



**Phase I
Geo-Environmental Site Assessment**

**Goodwillie's Timber Yard, 154 London Road,
Purbrook, Waterlooville, PO7 5SR**

*Prepared for:
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QUALITY ASSURANCE

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 Geo-Environmental	Phase I Geo-Environmental Assessment				
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Executive Summary				
Site Address	Goodwillie’s Timber Yard, 154 London Road, Purbrook, Waterlooville, PO7 5SR			
National Grid Reference	467688, 108563			
Site Area	3.41 ha			
Current Site Use	The site was a former timber yard which at the time of the site walkover (December 2024) was disused and generally comprised areas of hardstanding, buildings, associated infrastructure and areas of dense vegetation in the south and southwest.			
Site History	From the earliest available mapping (1859) three (3no.) buildings were mapped on-site and were denoted as a sawmill in 1865, with expansion of the sawmill/ timber yard occurring gradually within 1907, 1952, 1962, and 1973. The site has remained as it is currently since 1973.			
Geology and Hydrogeology	Geological Unit	Formation Name	Description	Aquifer Classification
	Made Ground	Made Ground	-	N/A
	Bedrock	Wittering Formation (Majority of site)	Sand, silt and clay	Secondary (A)
		London clay Formation (Most northern extent)	Clay, silt and sand	Unproductive
Hydrology	The nearest surface water feature is located 217-246m northwest and denoted as the River Wallington. There is no surface water abstractions identified within 250m of the subject site.			
Landfill Sites & Ground Gases	The Groundsure report identified one (1no.) record of an historical landfill site within 250m of the subject site denoted of Fielders Park.			
	No waste treatment, active or recently closed licenced waste sites within 250m of the subject site were identified within the Groundsure report. However, one (1no.) waste exception was recorded which related to the subject site.			
Radon	The site lies within an area where less than 1% of the properties are above the Action Level. At these levels BRE publication BR211 indicates that no special radon protective measures are required in the construction of new extensions or dwellings.			
Conceptual Site Model Conclusions				
The Conceptual Site Model has identified the presence of a series of potentially active pollution linkages associated with the previous recorded use of the site and surrounding areas which are considered to have the potential to present a risk to identified receptors at the site based on the proposed development.				
It is considered further investigation is required for the following identified sources:				
<ul style="list-style-type: none">On-Site – Unspecified Mills/ Timber Yard/ Windmill/ Sawmills including crane, tanks and electrical substation identified on historical mapping (1895-2024);1-6m northwest to west and eastern boundary as identified on historical mapping– Nurseries (1930-1966);12m west – Unspecified tank (1963);26m northeast – Electrical Substation (1973); and,117m southwest – Historical Landfill Fielders Park, Purbrook.				
Recommendations				
Environmental				
It is recommended an intrusive site investigation should be undertaken focussing on the location of the historic development including the Made Ground identified on site, as well as the potential off-site sources (Nurseries, tank, electrical substation, and historical landfill) to investigate the potential pollution linkages				

identified by the conceptual site model and determine the potential risks posed to future site users.

The site investigation should include chemical and geotechnical testing of soil samples for a suite of determinants representative of the potential sources identified within the CSM. The site investigation should also include gas monitoring to assess the risk posed by Made Ground and historical landfill, as identified within the CSM.

Upon return of chemical testing results a Tier 1 Risk Assessment should be undertaken to determine whether the encountered soils have the potential to present a significant risk to the identified receptors. This would enable mitigation measures to be formulated, if required.

It is recommended that an Asbestos Survey is undertaken in accordance with the Control of Asbestos Regulations (2012) prior to the commencement of any refurbishment or demolition works.

Consultation may be required regarding a Nitrates Assessment and SSSI Impact Risk Zones as set out within Sections 3.6.1 and 3.6.2 therefore it is recommended that contact should be made with a suitably qualified planning consultant for further information.

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1 INTRODUCTION

1.1 Background

Omnia have been commissioned by Foreman Homes to undertake a Phase I Geo-Environmental Site Assessment at the site of Goodwillie's Timberyard, 154 London Road, Purbrook, Waterlooville, PO7 5SR. A site location plan is presented as Figure 1.0 within Appendix III.

The site previously operated as a timber yard which is understood to have recently ceased operation.

1.2 Proposed Development

It is understood that the client is proposing to redevelop the recently closed Timber Yard/Saw Mill at the Goodwillie's Site to accommodate a residential development comprising approximately one hundred and eleven (111no.) houses, with private gardens associated communal public open space and vehicle access.

At this stage the site is currently at a pre-planning stage and therefore the proposed development as set out above has the potential to change. The outline proposed development plan, as provided to Omnia in February 2026 is presented as Figure 2.0 (Appendix III).

1.3 Objectives

The objectives of the Phase I Geo-Environmental Site Assessment are to:

- Undertake a site walkover and inspection, including interviews with site representatives if available;
- Review historical plans, site investigations, geology, hydrogeology, site sensitivity, floodplain issues, mining records and any local authority information available in order to complete a Desk Study in line with the Environment Agency (EA) document *Land Contamination Risk Management (LCRM)*;
- Assess the implications of any potential environmental risks, liabilities and development constraints associated with the site in relation to the future use of the site and in relation to off-site receptors; and,
- Provide a factual and interpretative report relating to the site and provide recommendations on any potential development issues with consideration of residential and environmental receptors.

1.4 Sources of Information

Background information was sought from the following sources:

- Groundsure Environmental Database Search (GS-98N-55R-YCE-YTL);
- Historical Ordnance Survey Mapping (1859–2024);
- The British Geological Survey (BGS) map for the site (Sheet 316, Fareham, Solid and Drift Edition at a scale of 1:50,000, 1998);

-
- Environment Agency flood designations, aquifer designations and groundwater source protection zones (<https://magic.defra.gov.uk/MagicMap.aspx>) [Accessed: 2024/02/22];
 - Zetica UXO Risk Maps (<https://zeticauxo.com/downloads-and-resources/risk-maps>); [Accessed: 2024/02/22]
 - British Standard BS10175:2011+A2:2017 – Investigation of Potentially Contaminated Sites – Code of Practice;
 - British Standard BS5930:2015+A1:2020 – *Code of Practice for Ground Investigations*; and,
 - Omnia Infiltration Test Report Ref: A12342_241218_L1 dated 02/01/2025.

1.5 Limitations

The limitations of this report are presented in Appendix I.

1.6 Confidentiality

Omnia has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from Omnia; a charge may be levied against such approval.

2 SITE SETTING

2.1 Site Details

Table 2-1 Site Details

Site Address	Goodwillie's Timber Yard, 154 London Road, Purbrook, Waterlooville, PO7 5SR
National Grid Reference	467688, 108563
Site Area	3.41 ha

All acronyms used within this report are defined in the Glossary presented in Appendix II.

A site location plan is presented as Figure 1.0 (Appendix III).

2.2 Current Site Use

2.2.1 Site Description

The area of investigation is located in the north of Purbrook and was irregularly shaped covering an area of 3.41ha. with an access route from the northern boundary which exits onto London Road (A3) to the north.

At the time of the site walkover (December 2024) the site was accessed via London Road through a metal palisade gate. The majority of the site was accessible during the site walkover however, the southernmost area of the site could not be accessed due to dense vegetation.

Based on observations made during the site walkover and available LIDAR data, the topography of the site was generally highest in the central area at approximately 63m above Ordnance Datum (AOD), sloping downwards approximately 2m (60m AOD) towards the northwest and approximately 7m (56m AOD) towards the southeast.

The site was a former timber yard, which at the time of the site walkover (December 2024) was disused and generally comprised areas of hardstanding, buildings and associated infrastructure in the north, centre and east of the site with an area considered to comprise a former outdoor storage area in the west and areas of dense vegetation in the south and southwest. The hardstanding on-site generally comprised areas of concrete, macadam and aggregate. The hardstanding on-site was observed to be in generally good visual condition with occasional cracking.

Eleven (11no.) buildings were observed across the north, centre and east of the site which are thought to comprise former administration and office buildings (photograph 7) in the northern part of the site with storage/industrial sheds (photograph 8) in the central and southern parts of the site. It was observed that generally the office and administration buildings were generally of masonry construction with ceramic tile/potentially asbestos containing corrugated cement sheeting roofing whilst the storage/industrial sheds were typically constructed either of wood with corrugated sheet metal roofing or corrugated sheet metal walls with ceramic tile roofing. The storage/industrial sheds were generally observed to be in a visually poor condition with areas of roofing missing.

An underground bunker of brick and concrete construction was observed in the north of the site (photographs 9, 10 and 11). The inside of the bunker was not accessed during the site walkover however, based on observations made of the structure from the outside, it is considered that the construct likely extended approximately 2m below ground level and was approximately 2m x 6m in dimension.

Based on a review of aerial imagery an area in the west of the site was formerly used as an outdoor timber storage area. During the site walkover, this area was observed to comprise a vegetated area with Made Ground aggregate beneath. Wooden sleepers were observed running in rows along the length of the area at ground level, likely for the purpose of elevating timber off the ground (photograph 4).

The southern and southwestern areas of the site were observed to comprise areas of dense vegetation of grass, bracken and weeds.

The northern, eastern and western site boundary was noted to generally comprise wooden fencing where the site was bordered by residential dwellings with a metal palisade fence approximately 2m tall along the southern boundary.

No surface water pooling was observed on-site during the site walkover (December 2024). Drainage from the buildings on-site generally drained to an underground drainage system, the condition of which was not observed.

An annotated site location plan showing observations from the walk-over survey is presented as Figure 3.0 (Appendix III). Relevant photographs from the site walk-over survey are located in Appendix IV.

2.2.2 Hazardous Materials Storage

Two (2no.) above ground storage tanks were observed on-site during the site walkover. A tank approximately 1.5x1.5x2.5m in size was observed in the north of the site (photograph 12). The tank was observed to be raised approximately 1.5m above the ground with stairs erected to access the tank. During the site walkover, no label was observed on the tank and therefore, the contents of the tank is not known. There was no observed bund around the outside of the tank and it is not known whether the tank is single skinned or self-bunded.

The second storage tank was located in the northwest of the site and was approximately 1.5x1.5x3.5m in size (photograph 13). During the site walkover, a Hazchem 3Y label was observed on the tank however, the contents of the tank was unknown. Adjacent to the tank was pipework assumed to be associated with pumping the contents of the tank around the site and a wooden storage container approximately 0.5x0.5x2.0m with a label stating it contained carbon dioxide for use on flammable liquids (photograph 14). The area containing the storage tank, pumping equipment and storage container was encompassed within a brick bund with a second brick bund encompassing the storage tank. The outer brick bund was observed to be broken in some areas.

Six (6no.) 200 litre metal drums were observed in the west of the site (photograph 15) in generally good visual condition with some slight rusting. No labels were observed in the drums and therefore the contents of the drums are unknown. Next to the drums was a wooden container approximately 2.0x0.5x1.0m containing 2 litre plastic containers (photograph 16). Based on

observations made during the site walkover, the containers are considered likely to have contained engine oil. Generally the containers were considered to be empty however, given the amount of containers present, the content of each container was not assessed. The number of plastic containers could not be assessed however, it was observed that the wooden container was filled with plastic containers.

A single 1000 litre IBC container was observed in the central area of the site with approximately 50 litres of a black liquid within (photographs 17 and 18). There was no observed odour from the black liquid. It was also observed that the ground around the IBCC container was stained black (photograph 19).

2.2.3 Potential Asbestos Containing Materials (PACM)

The exact ages of the buildings are unknown, but they are considered to pre-date the year 2000 based on historical mapping indicating the buildings on-site from 1866 and as such they are considered to have the potential to contain Asbestos Containing Materials (ACMs) within the building fabric. Based on observations during the site walkover, one (1no.) building was observed to comprise corrugated cement sheet roofing which is likely to contain ACMs. It is therefore recommended that an asbestos survey is undertaken in accordance with the Control of Asbestos Regulations (2012) prior to the commencement of any refurbishment or demolition works.

2.2.4 Waste Storage

General waste was observed sporadically across the site. Two (2no.) wooden general waste storage containers were observed in the central area of the site (photograph 20). This was approximately 2.0x0.5x1.0m in size.

Scrap wood and timber was observed across the site, however given the former use of the site, this is not considered to be fly-tipped material.

2.2.5 Tree Species

No tree species were observed on site.

2.2.6 Potential Invasive Species

During the site walkover no obvious signs of potential invasive species were identified. However, it should be noted that the site walkover was conducted during winter months, and it is therefore recommended that a further inspection is undertaken by a trained Ecologist during the growing season.

2.3 Surrounding Area

The site is situated predominantly in a residential area with a park comprising generally open grassland to the north. The surrounding land uses are summarised in Table 2-2 below:

Table 2-2 Land Use

Direction	Land Use
North	London Road (A3), beyond Berewood Town Park
East	Residential dwellings
South	Residential dwellings

Direction	Land Use
West	Residential dwellings

3 ENVIRONMENTAL SETTING

3.1 Geology

British Geological Survey Map (Sheet 316, Fareham, Solid and Drift Edition at a scale of 1:50,000, 1998) indicates that the site is underlain by the following geological sequence:

Table 3-1 Published Geological Sequence

Geological Unit	Formation Name	Description
Artificial Ground	Made Ground	Considered likely to be present due to previous on-site development as well as development in close proximity to the site.
Superficial	No Superficial Deposits recorded	
Bedrock	Wittering Formation (Majority of site – depicted in Figure 3.1 below)	Sand, silt and clay
	London Clay Formation (Most northern extent – depicted in Figure 3.1 below)	Clay, silt and sand

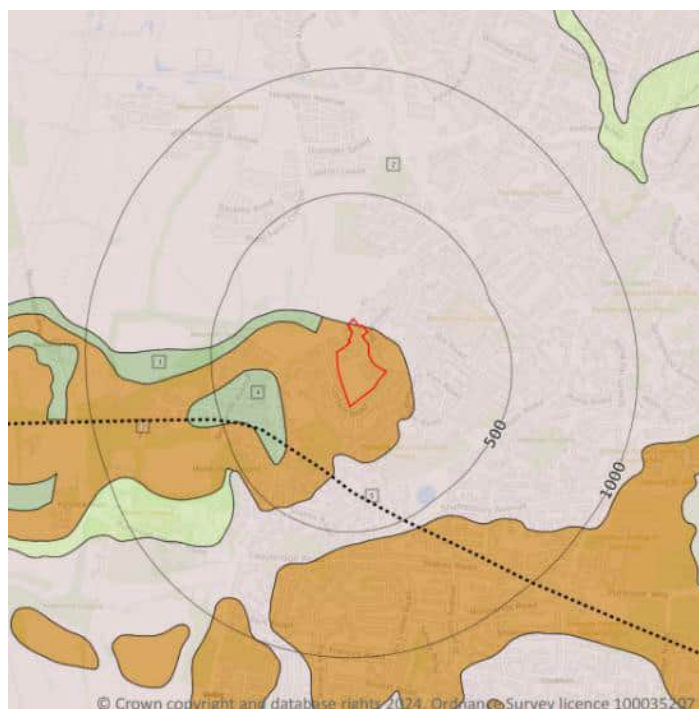


Figure 3.1 Bedrock Geology across site (Groundsure ref: GS-98N-55R-YCE-YTL)

Due to the historic development across site as well as the proximity to developments in the area around site there is potential for Made Ground to present within the site boundary. However, it is noted that there is no instance of Made Ground recorded on published BGS 1:10,000 or 1:50,000 scale geological mapping.

3.2 Hydrogeology

The site is underlain by the following aquifer classifications:

Table 3-2 Published Aquifer Classifications

Geological Unit	Description	Aquifer Classification
Made Ground	-	N/A
Bedrock - Wittering Formation (Majority of site)	Sand, silt and clay	Secondary (A)
Bedrock - London clay Formation (Most northern extent)	Clay, silt and sand	Unproductive

Review of the environmental database indicates that the site is located within a Zone 1c Groundwater Source Protection Zone (confined aquifer) described as an inner catchment within confined aquifer.

It is considered that the Source Protection Zone 1c is attributed to the Principal Chalk Aquifer which underlies the site at depth beneath a cover of Wittering Formation, London Clay Formation and Reading Formation. Published hydrogeological mapping predicts the base of Tertiary Deposits (Wittering Formation, London Clay Formation and Reading Formation) to be at an elevation of -50mOD. Given that the site is at an elevation of approximately +60mOD, this equates to the base of Tertiary Deposits at a depth of approximately 110m bGL.

There are no Groundwater abstractions or potable abstractions within 250m of the site boundary.

Based on local topography and the location of surface watercourses it is considered likely that shallow groundwater, if present, will follow local topography and flow in a south-westerly direction towards the River Wallington.

The Groundsure report indicates that the site is at negligible risk of groundwater flooding.

As set out within Section 6.3.1 intrusive investigation has been completed at the subject site, indicating the presences of Made Ground to a maximum depth of 1.10m bgl, further underlain by bedrock deposits relating to the Whittering Formation which were recorded to comprise a mixture of cohesive and granular materials. Further details are provided within section 6.3.1.

3.3 Hydrology

The nearest surface water feature is a water course identified 217-246m northwest. From the mapping provided the streams appear to be drainage ditches running along field boundaries.

According to the Groundsure Report, there are no licensed abstraction records from surface water located within 500 m of the Site.

3.4 Geotechnical Data

Geotechnical Data presented within the Groundsure Report identifies the following potential ground hazards which are summarised in Table 3-3 below:

Table 3-3 Geotechnical Data

Hazard	Designation
Shrink-Swell Clay	Moderate - ground conditions predominantly high plasticity (Majority of site).
	Low - ground conditions predominantly medium plasticity (Most Northern extent of site).
Landslides	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.
Ground Dissolution	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.
Compressible Ground	Negligible - Compressible strata are not thought to occur.
Collapsible Deposits	Very low - Deposits with potential to collapse when loaded and saturated are unlikely to be present.
Running Sand	Very low - Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Where multiple classifications have been identified above (Shrink-Swell Clay), this is assumed to be due to the bedrock geology split on site detailed within Table 4-2 above, figures outlining the boundaries of the Shrink-Swell Clay designations from the Groundsure are below.

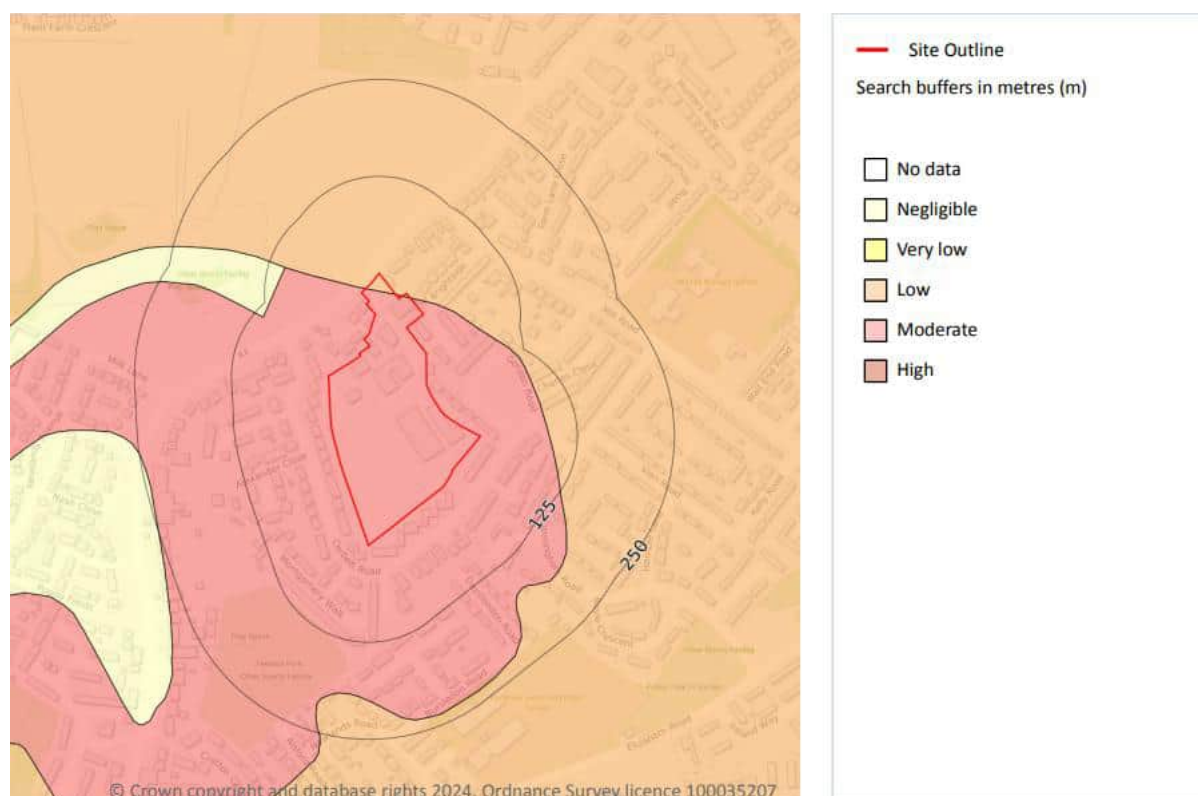


Figure 3-4 Map of the Natural Ground Subsidence - Shrink swell clays found across site (Groundsure reference: GS-98N-5SR-YCE-YTL)

3.5 Radon Risk Potential

The site lies within an area where less than 1% of the properties are above the Action Level. At these levels BRE publication BR211 indicates that no special radon protective measures are required in the construction of new extensions or dwellings.

3.6 Sensitive Land Uses

The Groundsure report indicates that the site is located within a currently defined Nitrate Vulnerable Zone (NVZ), which is the Chichester, Langstone and Portsmouth Harbours Eutrophic NVZ.

The Groundsure report also identified the site being within four (4no.) SSSI Impact Risk Zones.

The Groundsure did not identify any other sensitive land uses within 250m of the site.

3.6.1 Sites of Special Scientific Interest (SSSI) Impact Risk Zones

The Groundsure Report identified that the site is located within four (4no.) SSSI Impact Risk Zones.

The Groundsure Report states that all planning applications except householder applications require consultation as well as planning applications that consist of residential developments of 100 units or more.

Therefore, it is recommended that contact should be made with a suitably qualified planning consultant for further information.

3.6.2 Nitrate Vulnerable Zone (NVZ)

The site lies within the Chichester, Langstone and Portsmouth Harbours Eutrophic Nitrate Vulnerable Zone. The proposed development is not for an agricultural end use, which would require mandatory rules to be followed regarding nitrate loss from agriculture.

However, the proposed development does include additional overnight accommodation and therefore the nutrient contents of all discharges, including those to the main sewer, need to be considered in combination for impacts on the surrounding area and Solent Water.

It is considered likely that a nitrate balance report will be required as part of the planning application to assess the potential risk posed from the proposed development on nitrates entering surrounding waters.

3.7 Site Sensitivity Assessment

Based on the information presented in the sections above, the site is considered as being located within a Low to Moderate sensitivity setting due to the following reasons:

Table 3-4 Summary of Site Sensitivity Assessment

Consideration	Present (yes/no) or type	Overall Sensitivity
Geology	<p>The Wittering formation and London Clay formation consist of sands, silts and clays.</p> <p>There are no superficial deposits present on site.</p> <p>There is also a potential for Made Ground to be present on site.</p>	Low to Moderate
Superficial Aquifer	N/A	
Bedrock Aquifer	The majority of site is underlain by bedrock of the Wittering Formation which is a Secondary A aquifer. The small portion of the site with the London clay formation present is an unproductive aquifer.	
Aquifer within SPZ	Yes	
Located within an NVZ	Yes	
Groundwater Abstractions within 250m	No	
Surface Water Abstractions within 250m	No	
Surface water receptor within 250m?	No	

4 SITE HISTORY & INDUSTRIAL LAND USE

4.1 Site History

A review of historical land use pertinent to the site and within a 250m radius is summarised in Table 4-1.

Table 4-1 Historical Land Use

Map Edition	Historical Land Use	
	On Site	Off Site
1859-1865 (1:2,500) (1:10,560)	'Purbrook Wind Mill' in the north of site. Two (2no.) structures denoted 'Mill Cottage' on the north.	Coppice denoted directly south of site boundary. Saw pit denoted 44m west of site. Smithy denoted 150m west of site.
1865-1897 (1:10,560) (1:2,500)	Saw mill denoted within the north of the site.	Saw pit denoted 44m west of site no longer present (1897). Smithy 150m west no longer present (1897)
1907-1909 (1:10,560) (1:2,500)	Additional building on-site within the northern central area.	No Significant change.
1930-1933 (1:10,560) (1:2,500)	No Significant change.	Nursery along northern boundary.
1938-1942 (1:10,560) (1:2,500)	No Significant change.	Nursery along western boundary.
1952 (1:2,500)	Additional building and crane on-site within the northern central area.	Nursery along eastern boundary.
1962-1966 (1:10,560) (1:2,500)	Development on-site within the southern extent of the site.	Nursery along western boundary no longer present (1962).
1973-2024 (1:1,250) (1:10,000)	Electrical Substation in northwestern corner of the site (1973). Tank within north and centre of the site (1973).	Electrical Substation on western boundary of the site (1973).

A selection of historical maps are presented in Appendix V.

4.2 Historic and Current Industrial Land Uses

The Groundsure Report identified thirty-nine (39no.) historic and current industrial land uses within a 250m radius of the subject site. Upon further review these relate to twenty-five (25no.) separate features.

As set out within Section 3.2 shallow groundwater, if present, is likely to flow broadly in a south-westerly direction following the shallow topographical gradient of the surrounding area towards the River Wallington.

After a review of the records, and consideration of the walkover observations, age, distance and mobility of potential contaminants, the following current and historic industrial land uses are considered to be environmentally pertinent to the subject site:

- On-Site – Unspecified Mills/ Timber Yard/ Windmill/ Sawmills including crane, tanks and electrical substation identified on historical mapping (1895-2024);
- 1-6m northwest to west and eastern boundary as identified on historical mapping– Nurseries (1930-1966);
- 12m west – Unspecified tank (1963); and,
- 26m northeast – Electrical Substation (1973).

5 LANDFILL AND WASTE TREATMENT SITES

The Groundsure Report identified one (1no.) records of historical landfill sites within 250m of the site, detailed below:

- 117m southwest – Historical Landfill Fielders Park, Purbrook – Waste type: Household – *Not mapped on historical mapping, however is denoted as “Fielders Park” from 1963 and therefore is considered to have been backfilled in c. 1963.*

The Groundsure report did not identify any historic waste treatment sites and no active or recently closed licensed waste sites within 250m of the subject site.

However, one (1no.) record of waste exemptions was recorded on-site relating to a use of waste exemption in accordance with an exemption, by ‘use of waste in construction.

5.1 Potentially Infilled Land

A number of potentially infilled features have been identified surrounding the site as part of the data review. Potential sources that are considered to have been infilled over 70 years ago are not considered further as prior to the Clean Air Act of 1956, the majority of waste was burned and as such historical landfill prior to this date contain little putrescible waste. Furthermore, given the typical ground gas generation curve, it is considered unlikely that potential sources older than 70 years would continue to present a plausible ground gas generation risk to the end site users.

Potential areas of infilled land within a 250m radius of the site have been identified, those that are considered environmentally pertinent are included below:

- 44m west - Saw pit (1859-1879) (128 years old);
- 117m southwest of site – Fielders Park, Purbrook (Landfill/Reclamation)- Historical maps indicate this area to have been backfilled in 1963 (62 years old);
 - Waste type: Household

Given that the saw pit was backfilled 128 years ago it is not considered that it would continue to present a plausible risk to the end site users and therefore will not be considered further.

6 CONSULTATIONS

6.1 Planning History

Omnia have undertaken a review of online planning records held by Havant Borough Council.

Three (3no.) applications have been made relating to the subject site, two (2no.) relating to an outline application to develop the site into residential housing submitted in 1999 and 2000 both applications were not proceeded with. One application relating to the demolition of multiple buildings on-site with the proposed construction of new retail sales buildings however, this was also not progressed with. No information/ documents were provided within these applications.

6.2 Contaminated Land Officer

Contact was made with Havant Borough Council via email in January 2025 regarding whether the council were aware of any environmental issues pertaining to the site.

A response was received on 16/01/2025 and has been summarised below:

"Thank you for your request for information under the Environmental Information Regulations 2004 which was received by Havant Borough Council on 13rd January 2025. You have requested the following:

- *Any environmental issues pertaining to the site*
 - *The historic use of the site as Sawmills & Timber Yard, outdoor storage, milling and processing of treated timber*
 - *The historic use of adjacent land for nursery gardens*
- *Any pollution incidents*
 - *None on record, however records are known to be significantly out of date.*
 - *The Environment Agency is the appropriate body from which to request information on pollution incidents.*
- *Any historic industrial land uses*
 - *Sawmills/Timber Yard, potentially since before 1878 (mill present on site at that date), to present.*
 - *Nursery Gardens use, since before 1932, to at least 1963 (structures probably in place until >1973). Structures within 5m of subject land boundary.*

Please note that the Council considers the above-referenced landuses to be 'potentially contaminative'. The Council does not currently hold any intrusive site investigation information relating to the subject land, or to any land adjacent to the subject land, to the best of our knowledge."

6.3 Previous Reports

6.3.1 Omnia Infiltration Testing Report (Report ref: A12342_241218_L1 dated January 2025)

Infiltration testing was undertaken by Omnia in December 2024 (ref: A12342_241218_L1 Dated January 2025) in order to obtaining information on existing ground conditions and broad level information on drainage potential.

Ground conditions encountered:

Made Ground was encountered within all seven (7no.) exploratory hole locations (TP101- TP107), to a maximum depth of 1.10m bgl (TP102), with an average Made Ground thickness of 0.67m across site. The Made Ground generally comprised soft dark brown slightly gravelly, silty CLAY. Gravel was angular to sub-rounded fine to coarse brick, concrete, flint, plastic bags OR slightly sandy angular to sub-rounded fine to coarse GRAVEL of macadam, brick and concrete. TP105 encountered a layer of silty sub-angular to sub-rounded fine to coarse chalk from 0.15-0.50m bgl.

Directly below the Made Ground deposits bedrock soils attributed to the Wittering Formation were encountered within all locations (TP101-TP107) to a maximum observed depth of 2.50m bgl although the base of the strata was not proven within any of the locations.

Typically, the bedrock deposits were recorded to comprise soft yellowish/ reddish brown very sandy silty CLAY, sand was fine to coarse OR Yellowish brown silty fine to coarse SAND.

Groundwater was not encountered within any of the intrusive locations.

Infiltration rates for the near surface cohesive/granular Wittering Formation deposits ranged between 1.90×10^{-6} to 1.19×10^{-5} m/s with infiltration testing undertaken successfully at four (4no.) out of seven (7no.) test locations across site. The remaining three (3no.) locations failed to have sufficient infiltration and were therefore considered to be unsuccessful.

6.4 Unexploded Ordnance Risk Assessment

A review of publicly available information (provided by Zetica UXO) shows the site as having a 'moderate risk' associated with bombing density and bomb risk.

The site is consequently considered **moderate risk** with regards to unexploded ordnance. It is recommended that contact is made with a suitably qualified and experienced UXO contractor, and any intrusive works should be supervised.

6.5 Regulatory Database

The following information has been obtained from a commercially available environmental database. The summary table (Table 6-1) only includes records not otherwise detailed in the report. Where more than two (2no.) entries have been identified, the Table summarises the closest two (2no.) entries to the site.

Full regulatory and permit search information is presented in the attached Groundsure Report (Appendix VI).

The table below summarises features that are considered to have the potential to present a significant risk to the site.

Table 6-1 Summary of Groundsure Data

	0-249m	250-500m	Details
Licensed Pollutant Release (Part A(2)/B)	0	2	<p>499-500m northeast – Shell UK ltd, 222 London Road, PO7 7AA.</p> <p>Unloading of Petrol into storage at service stations.</p> <p>Permit Type: Part B (Historical and current permit listed – Both records relate to the same address)</p>
Licensed discharges to controlled waters	1	1	<p>96m southeast – Farhjem, Southwick, Fareham</p> <p>Sewage discharges- Not Water Company – unspecified released into freshwater river</p> <p>469m south – Westbrookgrove, Purbrook</p> <p>Sewage discharges- Not Water Company – unspecified released into freshwater river</p>
Pollution Incidents (EA/NRW)	0	6	<p>364m north – 24/07/2001 Atmospheric pollutants and effects</p> <p>No impact to water, minor impact to land and air</p> <p>392m south – 17/01/2012 Crude Sewage</p> <p>Significant impact to water, no impact to land and air.</p>

7 CONCEPTUAL SITE MODEL (CSM)

7.1 Initial CSM

In accordance with Environment Agency, LCRM and BSI 10175 (Code of Practice for Investigation of Potentially Contaminated Land), Omnia have developed an initial CSM to identify potential contamination sources, migration pathways and receptors within the study area. A residential end use has been adopted given the proposed site development.

The potential on-site and off-site sources identified have been detailed within Figure 4.0 (Appendix III).

7.1.1 On-site Potential Sources

- On-Site – Unspecified Mills/ Timber Yard/ Windmill/ Sawmills including crane, tanks and electrical substation identified on historical mapping (1895-2024);

7.1.2 Off-site Potential Sources

- 1-6m northwest to west and eastern boundary as identified on historical mapping– Horticultural Nurseries (1930-1966);
- 12m west – Unspecified tank (1963);
- 26m northeast – Electrical Substation (1973); and,
- 117m southwest – Historical Landfill Fielders Park, Purbrook.

7.1.3 Potential Pathways

- Inhalation and ingestion of impacted soils and dusts;
- Dermal contact with impacted soils;
- Inhalation of vapours;
- Inhalation of fibres;
- Vertical and lateral migration; and,
- Migration of gas into confined spaces.

7.1.4 Potential Receptors

- Future Site Users.
- Controlled Waters
 - Groundwater in underlying Secondary Aquifer A; and,
 - Surface Water in the River Wallington

Construction workers are not considered to be a plausible receptor due to management of their exposure through the use of suitable PPE and hygienic working practices as required under HSE/CDM regulations. Furthermore, the length of any exposure is considered to be very short in comparison to the criteria for which the adopted end use has been derived.

An Initial Conceptual Site Model has been prepared for the site and is presented overleaf within Table 7-1.

Table 7-1 Initial Conceptual Site Model

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
On-Site Potential Sources							
Historic land use as Timber Yard/ Windmill/ Sawmills identified on historical mapping (1895-2024)	Heavy Metals (General) (As, B, Cd, Cr, Cu, Pb, Hg, Se, Ni, Zn) And CCA Wood Preservative Solutions (Cr, Cu, As)	Dermal contact with impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	Potentially Active- Further Investigation Required
		Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
	Creosote Wood Preservative Solutions (Polycyclic Aromatic Hydrocarbons (PAH) & Phenols)	Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Inhalation of	Future Site	Moderate	Moderate	Moderate	

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
	Historic Burning of Waste (PAH)	Vapours	Users				
		Dermal contact with impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
	Fuels & Lubricants (Total Petroleum Hydrocarbons (TPH))	Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Inhalation of Vapours	Future Site Users	Moderate	Moderate	Moderate	

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
	Preservatives/Varnishes	Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
	Volatile Organic Compounds (VOC)	Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Inhalation of Vapours	Future Site Users	Moderate	Moderate	Moderate	
	Asbestos	Inhalation of Fibres	Future Site Users	Moderate	Moderate	Moderate	
Made Ground	Ground Gas (CH ₄ & CO ₂)	Vertical and Lateral Migration into confined spaces	Future Site Users	Moderate	Severe	High	
Crane on historical mapping (1895-2024)	Polycyclic Aromatic Hydrocarbons (PAH)	Dermal contact with impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
	Total Petroleum Hydrocarbons (TPH)	Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Inhalation of Vapours	Future Site Users	Moderate	Moderate	Moderate	
Above Ground Storage Tanks identified on historical mapping (1895-2024)	Total Petroleum Hydrocarbons (TPH)	Ingestion of Impacted soils and dust	Future Site Users	Moderate	Moderate	Moderate	Potentially Active – Further Investigation Required.
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Vertical & Lateral Migration	Controlled Waters (River Wallington)	Moderate	Minor	Low/Moderate	
		Inhalation of Vapours	Future Site Users	Moderate	Moderate	Moderate	
	Volatile Organic Compounds (VOC)	Vertical & Lateral Migration	Controlled Waters (River	Moderate	Minor	Low/Moderate	

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
			Wallington)				
		Vertical & Lateral Migration	Controlled Waters (Secondary A Aquifer)	Moderate	Minor	Low/Moderate	
		Inhalation of Vapours	Future Site Users	Moderate	Moderate	Moderate	
Electrical substation identified on historical mapping (1895-2024)	Polychlorinated Biphenyls (PCBs)	Lateral Migration	Future Site Users	Low	Moderate	Low/Moderate	Potentially Active – Further Investigation Required.
Off-Site Potential Sources							
1-6m northwest to west and eastern boundary as identified on historical mapping– Horticultural Nurseries (1930-1966)	Heavy Metals (As, Pb)	Lateral Migration	Future Site Users	Low	Moderate	Low/Moderate	Potentially Active – Further Investigation Required.
	Total Petroleum Hydrocarbons (TPH)	Lateral Migration	Future Site Users	Moderate	Moderate	Moderate	
	Herbicides and Pesticides	Lateral Migration	Future Site Users	Low	Moderate	Low/Moderate	

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Magnitude of Occurrence	Overall Risk Rating	Active/Inactive
12m west – Unspecified tank (1963)	Total Petroleum Hydrocarbons (TPH)	Lateral Migration	Future Site Users	Moderate	Moderate	Moderate	Potentially Active – Further Investigation Required.
26m northeast – Electrical Substation (1973)	Polychlorinated Biphenyls (PCBs)	Lateral Migration	Future Site Users	Low	Moderate	Low/Moderate	Potentially Active – Further Investigation Required.
117m southwest – Historical Landfill Fielders Park, Purbrook	Ground Gas (CH ₄ & CO ₂)	Vertical and Lateral Migration into confined spaces	Future Site Users	Moderate	Severe	High	Potentially Active – Further Investigation Required.

8 CONCLUSIONS AND RECOMMENDATIONS

Conceptual Site Model Conclusions

The Conceptual Site Model has identified the presence of a series of potentially active pollution linkages associated with the previous recorded use of the site and surrounding areas which are considered to have the potential to present a risk to identified receptors at the site based on the proposed development.

It is considered further investigation is required for the following identified sources:

- On-Site – Unspecified Mills/ Timber Yard/ Windmill/ Sawmills including crane, tanks and electrical substation identified on historical mapping (1895-2024);
- 1-6m northwest to west and eastern boundary as identified on historical mapping– Nurseries (1930-1966);
- 12m west – Unspecified tank (1963);
- 26m northeast – Electrical Substation (1973); and,
- 117m southwest – Historical Landfill Fielders Park, Purbrook.

Recommendations

Environmental

It is recommended an intrusive site investigation should be undertaken focussing on the location of the historic development including the Made Ground identified on site, as well as the potential off-site sources (Nurseries, tank, electrical substation, and historical landfill) to investigate the potential pollution linkages identified by the conceptual site model and determine the potential risks posed to future site users.

The site investigation should include chemical and geotechnical testing of soil samples for a suite of determinants representative of the potential sources identified within the CSM. The site investigation should also include gas monitoring to assess the risk posed by Made Ground and historical landfill, as identified within the CSM.

Upon return of chemical testing results a Tier 1 Risk Assessment should be undertaken to determine whether the encountered soils have the potential to present a significant risk to the identified receptors. This would enable mitigation measures to be formulated, if required.

It is recommended that an Asbestos Survey is undertaken in accordance with the Control of Asbestos Regulations (2012) prior to the commencement of any refurbishment or demolition works.

Consultation maybe required regarding a Nitrates Assessment and SSSI Impact Risk Zones as set out within Sections 3.6.1 and 3.6.2 therefore it is recommended that contact should be made with a suitably qualified planning consultant for further information.

APPENDIX I - LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between Omnia and the Client as indicated in Section 1.2.
 2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.
 3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination, which are enforced, by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
 4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.
 5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
 6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
 7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
 8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
 9. Omnia cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by Omnia is owned by them, and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by Omnia in this connection without their explicit written agreement there to by Omnia.
 10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.
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APPENDIX II – GLOSSARY

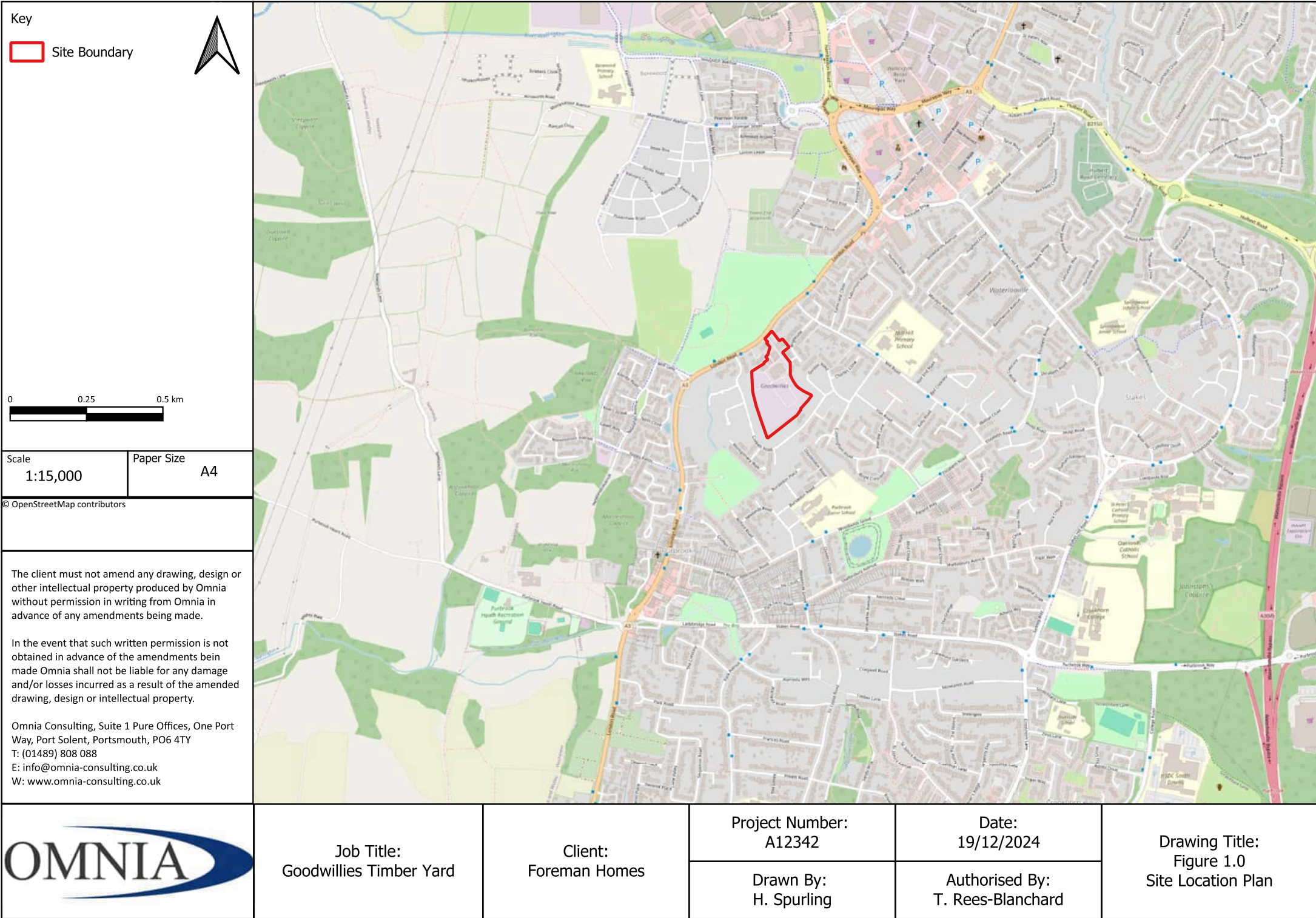
AST	Above Ground Storage Tank
BGS	British Geological Survey
BSI	British Standards Institute
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CIEH	Chartered Institute of Environmental Health
CIRIA	Construction Industry Research Association
CLEA	Contaminated Land Exposure Assessment
CSM	Conceptual Site Model
DNAPL	Dense Non-Aqueous Phase Liquid (Chlorinated Solvents, PCB)
DWS	Drinking Water Standard
EA	Environment Agency
EQS	Environmental Quality Standard
GAC	General Assessment Criteria
GL	Ground Level
GSV	Gas Screening Value
HCV	Health Criteria Value
ICSM	Initial Conceptual Site Model
LNAPL	Light Non-Aqueous Phase Liquid (Petrol, Diesel, Kerosene)
ND	Not Detected
LMRL	Lower Method Reporting Limit
NR	Not Recorded
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Poly-Chlorinated Biphenyl
PID	Photo-Ionisation Detector
QA	Quality Assurance
SGV	Soil Guideline Value
SPH	Separate Phase Hydrocarbon
TPH (CWG)	Total Petroleum Hydrocarbon (Criteria Working Group)
SPT	Standard Penetration Test
SVOC	Semi Volatile Organic Compound
UST	Underground Storage Tank
VCCS	Vibro Concrete Columns
VOC	Volatile Organic Compound
WTE	Water Table Elevation

UNITS

M	Metres
KM	Kilometres
%	Percent
%V/V	Percent Volume in Air
MB	Milli Bars (Atmospheric Pressure)
L/HR	Litres Per Hour
µG/L	Micrograms Per Litre (Parts Per Billion)
PPB	Parts Per Billion
MG/KG	Milligrams Per Kilogram (Parts Per Million)
PPM	Parts Per Million
MG/M ³	Milligram Per Metre Cubed
M BGL	Metres Below Ground Level
M BCL	Metres Below Cover Level

MAOD	Metres Above Ordnance Datum (Sea Level)
KN/M ²	Kilo Newtons Per Metre Squared
µM	Micrometre

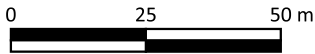
APPENDIX III - DRAWINGS





Key

 Site Boundary



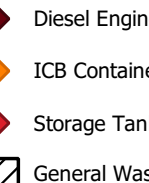
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Project Number: A12342	Client: Foreman Homes	Drawn By: H. Spurling	Drawing Title: Figure 2.0 Proposed Development Plan
Job Title: Goodwillies Timber Yard	Date: 04/02/2026	Authorised By: O. Maxwell	

Key



- 
-  Site Boundary
 -  Diesel Engine Oil Containers
 -  ICB Container
 -  Storage Tanks
 -  General Waste Storage Containers
 -  Hardstanding
 -  Historic Outdoor Wood Storage Area
 -  Vegetation
 -  Building (Office/Administration)
 -  Building (Storage/Industrial)



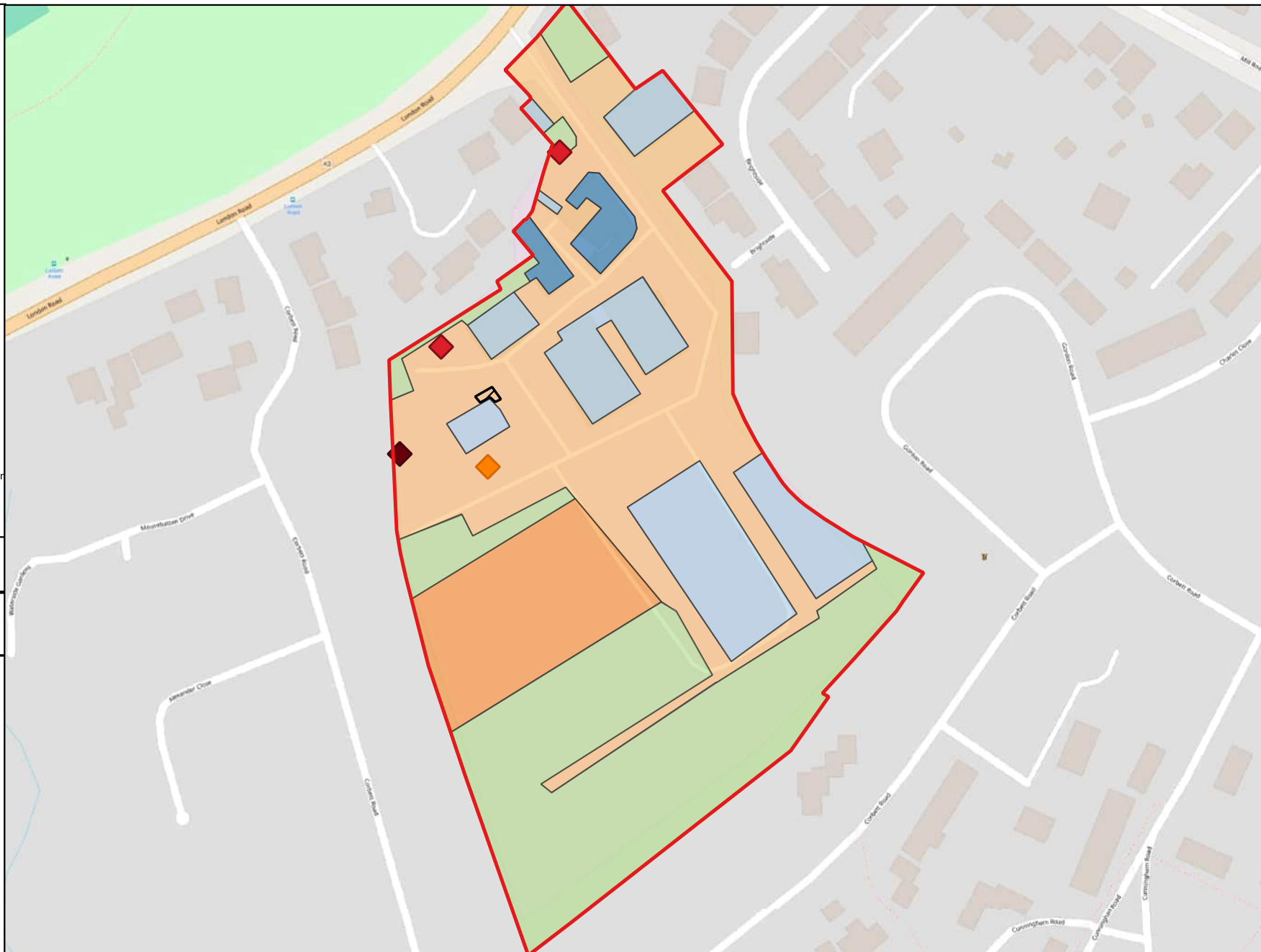
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Job Title:
Goodwillies Timber Yard

Client:
Foreman Homes

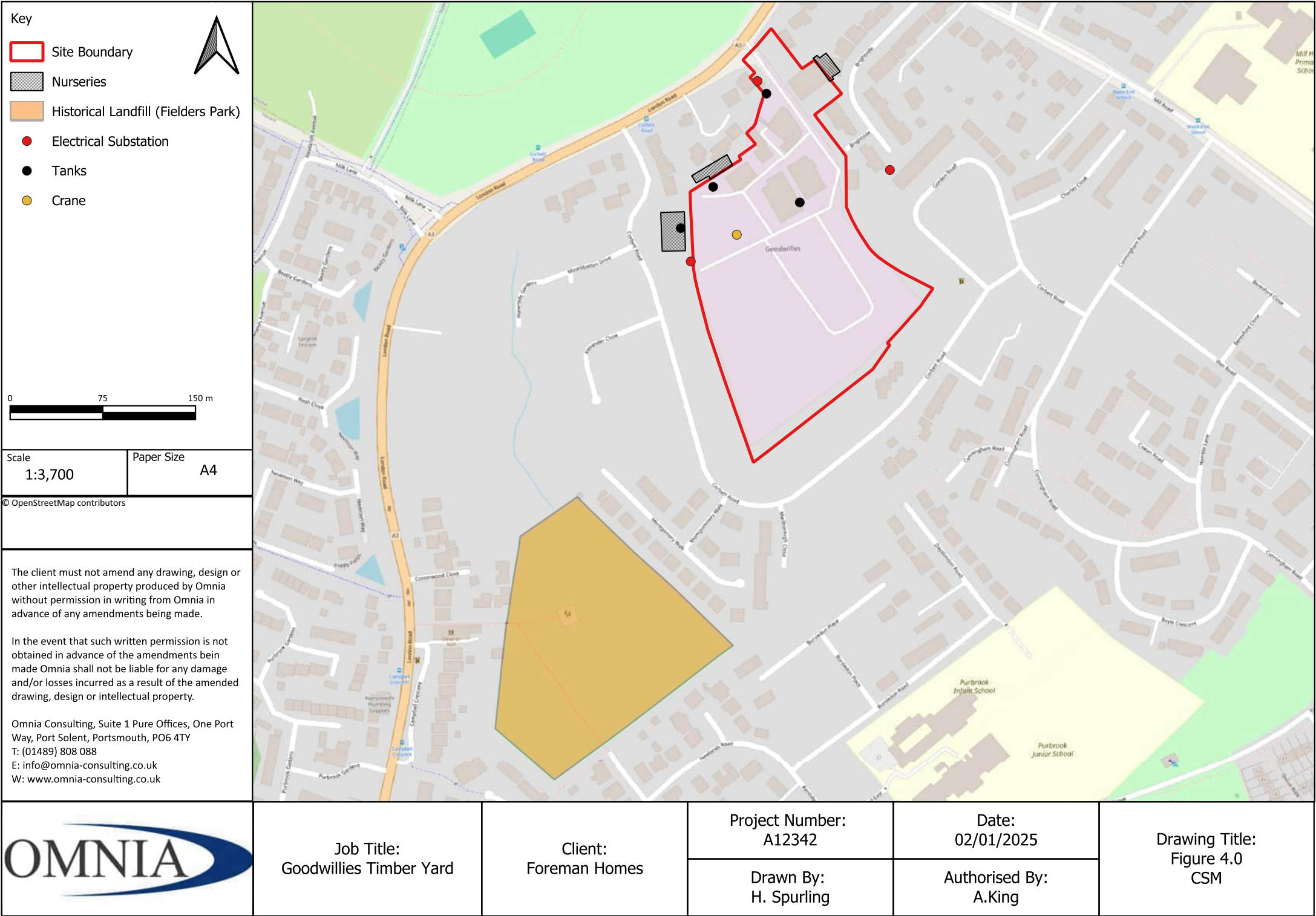
Project Number:
A12342

Drawn By:
J. Wolverton

Date:
02/01/2024

Authorised By:
H. Spurling

Drawing Title:
Figure 3.0
Site Walkover Plan



APPENDIX IV - PHOTOGRAPHS



Photograph 1 – Entrance to site from London Road (facing south) – December 2024



Photograph 2 – Overview of the north of the site (facing southeast) – December 2024



Photograph 3 – Overview of the central area of the site (facing south) – December 2024



Photograph 4 – Overview of the western area of the site (facing east) – December 2024



Photograph 5 – Overview of the southern area of the site (facing west) – December 2024



Photograph 6 – Overview of the eastern area of the site (facing north) – December 2024



Photograph 7 – Typical administration/office building construction – December 2024



Photograph 8 – Typical storage/industrial shed construction – December 2024



Photograph 9 – Entrance to the underground bunker – December 2024



Photograph 10 – Entrance to the underground bunker – December 2024



Photograph 11 – Outside construct of the underground bunker – December 2024



Photograph 12 – Storage tank in the north of the site – December 2024



Photograph 13 – Storage tank in the northwest of the site – December 2024



Photograph 14 – Wooden storage shed in the northwest of the site – December 2024



Photograph 15 –Metal drums located in the west of the site – December 2024



Photograph 16 – Plastic storage containers in the west of the site – December 2024



Photograph 17 – IBC container located in the central area of the site – December 2024



Photograph 18 – Liquid within the IBC container – December 2024



Photograph 19 – Staining around the IBC container in the central area of the site – December 2024



Photograph 20 – Wooden containers containing general waste – December 2024

APPENDIX V - HISTORICAL MAPS

Site Details:

J F GOODWILLIE LTD, 154,
LONDON ROAD,
WATERLOOVILLE, HAMPSHIRE,
PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

Map date: 1869

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1869
Revised 1869
Edition N/A
Copyright N/A
Levelled N/A

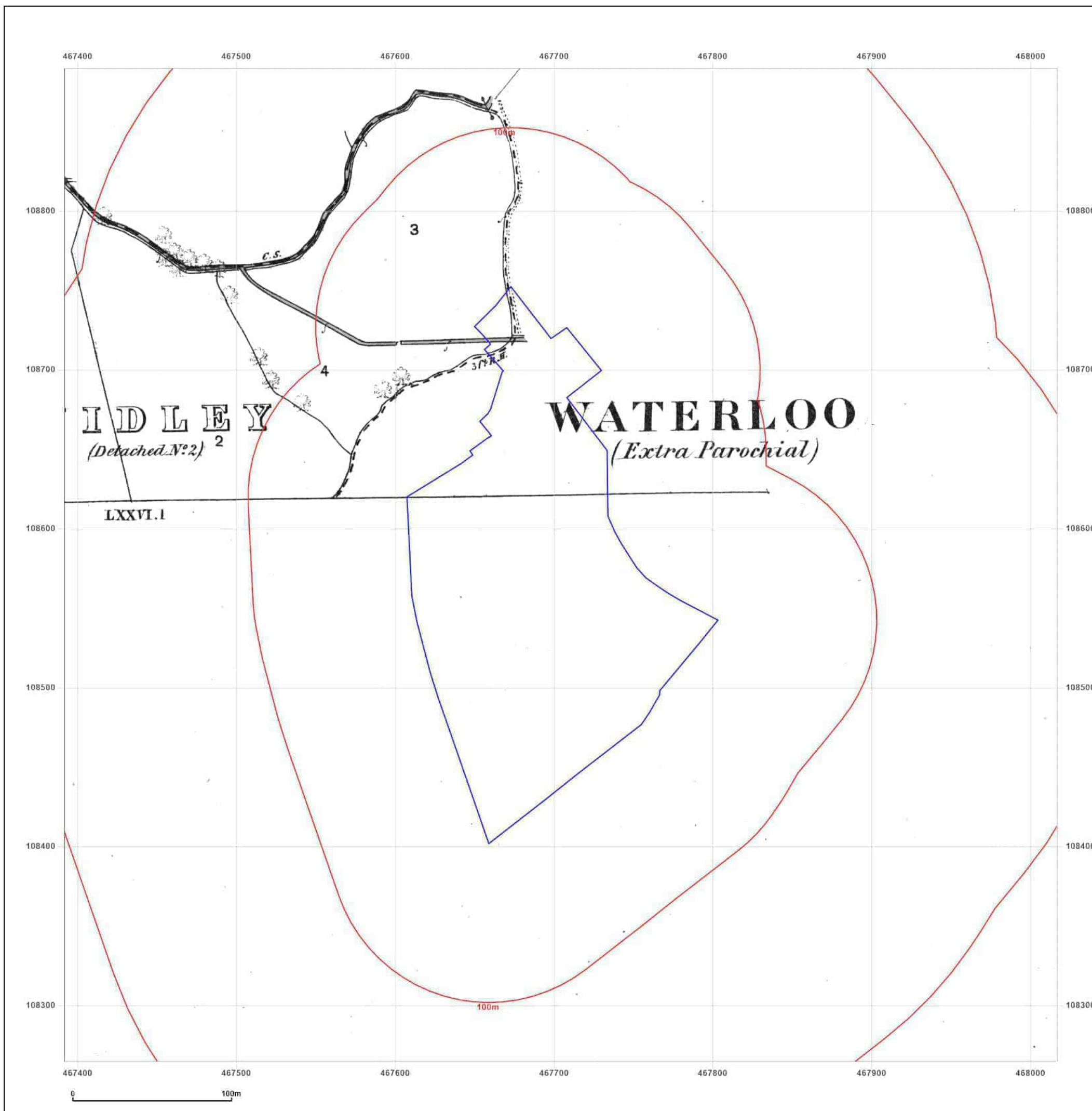


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Map legend available at:
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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

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Surveyed 1869
Revised 1869
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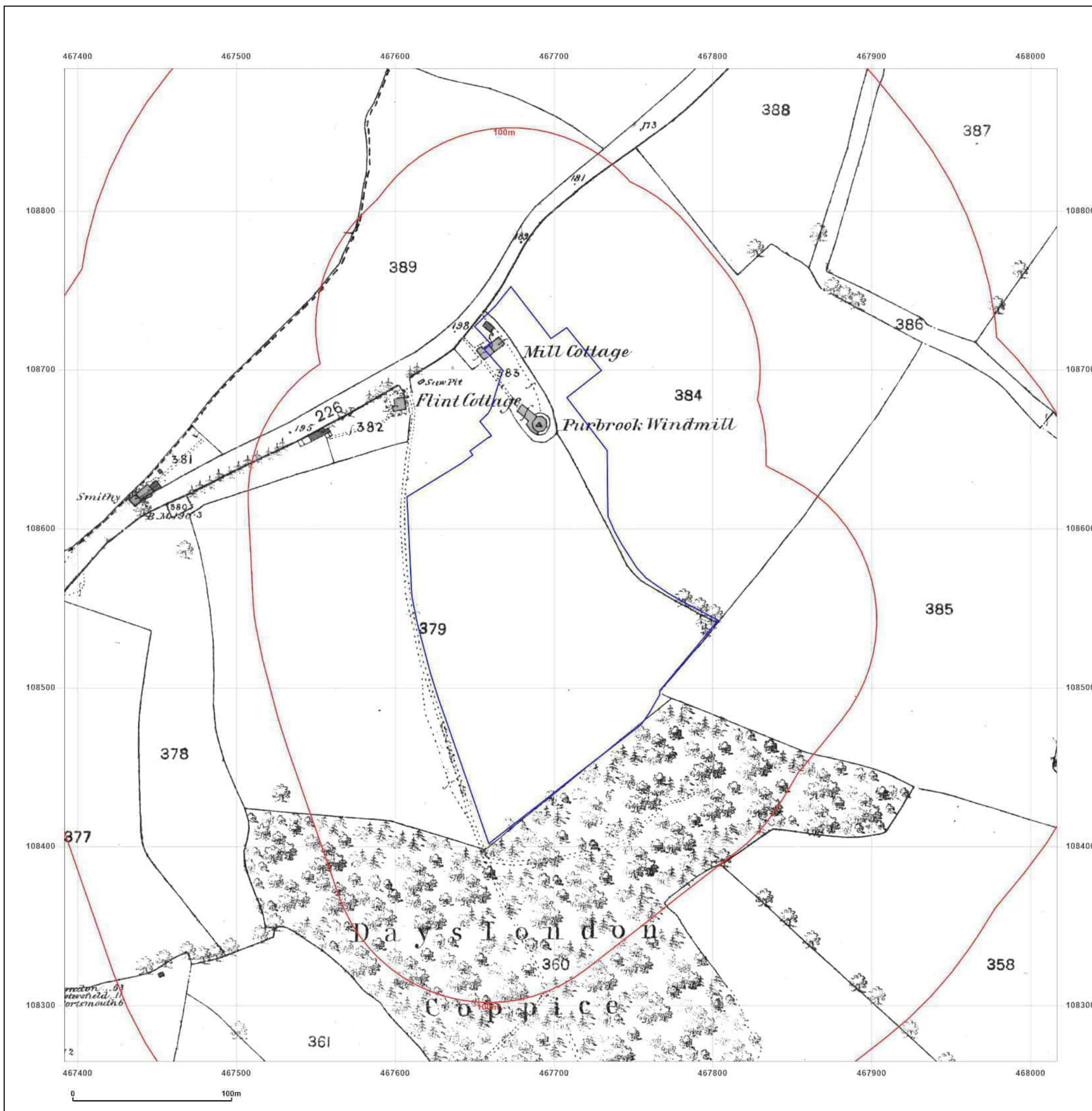


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Site Details:

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PO7 5SR

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Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

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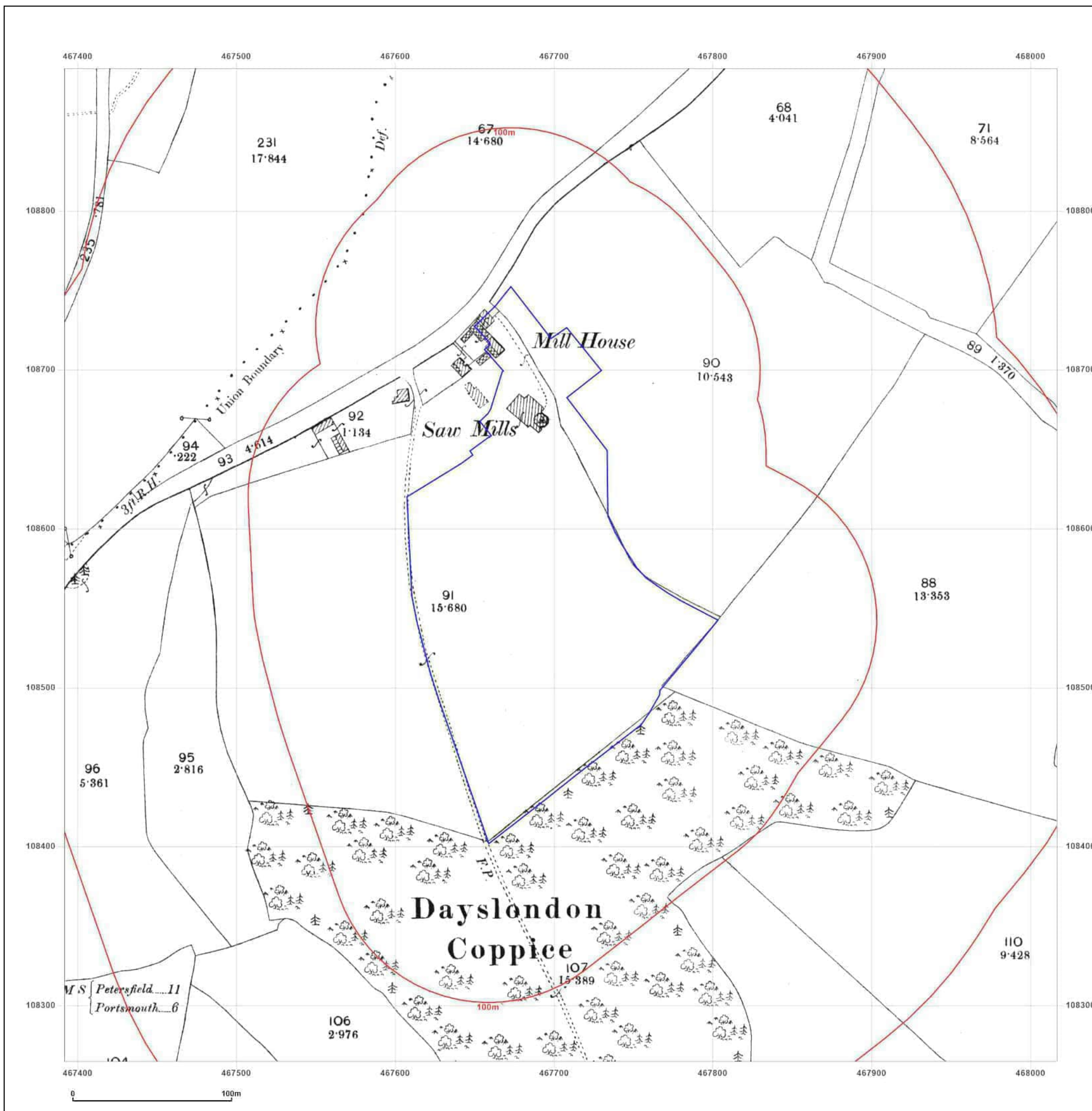


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PO7 5SR

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Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

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Surveyed 1909
Revised 1909
Edition N/A
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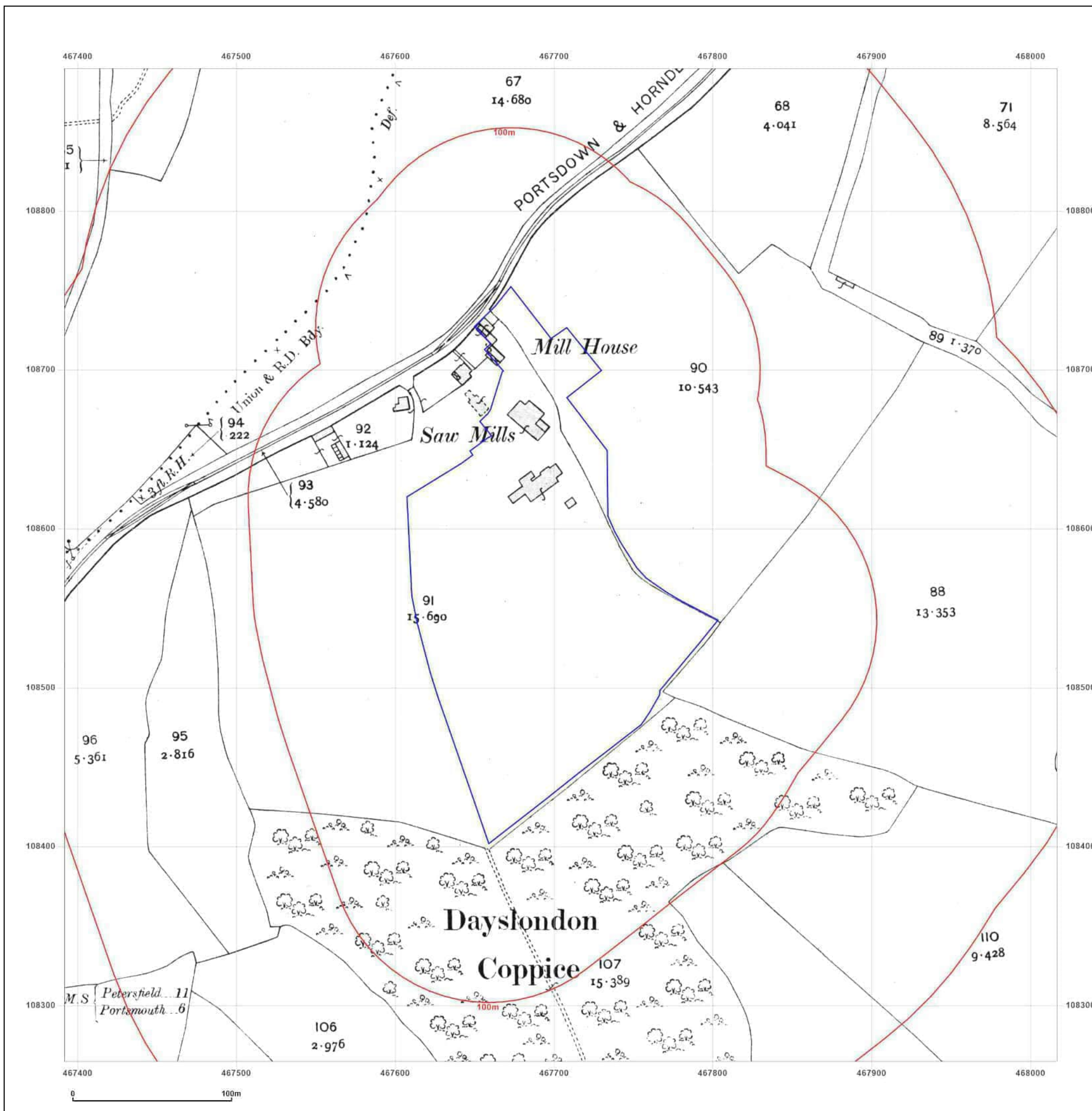


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Site Details:

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Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

Map date: 1932

Scale: 1:2,500

Printed at: 1:2,500



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Copyright N/A
Levelled N/A

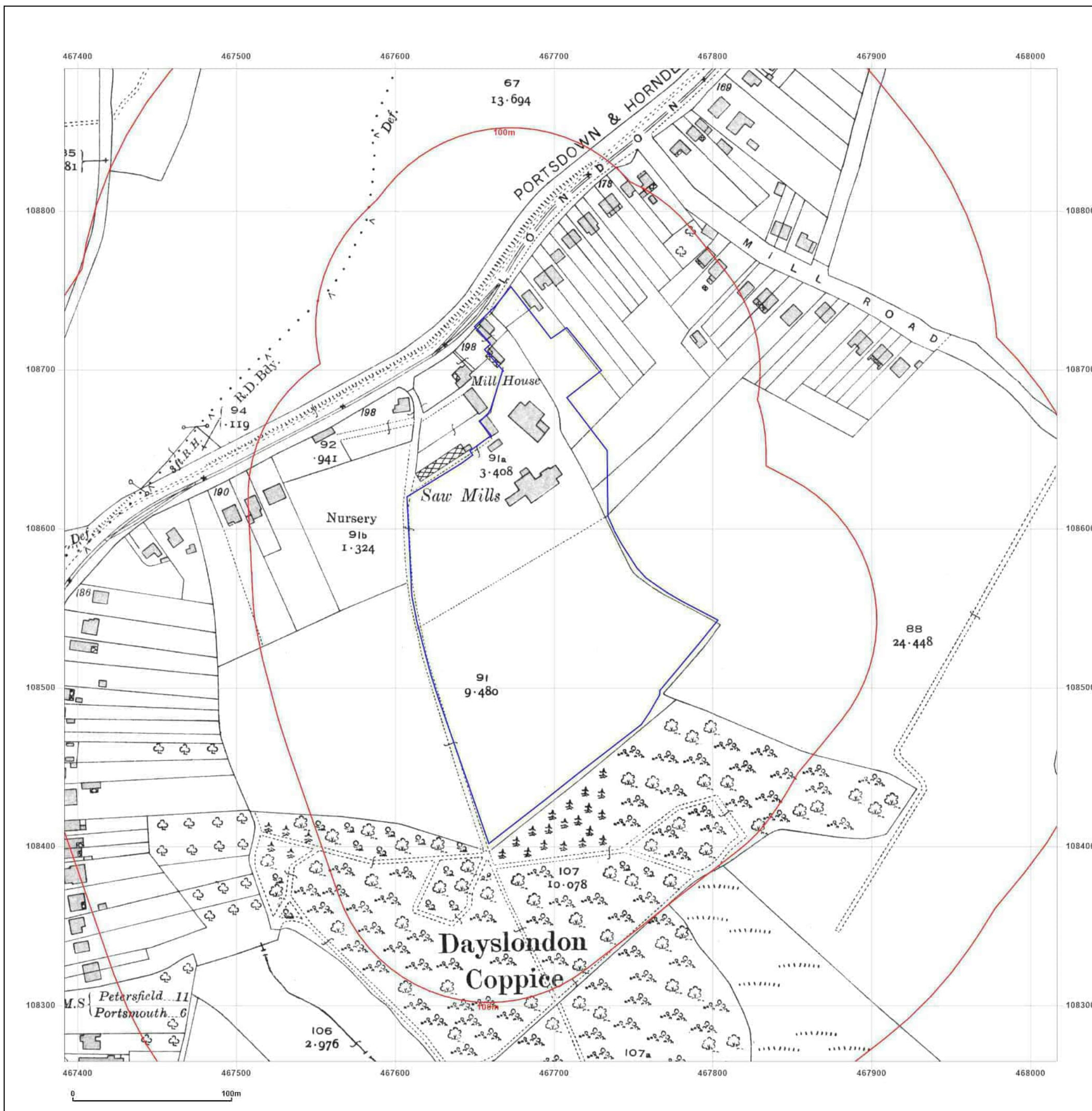


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Site Details:

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LONDON ROAD,
WATERLOOVILLE, HAMPSHIRE,
PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: County Series

Map date: 1939

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1939
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: National Grid

Map date: 1952

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1946

Surveyed 1952
Revised 1952
Edition N/A
Copyright N/A
Levelled 1938



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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_2500
Grid Ref: 467704, 108577

Map Name: National Grid

Map date: 1962-1965

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1952
Revised 1960
Edition N/A
Copyright 1962
Levelled 1957

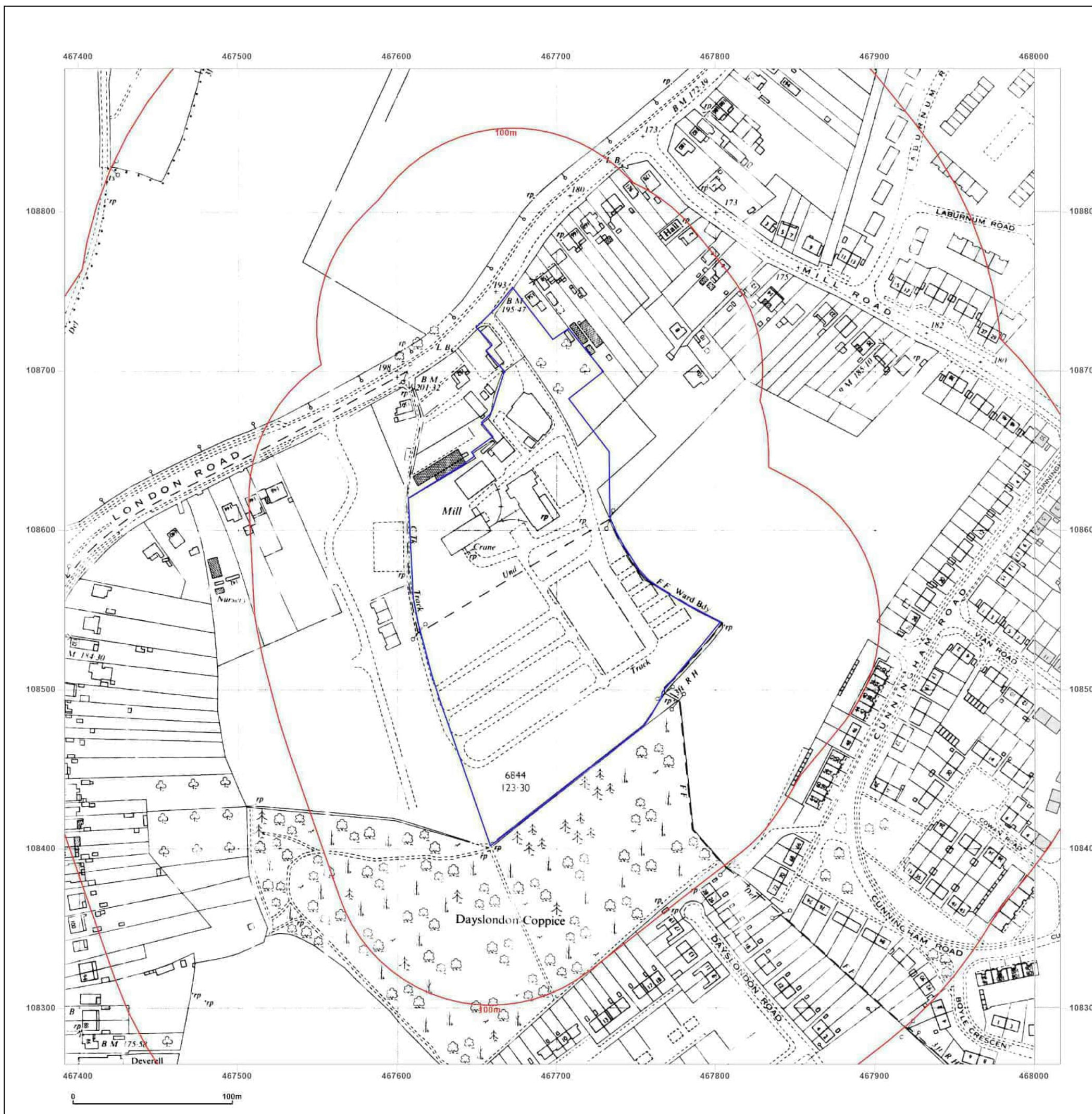


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_1
Grid Ref: 467704, 108327

Map Name: National Grid

Map date: 1973-1974

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1972
Revised 1972
Edition N/A
Copyright 1973
Levelled 1957

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1973
Levelled 1957

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1974
Levelled 1957

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1974
Levelled 1957

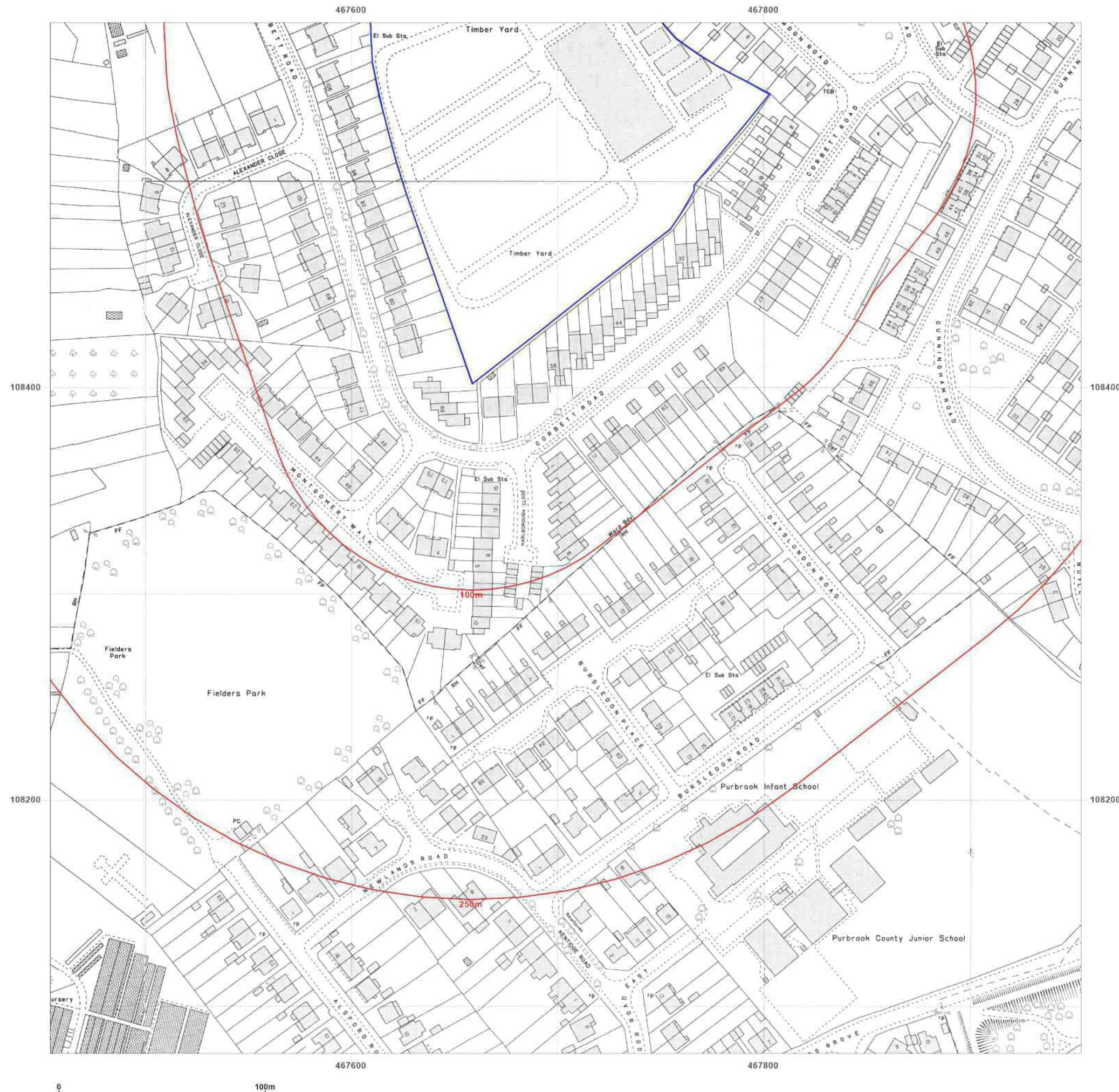


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Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_1
Grid Ref: 467704, 108327

Map Name: National Grid

Map date: 1989-1993

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1989
Levelled 1957

Surveyed 1993
Revised 1993
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1957
Revised 1989
Edition N/A
Copyright 1989
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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_1
Grid Ref: 467704, 108327

Map Name: National Grid

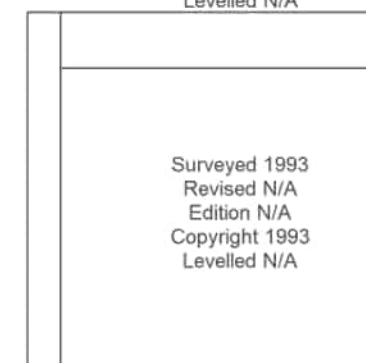
Map date: 1993

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1993
Revised 1993
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

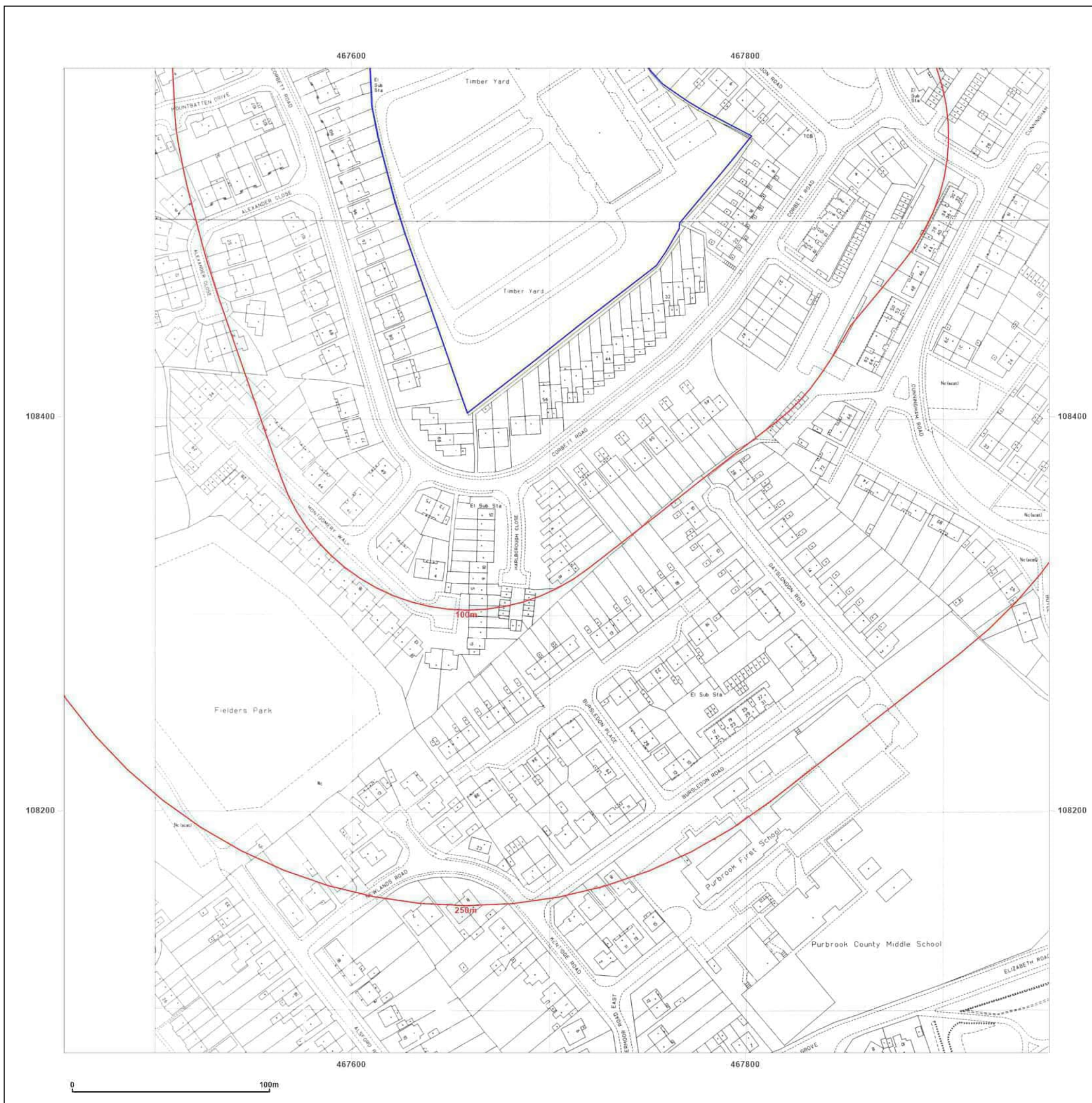


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_2
Grid Ref: 467704, 108827

Map Name: National Grid

Map date: 1980-1982

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1957
Revised 1982
Edition N/A
Copyright 1982
Levelled 1957

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

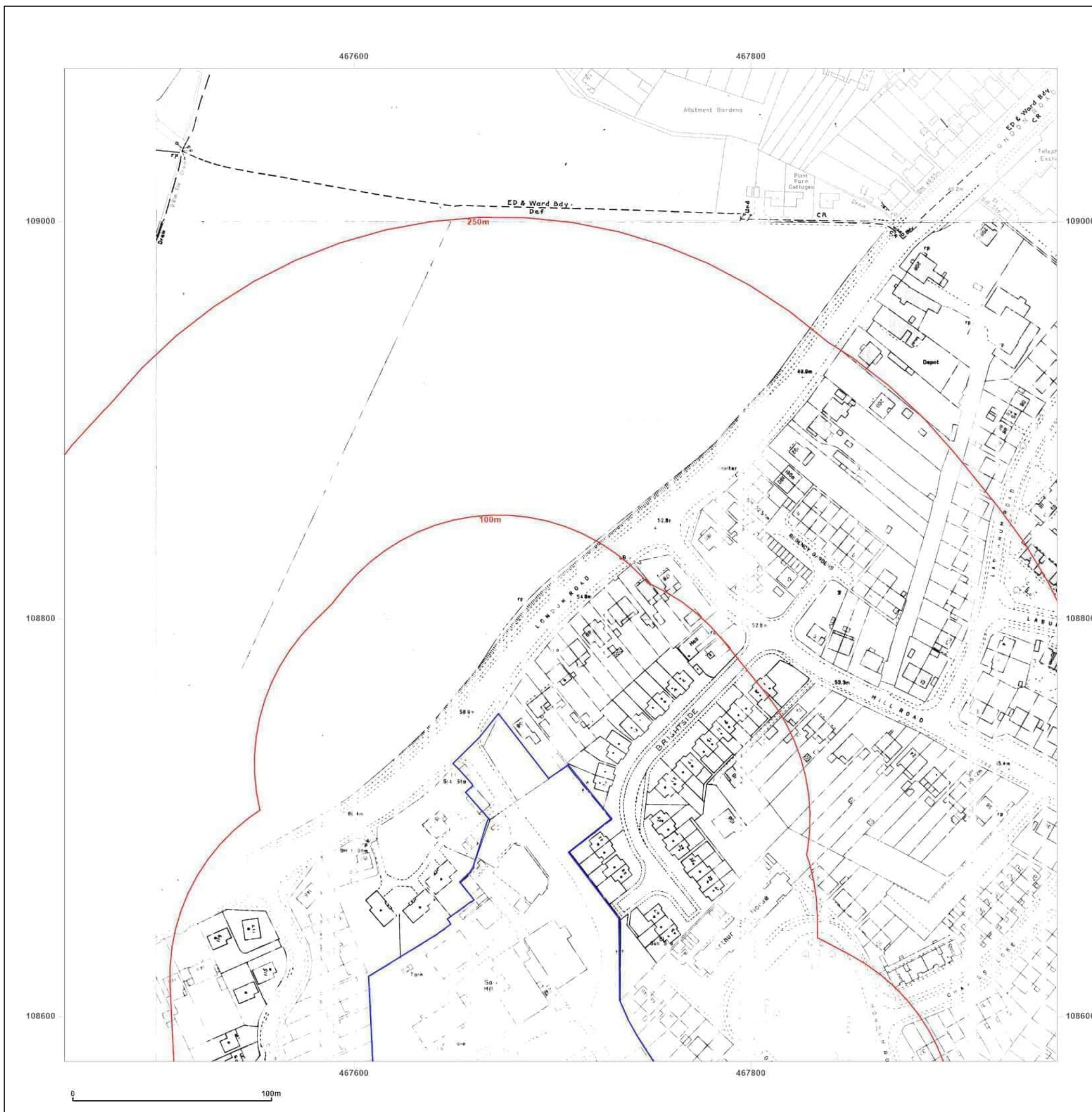


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Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_2
Grid Ref: 467704, 108827

Map Name: National Grid

Map date: 1987-1989

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1971
Revised 1971
Edition N/A
Copyright 1973
Levelled 1987

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1989
Levelled 1957



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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_1250_1_2
Grid Ref: 467704, 108827

Map Name: National Grid

Map date: 1989-1993

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1993
Revised 1993
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1957
Revised 1989
Edition N/A
Copyright 1989
Levelled 1957

Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

Surveyed 1993
Revised 1993
Edition N/A
Copyright N/A
Levelled N/A



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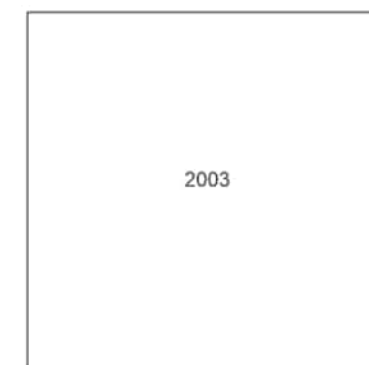
Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_Landline_1_1
Grid Ref: 467705, 108427

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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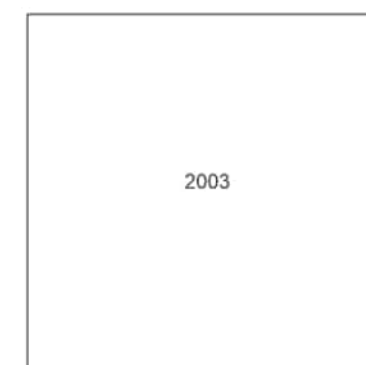
Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN_Landline_1_2
Grid Ref: 467705, 108727

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1865-1867

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1867
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

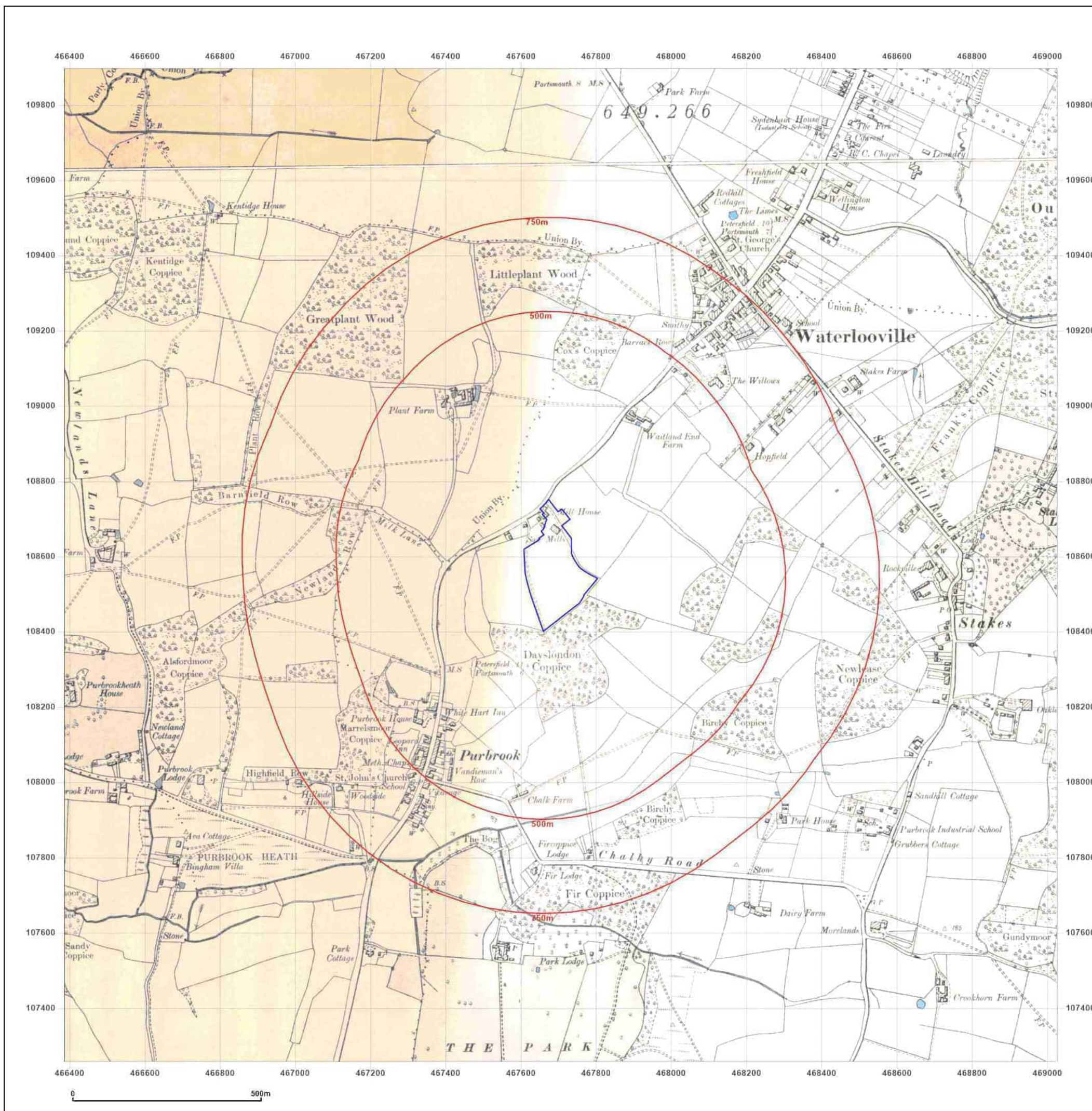


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1895

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1867
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

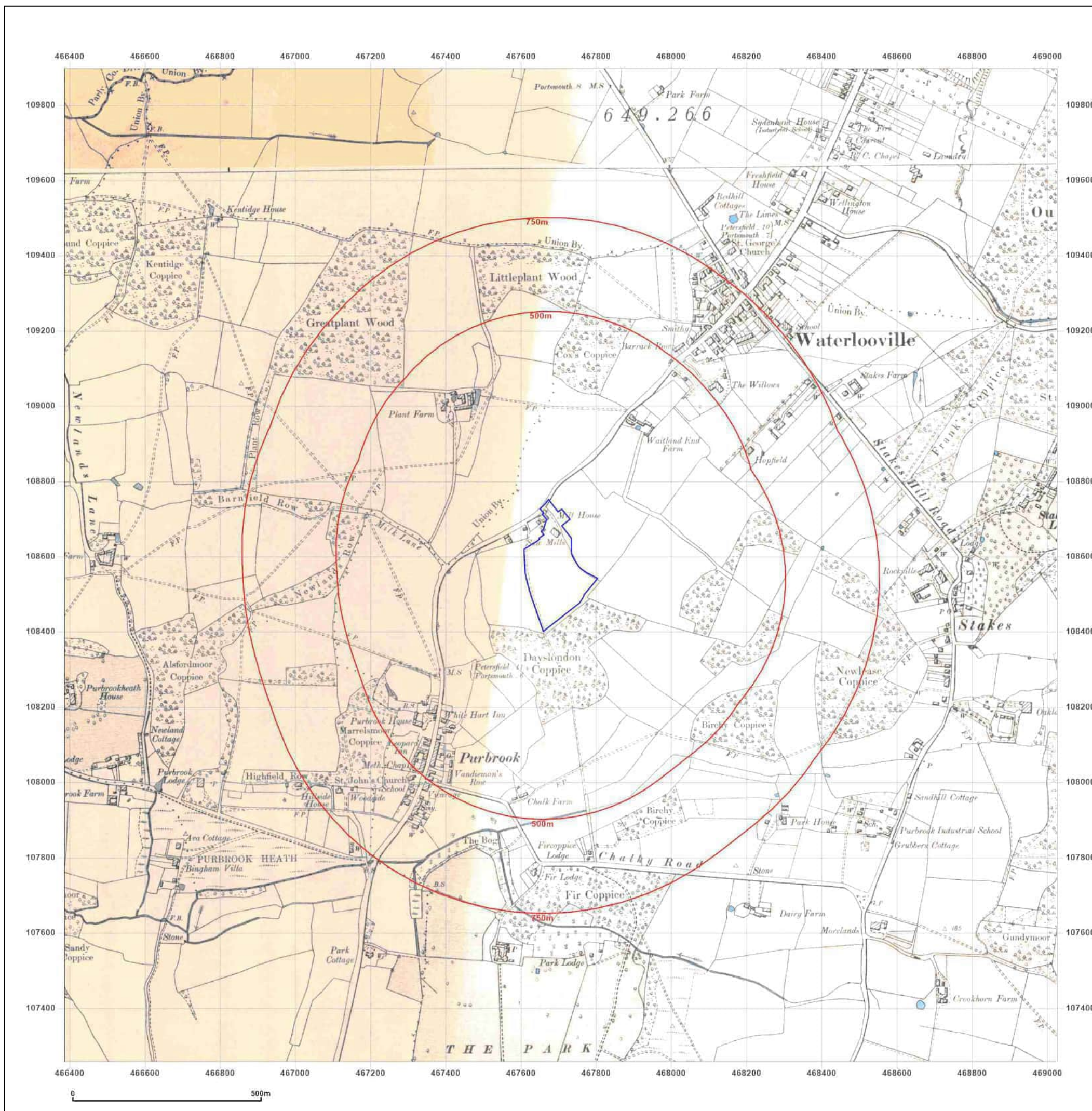


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1907

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1859
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

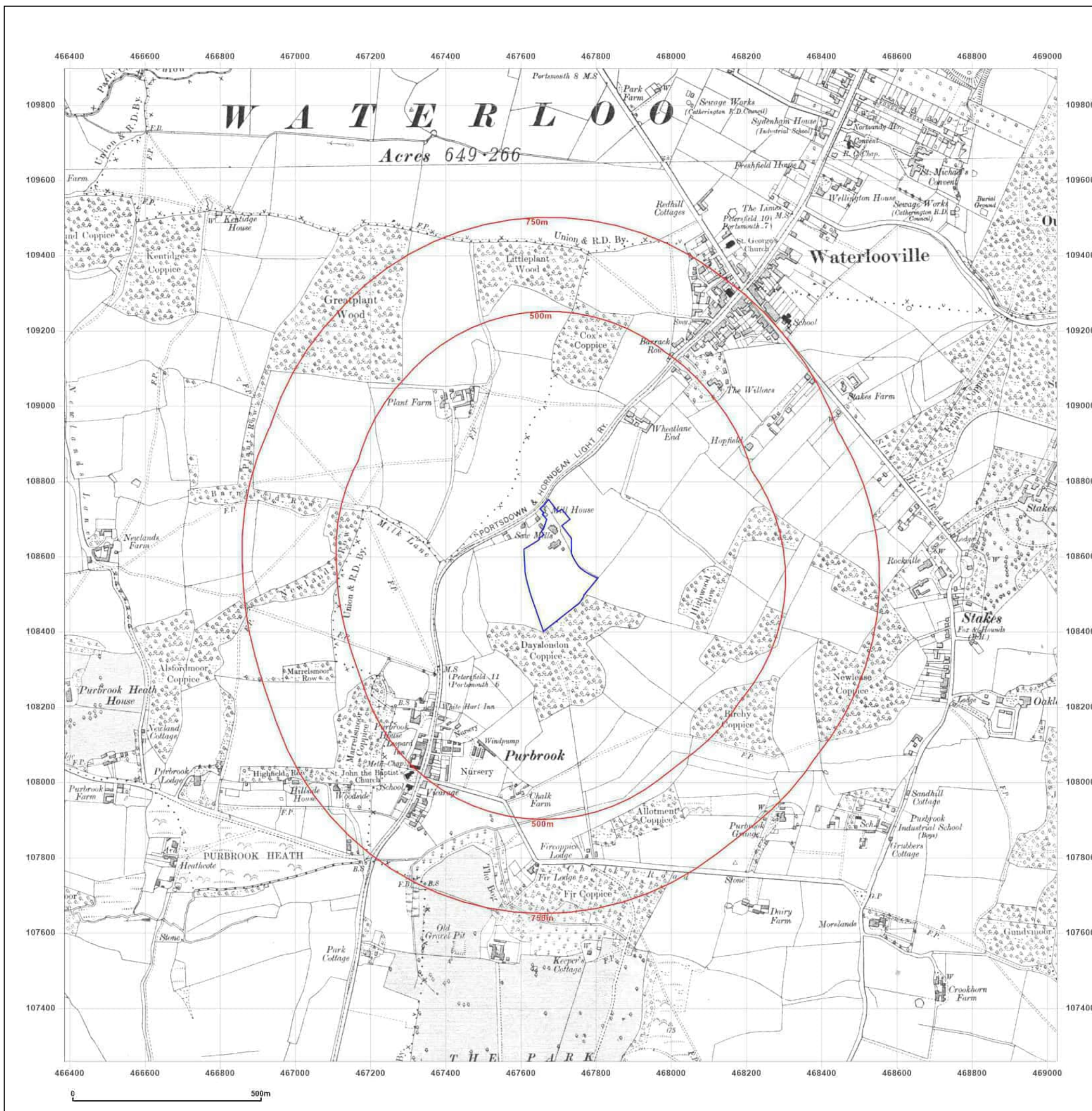


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1930

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1859
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

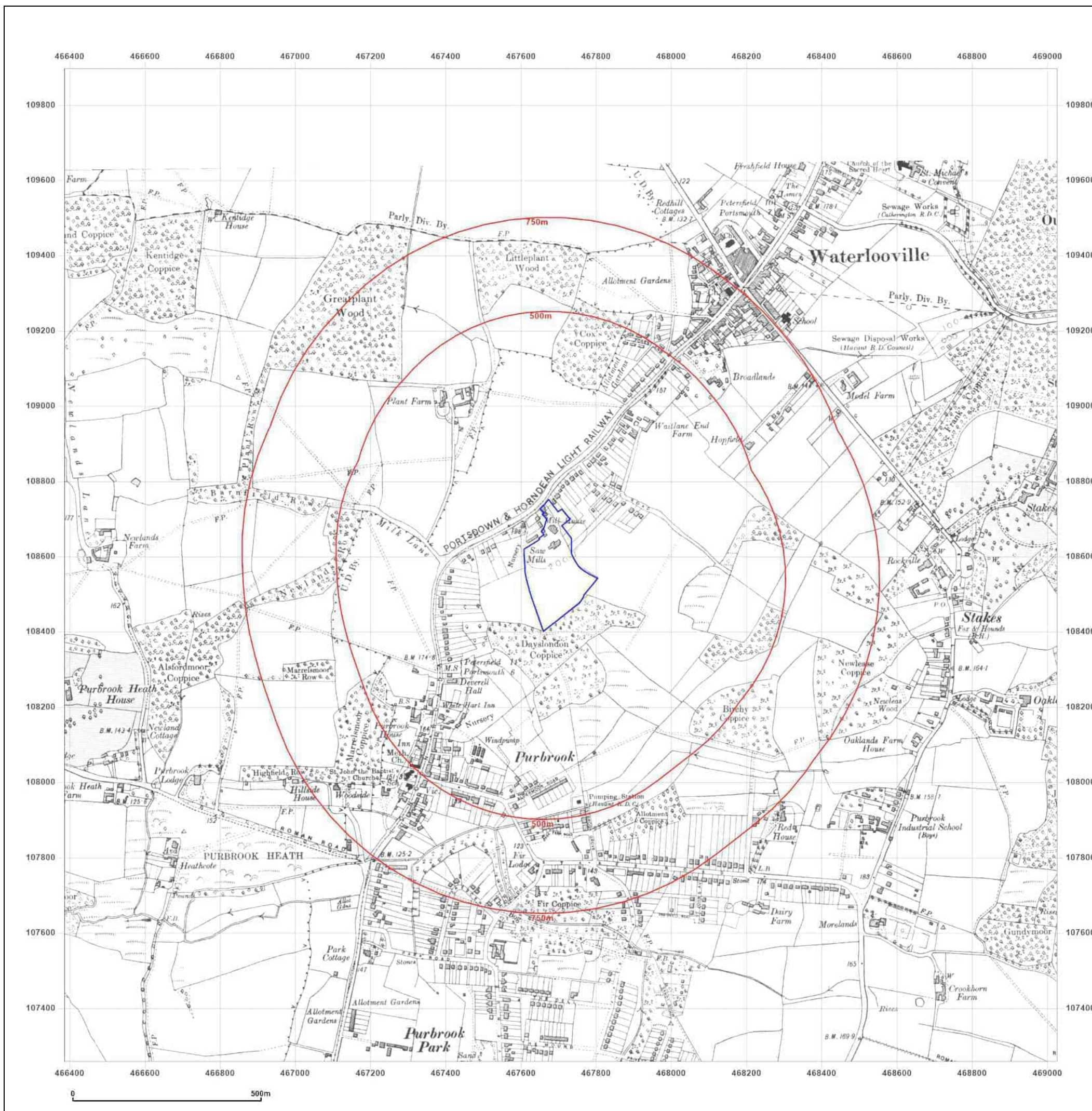


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1930-1933

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1859
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

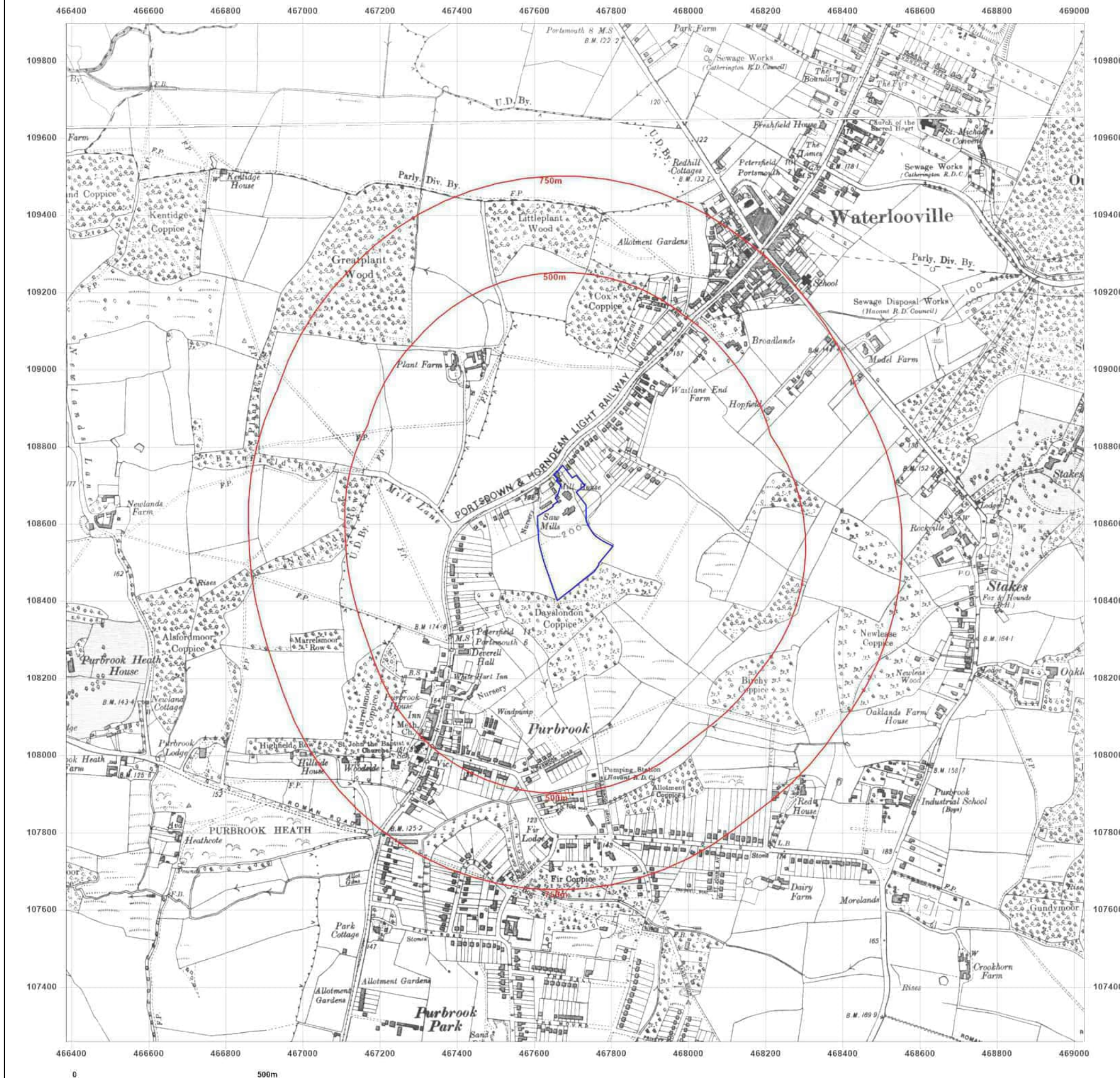


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: County Series

Map date: 1938-1942

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1942
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1859
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

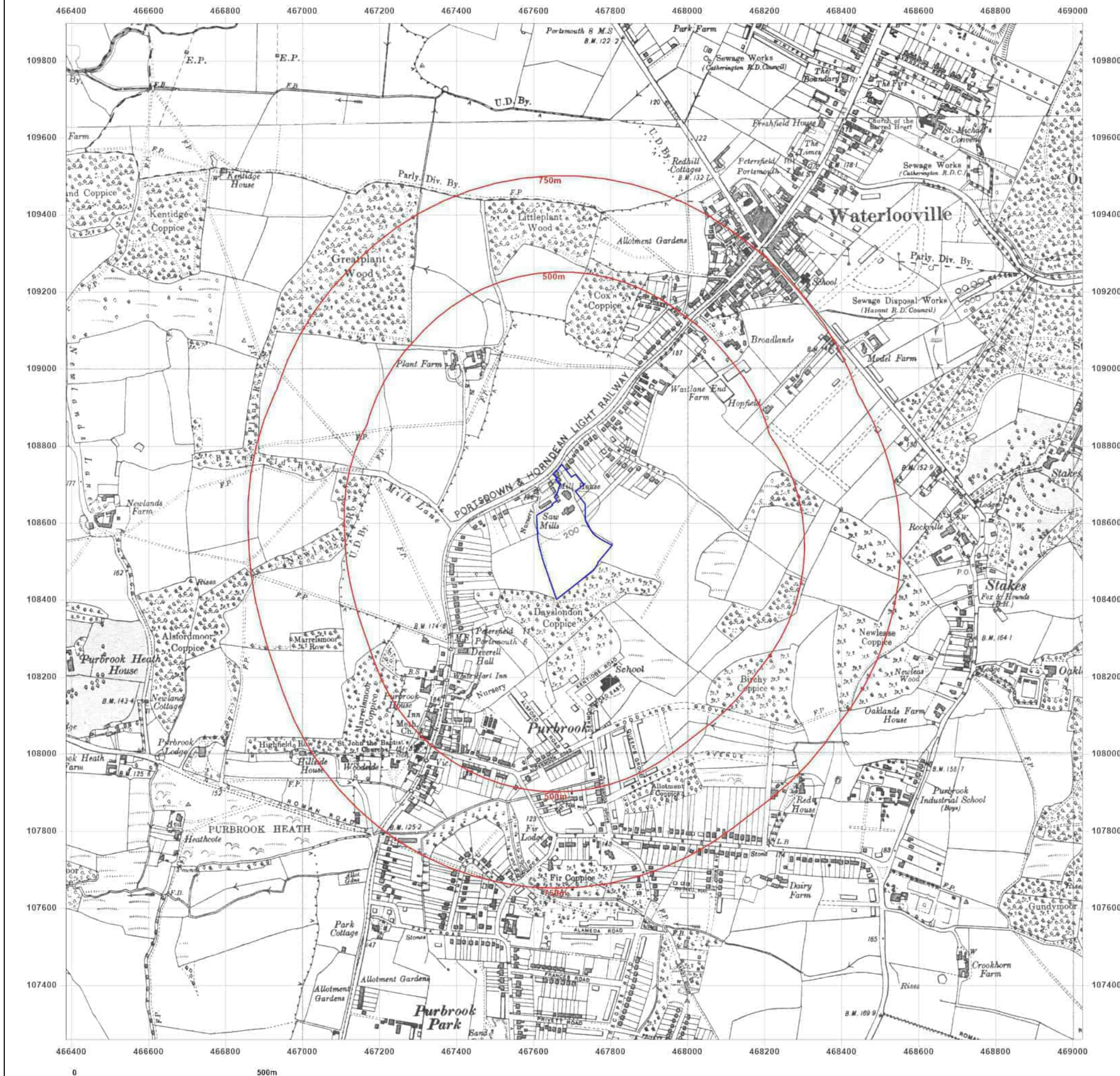


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Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: Provisional

Map date: 1963

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1865
Revised 1957
Edition N/A
Copyright 1963
Levelled N/A

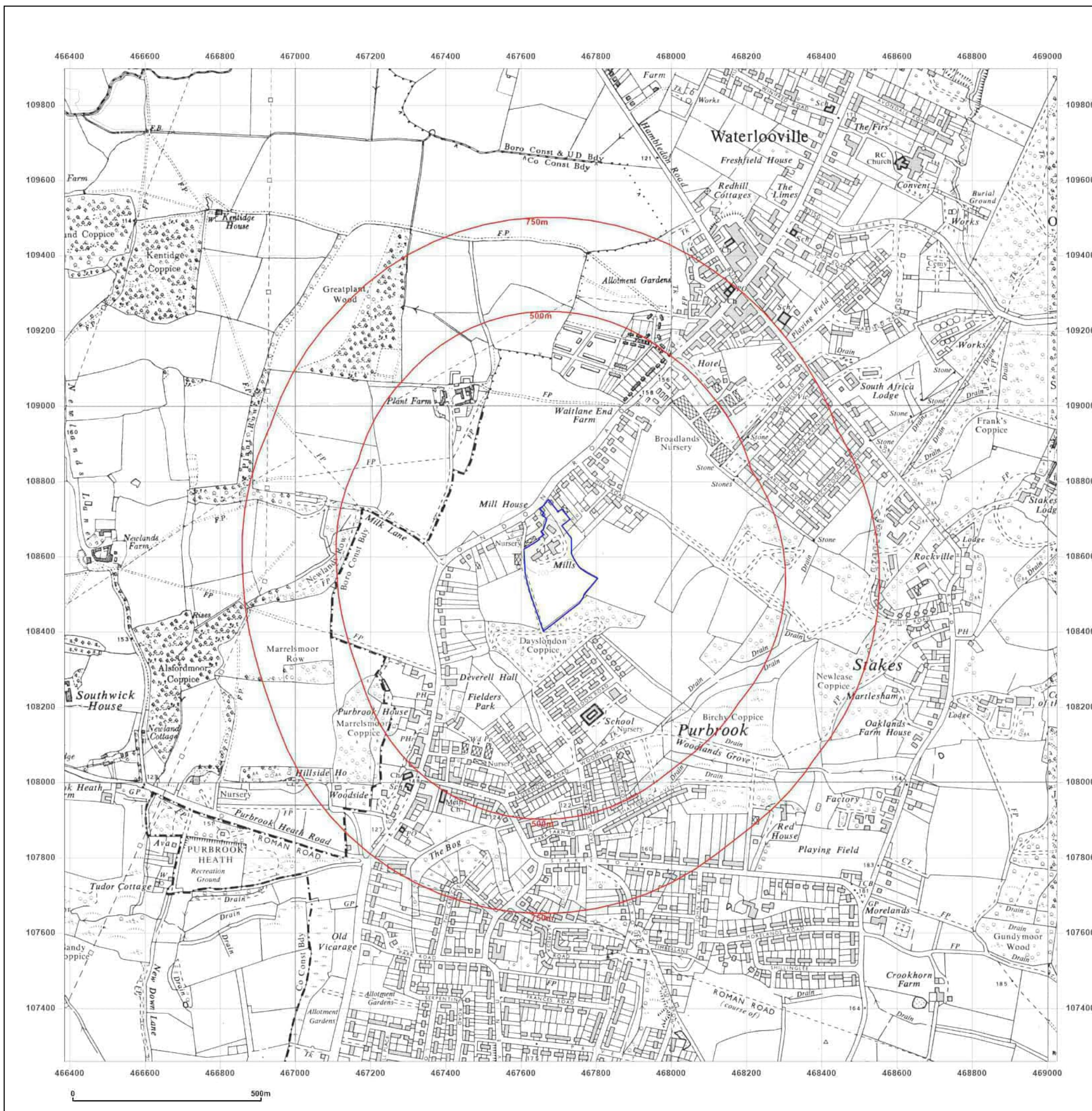


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: National Grid

Map date: 1980

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1980
Revised 1980
Edition N/A
Copyright N/A
Levelled N/A

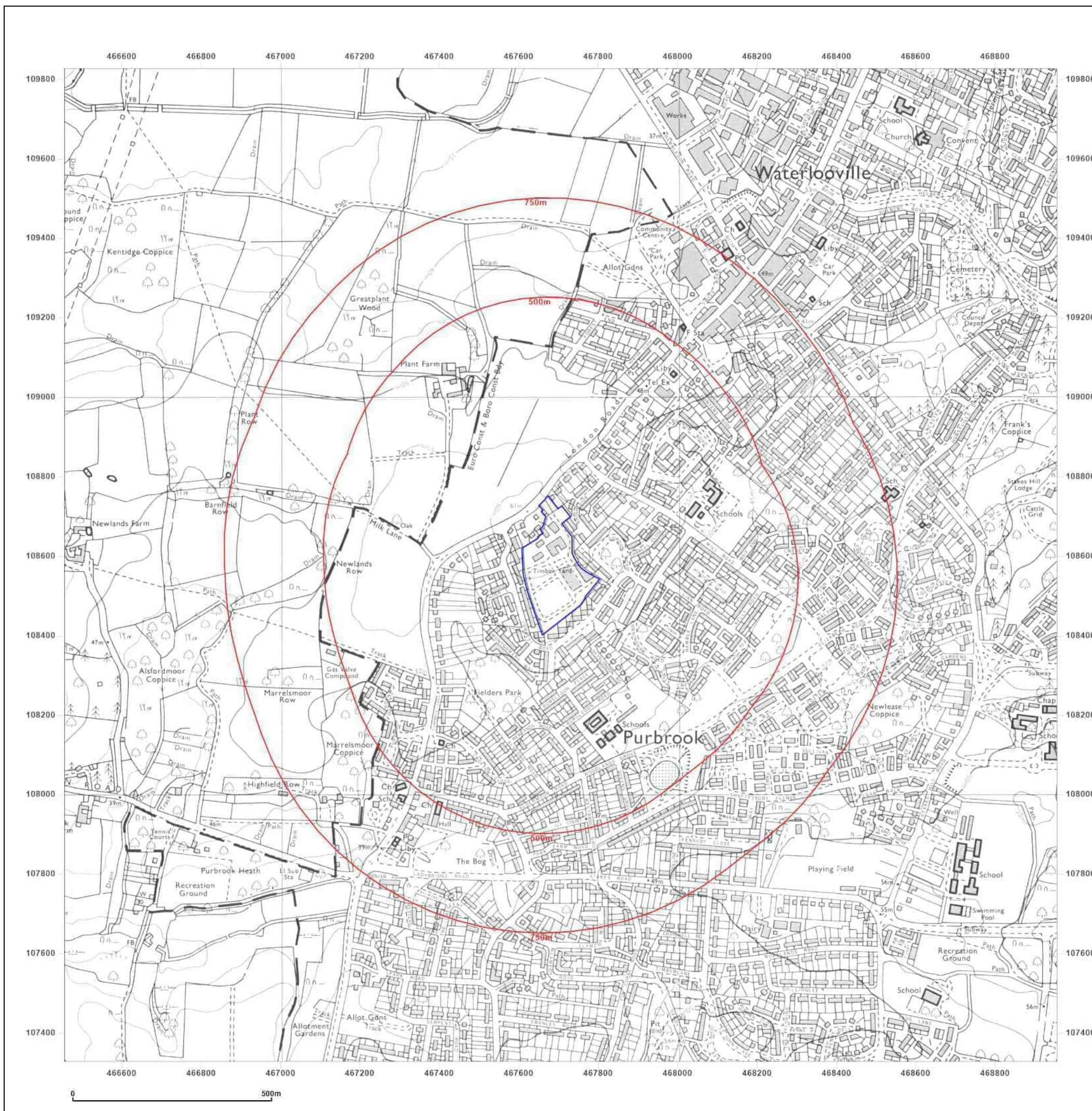


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: National Grid

Map date: 1991

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1988
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A



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PO7 5SR

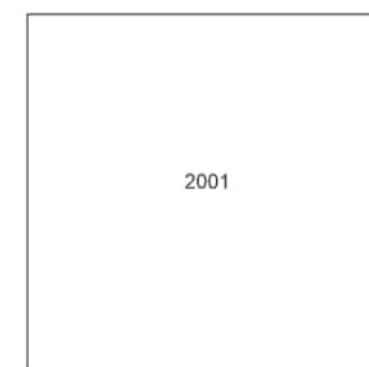
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Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

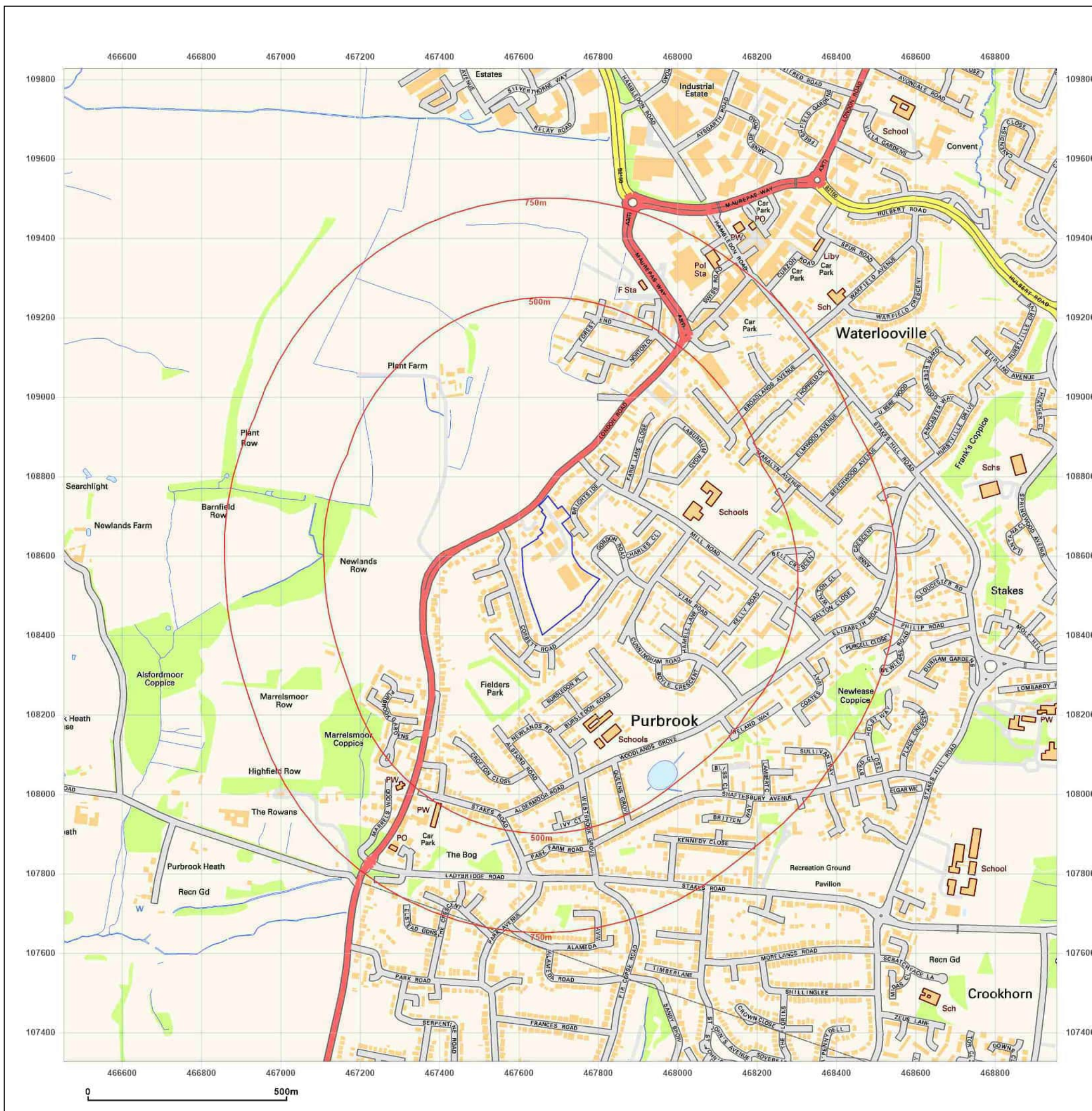


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

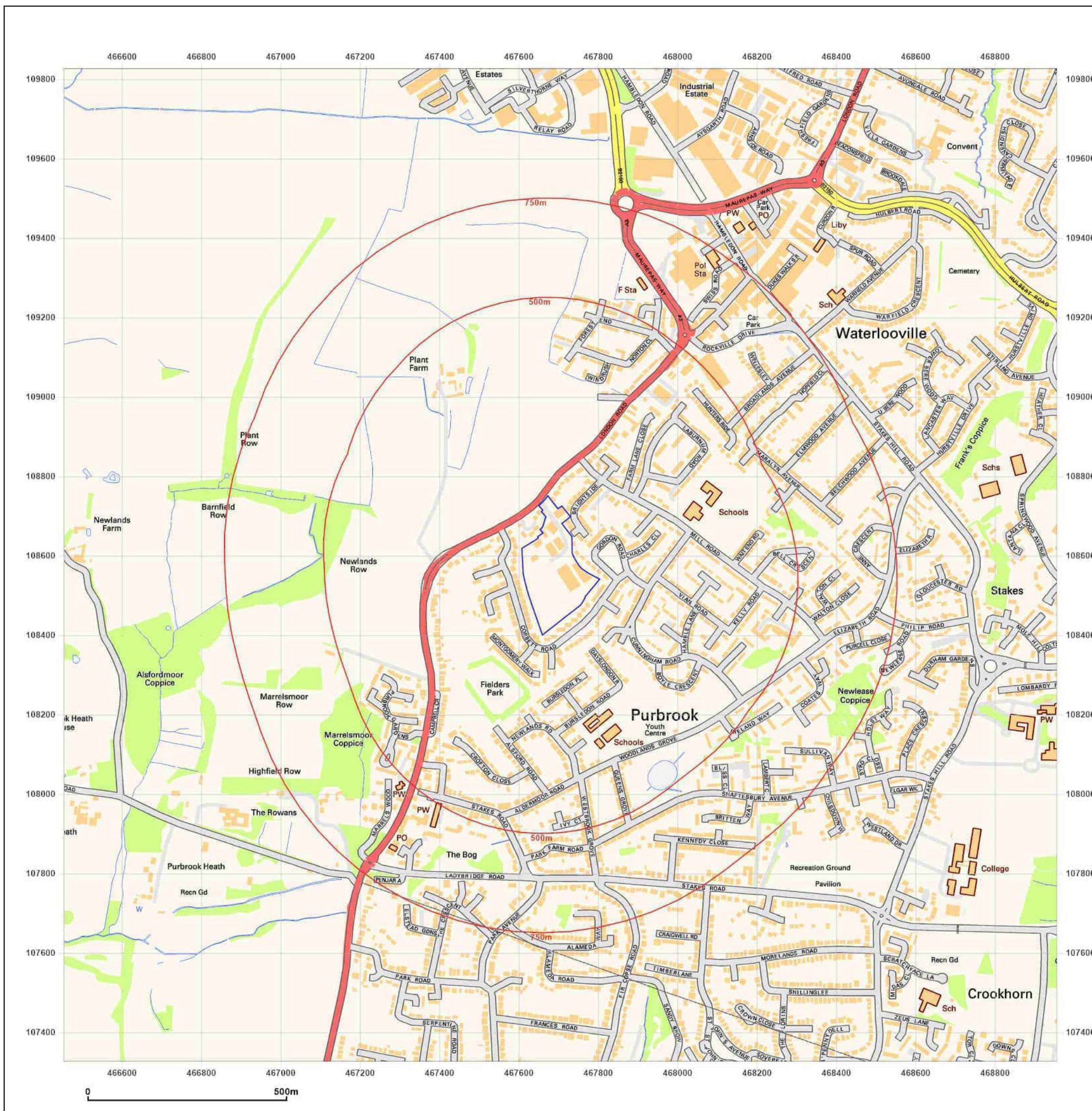


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PO7 5SR

Client Ref: A12342 PO3912
Report Ref: GS-ENO-IVJ-7DT-WRN
Grid Ref: 467705, 108577

Map Name: National Grid

Map date: 2024

Scale: 1:10,000

Printed at: 1:10,000



2024

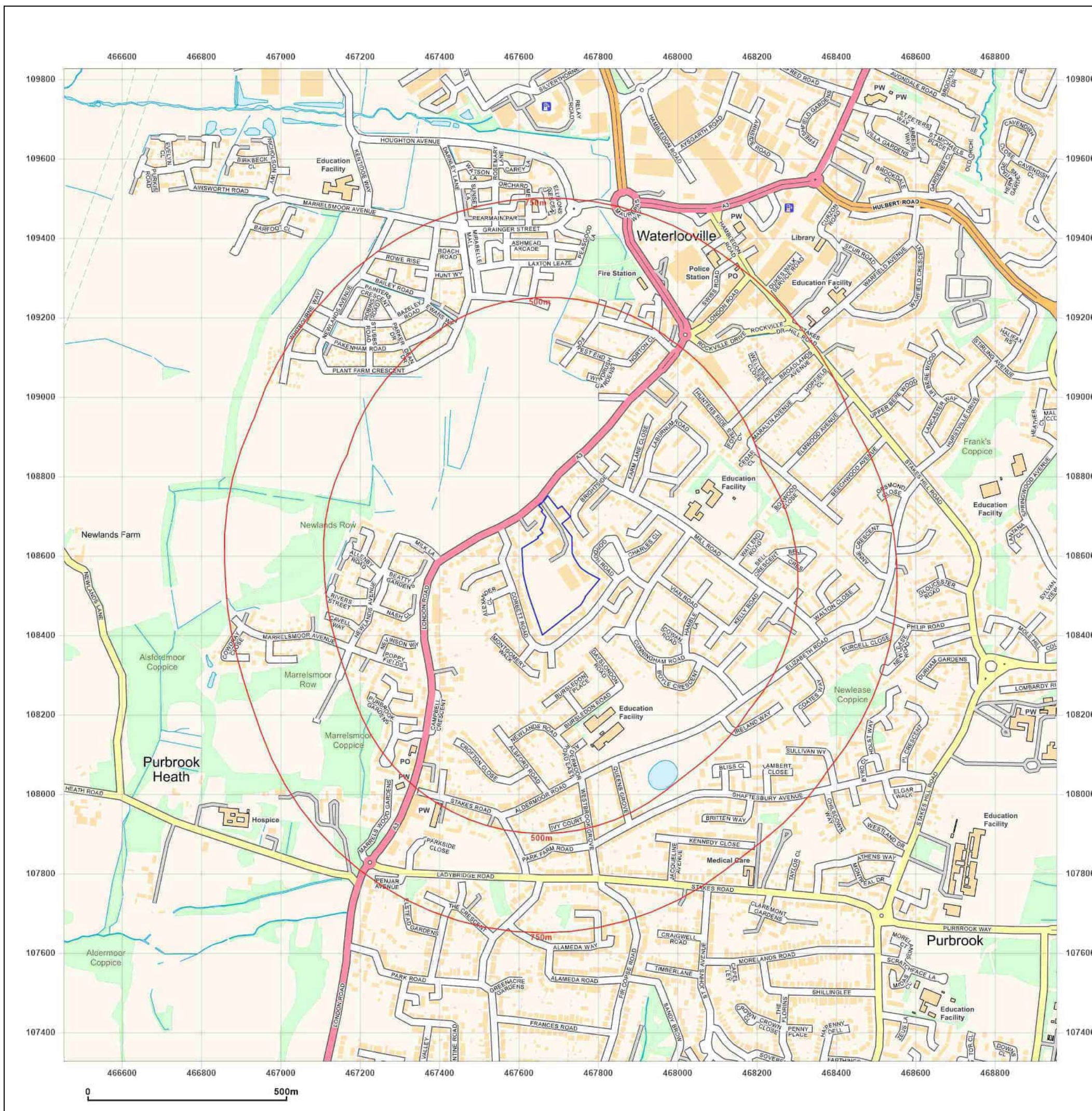


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APPENDIX VI – GROUNDSURE



J F GOODWILLIE LTD, 154, LONDON ROAD, WATERLOOVILLE, HAMPSHIRE, PO7 5SR

Order Details

Date: 04/12/2024
Your ref: A12342 PO3912
Our Ref: GS-98N-55R-YCE-YTL

Site Details

Location: 467688 108563
Area: 3.41 ha
Authority: [Havant Borough Council](#) ↗



Summary of findings

[p. 2 >](#)

Aerial image

[p. 9 >](#)

OS MasterMap site plan

[p.14 >](#)

[Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

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 >	7	5	1	14	-
17 >	1.2 >	Historical tanks >	6	0	0	4	-
17 >	1.3 >	Historical energy features >	2	2	4	26	-
19	1.4	Historical petrol stations	0	0	0	0	-
19 >	1.5 >	Historical garages >	0	0	0	5	-
20	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
21 >	2.1 >	Historical industrial land uses >	10	6	1	19	-
23 >	2.2 >	Historical tanks >	6	0	0	3	-
24 >	2.3 >	Historical energy features >	4	6	6	50	-
26	2.4	Historical petrol stations	0	0	0	0	-
26 >	2.5 >	Historical garages >	0	0	0	7	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
28	3.1	Active or recent landfill	0	0	0	0	-
28	3.2	Historical landfill (BGS records)	0	0	0	0	-
29	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
29 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	1	0	-
29	3.5	Historical waste sites	0	0	0	0	-
29	3.6	Licensed waste sites	0	0	0	0	-
30 >	3.7 >	Waste exemptions >	1	0	0	4	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
31 >	4.1 >	Recent industrial land uses >	5	2	5	-	-
32 >	4.2 >	Current or recent petrol stations >	0	0	0	1	-
33	4.3	Electricity cables	0	0	0	0	-
33	4.4	Gas pipelines	0	0	0	0	-
33	4.5	Sites determined as Contaminated Land	0	0	0	0	-



33	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
34	4.8	Hazardous substance storage/usage	0	0	0	0	-
34	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
34	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
34 >	4.11 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	2	-
35	4.12	Radioactive Substance Authorisations	0	0	0	0	-
35 >	4.13 >	<u>Licensed Discharges to controlled waters ></u>	0	0	1	1	-
35	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
35	4.15	Pollutant release to public sewer	0	0	0	0	-
36	4.16	List 1 Dangerous Substances	0	0	0	0	-
36	4.17	List 2 Dangerous Substances	0	0	0	0	-
36 >	4.18 >	<u>Pollution Incidents (EA/NRW) ></u>	0	0	0	6	-
37	4.19	Pollution inventory substances	0	0	0	0	-
37	4.20	Pollution inventory waste transfers	0	0	0	0	-
37	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
38 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
39 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
40 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
41	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
41	5.5	Groundwater vulnerability- local information	None (within 0m)				
42	5.6	Groundwater abstractions	0	0	0	0	0
43 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	1
43	5.8	Potable abstractions	0	0	0	0	0
43	5.9	Source Protection Zones	0	0	0	0	-
44 >	5.10 >	<u>Source Protection Zones (confined aquifer) ></u>	1	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
45 >	6.1 >	<u>Water Network (OS MasterMap) ></u>	0	0	5	-	-



46 >	6.2 >	Surface water features >	0	0	2	-	-
46 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
47 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
47	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
48	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
48	7.2	Historical Flood Events	0	0	0	-	-
48	7.3	Flood Defences	0	0	0	-	-
49	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
49	7.5	Flood Storage Areas	0	0	0	-	-
50	7.6	Flood Zone 2	None (within 50m)				
50	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
51 >	8.1 >	Surface water flooding >	1 in 100 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
53 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
54	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
55	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
55	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
55	10.4	Special Protection Areas (SPA)	0	0	0	0	0
55	10.5	National Nature Reserves (NNR)	0	0	0	0	0
56	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
56 >	10.7 >	Designated Ancient Woodland >	0	0	0	2	27
57	10.8	Biosphere Reserves	0	0	0	0	0
57	10.9	Forest Parks	0	0	0	0	0
58	10.10	Marine Conservation Zones	0	0	0	0	0
58	10.11	Green Belt	0	0	0	0	0
58	10.12	Proposed Ramsar sites	0	0	0	0	0



58	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
58	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
59	10.15	Nitrate Sensitive Areas	0	0	0	0	0
59 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	1
60 >	10.17 >	SSSI Impact Risk Zones >	4	-	-	-	-
62	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
63	11.1	World Heritage Sites	0	0	0	-	-
63	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
63	11.3	National Parks	0	0	0	-	-
63	11.4	Listed Buildings	0	0	0	-	-
64	11.5	Conservation Areas	0	0	0	-	-
64	11.6	Scheduled Ancient Monuments	0	0	0	-	-
64	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
65 >	12.1 >	Agricultural Land Classification >	Grade 3b (within 250m)				
66	12.2	Open Access Land	0	0	0	-	-
66	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	4	-	-
69	13.2	Habitat Networks	0	0	0	-	-
69 >	13.3 >	Open Mosaic Habitat >	1	0	0	-	-
69	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
70 >	14.1 >	10k Availability >	Identified (within 500m)				
71	14.2	Artificial and made ground (10k)	0	0	0	0	-
72 >	14.3 >	Superficial geology (10k) >	0	0	1	0	-



73	14.4	Landslip (10k)	0	0	0	0	-
74 >	14.5 >	Bedrock geology (10k) >	2	0	2	0	-
75 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	0	1	-
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)	0	0	0	0	-
77	15.3	Artificial ground permeability (50k)	0	0	-	-	-
78 >	15.4 >	Superficial geology (50k) >	0	0	1	0	-
79	15.5	Superficial permeability (50k)	None (within 50m)				
79	15.6	Landslip (50k)	0	0	0	0	-
79	15.7	Landslip permeability (50k)	None (within 50m)				
80 >	15.8 >	Bedrock geology (50k) >	2	0	2	0	-
81 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
81 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	0	1	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
82 >	16.1 >	BGS Boreholes >	0	1	14	-	-
Page	Section	Natural ground subsidence >					
84 >	17.1 >	Shrink swell clays >	Moderate (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	0	0	-
92 >	18.2 >	Surface ground workings >	0	1	0	-	-
92	18.3	Underground workings	0	0	0	0	0
92	18.4	Underground mining extents	0	0	0	0	-
92	18.5	Historical Mineral Planning Areas	0	0	0	0	-



93	18.6	Non-coal mining	0	0	0	0	0
93	18.7	JPB mining areas	None (within 0m)				
93	18.8	The Coal Authority non-coal mining	0	0	0	0	-
93	18.9	Researched mining	0	0	0	0	-
94	18.10	Mining record office plans	0	0	0	0	-
94	18.11	BGS mine plans	0	0	0	0	-
94	18.12	Coal mining	None (within 0m)				
94	18.13	Brine areas	None (within 0m)				
94	18.14	Gypsum areas	None (within 0m)				
95	18.15	Tin mining	None (within 0m)				
95	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
96	19.1	Natural cavities	0	0	0	0	-
96	19.2	Mining cavities	0	0	0	0	0
96	19.3	Reported recent incidents	0	0	0	0	-
96	19.4	Historical incidents	0	0	0	0	-
97	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
98 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
100 >	21.1 >	BGS Estimated Background Soil Chemistry >	3	0	-	-	-
100	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
100	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
101	22.1	Underground railways (London)	0	0	0	-	-
101	22.2	Underground railways (Non-London)	0	0	0	-	-
102	22.3	Railway tunnels	0	0	0	-	-
102 >	22.4 >	Historical railway and tunnel features >	1	0	0	-	-
102	22.5	Royal Mail tunnels	0	0	0	-	-



102	22.6	Historical railways	0	0	0	-	-
103	22.7	Railways	0	0	0	-	-
103	22.8	Crossrail 2	0	0	0	0	-
103	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 03/05/2023

Site Area: 3.41ha



Recent site history - 2020 aerial photograph



Capture Date: 05/04/2020

Site Area: 3.41ha



Recent site history - 2013 aerial photograph



Capture Date: 20/08/2013

Site Area: 3.41ha



Recent site history - 2005 aerial photograph



Capture Date: 16/05/2005

Site Area: 3.41ha



Recent site history - 1999 aerial photograph

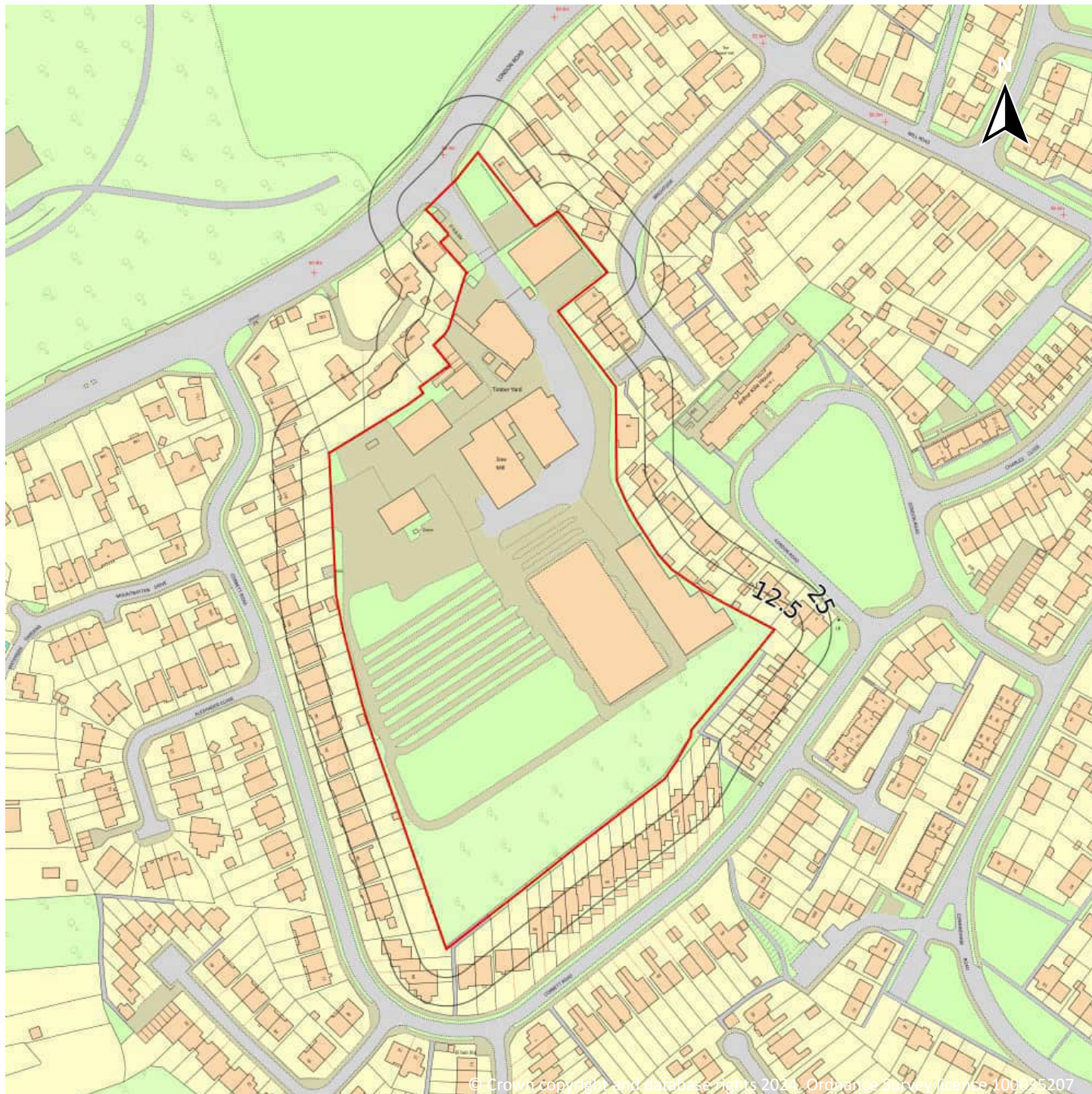


Capture Date: 04/09/1999

Site Area: 3.41ha



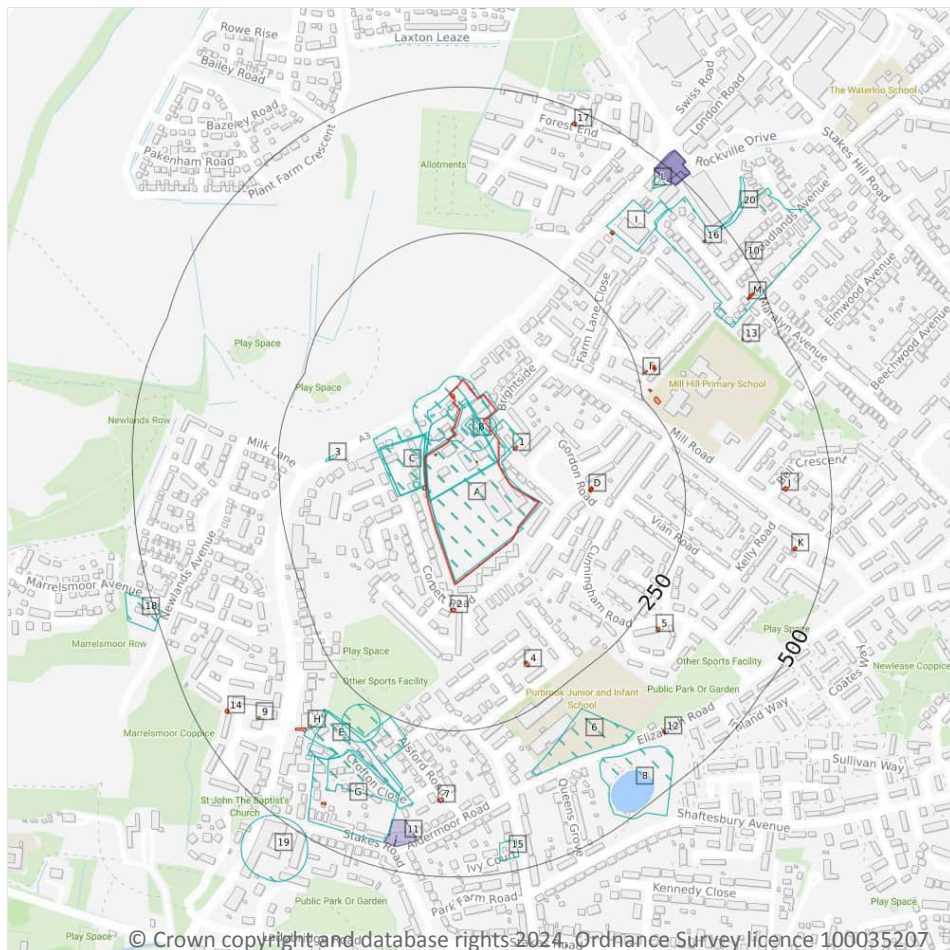
OS MasterMap site plan



Site Area: 3.41ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

27

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 Mills	1963	1892188



ID	Location	Land use	Dates present	Group ID
A	On site	Timber Yard	1980 - 1991	1938316
B	On site	Windmill	1866	1909230
B	On site	Sawmills	1930	1953342
B	On site	Sawmills	1895	1975672
B	On site	Sawmills	1907 - 1938	1984227
B	On site	Sawmills	1867	1993602
C	1m NW	Nursery	1930 - 1938	1964656
C	2m W	Nursery	1930	1986234
C	6m W	Nursery	1963	1993752
C	12m W	Unspecified Tank	1963	1893081
B	37m NW	Saw Pit	1866	1891702
3	150m W	Smithy	1866	1907272
E	252m S	Nursery	1907 - 1930	1957208
E	254m SW	Nursery	1930 - 1938	1978644
6	300m SE	Nursery	1963	1897971
E	306m SW	Nursery	1963	1937712
G	336m SW	Nursery	1907	1958631
E	343m SW	Wind Pump	1930	1883261
I	355m NE	Telephone Exchange	1980 - 1991	1931187
8	389m SE	Unspecified Pit	1980 - 1991	1991329
10	407m NE	Nursery	1963	1897846
15	448m S	Pumping Station	1930	1935093
L	456m NE	Smithy	1866	1907271
18	489m W	Gas Valve Compound	1991	1909040
19	491m SW	Smithy	1895	1967301
20	494m NE	Unspecified Ground Workings	1867	1880240

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

10

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'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
B	On site	Unspecified Tank	1973	331391
B	On site	Unspecified Tank	1993	331577
B	On site	Unspecified Tank	1989	332969
B	On site	Unspecified Tank	1993	333194
B	On site	Unspecified Tank	1973	337117
B	On site	Unspecified Tank	1989	339206
H	343m SW	Unspecified Tank	1859	326194
9	403m SW	Unspecified Tank	1869	326195
13	436m NE	Unspecified Tank	1954	326183
16	455m NE	Unspecified Tank	1952 - 1954	342620

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

34

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	On site	Electricity Substation	1973 - 1993	221534



ID	Location	Land use	Dates present	Group ID
C	On site	Electricity Substation	1973 - 1993	212650
1	26m NE	Electricity Substation	1973	210046
2	41m S	Electricity Substation	1974 - 1993	225163
D	86m E	Electricity Substation	1989	213129
D	88m E	Electricity Substation	1993	226457
D	88m E	Electricity Substation	1973	218526
4	179m S	Electricity Substation	1974 - 1993	228847
F	261m NE	Electricity Substation	1989	210053
F	262m NE	Electricity Substation	1983	207151
F	262m NE	Electricity Substation	1973 - 1993	216025
F	276m NE	Electricity Substation	1993	211411
F	277m NE	Electricity Substation	1973	217007
F	279m NE	Electricity Substation	1973	211390
F	279m NE	Electricity Substation	1990	213306
F	279m NE	Electricity Substation	1987	215531
F	279m NE	Electricity Substation	1990	218330
5	290m SE	Electricity Substation	1973	208692
I	351m NE	Electricity Substation	1993	222428
I	351m NE	Electricity Substation	1989 - 1990	214057
I	352m NE	Electricity Substation	1987	214255
I	352m NE	Electricity Substation	1972 - 1982	219143
H	354m SW	Electricity Substation	1974 - 1993	222192
7	365m S	Electricity Substation	1974 - 1993	225737
12	416m SE	Electricity Substation	1983	208693
J	417m E	Electricity Substation	1987 - 1990	222473
J	418m E	Electricity Substation	1973	226735
G	433m SW	Electricity Substation	1974 - 1993	218558
K	441m E	Electricity Substation	1976	212591



ID	Location	Land use	Dates present	Group ID
K	442m E	Electricity Substation	1987 - 1990	229027
14	442m SW	Electricity Substation	1974 - 1993	216275
M	469m NE	Electricity Substation	1987 - 1990	232801
M	470m NE	Electricity Substation	1973	214944
17	474m N	Electricity Substation	1972 - 1993	211651

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
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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	5
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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'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
11	411m S	Garage	1974 - 1978	68955
L	480m NE	Garage	1984 - 1989	68355
L	481m NE	Garage	1974	72442
L	481m NE	Garage	1966	70357
L	482m NE	Garage	1993	67908

This data is sourced from Ordnance Survey / Groundsure.



1.6 Historical military land

Records within 500m

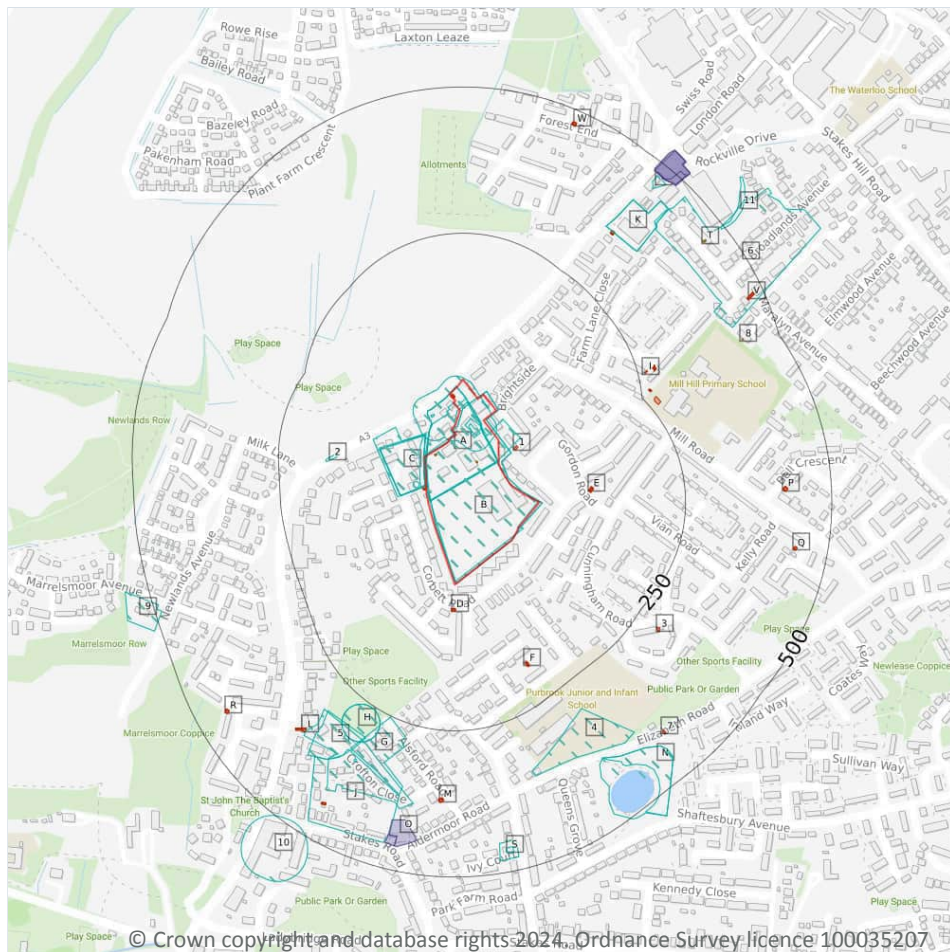
0

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 tanks
- Historical energy features
- Historical garages

2.1 Historical industrial land uses

Records within 500m

36

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 21](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Sawmills	1938	1984227
A	On site	Sawmills	1930	1984227
A	On site	Sawmills	1907	1984227



ID	Location	Land Use	Date	Group ID
A	On site	Windmill	1866	1909230
A	On site	Sawmills	1930	1953342
A	On site	Sawmills	1867	1993602
A	On site	Sawmills	1895	1975672
B	On site	Timber Yard	1991	1938316
B	On site	Timber Yard	1980	1938316
B	On site	Unspecified Mills	1963	1892188
C	1m NW	Nursery	1938	1964656
C	1m NW	Nursery	1930	1964656
C	2m W	Nursery	1930	1986234
C	6m W	Nursery	1963	1993752
C	12m W	Unspecified Tank	1963	1893081
A	37m NW	Saw Pit	1866	1891702
2	150m W	Smithy	1866	1907272
G	252m S	Nursery	1930	1957208
H	254m SW	Nursery	1938	1978644
H	254m SW	Nursery	1930	1978644
4	300m SE	Nursery	1963	1897971
5	302m SW	Nursery	1907	1957208
G	306m SW	Nursery	1963	1937712
J	336m SW	Nursery	1907	1958631
G	343m SW	Wind Pump	1930	1883261
K	355m NE	Telephone Exchange	1991	1931187
K	355m NE	Telephone Exchange	1980	1931187
N	389m SE	Unspecified Pit	1991	1991329
N	389m SE	Unspecified Pit	1980	1991329
6	407m NE	Nursery	1963	1897846
S	448m S	Pumping Station	1930	1935093



ID	Location	Land Use	Date	Group ID
U	456m NE	Smithy	1866	1907271
S	459m S	Pumping Station	1930	1935093
9	489m W	Gas Valve Compound	1991	1909040
10	491m SW	Smithy	1895	1967301
11	494m NE	Unspecified Ground Workings	1867	1880240

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	9
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Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Tank	1973	337117
A	On site	Unspecified Tank	1973	331391
A	On site	Unspecified Tank	1989	339206
A	On site	Unspecified Tank	1989	332969
A	On site	Unspecified Tank	1993	333194
A	On site	Unspecified Tank	1993	331577
8	436m NE	Unspecified Tank	1954	326183
T	455m NE	Unspecified Tank	1952	342620
T	456m NE	Unspecified Tank	1954	342620

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

66

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 21 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Electricity Substation	1973	221534
A	On site	Electricity Substation	1989	221534
A	On site	Electricity Substation	1993	221534
C	On site	Electricity Substation	1993	212650
C	On site	Electricity Substation	1973	212650
C	1m W	Electricity Substation	1989	212650
1	26m NE	Electricity Substation	1973	210046
D	41m S	Electricity Substation	1974	225163
D	42m S	Electricity Substation	1989	225163
D	42m S	Electricity Substation	1993	225163
E	86m E	Electricity Substation	1989	213129
E	88m E	Electricity Substation	1993	226457
E	88m E	Electricity Substation	1973	218526
F	179m S	Electricity Substation	1989	228847
F	180m S	Electricity Substation	1974	228847
F	181m S	Electricity Substation	1993	228847
I	261m NE	Electricity Substation	1989	210053
I	262m NE	Electricity Substation	1983	207151
I	262m NE	Electricity Substation	1989	216025
I	263m NE	Electricity Substation	1993	216025
I	263m NE	Electricity Substation	1973	216025
I	276m NE	Electricity Substation	1993	211411
I	277m NE	Electricity Substation	1973	217007



ID	Location	Land Use	Date	Group ID
I	279m NE	Electricity Substation	1973	211390
I	279m NE	Electricity Substation	1987	215531
I	279m NE	Electricity Substation	1990	218330
I	279m NE	Electricity Substation	1990	213306
3	290m SE	Electricity Substation	1973	208692
K	351m NE	Electricity Substation	1993	222428
K	351m NE	Electricity Substation	1989	214057
K	351m NE	Electricity Substation	1990	214057
K	352m NE	Electricity Substation	1987	214255
K	352m NE	Electricity Substation	1972	219143
K	352m NE	Electricity Substation	1982	219143
K	352m NE	Electricity Substation	1989	214057
K	352m NE	Electricity Substation	1990	214057
L	354m SW	Electricity Substation	1974	222192
L	354m SW	Electricity Substation	1981	222192
L	354m SW	Electricity Substation	1993	222192
M	365m S	Electricity Substation	1989	225737
M	365m S	Electricity Substation	1974	225737
M	367m S	Electricity Substation	1993	225737
7	416m SE	Electricity Substation	1983	208693
P	417m E	Electricity Substation	1987	222473
P	417m E	Electricity Substation	1990	222473
P	417m E	Electricity Substation	1990	222473
P	418m E	Electricity Substation	1973	226735
J	433m SW	Electricity Substation	1981	218558
J	433m SW	Electricity Substation	1974	218558
J	434m SW	Electricity Substation	1993	218558
Q	441m E	Electricity Substation	1976	212591



ID	Location	Land Use	Date	Group ID
Q	442m E	Electricity Substation	1987	229027
Q	442m E	Electricity Substation	1990	229027
R	442m SW	Electricity Substation	1974	216275
R	442m SW	Electricity Substation	1981	216275
R	442m SW	Electricity Substation	1993	216275
V	469m NE	Electricity Substation	1987	232801
V	469m NE	Electricity Substation	1990	232801
V	469m NE	Electricity Substation	1990	232801
V	470m NE	Electricity Substation	1973	214944
W	474m N	Electricity Substation	1993	211651
W	475m N	Electricity Substation	1972	211651
W	475m N	Electricity Substation	1982	211651
W	475m N	Electricity Substation	1989	211651
W	475m N	Electricity Substation	1990	211651
W	475m N	Electricity Substation	1987	211651

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

7

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

Features are displayed on the Past land use - un-grouped map on [page 21](#) >

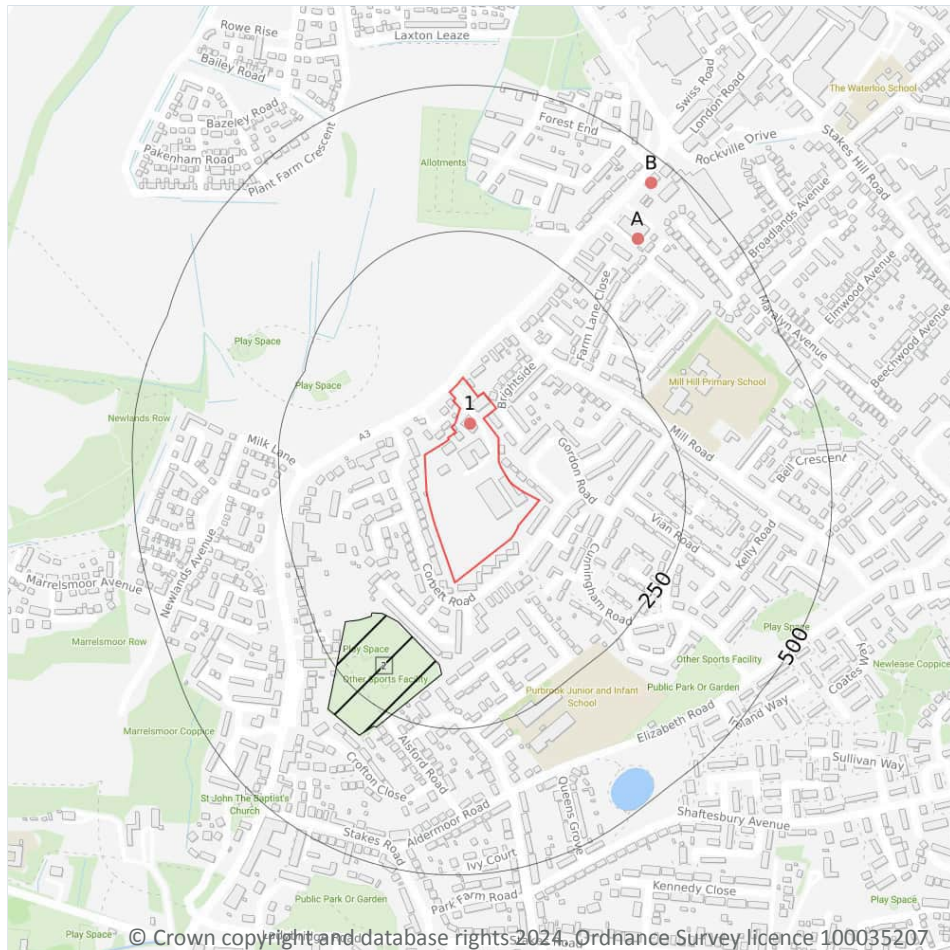


ID	Location	Land Use	Date	Group ID
O	411m S	Garage	1978	68955
O	441m S	Garage	1974	68955
U	480m NE	Garage	1984	68355
U	480m NE	Garage	1989	68355
U	481m NE	Garage	1974	72442
U	481m NE	Garage	1966	70357
U	482m NE	Garage	1993	67908

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- 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 28 >](#)

ID	Location	Details		
2	117m SW	Site Address: Fielders Park, Purbrook Licence Holder Address: -	Waste Licence: - Site Reference: FHA13 Waste Type: Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m**0**

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

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

3.6 Licensed waste sites

Records within 500m**0**

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

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



3.7 Waste exemptions

Records within 500m	5
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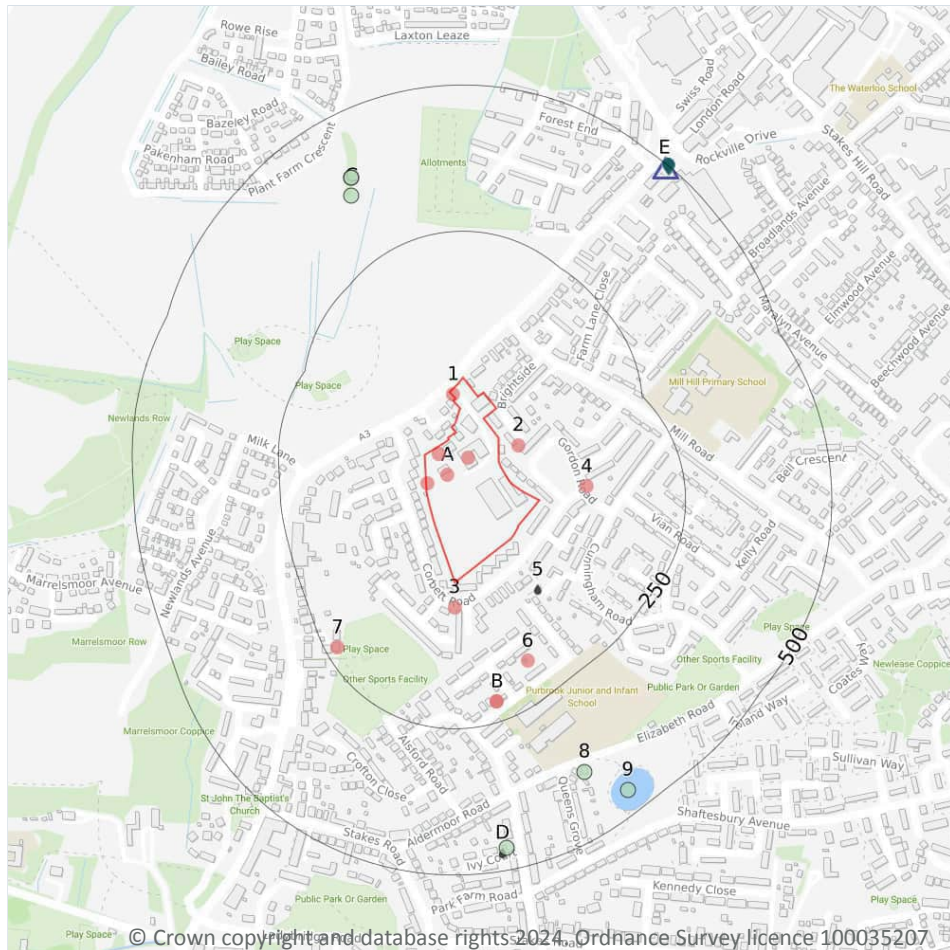
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 28 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
1	On site	Timber Centre, 154, London Road, Waterloooville, Po7 5sr	WEX123040	Using waste exemption	Not on a farm	Use of waste in construction
A	370m NE	Security House, 212-218 London Road, Waterloooville, Po7 7aj	WEX236431	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	370m NE	Security House, 212-218 London Road, Waterloooville, Po7 7aj	WEX236431	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	458m NE	-	WEX364723	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	458m NE	-	WEX364723	Storing waste exemption	Not on a farm	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
- ▲ Current or recent petrol stations
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

12

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 31](#) >

ID	Location	Company	Address	Activity	Category
1	On site	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
A	On site	Crane	Hampshire, PO7	Travelling Cranes and Gantries	Industrial Features
A	On site	Tank	Hampshire, PO7	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
A	On site	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
A	On site	Saw Mill	Hampshire, PO7	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products
2	34m NE	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
3	42m S	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
4	84m E	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
6	182m S	Electricity Sub Station	Hampshire, PO7	Electrical Features	Infrastructure and Facilities
B	216m S	Waterlooville P C Repairs	9, Bursledon Road, Waterlooville, Hampshire, PO7 5NJ	Electrical Equipment Repair and Servicing	Repair and Servicing
B	216m S	Scrap My Car Portsmouth	9, Bursledon Road, Waterlooville, Hampshire, PO7 5NJ	Secondhand Vehicles	Motoring
7	229m SW	Liondell Ltd	3, Cottonwood Close, Purbrook, Waterlooville, Hampshire, PO7 5JZ	Rubber, Silicones and Plastics	Industrial Products

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 31](#) >

ID	Location	Company	Address	LPG	Status
E	493m NE	SHELL	222, London Road, Rockville Drive, Waterlooville, Hampshire, PO7 7AA	No	Open

This data is sourced from Experian.



4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

2

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 31](#) >

ID	Location	Address	Details	
E	499m NE	Shell UK Ltd, 222 London Road, Waterlooville, PO7 7AA	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
E	500m NE	Shell U.K. Ltd., 222 London Road, Waterlooville, PO7 7AA	Process: Unloading of Petrol into Storage at Service Stations Status: Current 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.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

2

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

Features are displayed on the Current industrial land use map on [page 31](#) >

ID	Location	Address	Details	
5	96m SE	FARHJEM,FARHJEM,SOU THWICK,FAREHAM,HAM PSHIRE	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - NOT WATER COMPANY Permit Number: H01599 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 05/04/1963 Effective Date: 05/04/1963 Revocation Date: 31/03/1997
D	469m S	WESTBROOKGROVE,WE STBROOKGROVE,PURBR OOKHAMPSHIRE	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - NOT WATER COMPANY Permit Number: H01119 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 28/01/1970 Effective Date: 28/01/1970 Revocation Date: 31/03/1997

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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



4.16 List 1 Dangerous Substances

Records within 500m	0
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Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

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

4.17 List 2 Dangerous Substances

Records within 500m	0
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Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	6
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Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 31](#) >

ID	Location	Details	
C	364m N	Incident Date: 24/07/2001 Incident Identification: 18736 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
8	392m S	Incident Date: 17/01/2012 Incident Identification: 955065 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	392m N	Incident Date: 07/09/2001 Incident Identification: 29602 Pollutant: Sewage Materials Pollutant Description: Other Sewage Material	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
C	392m N	Incident Date: 07/09/2001 Incident Identification: 29602 Pollutant: Sewage Materials Pollutant Description: Other Sewage Material	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
9	461m SE	Incident Date: 10/10/2003 Incident Identification: 195449 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	463m S	Incident Date: 14/08/2013 Incident Identification: 1147738 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

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

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

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

4.20 Pollution inventory waste transfers

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

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

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

4.21 Pollution inventory radioactive waste

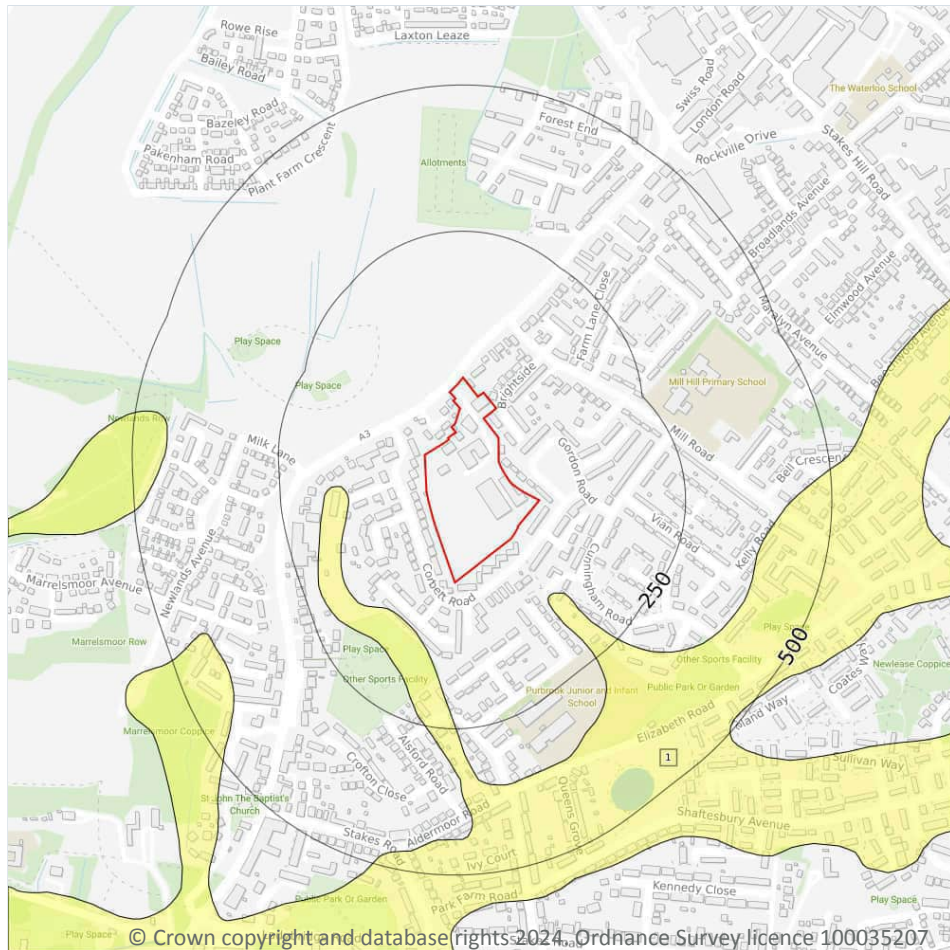
Records within 500m	0
----------------------------	----------

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

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



5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

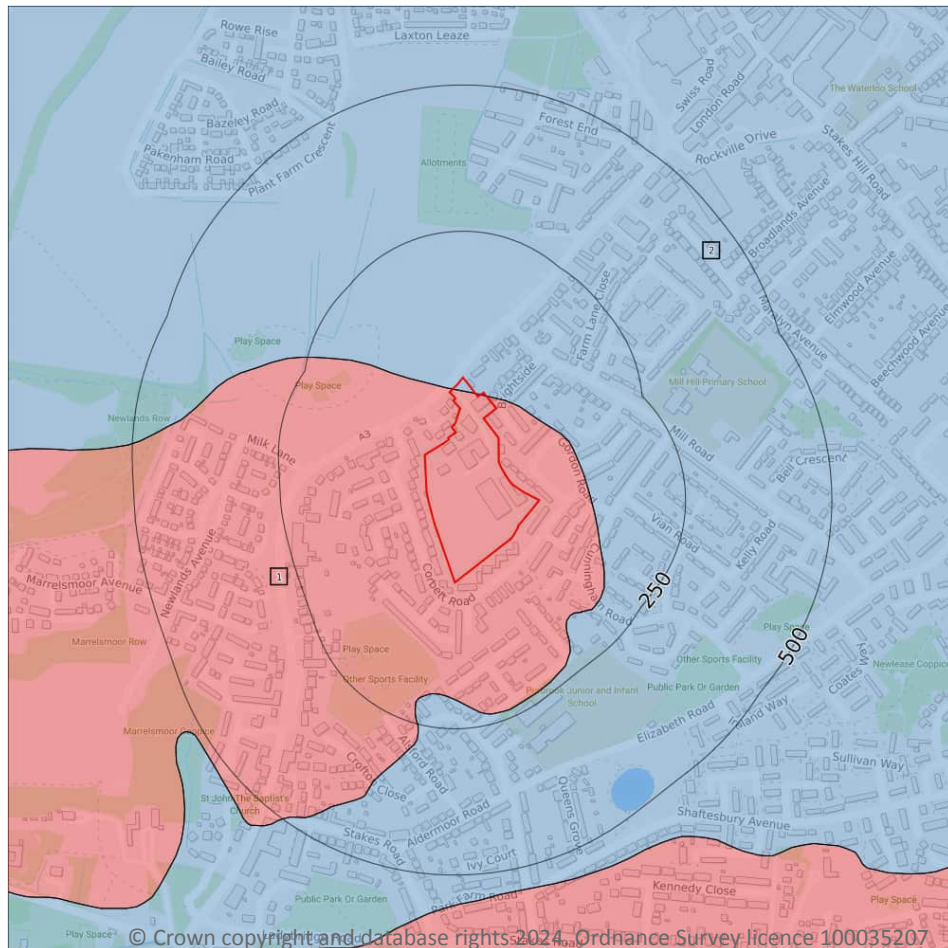
Features are displayed on the Hydrogeology map on [page 38](#) >

ID	Location	Designation	Description
1	107m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

2

Aquifer status of groundwater held within bedrock geology.

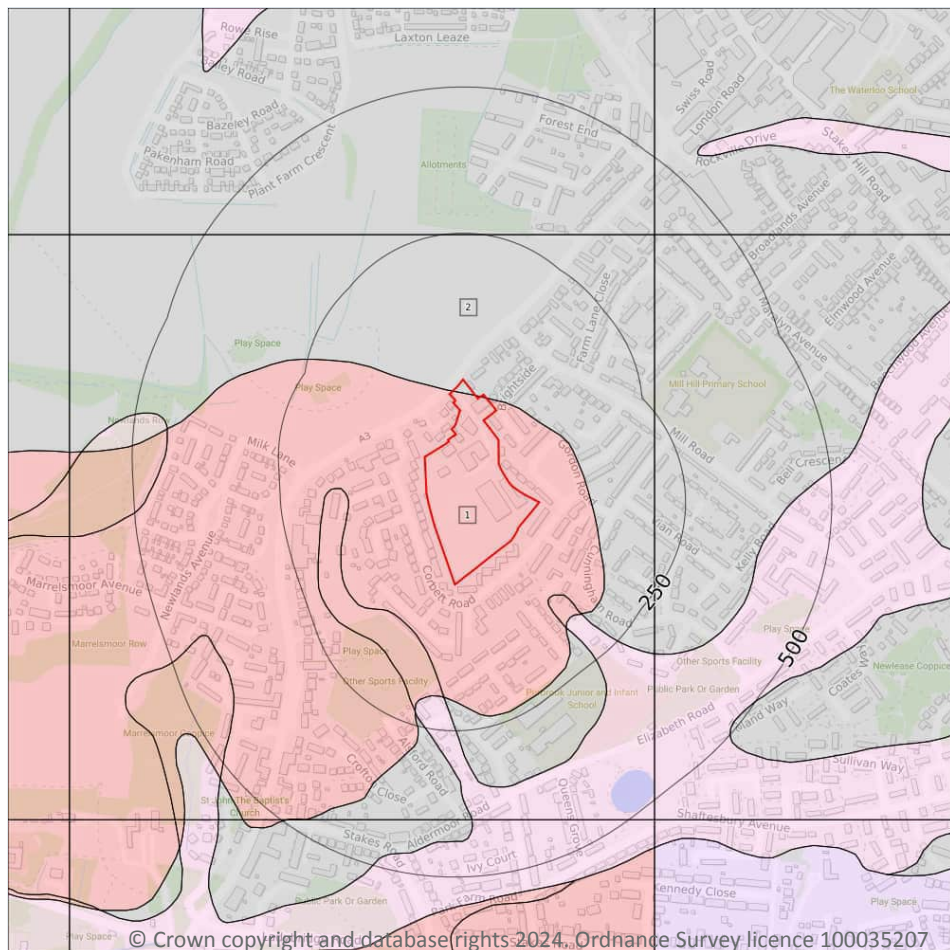
Features are displayed on the Bedrock aquifer map on [page 39](#) >

ID	Location	Designation	Description
1	On site	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
2	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



— Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

2

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 40](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Mixed
2	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - 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

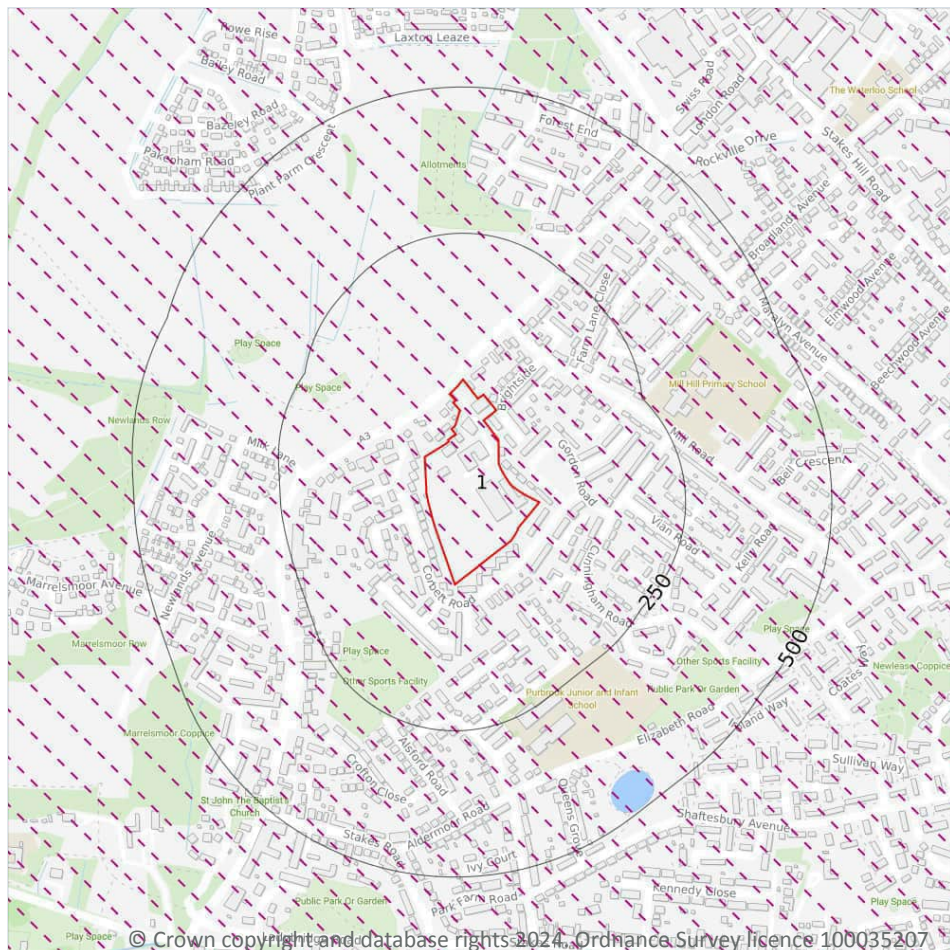
Records on site	0
------------------------	----------

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 ↗.

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

0

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.

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



5.7 Surface water abstractions

Records within 2000m

1

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 42 >](#)

ID	Location	Details	
-	964m N	Status: Active Licence No: SO/042/0028/014 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Southern Region Surface Waters Point: RIVER WALLINGTON, WEST OF WATERLOOVILLE Data Type: Point Name: West Waterlooville Developments Limited Easting: 467451 Northing: 109691	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/031307 Original Start Date: 14/08/2019 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/08/2019 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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.

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

5.9 Source Protection Zones

Records within 500m

0

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

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m**1**

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.

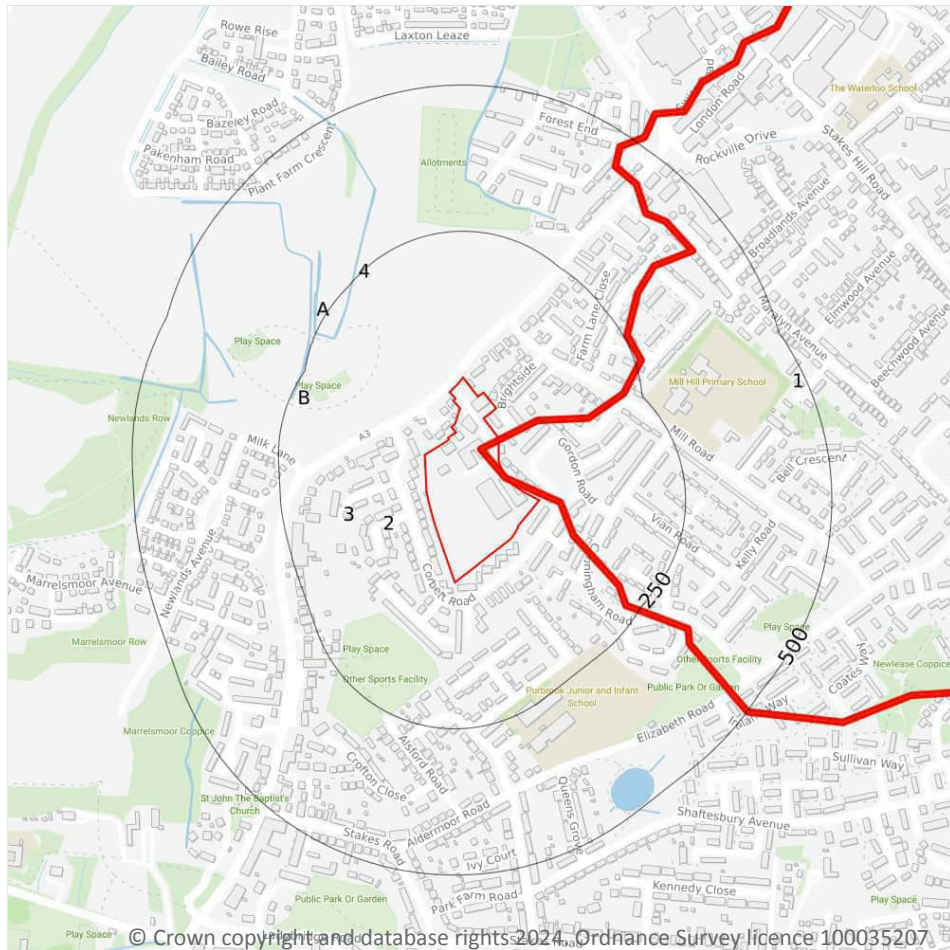
Features are displayed on the Abstractions and Source Protection Zones map on [page 42 >](#)

ID	Location	Type	Description
1	On site	1c	Inner catchment within confined aquifer

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- 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 MasterMap)

Records within 250m

5

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

Features are displayed on the Hydrology map on [page 45 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
3	146m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
4	217m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	219m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	246m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	250m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	2
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Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 45 >](#)

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2
------------------------	----------

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 45 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Hermitage Stream	GB107042016370	East Hampshire Rivers	East Hampshire
2	On site	River	Potwell Trib	GB107042016400	East Hampshire Rivers	East Hampshire

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



6.4 WFD Surface water bodies

Records identified	2
---------------------------	----------

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 45 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	856m SW	River	Potwell Trib	GB107042016400 ↗	Moderate	Fail	Moderate	2019
-	1251m NE	River	Hermitage Stream	GB107042016370 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

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

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.

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

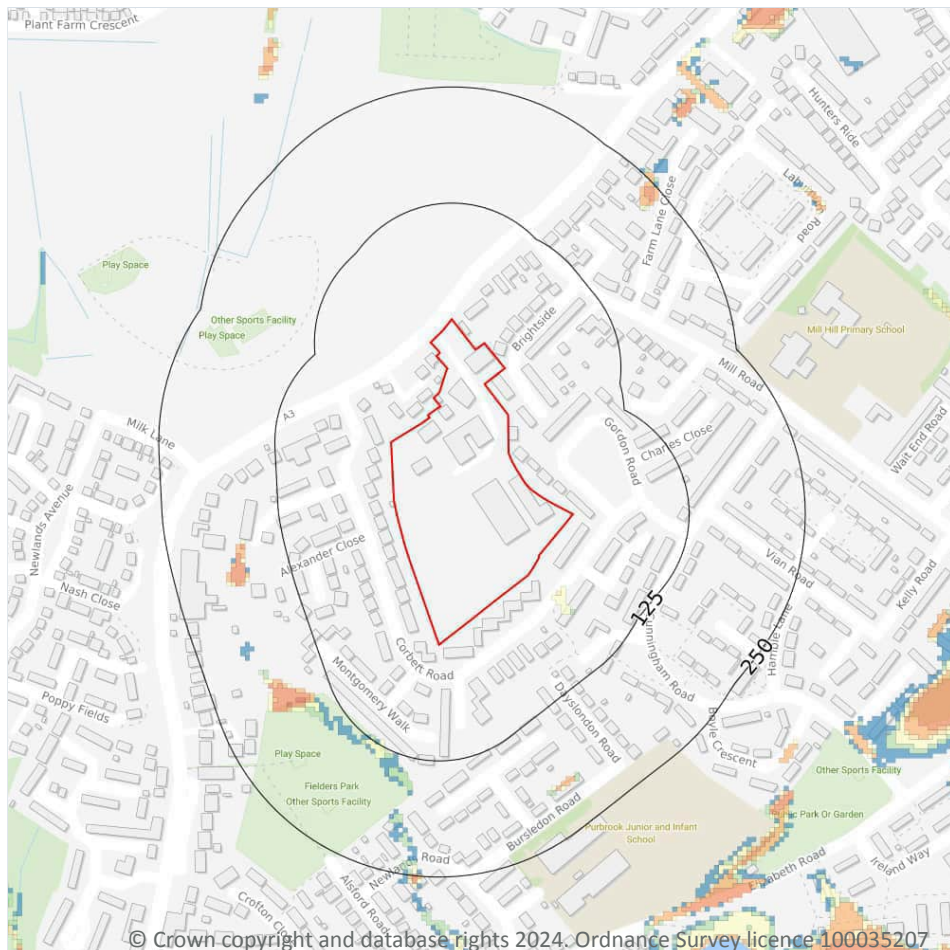
0

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



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

1 in 100 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 51](#) >

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.

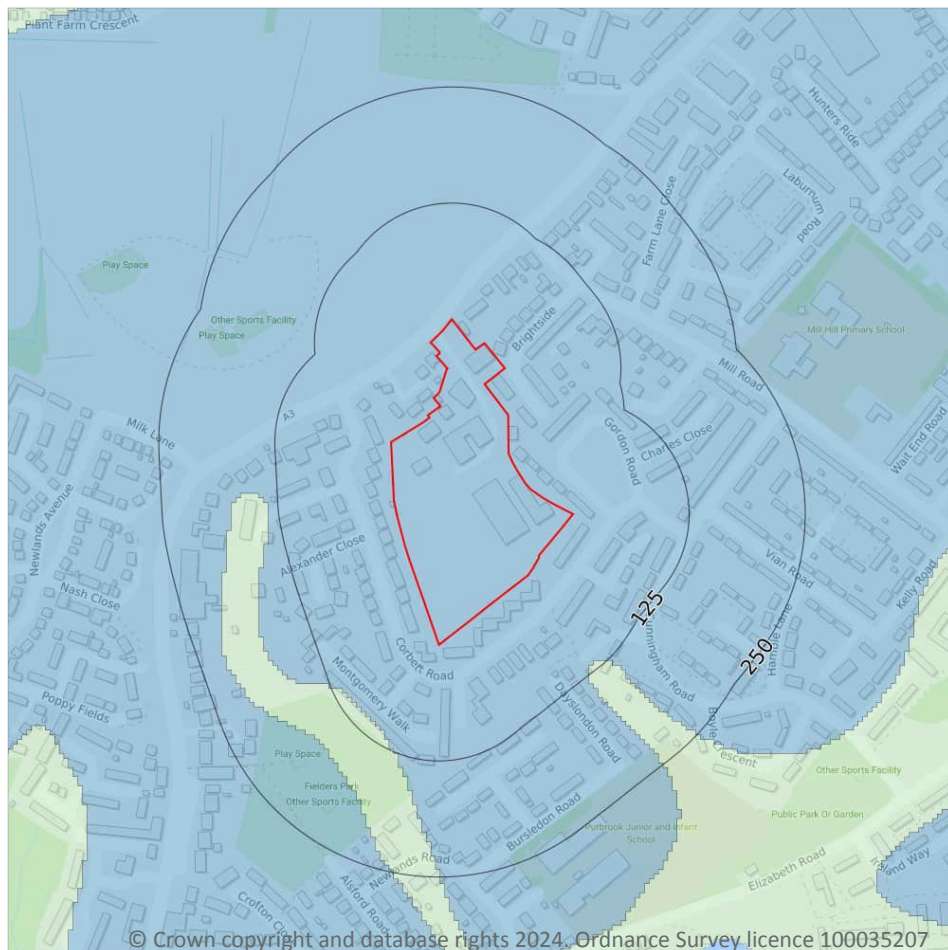
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

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

Negligible

Highest risk within 50m

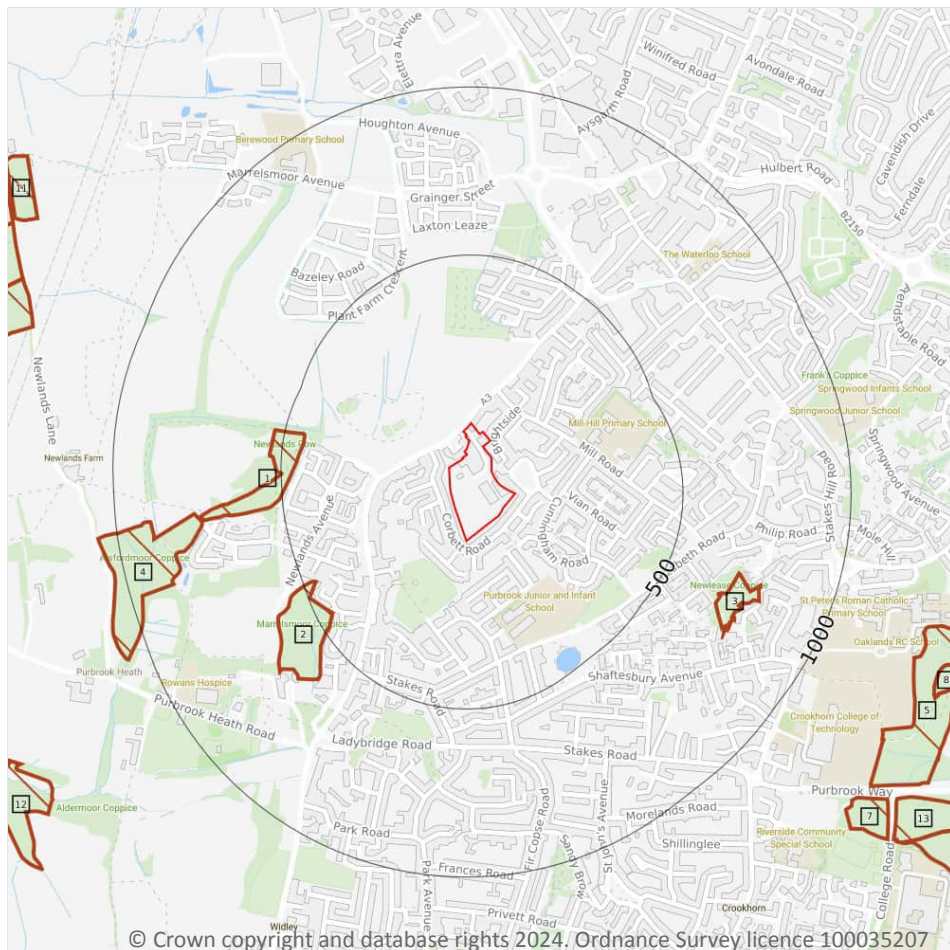
Negligible

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 53](#) >

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Designated Ancient Woodland

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

29

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.

Features are displayed on the Environmental designations map on [page 54 >](#)

ID	Location	Name	Woodland Type
1	438m W	Alsfordmoor Coppice	Ancient & Semi-Natural Woodland
2	452m SW	Unknown	Ancient & Semi-Natural Woodland
3	675m SE	Unknown	Ancient & Semi-Natural Woodland
4	745m W	Alsfordmoor Coppice	Ancient & Semi-Natural Woodland
5	1284m E	Unknown	Ancient & Semi-Natural Woodland
6	1307m W	Sheepwash/tattle/dunsland	Ancient & Semi-Natural Woodland
7	1350m SE	Unknown	Ancient & Semi-Natural Woodland
8	1369m E	Unknown	Ancient Replanted Woodland
-	1377m W	Sheepwash/tattle/dunsland	Ancient & Semi-Natural Woodland
10	1386m NW	Sheepwash/tattle/dunsland	Ancient Replanted Woodland
11	1417m NW	Sheepwash/tattle/dunsland	Ancient Replanted Woodland
12	1432m SW	Unknown	Ancient & Semi-Natural Woodland
13	1454m SE	Unknown	Ancient Replanted Woodland
-	1530m S	Purbrock Park Wood	Ancient & Semi-Natural Woodland
14	1543m SE	Unknown	Ancient & Semi-Natural Woodland
-	1586m S	Purbrock Park Wood	Ancient & Semi-Natural Woodland



ID	Location	Name	Woodland Type
-	1633m W	Sheepwash/tattle/dunsland	Ancient & Semi-Natural Woodland
-	1667m S	Purbrock Park Wood	Ancient & Semi-Natural Woodland
-	1727m E	Unknown	Ancient & Semi-Natural Woodland
-	1732m E	Unknown	Ancient & Semi-Natural Woodland
-	1743m E	Unknown	Ancient & Semi-Natural Woodland
-	1748m E	Unknown	Ancient Replanted Woodland
-	1752m NE	Unknown	Ancient & Semi-Natural Woodland
-	1804m N	Unknown	Ancient & Semi-Natural Woodland
-	1838m E	Unknown	Ancient & Semi-Natural Woodland
-	1847m NE	The Queens Inclosure	Ancient Replanted Woodland
-	1851m W	Sheepwash/tattle/dunsland	Ancient Replanted Woodland
-	1951m E	Bushy Lease	Ancient & Semi-Natural Woodland
-	1955m SE	Unknown	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.



10.15 Nitrate Sensitive Areas

Records within 2000m**0**

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m**2**

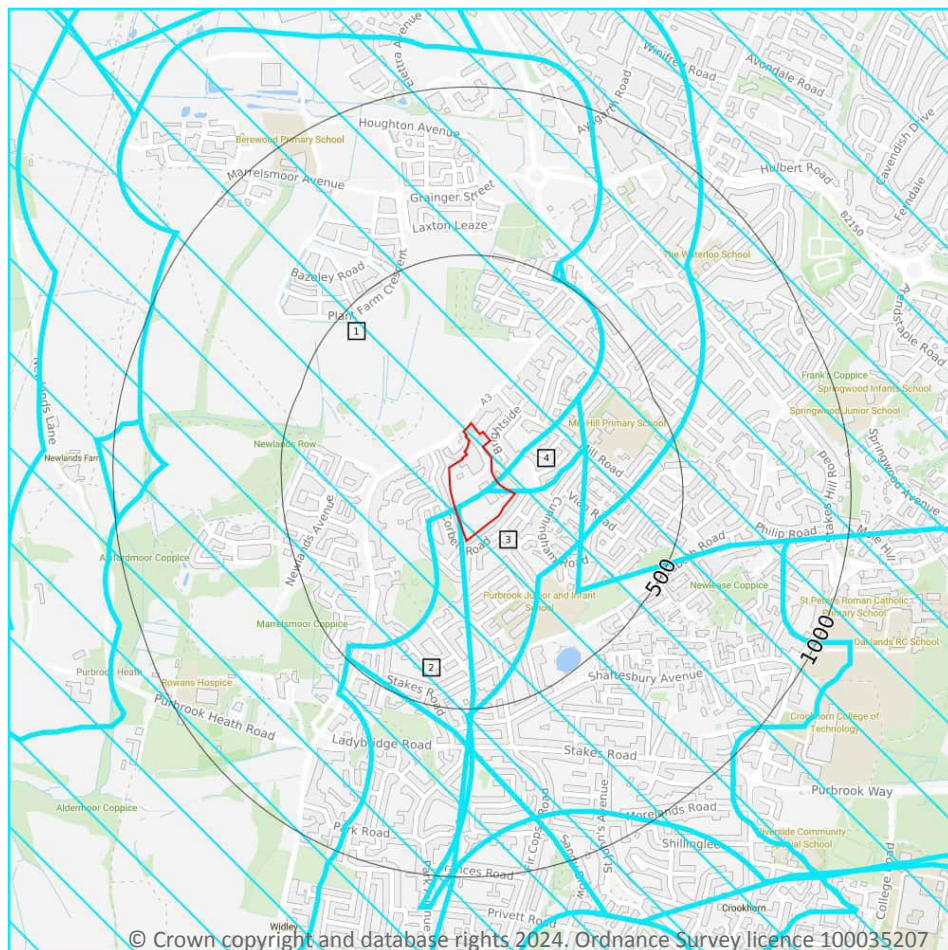
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	Chichester, Langstone and Portsmouth Harbours Eutrophic NVZ (TraC)	Eutrophic Water	2	Existing
1982m SW	Fareham	Groundwater	58	Existing

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



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

4

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 60](#) >

ID	Location	Type of developments requiring consultation
1	On site	<p>All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS.</p> <p>Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements. NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.</p>
2	On site	<p>Infrastructure - Pylons and overhead cables. Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Wind turbines.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.</p> <p>Residential - Residential development of 100 units or more.</p> <p>Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas.</p> <p>Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t).</p> <p>Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Discharges - Any discharge of water or liquid waste of more than 5m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements. NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.</p>
3	On site	<p>Infrastructure - Pylons and overhead cables. Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Wind turbines.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.</p> <p>Residential - Residential development of 100 units or more.</p> <p>Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas.</p> <p>Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t).</p> <p>Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements. NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.</p>



ID	Location	Type of developments requiring consultation
4	On site	<p>Infrastructure - Pylons and overhead cables. Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Wind turbines.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.</p> <p>Residential - Residential development of 100 units or more.</p> <p>Rural residential - Any residential development of 100 or more houses outside existing settlements/urban areas.</p> <p>Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t).</p> <p>Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Discharges - Any discharge of water or liquid waste of more than 5m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements. NUTRIENT IMPACT AREA. For new development with overnight accommodation Reg 63 of the Conservation of Habitats and Species Regulations 2017 must be applied and additional measures required. LPA to refer to Natural England's Nutrient Neutrality advice.</p>

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
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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

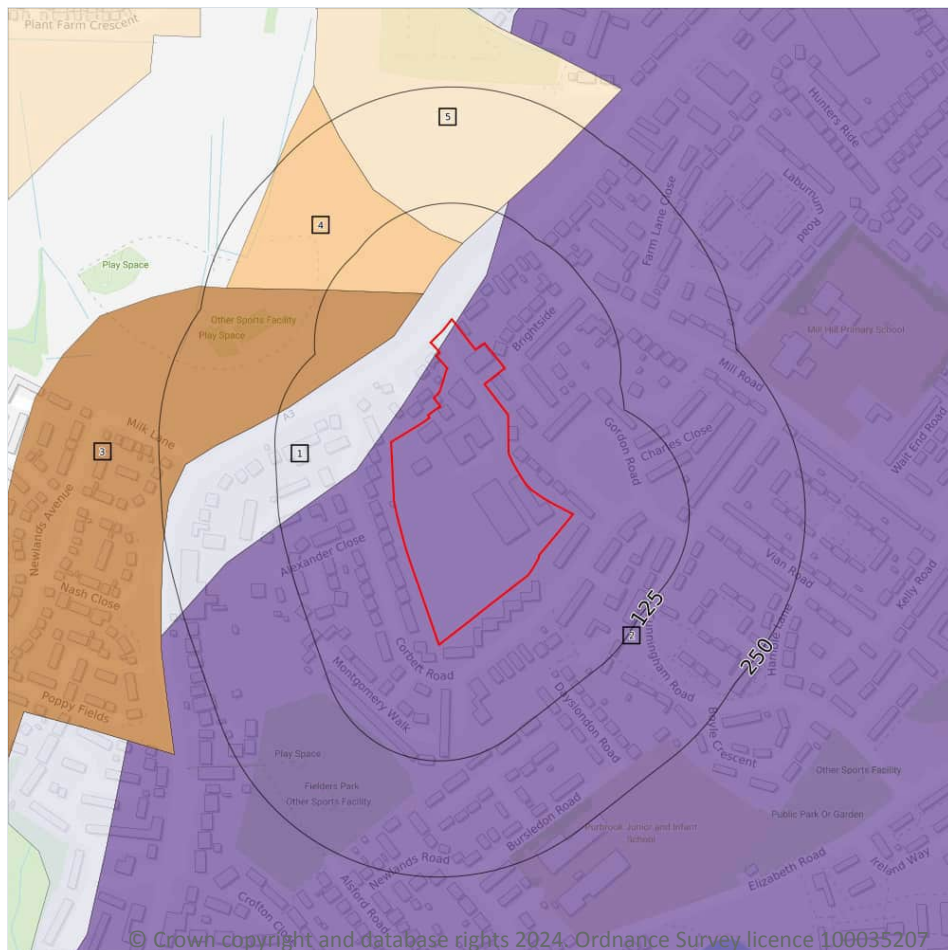
0

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

5

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 65](#) >

ID	Location	Classification	Description
1	On site	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.



ID	Location	Classification	Description
2	On site	Urban	Non-agricultural/no quality assigned
3	36m N	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
4	41m N	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
5	82m N	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

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

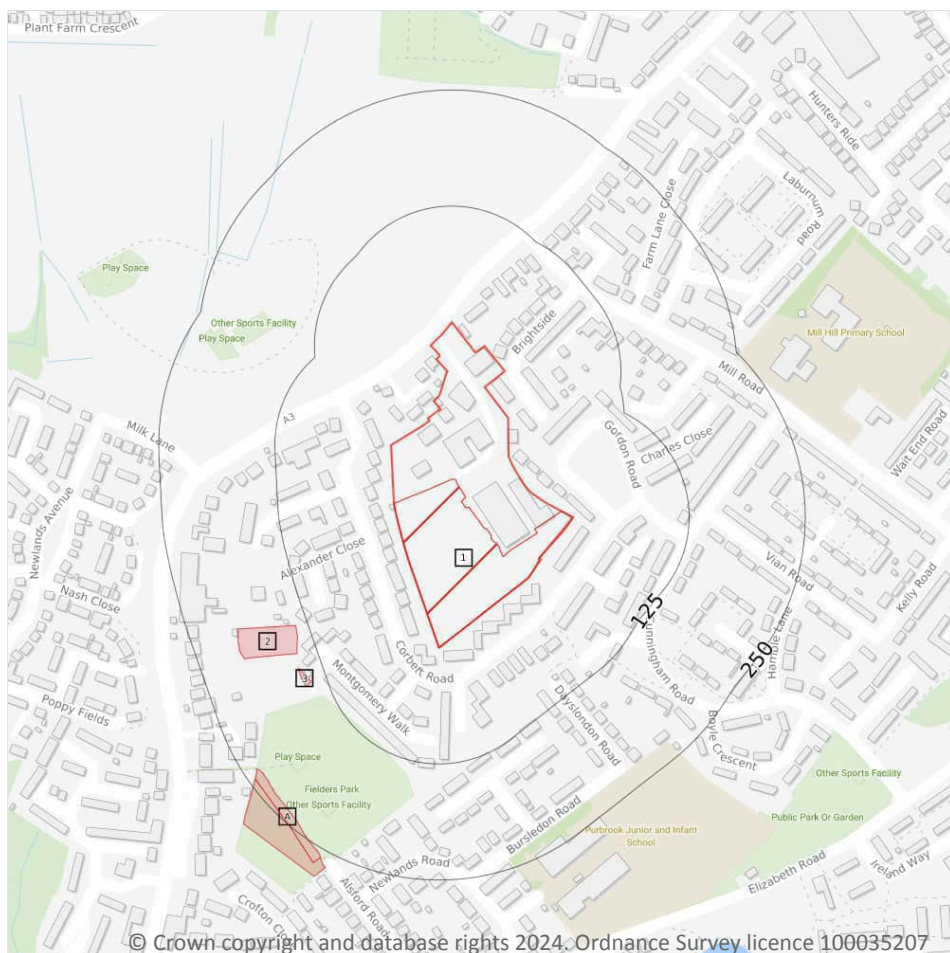
Records within 250m

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



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

4

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

Features are displayed on the Habitat designations map on [page 68](#) >

ID	Location	Main Habitat	Other habitats
2	138m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	142m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	233m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	243m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

1

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.

Features are displayed on the Habitat designations map on [page 68 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	On site	NLUD Ref: 173500009	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

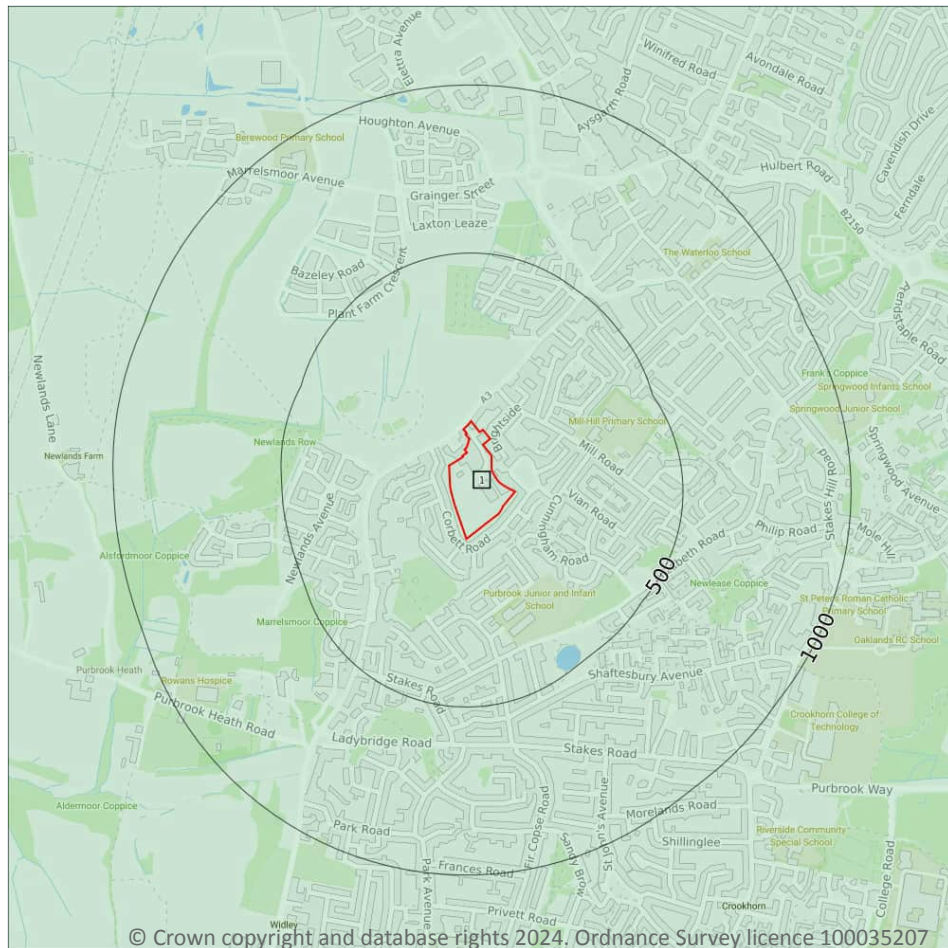
0

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 70](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SU60NE

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

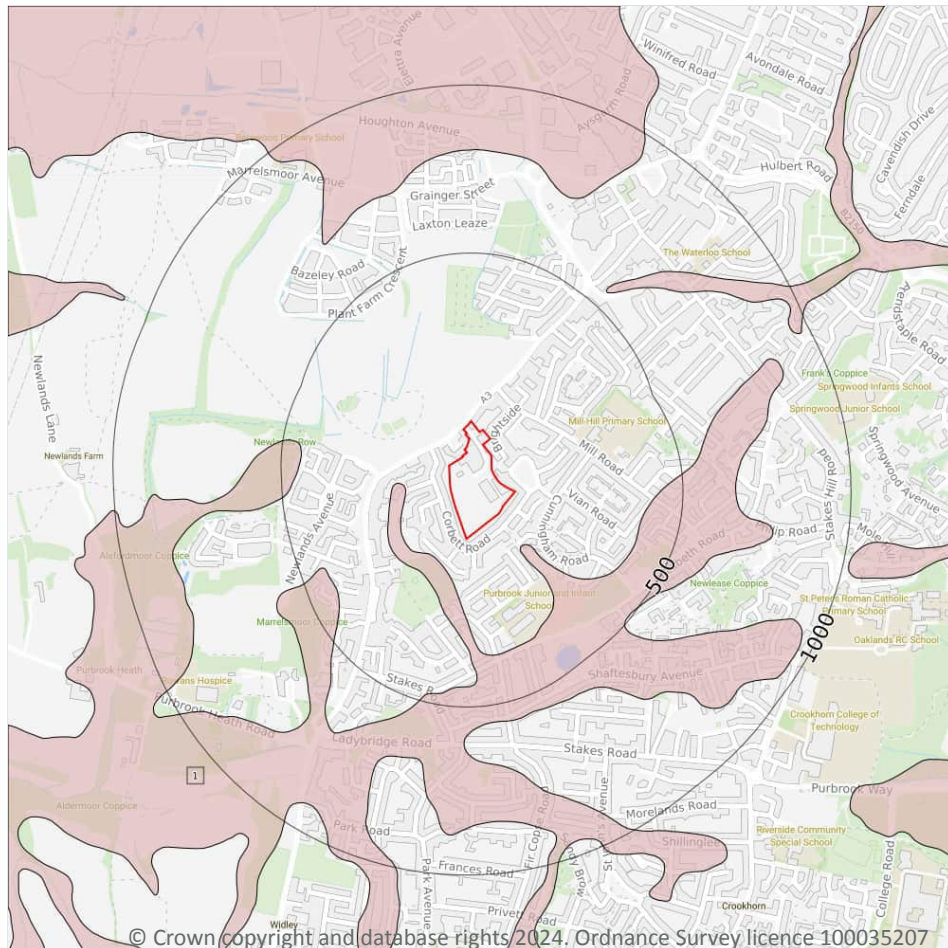
0

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.

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

1

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	106m SW	HEAD- XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

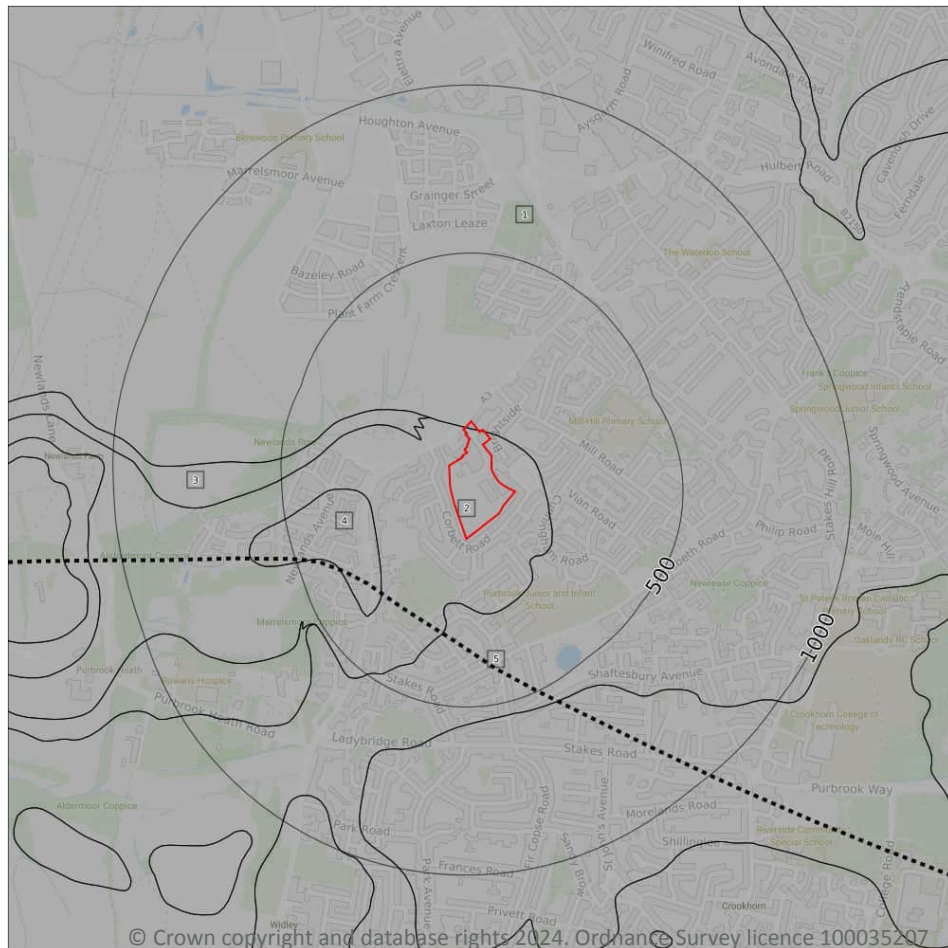
0

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

4

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-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch
2	On site	WTT-SSCL	Wittering Formation - Sand, Silt And Clay	Lutetian Age - Ypresian Age
3	104m NW	WTT-SANDU	Wittering Formation - Sand	Lutetian Age - Ypresian Age
4	243m W	WTT-SANDU	Wittering Formation - Sand	Lutetian Age - Ypresian Age



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

1

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.

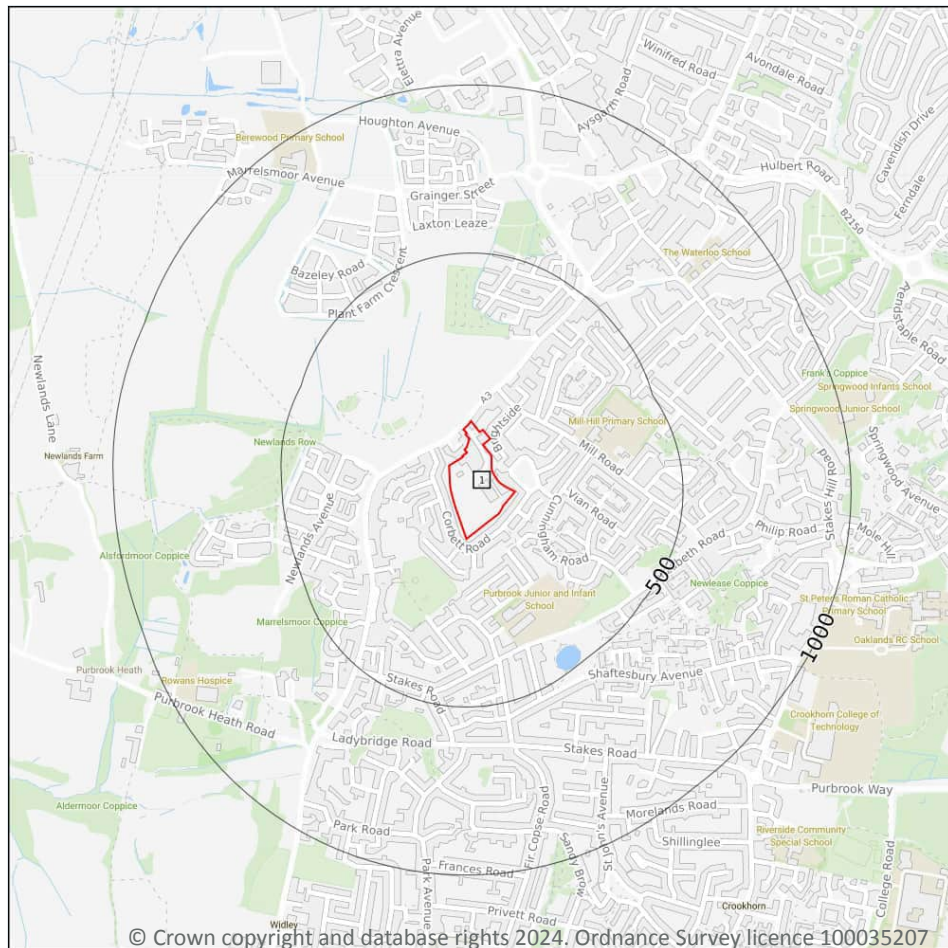
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 74 >](#)

ID	Location	Category	Description
5	276m SW	FOLD_AXIS	Axial plane trace of major syncline

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	EW316_fareham_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

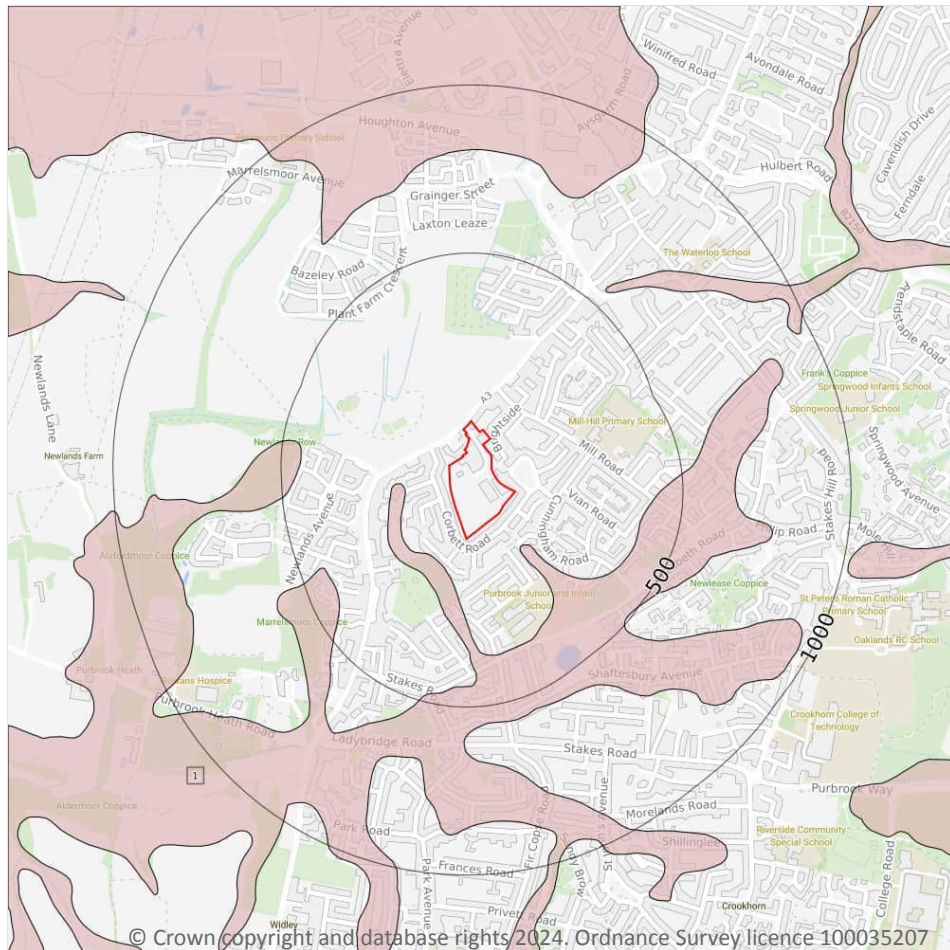
0

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

1

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 78](#) >

ID	Location	LEX Code	Description	Rock description
1	107m SW	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.



15.5 Superficial 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 superficial deposits (the zone between the land surface and the water table).

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

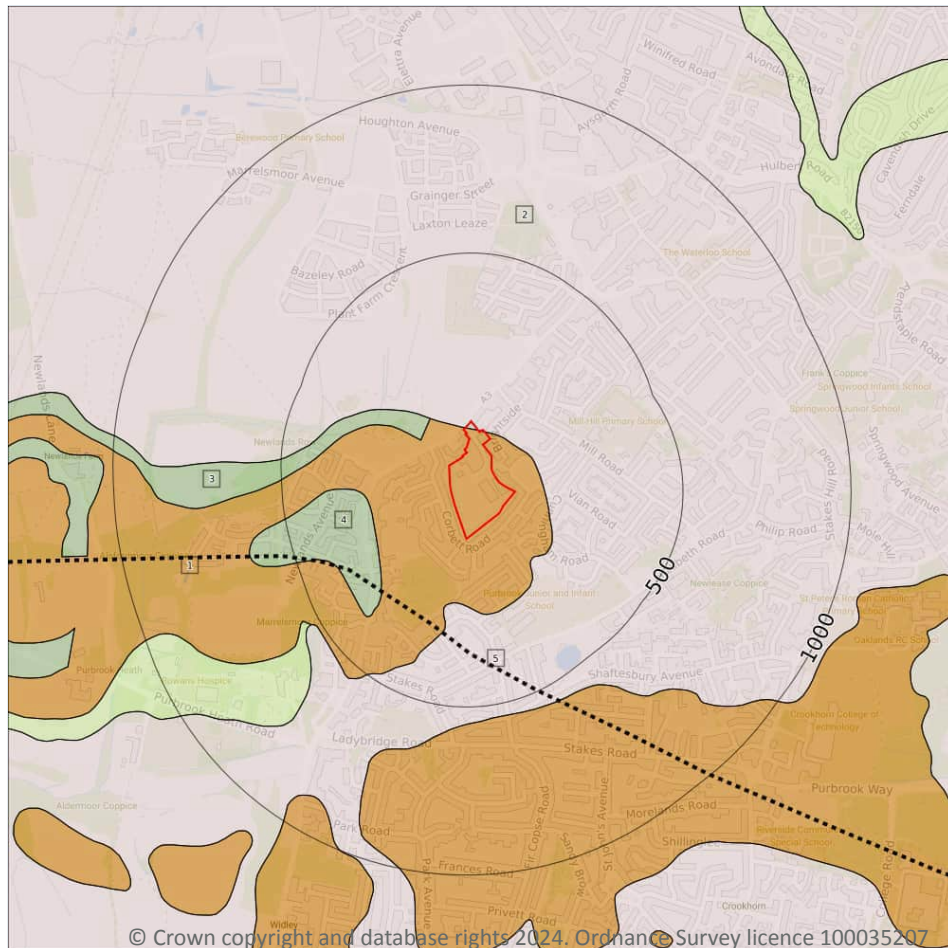
0

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

4

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 80](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	WTT-XSZC	WITTERING FORMATION - SAND, SILT AND CLAY	YPRESIAN
2	On site	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN
3	104m NW	WTT-S	WITTERING FORMATION - SAND	YPRESIAN
4	244m W	WTT-S	WITTERING FORMATION - SAND	YPRESIAN



This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

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
On site	Intergranular	High	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

1

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.

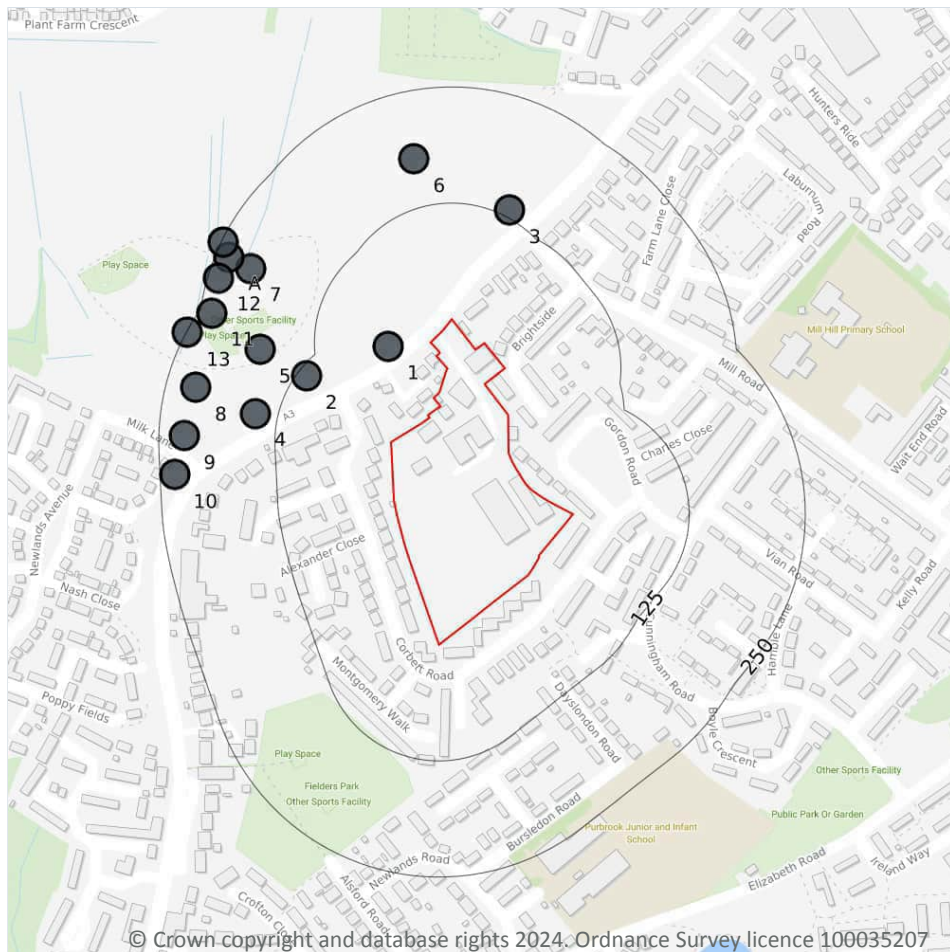
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 80](#) >

ID	Location	Category	Description
5	269m SW	FOLD_AXIS	Axial plane trace of major syncline

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

15

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 82](#) >

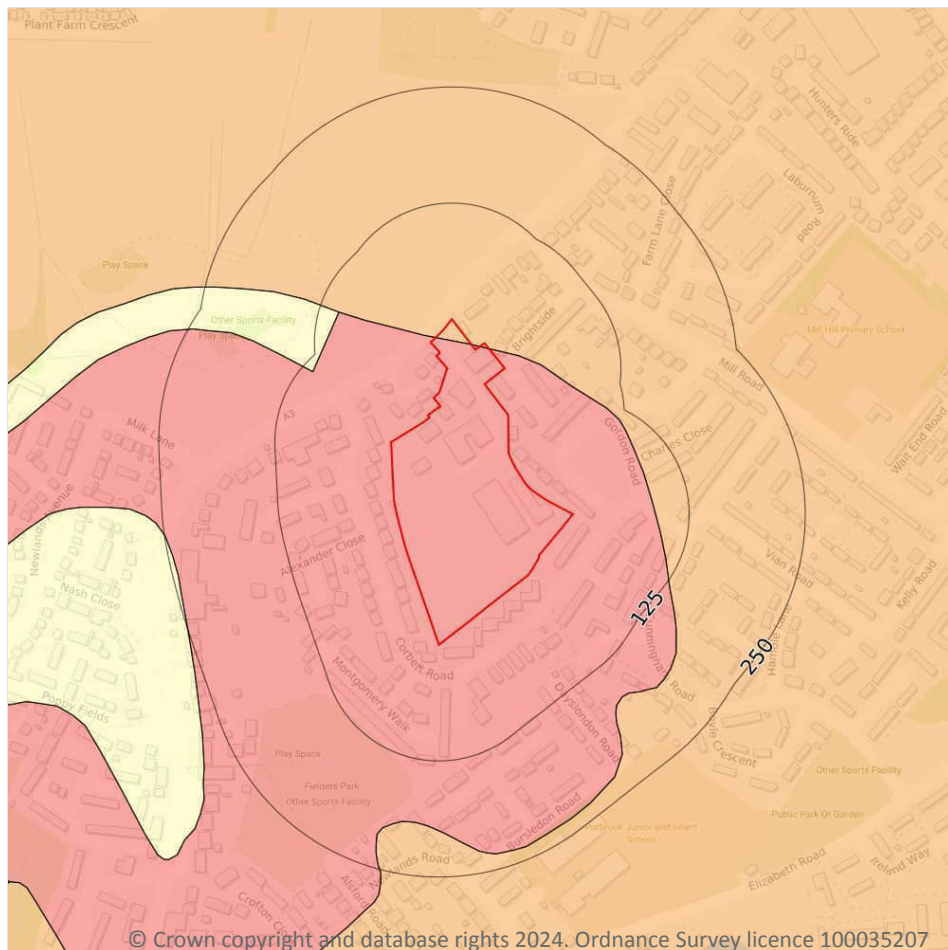
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	46m NW	467604 108723	Waterlooville TP21	-	Y	N/A
2	115m NW	467516 108691	Newlands Development BH5	-	Y	N/A
3	133m N	467735 108870	Newlands Development CBR 3	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	149m W	467461 108651	Waterlooville TP20	-	Y	N/A
5	173m NW	467466 108720	Newlands Development TP2	-	Y	N/A
6	177m N	467632 108925	Newlands Development CBR 2	-	Y	N/A
7	209m NW	467456 108807	Waterlooville BH15	-	Y	N/A
8	218m W	467397 108679	Newlands Development TP3	-	Y	N/A
9	222m W	467385 108627	Newlands Development BH6	-	Y	N/A
10	235m W	467374 108585	Newlands Development CBR17	-	Y	N/A
A	235m NW	467433 108819	Newlands Development BH2	-	Y	N/A
11	238m NW	467414 108759	Newlands Development BH4	-	Y	N/A
12	239m NW	467421 108797	Newlands Development BH3	-	Y	N/A
A	248m NW	467426 108835	Waterlooville TP18	-	Y	N/A
13	249m NW	467388 108738	Waterlooville TP15	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



- Site Outline**
- Search buffers in metres (m)**
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

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).

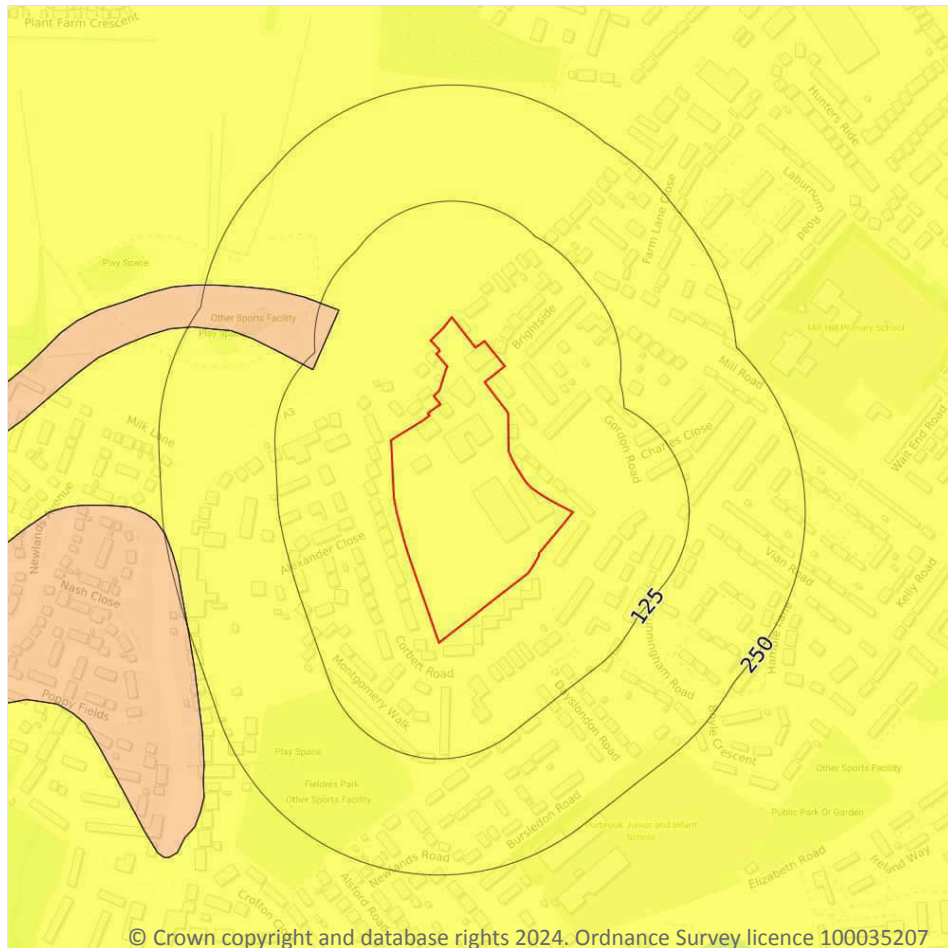
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 84 >](#)

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.
On site	Moderate	Ground conditions predominantly high 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.

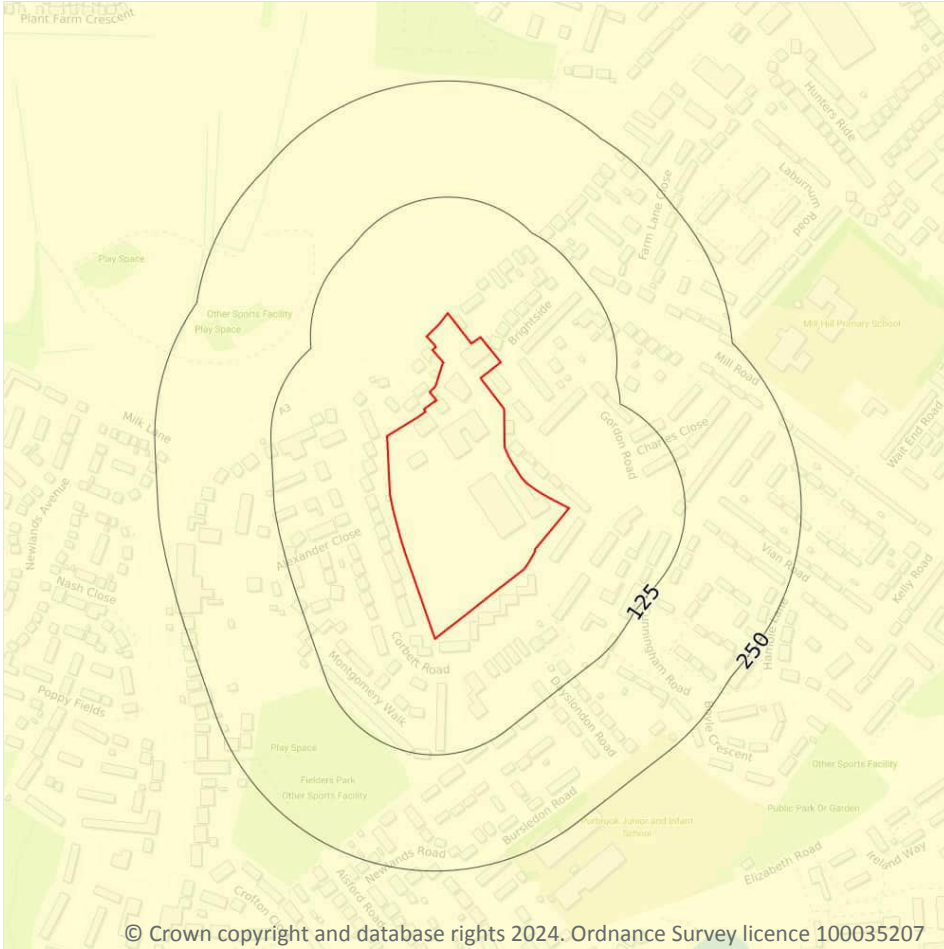
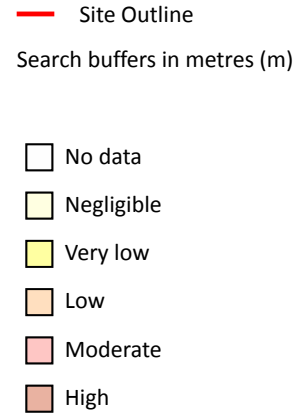
Features are displayed on the Natural ground subsidence - Running sands map on [page 85](#) >

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.

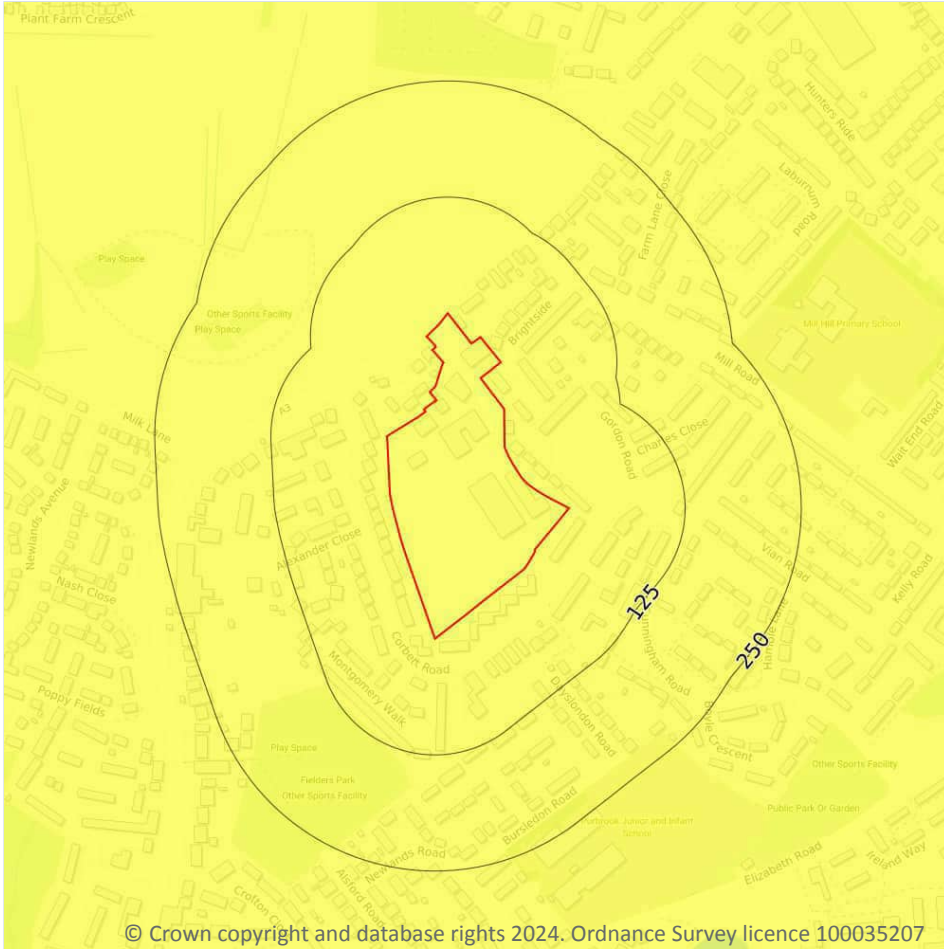
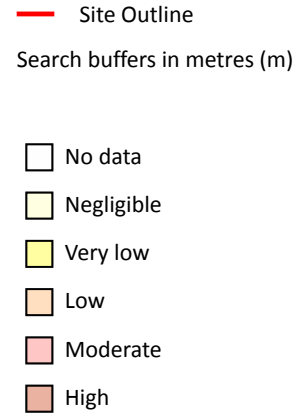
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 86 >](#)

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



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.

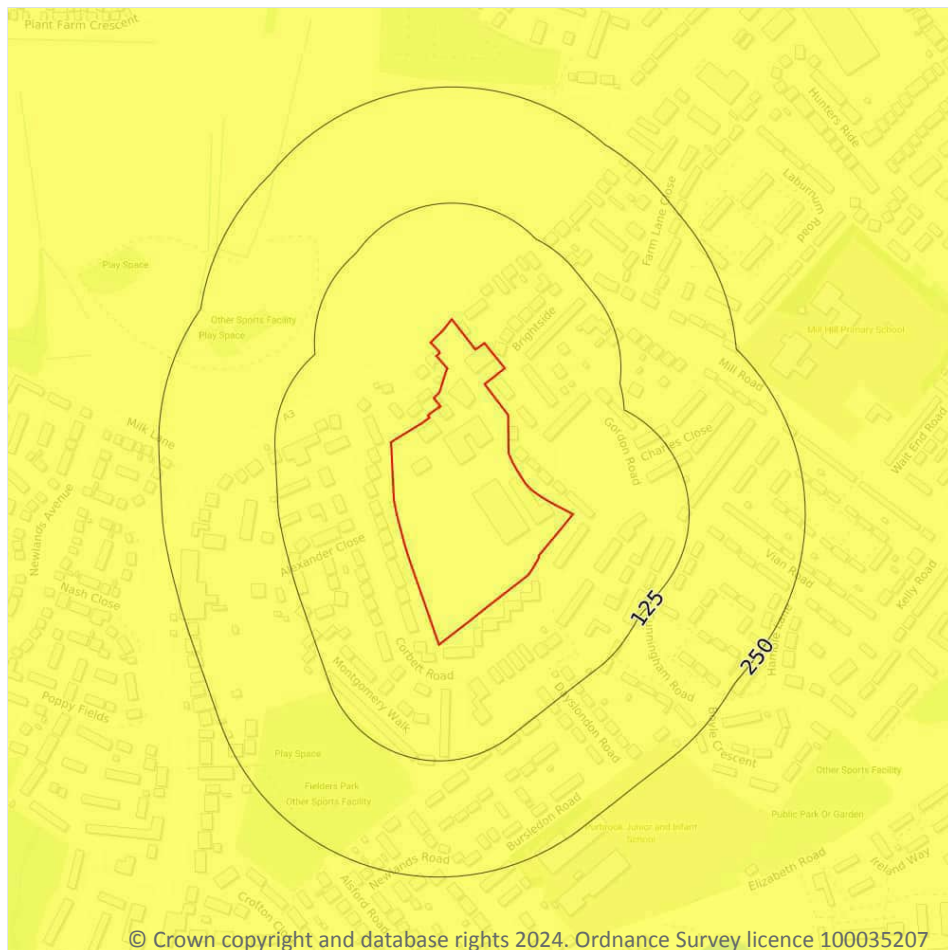
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 87 >](#)

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.

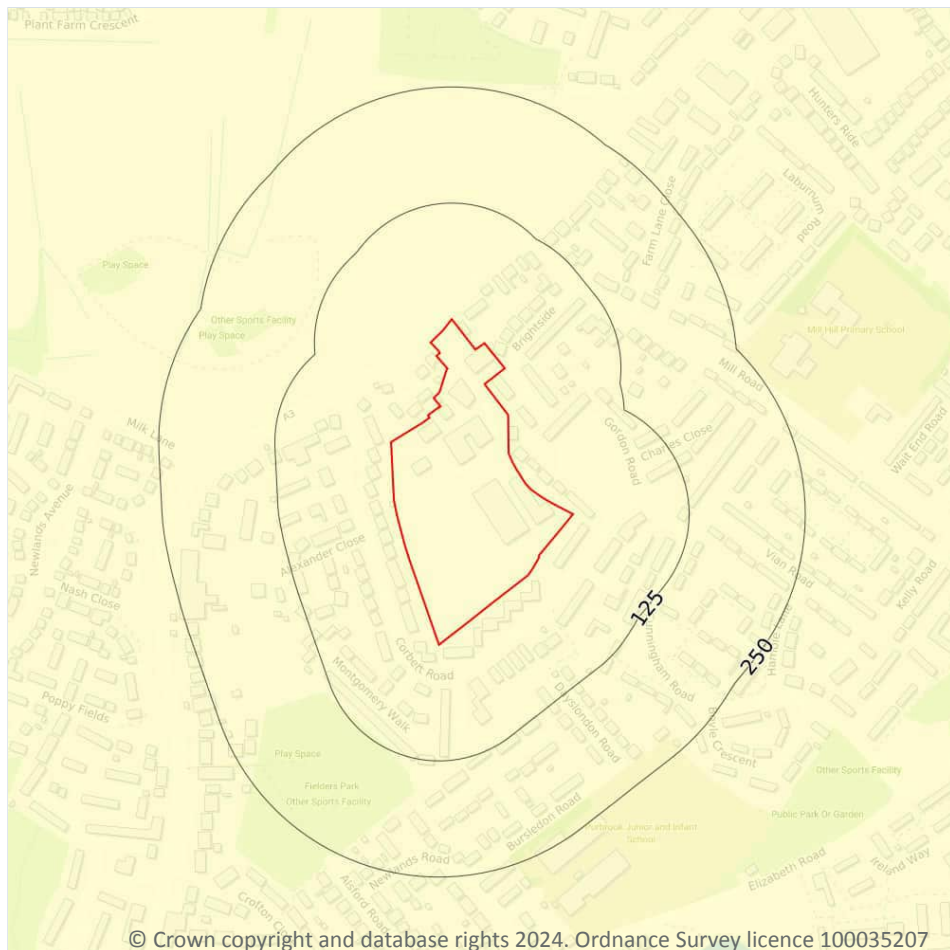
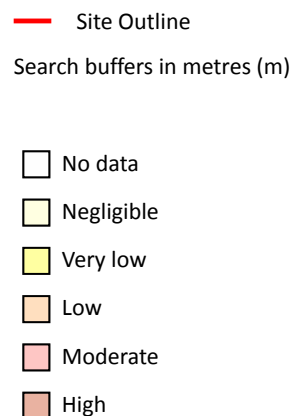
Features are displayed on the Natural ground subsidence - Landslides map on [page 88](#) >

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](#)

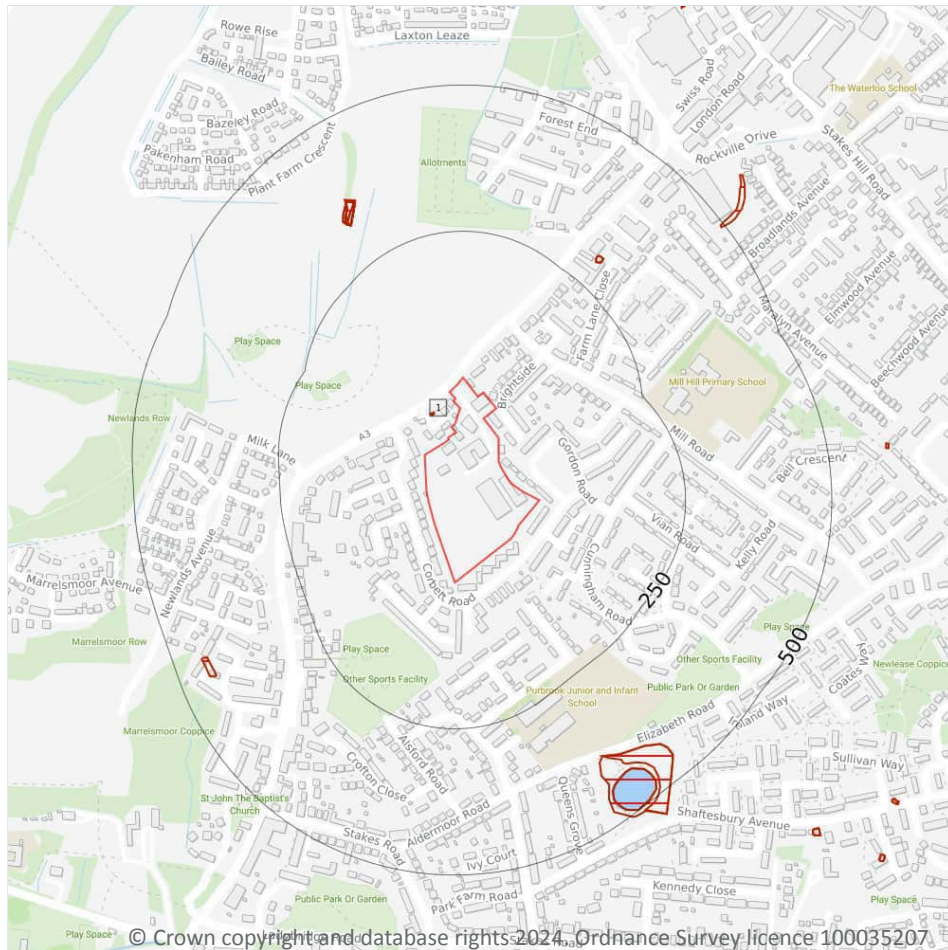
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



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

0

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

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

1

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
1	37m NW	Saw Pit	1866	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

0

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

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 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

0

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.

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

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.

19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

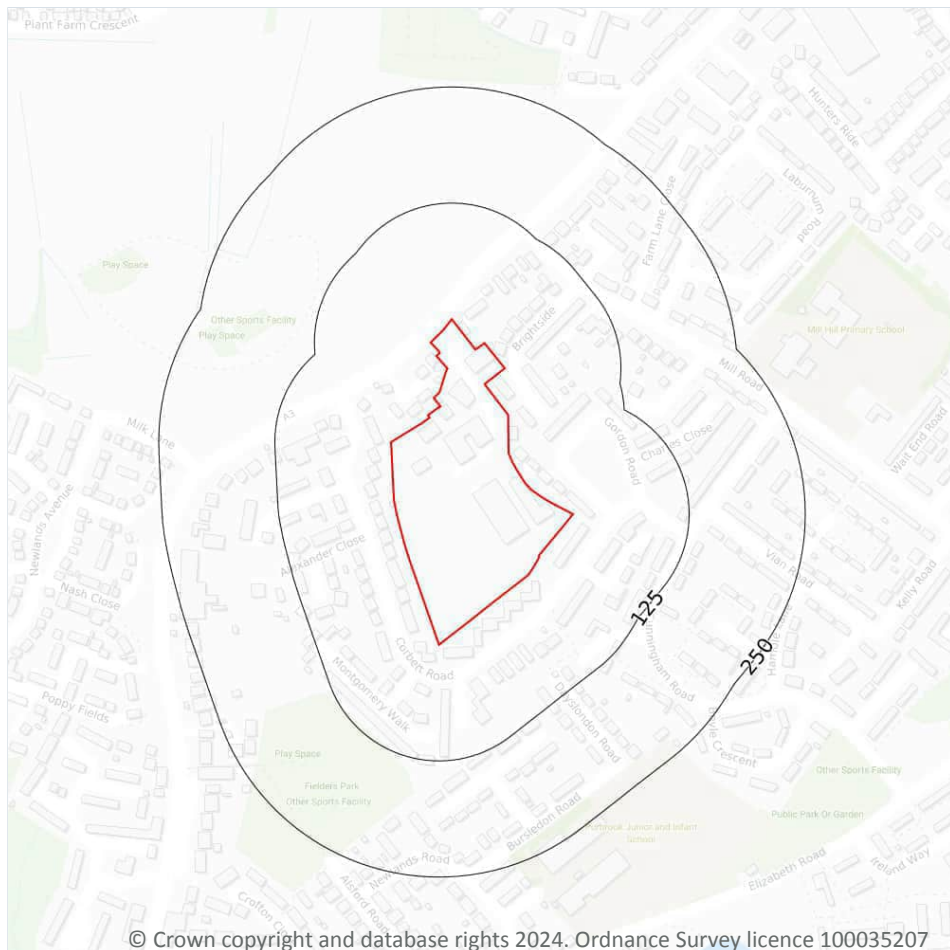
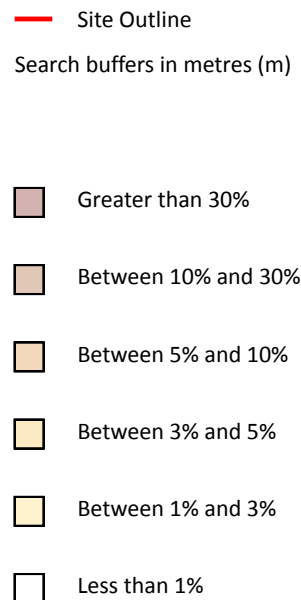
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.



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 98](#) >

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

3

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	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

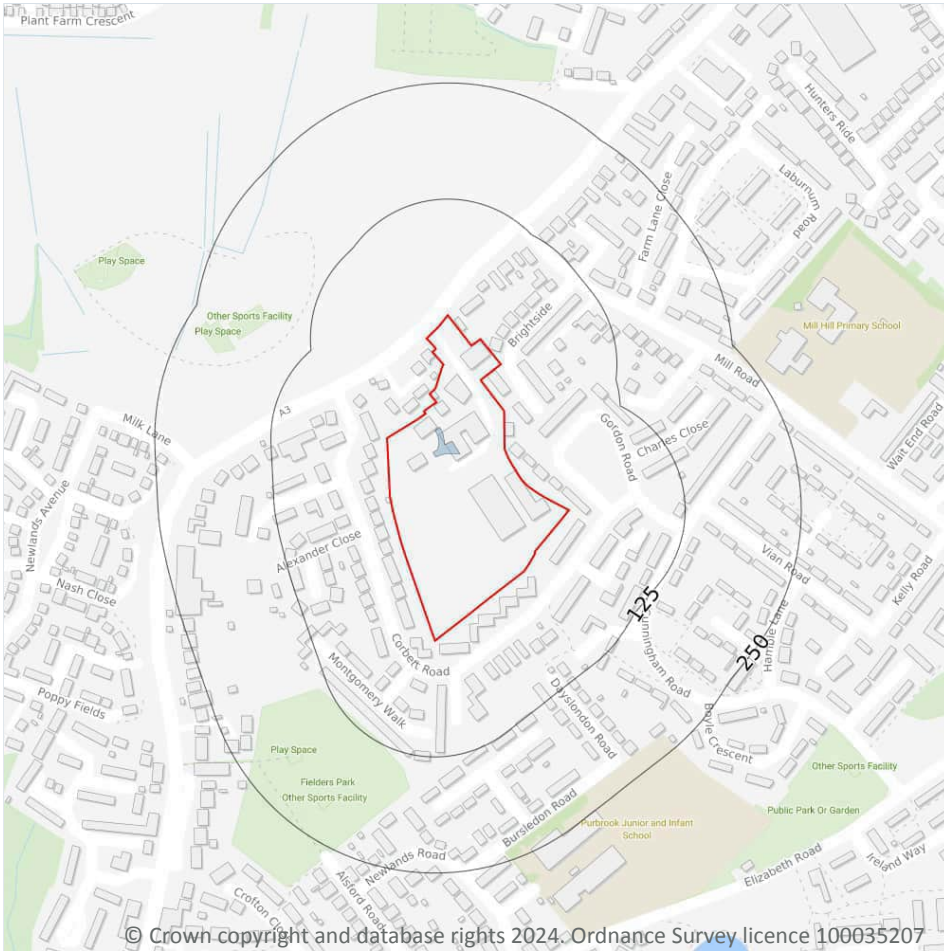
0

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



- Site Outline
- Search buffers in metres (m)
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

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

1

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

Features are displayed on the Railway infrastructure and projects map on [page 101](#) >

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1952	2500

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> ↗.

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Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

