	Status: Historical Licence No: TH/039/0036/004 Details: Spray Irrigation - Storage Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK (PHASE 3)- BOREHOLE A Data Type: Point Name: Horton Road Limited Easting: 507460 Northing: 180230	Annual Volume (m ³): 45411 Max Daily Volume (m ³): 604.8 Original Application No: - Original Start Date: 02/02/2010 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 24/09/2015 Version End Date: -
-	1326m SE	Status: Historical Licence No: TH/039/0036/004 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK (PHASE 3)- BOREHOLE A Data Type: Point Name: Prologis UK CCCIX SARL Easting: 507460 Northing: 180230	Annual Volume (m ³): 45411 Max Daily Volume (m ³): 604.8 Original Application No: - Original Start Date: 02/02/2010 Expiry Date: 31/03/2019 Issue No: 4 Version Start Date: 14/09/2018 Version End Date: -
-	1369m E	Status: Historical Licence No: 28/39/28/0277 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: WELL AT LITTLE LONDON NURSERY, HARLINGTON ROAD, HILLINGDON Data Type: Point Name: BARWICK Easting: 507800 Northing: 181700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 13/02/1967 Expiry Date: - Issue No: 100 Version Start Date: 25/09/1996 Version End Date: -
-	1369m E	Status: Historical Licence No: 28/39/28/0277 Details: Spray Irrigation - Spray Irrigation Definition Order Direct Source: THAMES GROUNDWATER Point: WELL AT LITTLE LONDON NURSERY, HARLINGTON ROAD, HILLINGDON Data Type: Point Name: BARWICK Easting: 507800 Northing: 181700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 13/02/1967 Expiry Date: - Issue No: 100 Version Start Date: 25/09/1996 Version End Date: -
-	1403m SE	Status: Historical Licence No: TH/039/0036/004/R01 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: STOCKLEY PARK (PHASE 3)- BOREHOLE A Data Type: Point Name: Prologis UK CCCIX SARL Easting: 507412 Northing: 180084	Annual Volume (m ³): 3500 Max Daily Volume (m ³): 50 Original Application No: NPS/WR/026745 Original Start Date: 01/04/2019 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -



ID	Location	Details	
-	1687m NE	Status: Historical Licence No: 28/39/28/0008 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT WHITELYS PARADE Data Type: Point Name: BLUE DRAGON (HILLINGDON) LTD Easting: 507800 Northing: 182300	Annual Volume (m ³): 37669 Max Daily Volume (m ³): 181.84 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 08/11/1965 Version End Date: -
-	1699m NE	Status: Active Licence No: 28/39/28/0008 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT WHITELYS PARADE Data Type: Point Name: BLUE DRAGON (HILLINGDON) LTD Easting: 507817 Northing: 182299	Annual Volume (m ³): 47663 Max Daily Volume (m ³): 200 Original Application No: NPS/WR/014518 Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 07/02/2014 Version End Date: -
-	1963m SE	Status: Active Licence No: TH/039/0036/024 Details: Trickle Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: UNLINED LAGOON WITHIN GRAVELS AT STOCKLEY PARK, UXBRIDGE Data Type: Point Name: Stockley Park Estates Company Limited Easting: 508085 Northing: 179976	Annual Volume (m ³): 15606 Max Daily Volume (m ³): 200 Original Application No: NPS/NA/001732 Original Start Date: 07/09/2022 Expiry Date: 31/03/2038 Issue No: 1 Version Start Date: 07/09/2022 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

3

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 38 >](#)



ID	Location	Details	
-	1676m W	Status: Historical Licence No: 28/39/28/0495 Details: Hydroelectric Power Generation Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER COLNE AT HUNTSMOOR WEIR, COWLEY, MIDDLESEX Data Type: Point Name: RIGBY Easting: 504870 Northing: 181570	Annual Volume (m ³): 21503232 Max Daily Volume (m ³): 58752 Original Application No: - Original Start Date: 01/04/1991 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1991 Version End Date: -
-	1786m SE	Status: Active Licence No: 28/39/36/0038 Details: Process Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: GRAND UNION CANAL AT STOCKLEY ROAD, WEST DRAYTON. Data Type: Line Name: Canal and River Trust Easting: 507770 Northing: 179890	Annual Volume (m ³): 24000 Max Daily Volume (m ³): 160 Original Application No: NPS/WR/045207 Original Start Date: 26/03/1976 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -
-	1805m SE	Status: Historical Licence No: 28/39/36/0038 Details: Dust suppression Direct Source: THAMES SURFACE WATER - NON TIDAL Point: GRAND UNION CANAL FRONTAGE AT WEST DRAYTON Data Type: Line Name: BRITISH WATERWAYS BOARD Easting: 507700 Northing: 179800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 26/03/1976 Expiry Date: - Issue No: 100 Version Start Date: 28/02/1995 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

5

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 38 >](#)



ID	Location	Details	
-	832m NE	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: HILLINGDON HOSPITAL- BOREHOLE Data Type: Point Name: The Hillingdon Hospital NHS Trust Easting: 506910 Northing: 181930	Annual Volume (m ³): 138166 Max Daily Volume (m ³): 385.4 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 01/01/2010 Version End Date: -
-	832m NE	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE B AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506910 Northing: 181930	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -
-	1032m N	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE C AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506820 Northing: 182180	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -
-	1057m NE	Status: Active Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: HILLINGDON HOSPITAL - BOREHOLE Data Type: Point Name: The Hillingdon Hospital NHS Trust Easting: 506950 Northing: 182160	Annual Volume (m ³): 138166 Max Daily Volume (m ³): 385.4 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 103 Version Start Date: 01/01/2010 Version End Date: -



ID	Location	Details	
-	1057m NE	Status: Historical Licence No: 28/39/28/0513 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE A AT HILLINGDON HOSPITAL, HILLINGDON Data Type: Point Name: HILLINGDON HOSPITAL NHS TRUST Easting: 506950 Northing: 182160	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1000 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2005 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	0
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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.

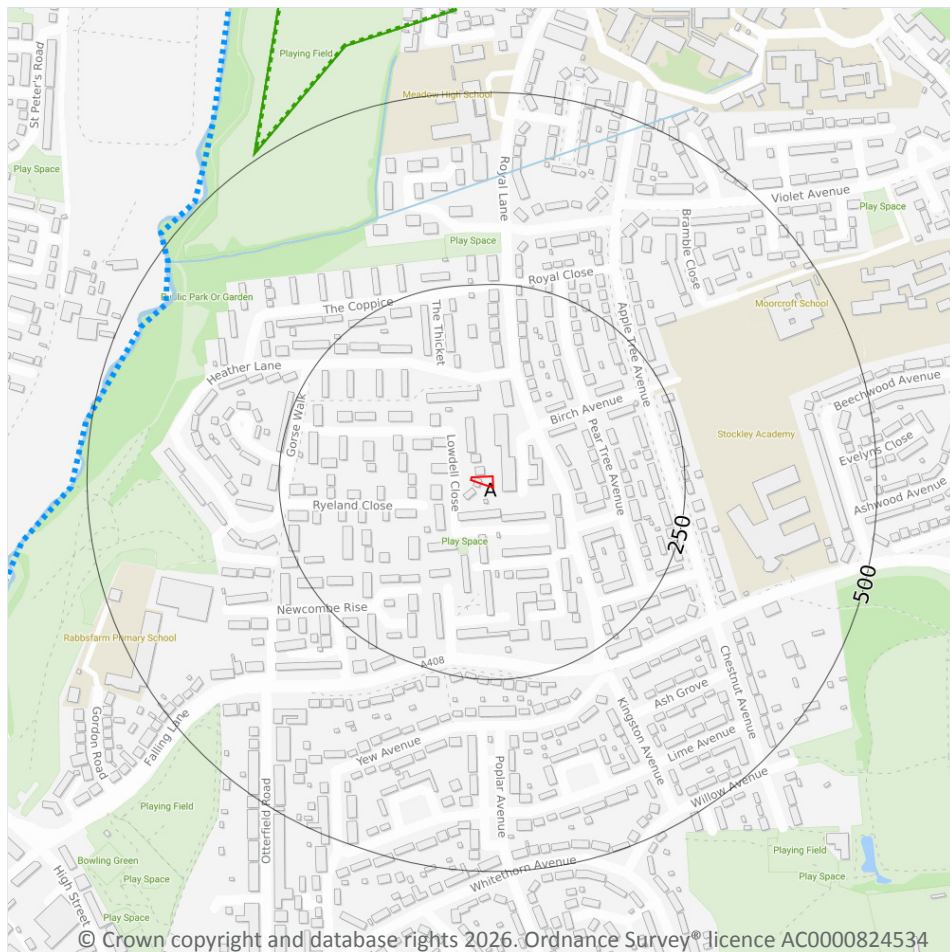
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0
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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



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS NGD)

Records within 250m

0

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

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

0

Covering rivers, streams and lakes (some overlap with OS NGD 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.



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 47 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Pinn	GB106039023070	Colne	Colne

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

6.4 WFD Surface water bodies

Records identified	1
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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 47 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	458m NW	River	Pinn	GB106039023070 ↗	No longer applicable	Does not require assessment	Moderate	2022

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 47](#) >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Lower Thames Gravels	GB40603G000300 ↗	Poor	Good	Poor	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; 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). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m

0

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.

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

7.6 Flood Zone 2

Records within 50m

0

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.

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

7.7 Flood Zone 3

Records within 50m

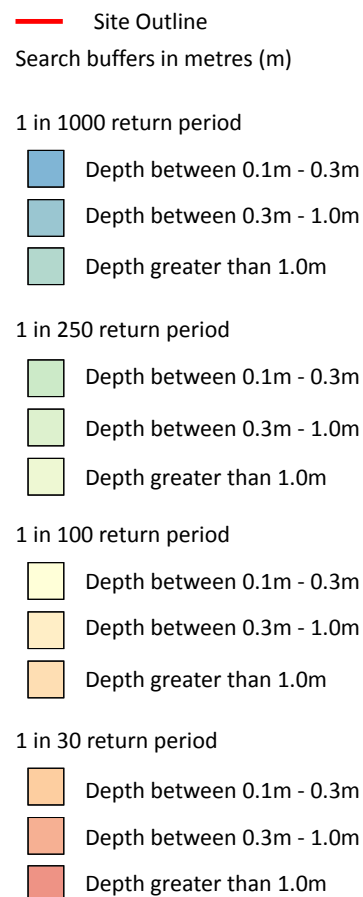
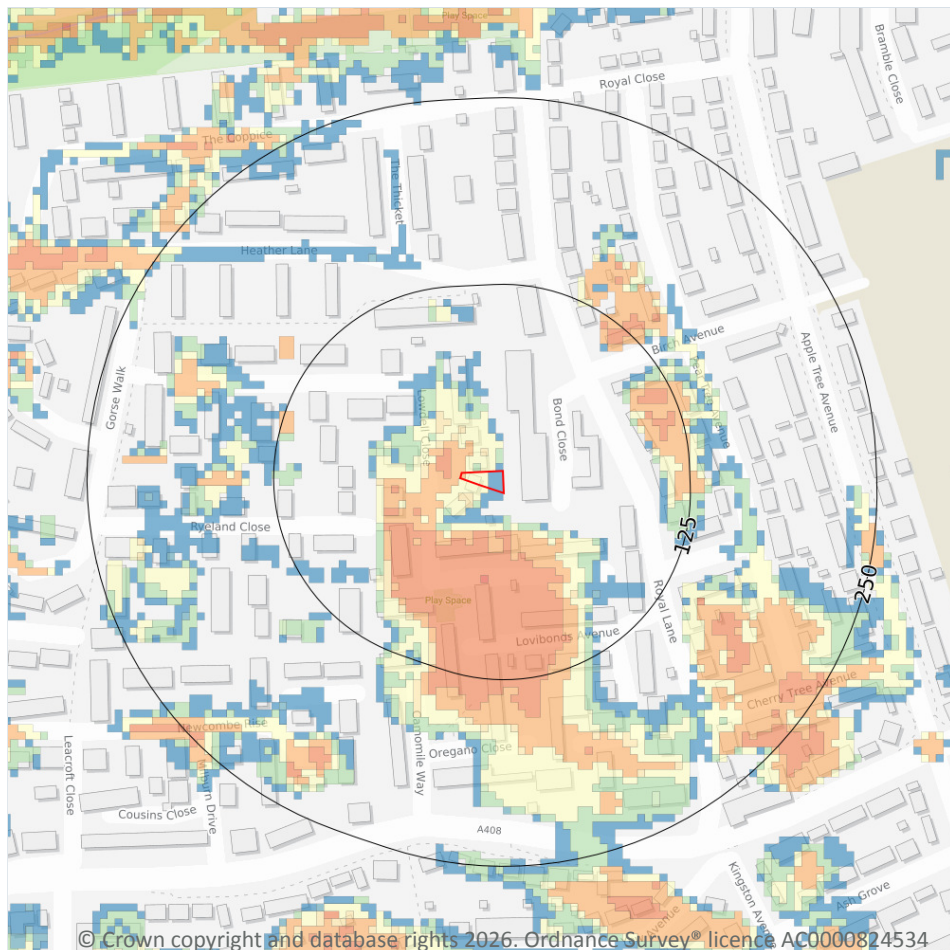
0

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.

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, 0.3m - 1.0m

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 53](#) >

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 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiantal 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

Moderate

Highest risk within 50m

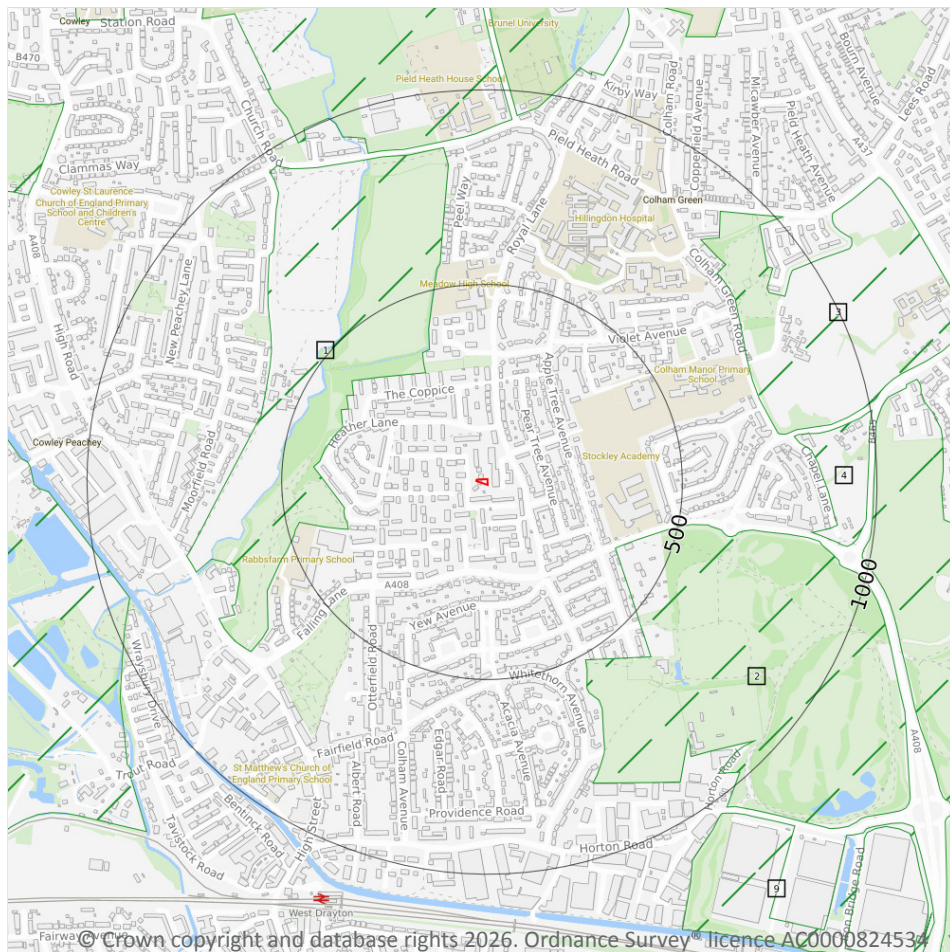
Moderate

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 55 >](#)

This data is sourced from Ambienta Risk Analytics.

10 Environmental designations



— Site Outline
Search buffers in metres (m)
Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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.

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**0**

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.

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**0**

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.

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

18

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

Features are displayed on the Environmental designations map on [page 56 >](#)

ID	Location	Name	Local Authority name
1	304m NW	London Green Belt	Hillingdon
2	366m SE	London Green Belt	Hillingdon
3	726m E	London Green Belt	Hillingdon
4	796m E	London Green Belt	Hillingdon
5	868m N	London Green Belt	Hillingdon
6	937m N	London Green Belt	Hillingdon
7	940m W	London Green Belt	Hillingdon
8	979m E	London Green Belt	Hillingdon
9	1036m SE	London Green Belt	Hillingdon
10	1245m NE	London Green Belt	Hillingdon
11	1365m NW	London Green Belt	Hillingdon
-	1665m W	London Green Belt	Buckinghamshire
-	1738m S	London Green Belt	Hillingdon
-	1781m NW	London Green Belt	Hillingdon
-	1785m N	London Green Belt	Hillingdon
-	1804m SE	London Green Belt	Hillingdon
-	1806m SW	London Green Belt	Hillingdon
-	1981m SE	London Green Belt	Hillingdon



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

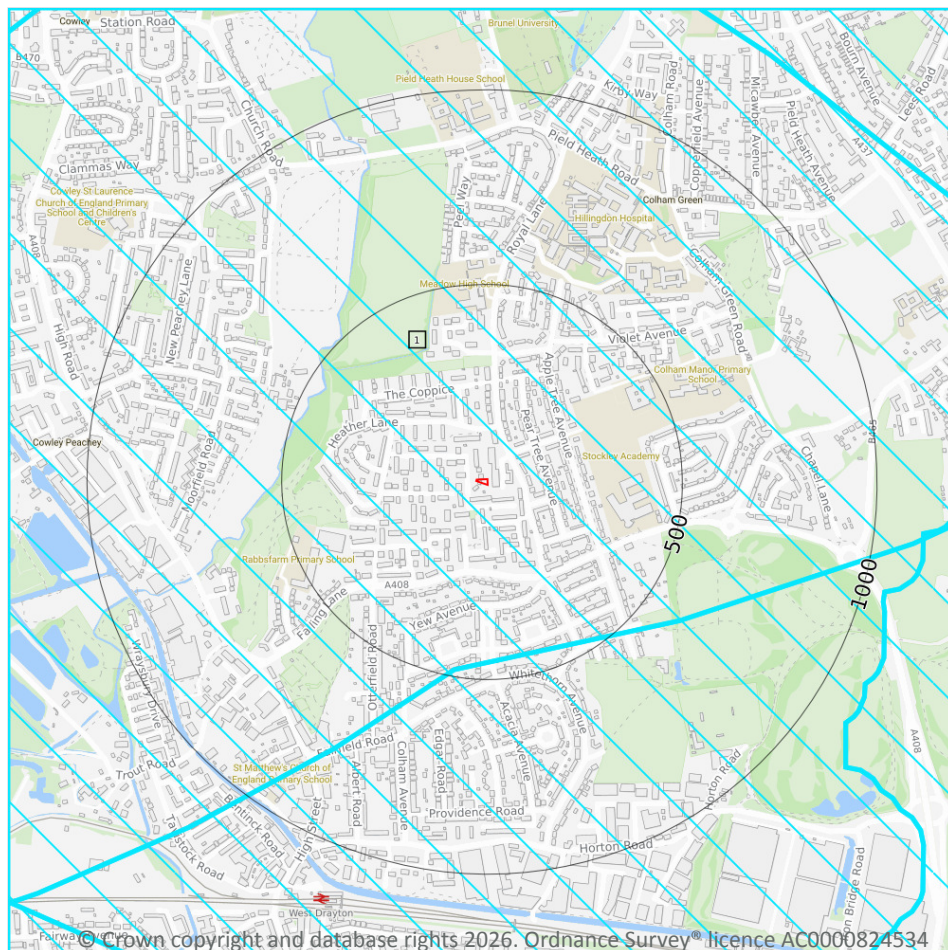
0

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.

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 62 >](#)

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0300000530050&notes=&location=506366,181433%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

0

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.

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



11 Visual and cultural designations

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

0

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.



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

11.5 Conservation Areas

Records within 250m

0

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.

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

11.7 Registered Parks and Gardens

Records within 250m

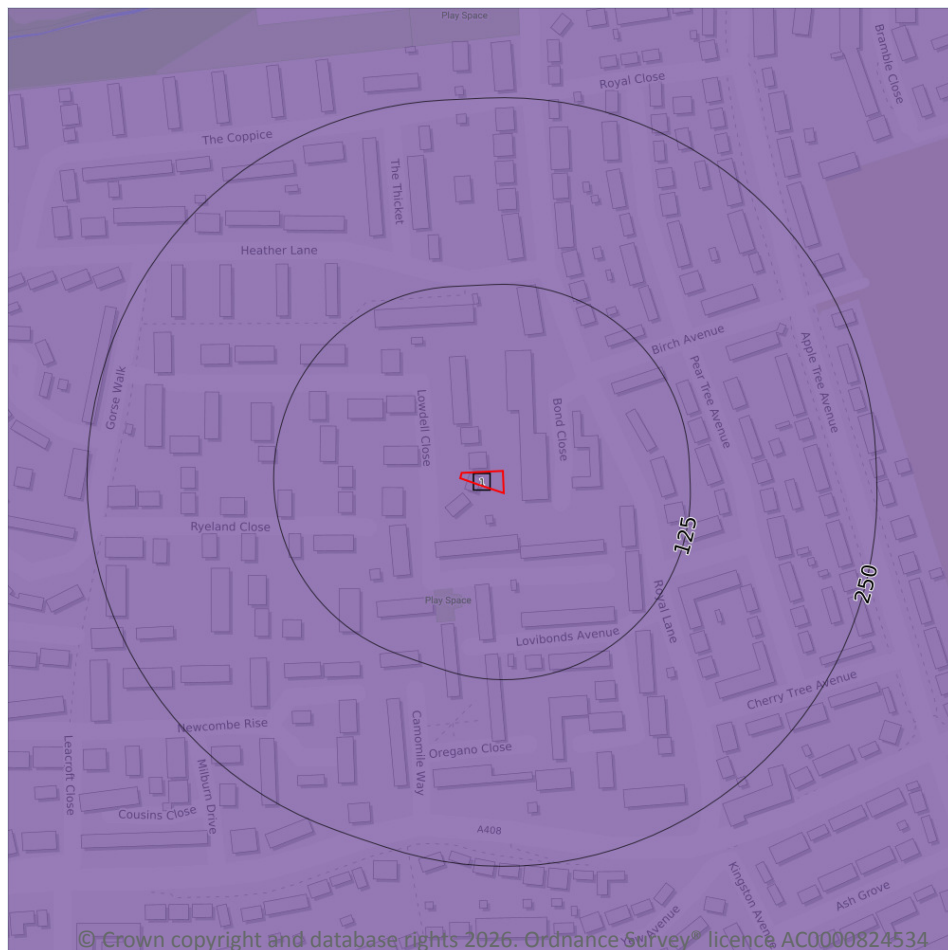
0

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.

This data is sourced from Historic England, 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 66](#) >

ID	Location	Classification	Description
1	On site	Urban	Non-agricultural/no quality assigned

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. The schemes identified may be historical schemes that have now expired, or may still be active.

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

13.1 Priority Habitat Inventory

Records within 250m

0

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

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

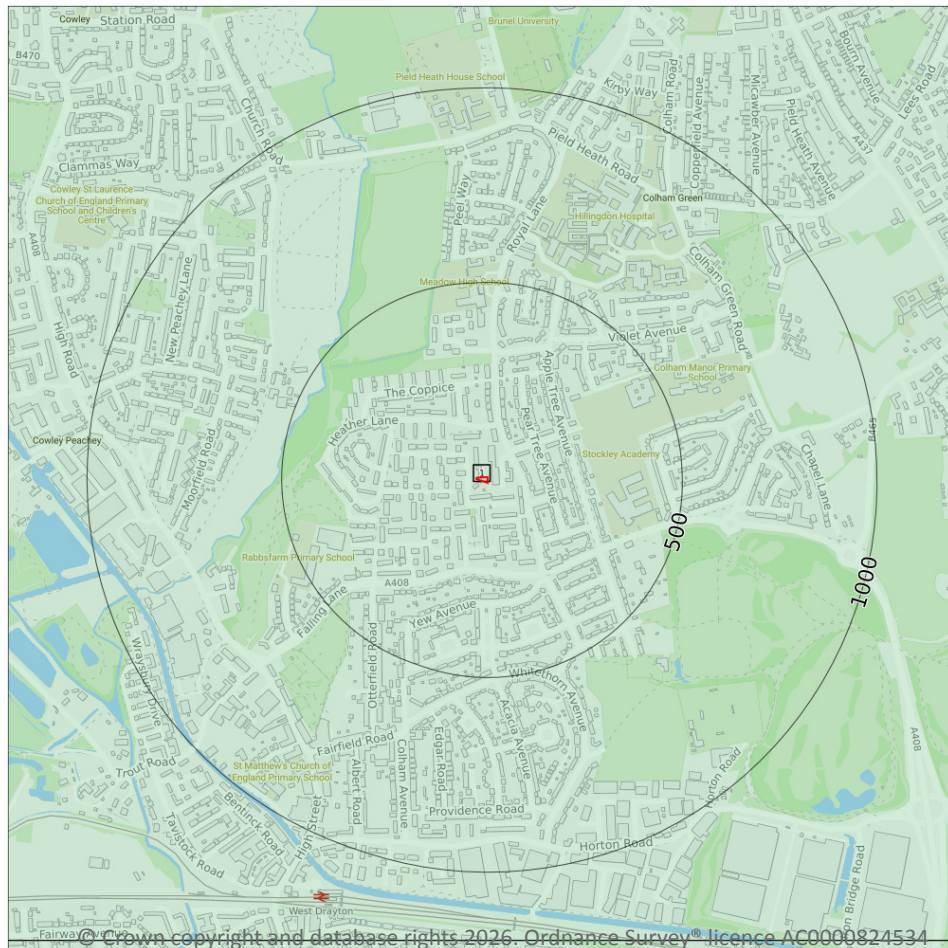
0

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

1

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.

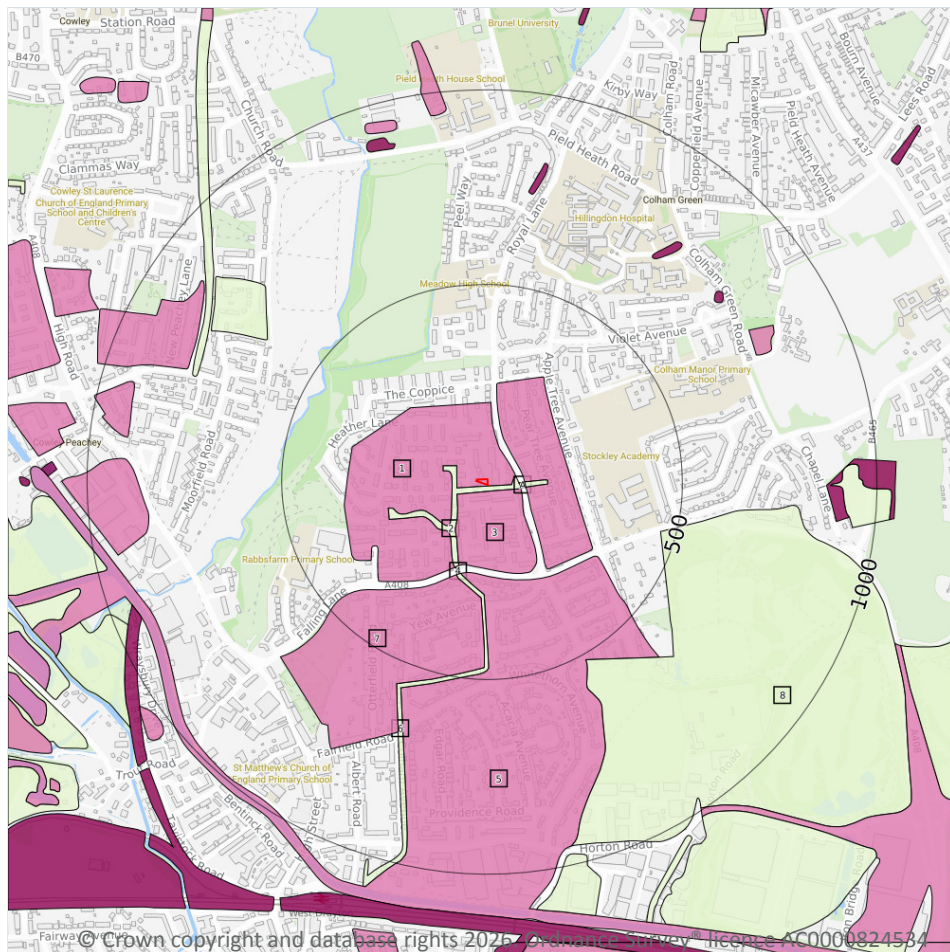
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 69](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TQ08SE

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

11

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 70](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	Worked Ground (Undivided)	Void
2	3m S	WMGR-ARTDP	Infilled Ground	Artificial deposit
3	17m S	WGR-VOID	Worked Ground (Undivided)	Void
A	80m E	WGR-VOID	Worked Ground (Undivided)	Void

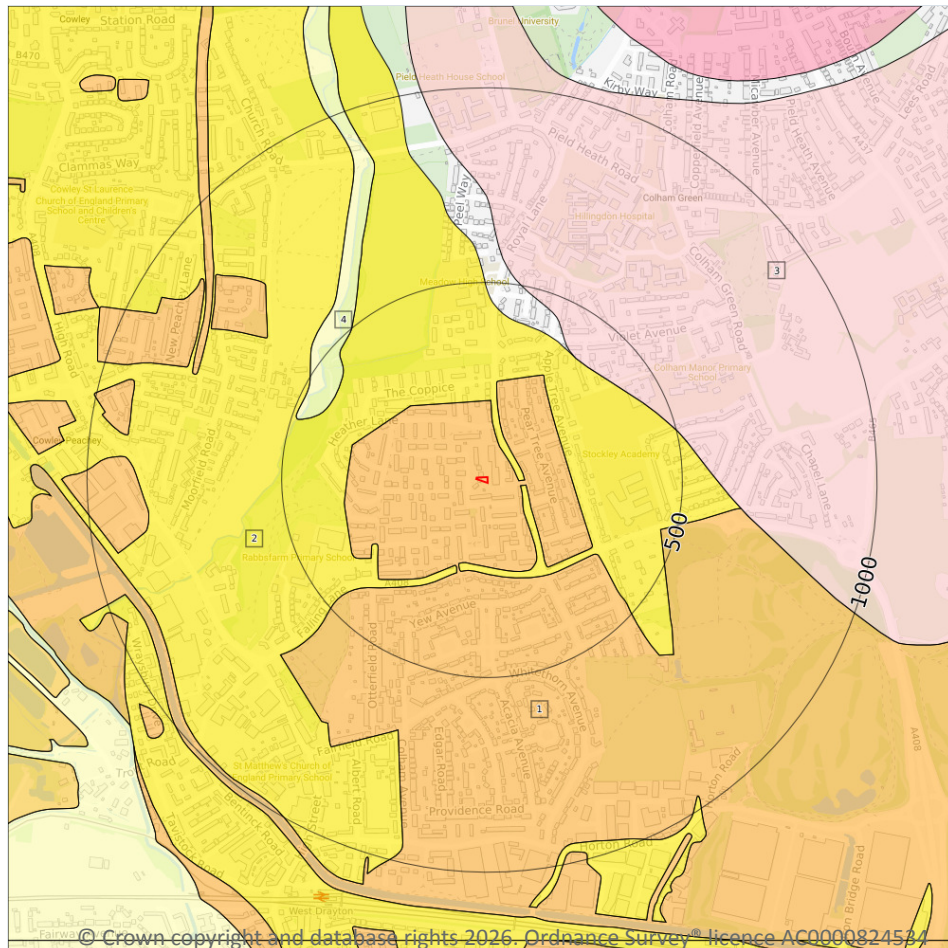


ID	Location	LEX Code	Description	Rock description
A	85m NE	WGR-VOID	Worked Ground (Undivided)	Void
A	95m E	WMGR-ARTDP	Infilled Ground	Artificial deposit
4	220m S	WMGR-ARTDP	Infilled Ground	Artificial deposit
5	229m S	WGR-VOID	Worked Ground (Undivided)	Void
6	238m S	WMGR-ARTDP	Infilled Ground	Artificial deposit
7	244m S	WGR-VOID	Worked Ground (Undivided)	Void
8	460m E	WMGR-ARTDP	Infilled Ground	Artificial deposit

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

4

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 72](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	LHGR-XSV	Lynch Hill Gravel Member-Sand And Gravel	Sand and gravel
2	69m NE	LASI-Z	Langley Silt Member-Silt	Silt
3	380m NE	BHT-XSV	Boyn Hill Gravel Member-Sand And Gravel	Sand and gravel
4	419m NW	ALV-XZC	Alluvium-Silt And Clay	Silt and clay



This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

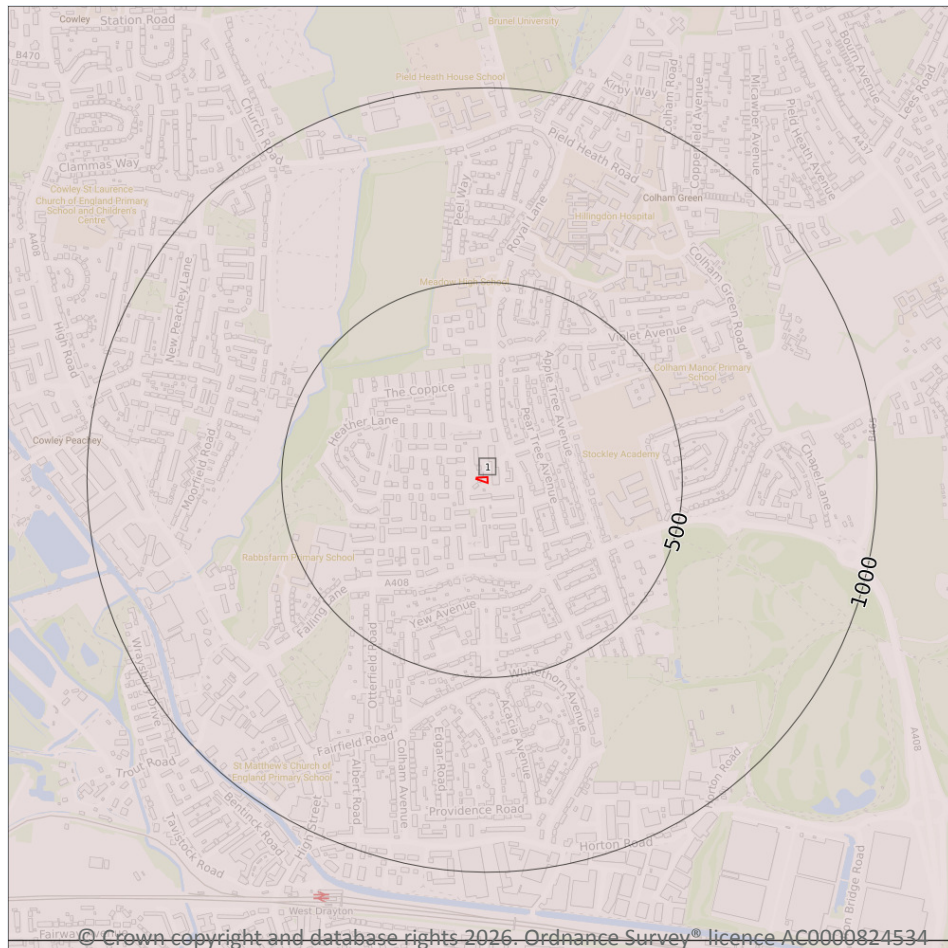
0

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

1

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 74](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZS	London Clay Formation-Clay, Silt And Sand	Ypresian

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

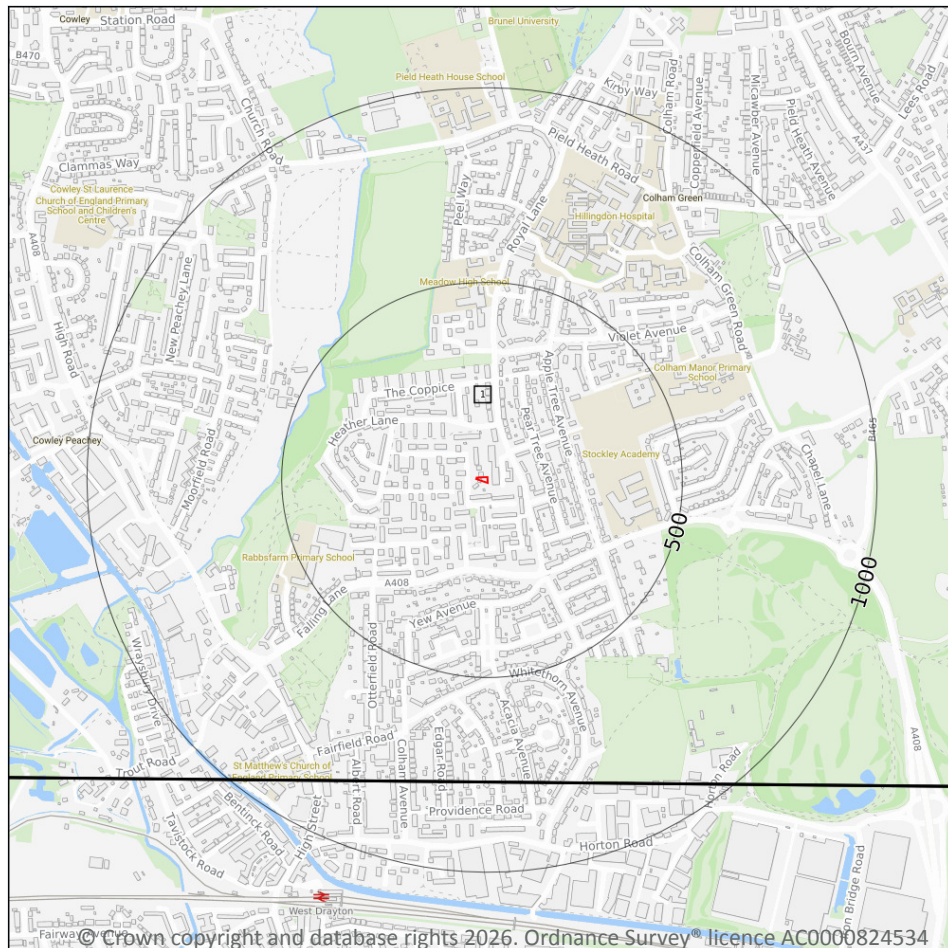
0

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.

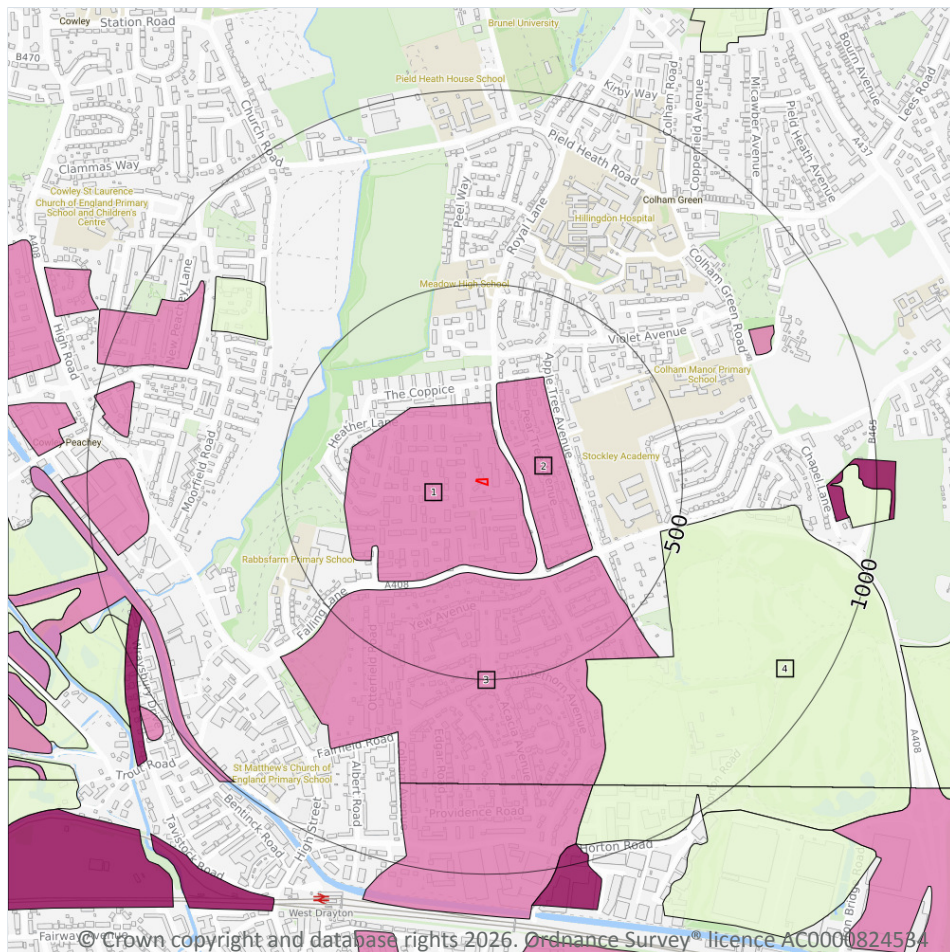
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 76](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW255_beaconsfield_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

4

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 77](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	Worked Ground	Void
2	85m NE	WGR-VOID	Worked Ground	Void
3	230m S	WGR-VOID	Worked Ground	Void
4	460m E	WMGR-ARTDP	Infilled Ground	Artificial deposit



This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

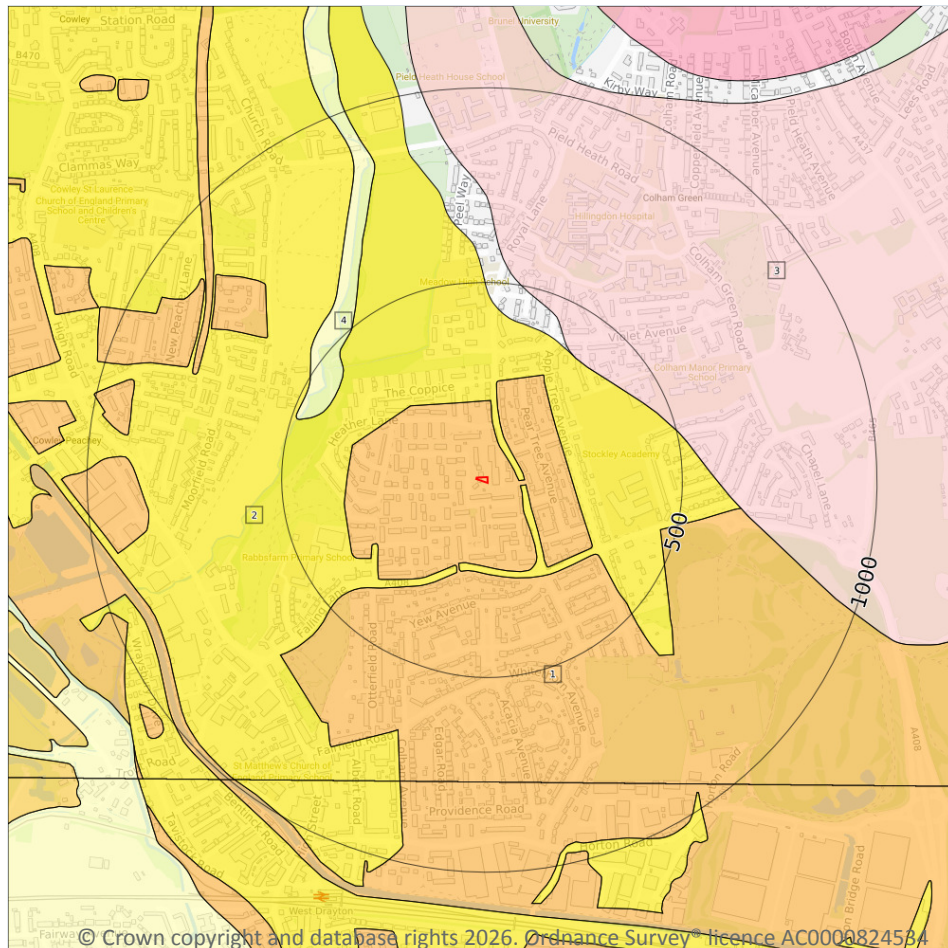
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial 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 - 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 79 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	LHGR-XSV	Lynch Hill Gravel Member	Sand and gravel
2	69m NE	LASI-XCZ	Langley Silt Member	Clay and silt
3	381m NE	BHT-XSV	Boyn Hill Gravel Member	Sand and gravel
4	420m NW	ALV-XCZSV	Alluvium	Clay, silt, sand and gravel



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

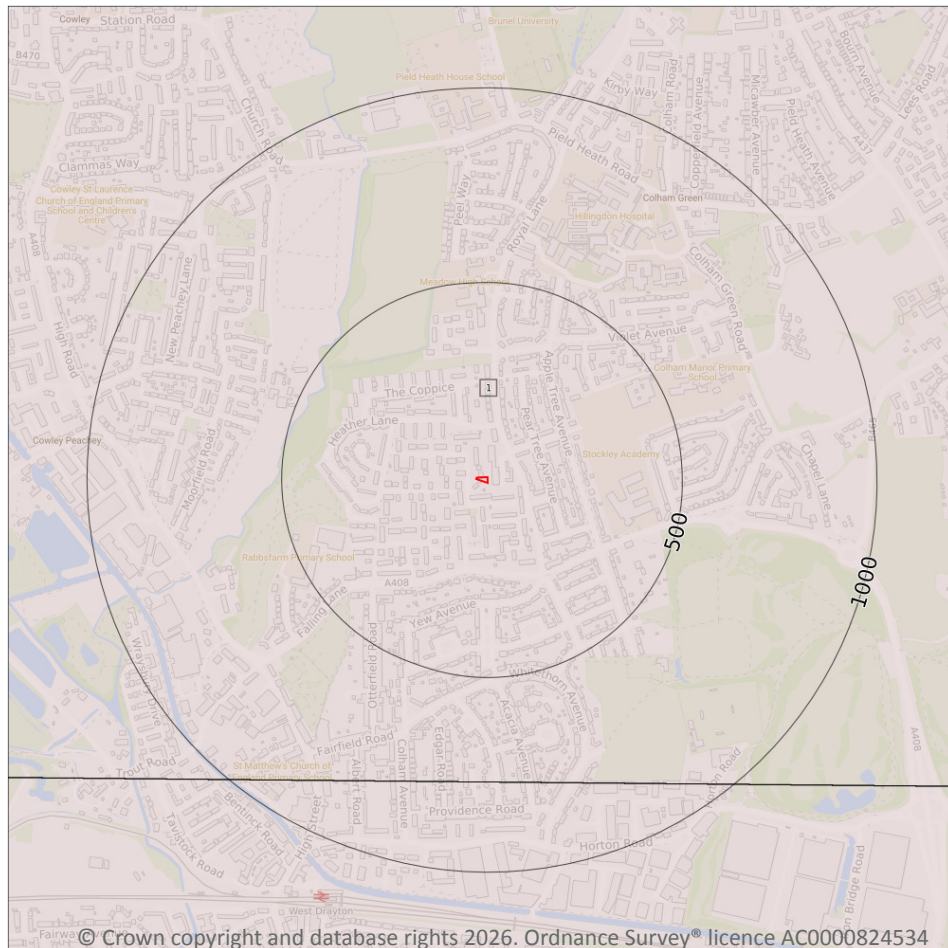
0

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 81](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZS	London Clay Formation-Clay, silt and sand	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	Moderate	Very Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

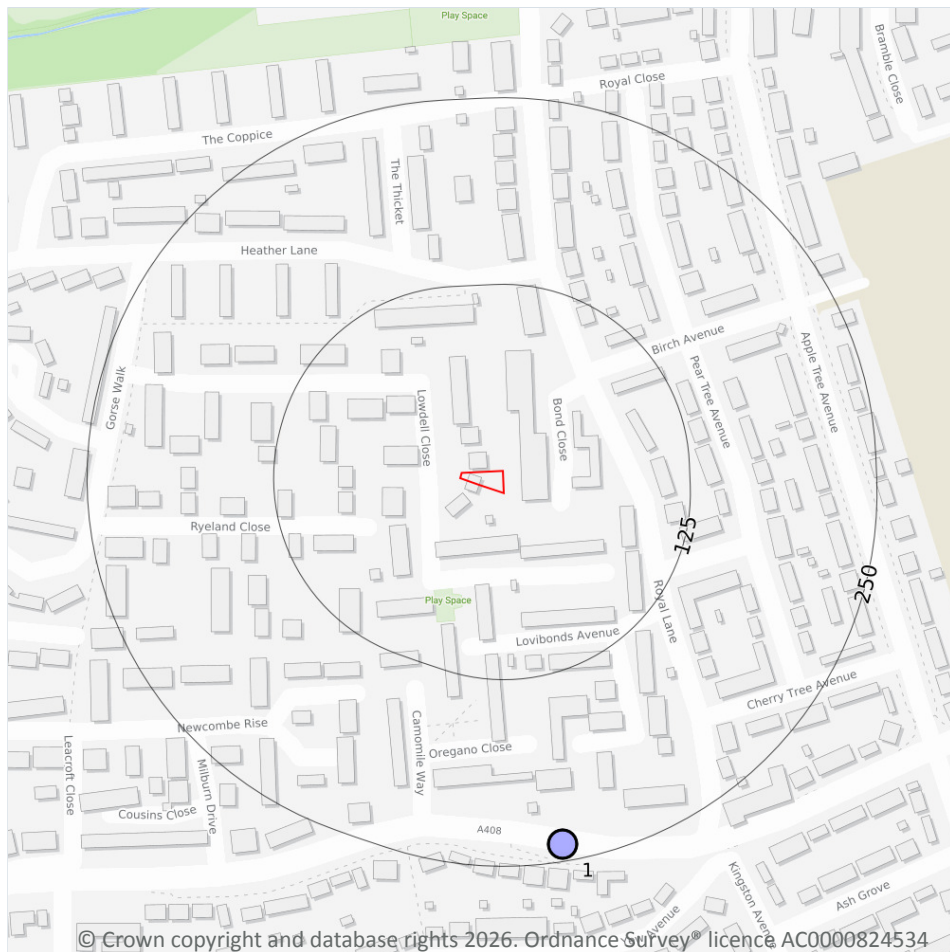
Records within 500m**0**

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

1

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.

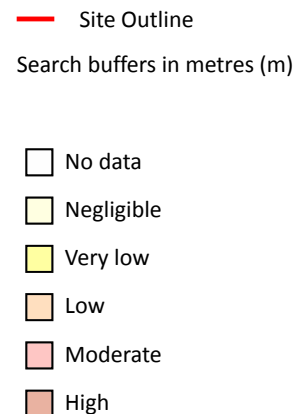
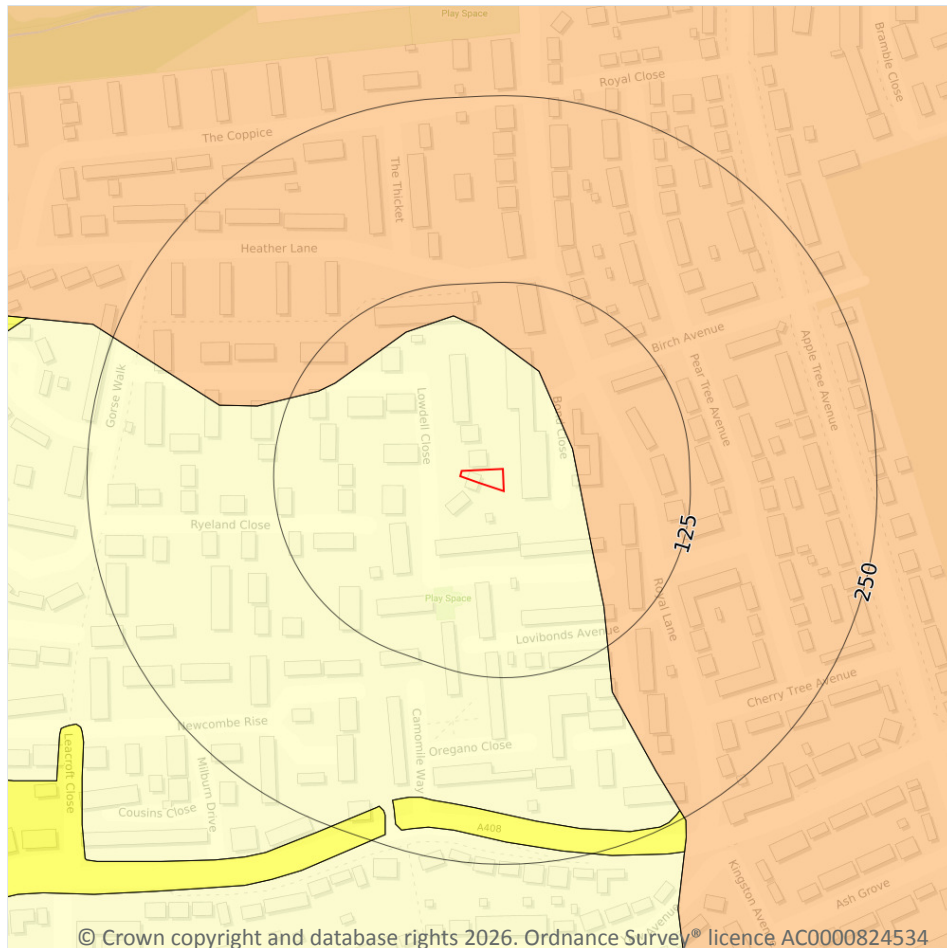
Features are displayed on the Boreholes map on [page 83](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	238m S	506570 180940	YIEWSLEY BYPASS 3	2.0	N	576532 ↗

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

2

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).

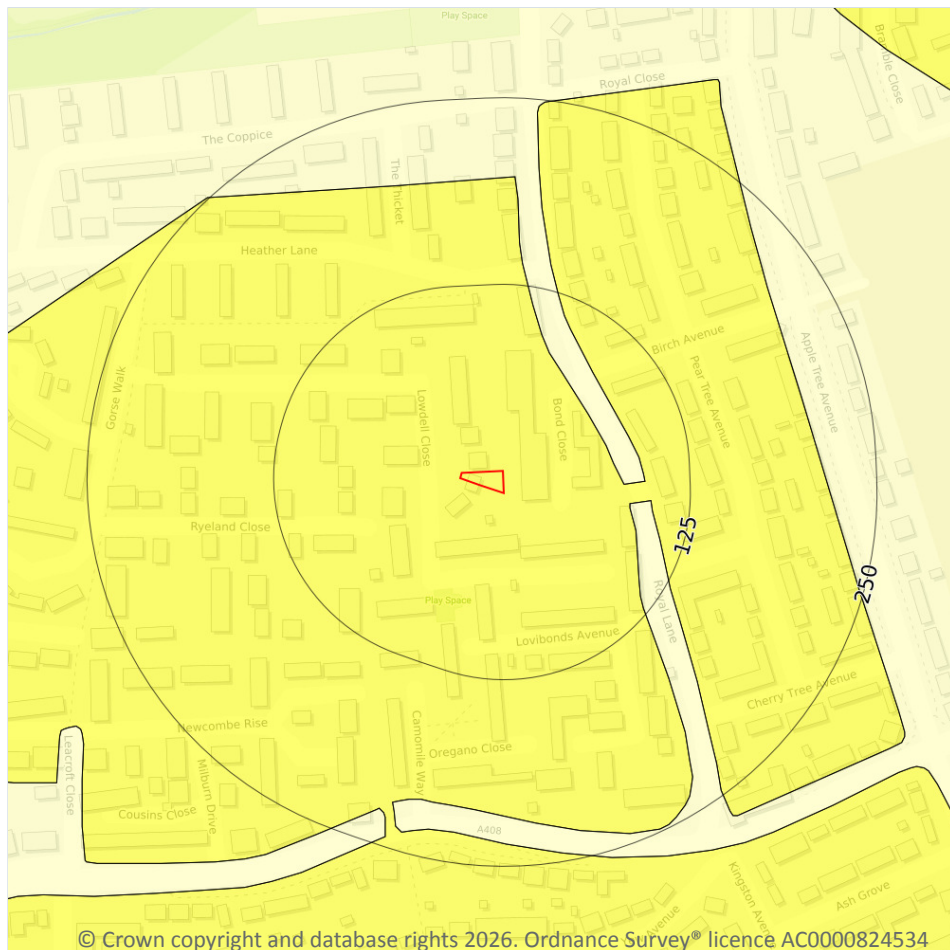
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 84 >](#)

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
48m NE	Low	Ground conditions predominantly medium plasticity.

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.

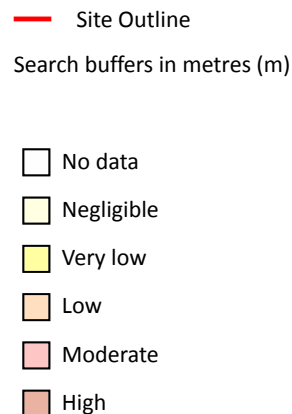
Features are displayed on the Natural ground subsidence - Running sands map on [page 85 >](#)

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

1

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.

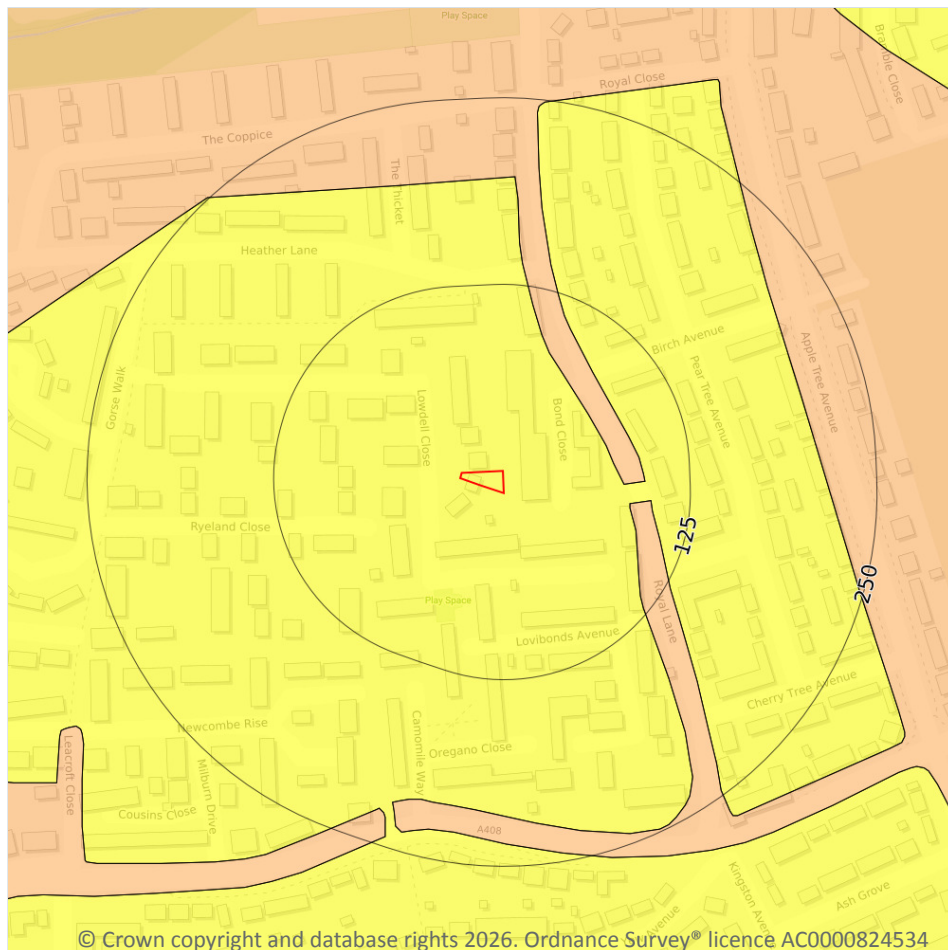
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 86 >](#)

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

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 87 >](#)

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.

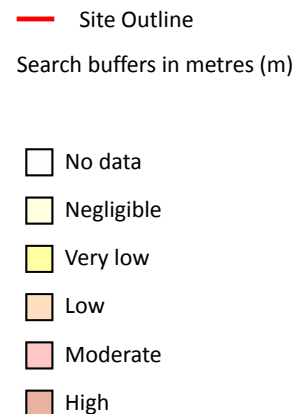
Features are displayed on the Natural ground subsidence - Landslides map on [page 88](#) >

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



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 89](#)

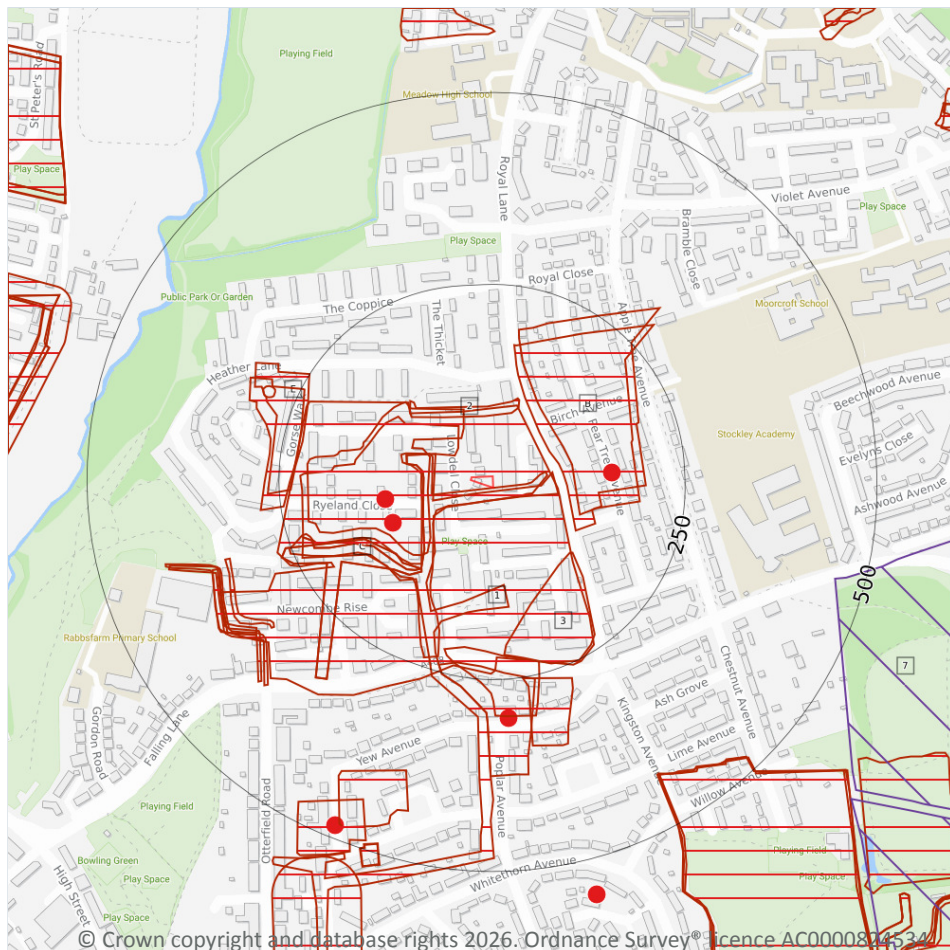
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- 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 BritPits

Records within 500m

6

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.

Features are displayed on the Mining and ground workings map on [page 91](#) >



ID	Location	Details	Description
A	114m W	Name: Yiewsley Brickfields Address: Falling Lane, YIEWSLEY, Middlesex Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
A	115m SW	Name: Yiewsley Gravel Pit Address: YIEWSLEY, Middlesex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
4	155m E	Name: Yiewsley Brickfields Address: Falling Lane, YIEWSLEY, Middlesex Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
D	301m S	Name: Falling Lane Gravel Pit Address: Falling Lane, YIEWSLEY, Middlesex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.



ID	Location	Details	Description
H	483m S	Name: Viewsley Brickfields Address: Falling Lane, YIEWSLEY, Middlesex Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
H	497m S	Name: Viewsley Gravel Pit Address: YIEWSLEY, Middlesex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	15
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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 and ground workings map on [page 91](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Unspecified Ground Workings	1970	1:10560
A	On site	Unspecified Pit	1932	1:10560
1	5m S	Canal	1868	1:10560
A	36m NW	Gravel Pit	1868	1:10560
A	53m N	Gravel Pit	1881	1:10560
2	79m N	Gravel Pit	1938	1:10560
B	81m NE	Brick Field	1868	1:10560
B	98m NE	Brick Field	1881	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
3	131m SE	Unspecified Pit	1975	1:10000
C	132m SW	Unspecified Ground Workings	1938	1:10560
C	132m SW	Unspecified Ground Workings	1938	1:10560
D	211m S	Gravel Pit	1881	1:10560
E	225m W	Brick Field	1881	1:10560
E	228m W	Brick Field	1868	1:10560
D	232m S	Gravel Pit	1868	1:10560

This data is sourced from Ordnance Survey®/Groundsure.

18.3 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 data is sourced from Ordnance Survey®/Groundsure.

18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

1

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.

Features are displayed on the Mining and ground workings map on [page 91](#) >



ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
7	461m E	Yiewsley Brickfields	Sand and gravel	Surface mineral working	Application	Not available

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 JPB mining areas

Records on site	0
------------------------	----------

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0
----------------------------	----------

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	3
----------------------------	----------

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is



approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
On site	Stone
86m NE	Stone
230m S	Stone

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0
----------------------------	----------

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0
----------------------------	----------

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 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.

18.13 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.

18.14 Gypsum areas

Records on site	0
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 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 Ground cavities and sinkholes

19.1 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 Stantec UK Ltd.

19.2 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 Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey® maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

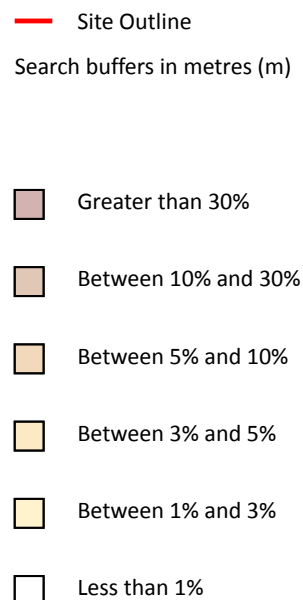
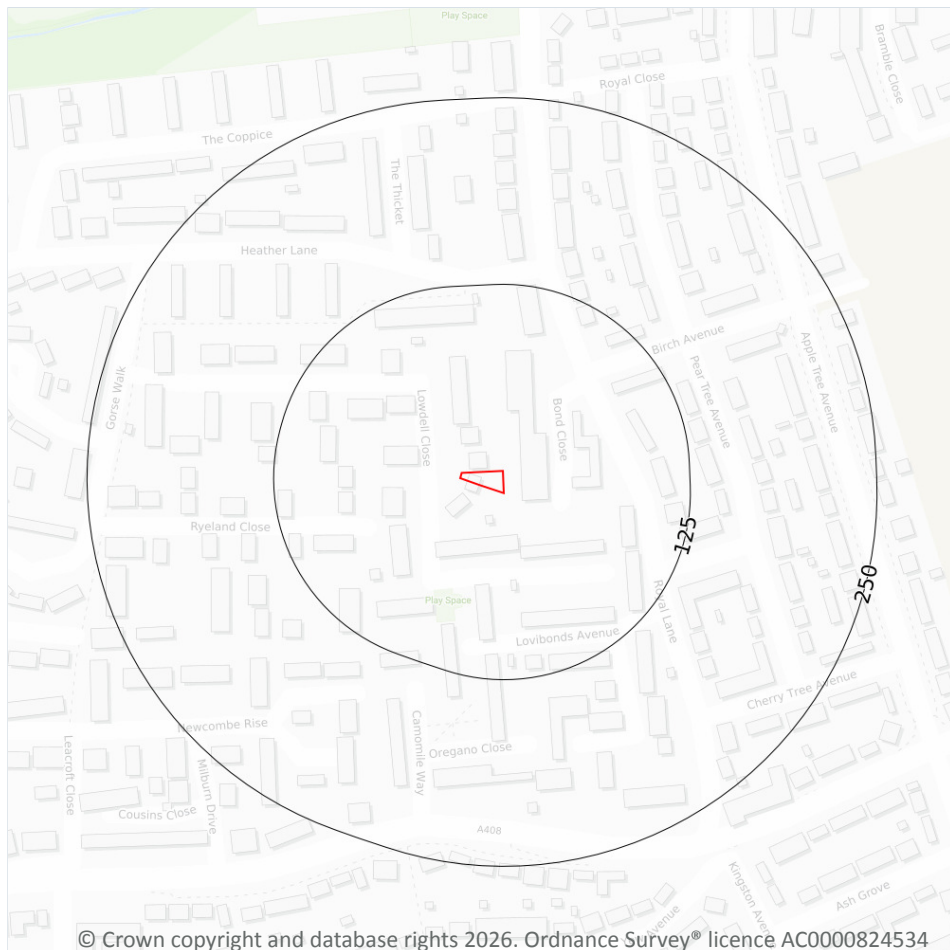
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 100](#) >

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



This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

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 km². 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 km²; 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
1m W	No data	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	No data	No data

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

4

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 km²).

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	21	3.7	298	205	0.7	163	126	32	31
1m W	22	3.8	341	234	0.8	112	115	31	39
10m N	20	3.5	264	181	0.7	191	127	31	26
12m N	20	3.5	304	209	0.8	112	106	29	33

This data is sourced from the British Geological Survey.



21.3 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 km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 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.

22.2 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.

22.3 Railway tunnels

Records within 250m**0**

Railway tunnels taken from contemporary Ordnance Survey® mapping.

This data is sourced from the Ordnance Survey®.

22.4 Historical railway and tunnel features

Records within 250m**0**

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.

This data is sourced from Ordnance Survey®/Groundsure.

22.5 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.

22.6 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.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey® and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.9 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> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-conditions-april-2026/ ↗.





APPENDIX C – EA FLOOD RISK FOR PLANNING

Flood map for planning

Your reference
Unspecified

Location (easting/northing)
506518/181184

Created
30 June 2026 16:02

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following**:

- bigger than 1 hectare (ha)
- in an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

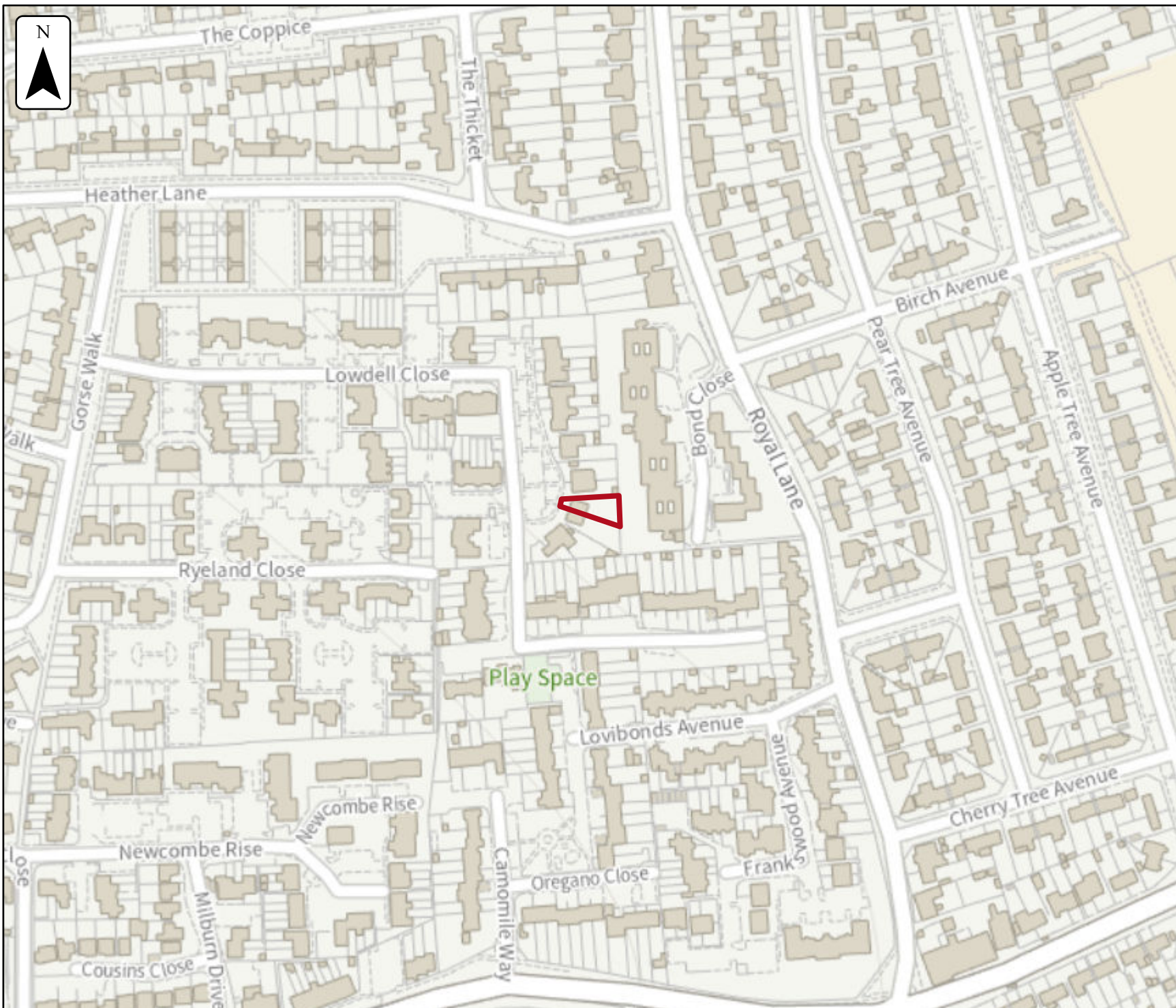
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2026 AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference

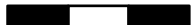
Unspecified

Location (easting/northing)
506518/181184

Scale
1:2,500

Created
30 Jun 2026 16:02

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area


0 20 40 60m