



# **Phase 1 Environmental Report**

**Hayes Park, Hayes End Road, Hayes, Hillingdon, UB4 8FE**

Universities Superannuation Scheme Limited (acting as sole corporate trustee of the Universities Superannuation Scheme)

May 2021

## Preface

**Property Address:** Hayes Park, Hayes End Road, Hayes, Hillingdon, UB4 8FE

**NGR:** E: 508869 N: 182469

**Property Use:** Office campus

**Site Area:** Approximately 5.5 Hectares (13.6 Acres)

**Tenure:** Freehold

**Date of Inspection:** 5 May 2021

**Inspection Conditions:** Dry and sunny




**Access Restrictions:** All relevant areas inspected

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**Instruction Number:** 01C100434

**Report Control:**

Status:		Date:
Version 1		May 2021
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<b>For and on behalf of Avison Young (UK) Limited</b>		
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## Executive Summary

The Avison Young Environmental Services Team has completed a Phase 1 Environmental Due Diligence Report for the subject property.

The report has been commissioned to examine the entire Hayes Park site, but as part of this work, we have considered the Hayes Park North site in relation to the Prior Approval application to change the use from office to residential under permitted development rights.

The wider subject site is occupied by three office buildings arranged over basement, ground and two upper floors, known as: North Building (occupied by Pladis and subject to the Prior Approval application), Central Building (vacant) and South Building (vacant). A compound containing plant rooms, above ground fuel tank and a back-up generator is located in the west of the site and a two storey car park is located within the northwest corner. The rest of the site comprises landscaped grounds.

Based on our site inspection, no visual evidence of significant ground contamination and/or hazardous processes was noted on any part of the property. There is a large fuel tank located within the chiller compound, however, this was noted to be empty and no staining to the ground surface noted. A further smaller tank is known to be present but this is contained in a secure room with concrete floor and no issues are known. The planning records make reference to the installation of a below ground fuel tank, but no record of this is known.

We have not been provided with any Asbestos Register(s) for any of the site buildings. Given the age of North Building (2001) which is subject to the Prior Approval application, we consider that asbestos is unlikely to be present. However, the Central and South Buildings which do not form part of the Prior Approval application, were built c.1960s, and despite being subject to major refurbishment in c.2002, the potential for asbestos cannot be discounted without further validation. Asbestos demolition/refurbishment survey will be required in the event of any redevelopment work.

The site is located in an area where there is a low risk of fluvial / coastal flooding. Localised areas of the site are at risk of surface water flooding as identified on the Environment Agency maps. These correspond to topographically low areas and no issues of surface water flooding are known. Nevertheless, surface water drains should be regularly maintained to prevent surface water flooding in these areas. The basement levels of the Central and South Buildings have the provision of sump pumps to deal with the ingress of groundwater.

Based on our review of information available, we have not identified any material environmental liabilities that would affect the future redevelopment of the property, which includes the conversion of the North Building to residential through the Prior Approval application. In conclusion, we consider the site represents a **Low Environmental Risk** for future use from a ground a contamination or flood risk perspective.

## 1. Scope of Instruction and Brief

### Objectives

- 1.1 Instructions were received from Universities Superannuation Scheme Limited (acting as sole corporate trustee of the Universities Superannuation Scheme) (the Client) to undertake an Environmental Due Diligence Report for the subject property. We understand that the Client intends to dispose of the freehold interest in the subject property and this report will form part of a sales pack that will be provided to potential purchasers. The future use of the site is not confirmed, but is likely to comprise a change of use from offices to residential use with the North Building subject to Permitted Development.
- 1.2 Therefore, the primary objectives of our report are to identify those environmental issues which have the potential to affect value, site use or may lead to regulatory intervention and to provide comment on the suitability of the site from an environmental perspective.
- 1.3 A copy of Avison Young Standard Terms of Appointment is presented in **Appendix I**.

### Background Data Sources

- 1.4 The findings of this report are based upon information provided to us and database information obtained from regulatory and statutory bodies (the Environment Agency, Local Authority, etc) as contained within the Groundsure Insight Report (Ref. GS-7780589 and Ref. GS-7780590).
- 1.5 The findings and opinions conveyed in this report are based on information obtained from a variety of sources as detailed in the report and which Avison Young assumes to be reliable, but has not been independently confirmed. Therefore, Avison Young cannot and does not guarantee the authenticity or reliability of third party information it has relied upon.
- 1.6 All Ordnance Survey Mapping contained within this report is © Crown Copyright. All rights reserved, licence number 100000795.

## **Report Preparation**

- 1.7 This report is based on and prepared in general accordance with current best practice guidance documents concerning the assessment of potentially contaminated land including; British Standard (BS) 10175:2011: +A2:2017: Investigation of Potentially Contaminated Sites, Environment Agency Land Contamination: Risk Management Guidance, DEFRA (2012): Environmental Protection Act 1990: Part 2A, Contaminated Land Statutory Guidance, the National Planning Policy Framework and the Royal Institution of Chartered Surveyors (RICS) Environmental Risks and Global Real Estate 1<sup>st</sup> Edition, November 2018.

2. Site Location

Item	Description	
Site Location	Hayes Park is located in Hillingdon, North West London and can be accessed by two entrances; the principal entrance fronting Park Lane to the east of the site and a secondary entrance accessed from Hayes End Road to the west. These roads lead directly to the A4020. Site location and layout plans are below.	
Surrounding Land Uses	North	Open fields with residential beyond
	East	Green space with residential beyond
	South	Green space and community mental health centre
	West	Open fields and residential dwellings

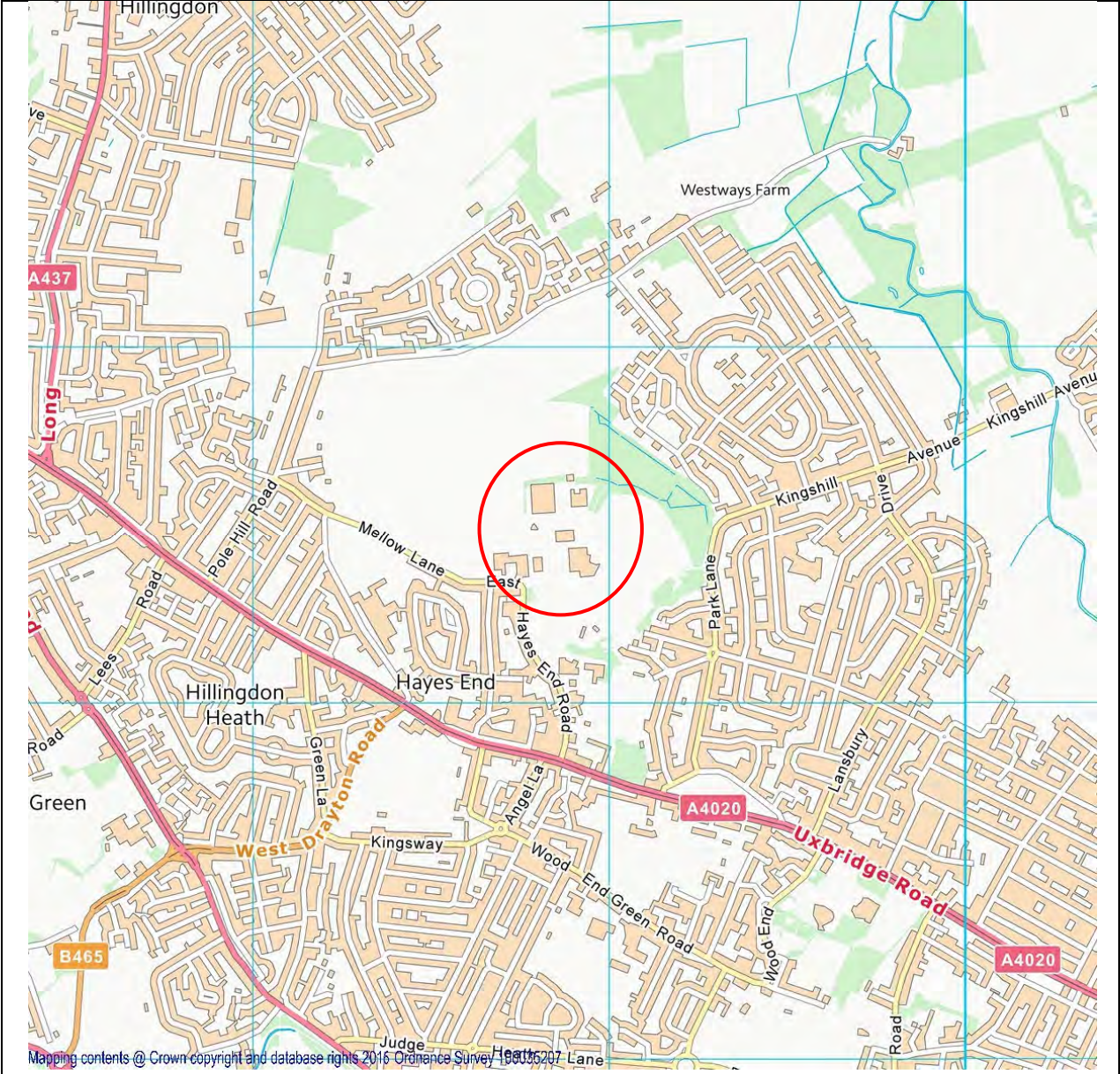
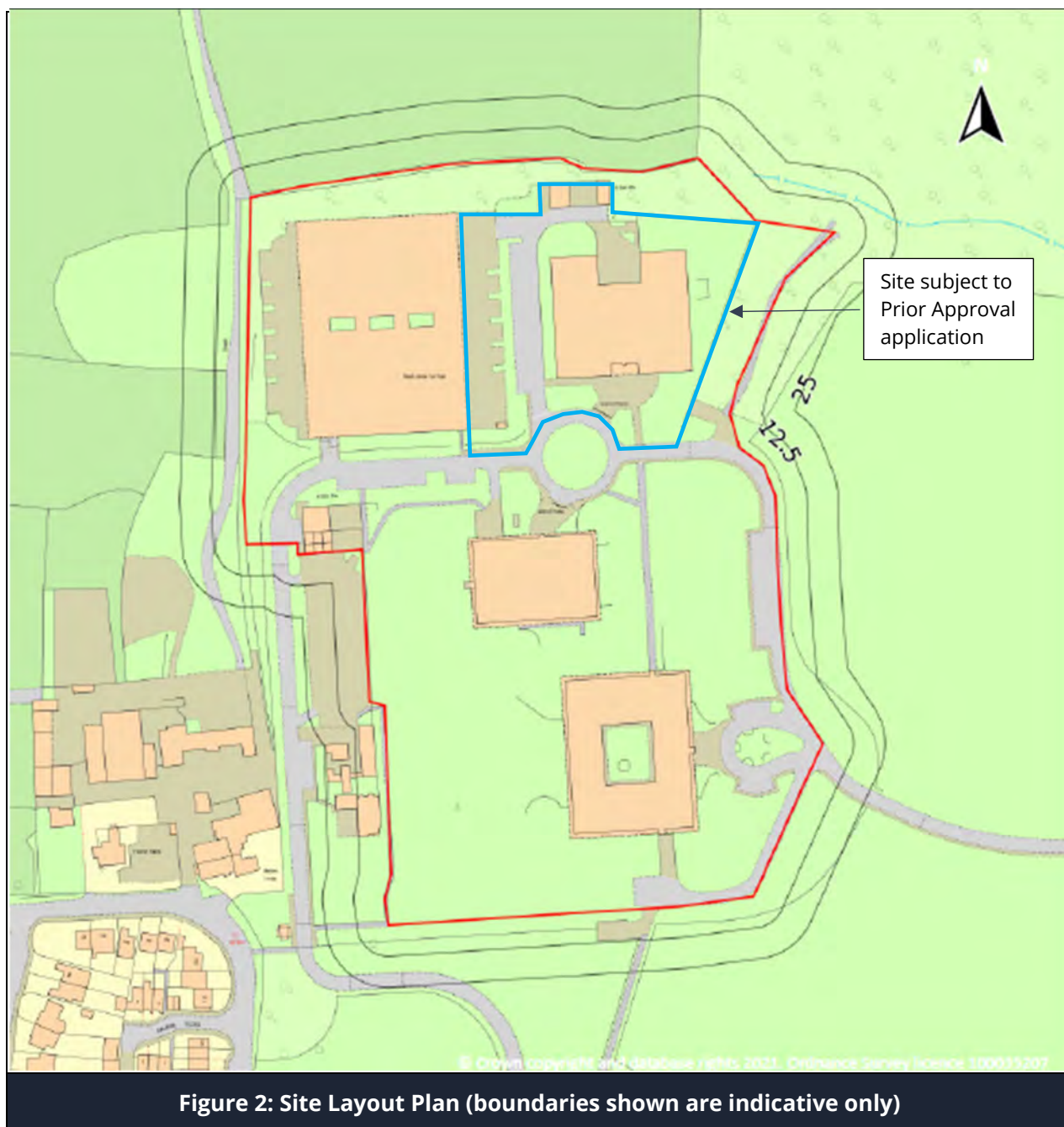


Figure 1: Site Location Plan

### 3. Site Description

3.1 The following site layout plan and table provides a summary of the site layout, usage and condition.



Item	Description
<b>General Description</b>	<p>Hayes Park comprises extensive landscaped grounds and three main office buildings known as:</p> <ul style="list-style-type: none"> <li>• North Building, occupied by Pladis;</li> <li>• Central Building currently vacant but formerly occupied by Fujitsu; and</li> <li>• South Building currently vacant but formerly occupied by H. J. Heinz Ltd.</li> </ul>

Item	Description
<b>General Description (continued)</b>	<p>In addition, there is a two-storey car park located adjacent to the North Building and plant compounds serving each building.</p> <p>The premises are located in extensive grounds mainly laid to grass accessed from either Hayes End Road or Park Lane via security gatehouses, which are outside the demise of the subject site, being held under a separate Freehold title.</p> <p>The North building was constructed over 20 years ago and comprises a three storey office block, with lower ground floor plant room areas, totalling some 6,156 m<sup>2</sup>. We understand that it is concrete framed with in-situ concrete floors and roof slab. The walls are formed with aluminium framed, double glazed windows set between facing brickwork, which covers the main structural frame and roof parapets. Internally the building is provided with suspended ceilings and raised floors and air conditioning system. A separate compound to the north of the building houses the chillers and other mechanical plant as well as an electrical substation.</p> <p>The South and Central buildings were constructed in 1963 and are Grade II* Listed. The southern building provides approximately 6,564 m<sup>2</sup> of office space on three main floors with basement plant room areas and a large central lightwell. The central building comprises some 4,259m<sup>2</sup> again on 3 floors with a basement plant room. We understand that both buildings were extensively refurbished in the early 2000s with the works incorporating suspended ceilings, raised floors, air conditioning and renewal of the electrical installations. In addition, the earth bund was removed from the front of the Central Building to enable a loading bay to be constructed for the tenant at the time.</p> <p>We understand that there is an underground access tunnel (now blocked) between the central and southern buildings. Within the basement levels of these buildings there are sump pumps to control and manage the ingress of groundwater.</p> <p>A separate compound to the west of the buildings houses mechanical and electrical plant including electrical sub-stations and a tenant installed generator serving the Central Building. The compound also contains an above ground fuel tank supplying a back-up generator. Within the compound switch room, below ground cables were noted to be immersed in water (groundwater). It is understood that there has been an attempt to tank the switch room some time ago but this had failed and hence the cables had been left immersed in water.</p> <p>The two storey car park, providing approximately 600 spaces, was constructed in the late 1990s and comprises a reinforced concrete structure with the top deck being level with the main access road into it.</p> <p>Externally, the property benefits from a large expanse of landscaping and mature trees with a good quality hard standing estate road.</p>
<b>Underground Railway Infrastructure</b>	<p>The Groundsure Insight Report does not identify any underground railway infrastructure within 250m of the site.</p>

Item	Description
<b>Site Services</b>	<p>We understand that the property is served with power, drainage and communication infrastructure. The condition or capacity of these services is not known and they are assumed for the purpose of this report to be in good order.</p> <p>For further information please refer to the Building Survey which have been prepared to support the disposal.</p> <p>The following infrastructure was observed on site:</p> <ul style="list-style-type: none"> <li>• An electricity substation is located in the compound building on the western elevation of the site. In addition, a further electricity substation is located to the rear of the North Building. These were noted to be the property of SSE Power Distribution.</li> <li>• An Inergen fire suppression system was noted in the basement of the Central Building.</li> <li>• A back-up generator was present in the compound as mentioned above. At the time of the inspection, this was locked but the supply tank is contained in a secure room with concrete floor.</li> </ul>
<b>Existing Site Drainage</b>	<p>We have not been provided with any private drainage drawings for the property but understand that the site benefits from a positive drainage system. A schematic drawing of the services associated with the North Building has been obtained and this shows a surface water manhole in the rear service yard. It is not clear from the drawing, but this would appear to connect to a storm water pumping station located between the building and the adjacent car park. The eventual discharge is not known.</p> <p>The condition of the below ground surface water drainage is unknown but no issues have been reported.</p> <p>It is not believed that a consent to discharge trade effluent would be required for the current site activities.</p>
<b>Underground/ Above Ground Tanks</b>	<p>No evidence of underground storage tanks (USTs) were noted during the site visit.</p> <p>From our site inspection, we noted a c.10,000 litre above ground diesel storage tank (AST), associated with the back-up generator for the Central Building, that is located within an open brick built chiller compound situated in the west of the site. The tank was noted to be empty and no evidence the tank having leaked was noted. All external pipework was noted to be above ground and no evidence of surface staining was noted around any of the fill pipes of fill point.</p> <p>A smaller tank of approximately 1,000 litres is also located within this compound and contained within the generator room. This could not be accessed during our inspection.</p>
<b>Chemical &amp; Materials Storage</b>	<p>From our site inspection, there are no significant quantities of chemicals used or stored on site.</p>
<b>Waste Management Practices</b>	<p>In general, waste streams appeared to be adequately managed and the general level of housekeeping across the site was to an acceptable standard. Waste was noted to be held in designated areas prior to collection.</p>

Item	Description
<b>Environmental Regulatory Controls</b>	From the activities observed on site, we do not believe there is a requirement for the occupiers of the property to hold an exemption, permit or licence under the Environmental Permitting (England and Wales) Regulations 2016, the Water Resources (Abstraction and Impounding) Regulations 2006 or the Water Resources Act 1991.
<b>Non-Native Invasive Plants</b>	Although we are not qualified, during our inspection no non-native invasive plants such as Japanese Knotweed, Giant Hogweed and Himalayan Balsam were suspected to be present in the areas inspected. Should further clarification on this be required, a specialist survey would need to be commissioned.
<b>Environmental Observations</b>	No significant evidence of ground contamination or hazardous processes were noted.

3.2 A selection of site photographs taken on 5 May is presented below.



**Photo 1:** View of the front elevation to the North Building



**Photo 2:** View of front elevation of the Central Building



**Photo 3:** View of rear elevation of the Southern Building



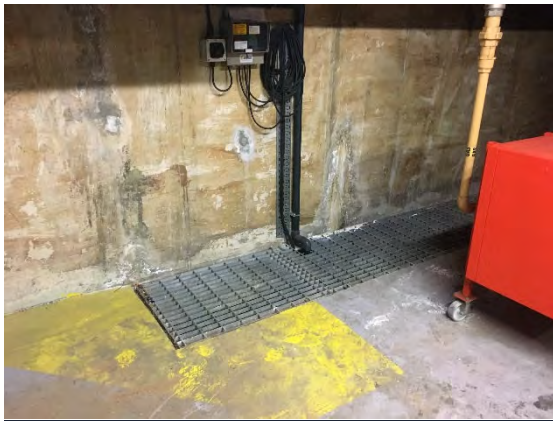
**Photo 4:** View of substations in plant compound



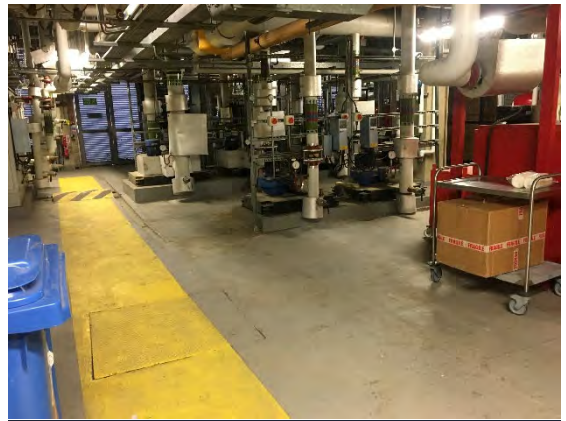
**Photo 5:** View of decked car park



**Photo 6:** View of estate road



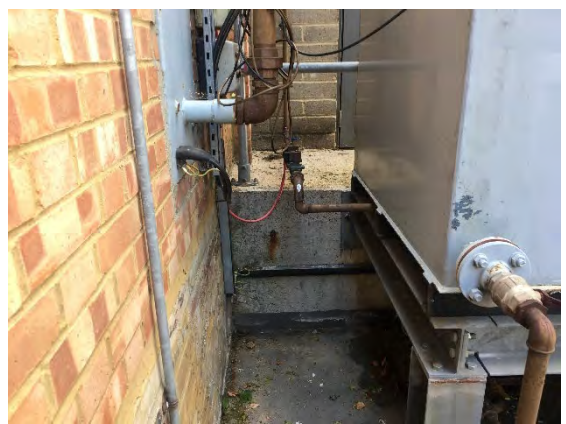
**Photo 7:** View of sump pump in basement plant room in Central Building



**Photo 8:** View of basement plant room in North Building



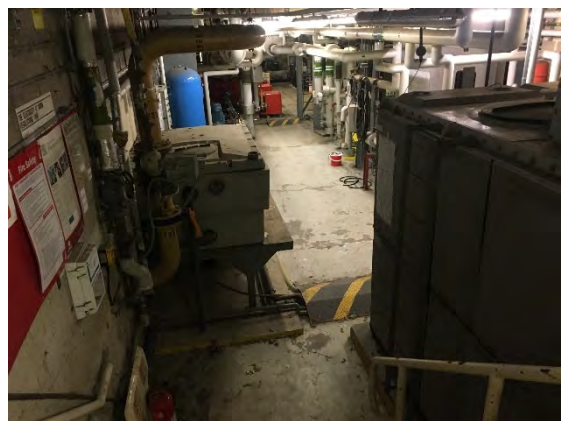
**Photo 9:** View of above ground fuel tank in plant compound



**Photo 10:** View of fill point inside plant compound



**Photo 11:** View of fill point on exterior of plant compound



**Photo 12:** View of basement plant room North Building

## 4. Asbestos Containing Materials

- 4.1 The Control of Asbestos Regulations 2012 came into effect in April 2012. These repeal earlier asbestos legislation, including; the Asbestos Regulations 2006, the Control of Asbestos at Work Regulations 2002, Asbestos Licensing Regulations 1983 and the Asbestos (Prohibition) Regulations 1992 (as amended).
- 4.2 Owners, occupiers, managers and/or those who have responsibilities for premises have a legal duty to either manage the risk of asbestos or a duty to co-operate with whoever manages that risk. The responsible party has to identify the existence of asbestos containing materials, record their location and condition, set out a plan to manage the risk from the material and take the necessary steps to put this plan into action.
- 4.3 An appropriately licensed asbestos contractor should remove asbestos material that is likely to be disturbed and cannot be easily protected. Reviews of this plan will have to be undertaken on an on-going basis. Details as to the location and condition of the materials must be provided to anyone who is liable to work on or disturb it.

### Asbestos Survey

- 4.4 We understand that asbestos was not specified in the construction of the North Building and any asbestos was stripped from the Central/South Building(s) during the major refurbishment in 2002. However, no information was currently available in the Health and Safety Files and no Asbestos Register was available to confirm this statement. Although the Central/South Buildings have been subject to major refurbishment in 2002, the potential for asbestos cannot be discounted without further validation.

## 5. Historical Development

### Historical Maps

- 5.1 In order to ascertain the historical land uses on site, Avison Young has purchased historical mapping from Groundsure, at scales of 1:500, 1:1,250, 1:2,500, 1:10,000 and 1:10,560. We have also reviewed the site's planning history where information for the site is available.

Date	Description
<b>1868 - 1960</b>	The site is shown to comprise Hayes Park Private Lunatic Asylum. This consists of a large building located towards the south-central portion of the site with the rest of the site comprising landscaped grounds and woodland extending off site to the north east and east. To the south east is a series of ponds. To the west of the site is a collection of buildings identified as Home Farm together with extensive agricultural land.
<b>1966</b>	The site is no longer identified as a lunatic asylum and the southern and central buildings have been established together with a smaller building just to the north of the Central Building. Home Farm remains but extensive redevelopment encroaches around much of the site.
<b>1973 - 2001</b>	A further large building is located towards the north western corner of the site.
<b>2010 to present</b>	The Northern Building and adjacent car park have been constructed and the broad current configuration of the site has been established.

- 5.2 Selected extracts of the historical maps are provided in **Appendix II**.

### Planning Records

- 5.3 We have also reviewed the Hillingdon Council planning portal to ascertain the material changes in land use, where information for the site is available, this is summarised below:

Application Ref	Description of Material	Date Approved
12853/K/85/1501	Office development	10/09/85
12853/L/87/2219	Erection of a temporary building for use as additional offices until the end of 1991	10/11/87
12853/X/96/1670	External and internal alterations to administration and research buildings and demolition of a former market garden wall (Application for Listed Building Consent)	29/10/96

Application Ref	Description of Material	Date Approved
12853/W/96/1667	Refurbishment of existing administration and research buildings for office use, the erection of a new office building and decked car park (involving the demolition of Field House and garden walls), realignment of internal road and provision of car parking and landscaping to individual buildings	29/10/96
12853/Y/97/0651	Demolition and reinstatement of part of a pre-1948 garden wall (Application for Listed Building Consent)	28/4/97
12853/AA/97/0654	Installation of a temporary car park on part of existing parkland including a temporary footbridge /pathway and associated fencing	28/4/97
12853/AD/99/1551	Details of tree protection in compliance with condition 7 of planning permission ref. 12853W/96/1667 dated 10/08/98; Refurbishment of existing administration and research buildings for office use, the erection of new office building and decked car park	26/7/99
12853/APP/2000/66	Details of landscaping scheme in compliance with condition 10 of planning permission ref.12853w/96/1667 dated 10/08/96; refurbishment of existing administration building and research building and erection of new office building	12/1/00
12853/APP/2000/1904	Internal partition works and installation of 10 condenser units and a kitchen extract pipe (application for listed building consent) South Building	4/8/00
12853/APP/2001/384	Internal fitting out, roof mounted vents and below ground fuel tank (application for listed building consent) Central Building	21/2/01
12853/APP/2001/382	Installation of roof mounted extract fans and external vent Central Building	21/2/01
12853/APP/2007/3364	Details of condition 3 (brick and pointing and condition 4 (site survey) in compliance with listed building consent ref: 12853/app/2006/3060, dated 29-01-2007: (rebuilding of listed boundary wall to the rear and side of united biscuits building)	1/11/07
12853/APP/2010/277	Internal alterations to existing staircases and alterations to front entrance (Listed Building Consent)	15/2/10

5.4 No relevant supporting documentation was found for any of these approved applications which were mostly made in the name of H.J Heinz.

- 5.5 The above is provided as a summary of the available information. Planning portals do not always have all the documentation uploaded and records only go back a certain number of years. No direct enquiries with the Local Planning Authority have been made. Your solicitors or planning advisor should confirm if there are any outstanding planning conditions or breaches to planning control.

### **Potential for Historical Contamination**

- 5.6 In summary, given that the property was in use as a Lunatic Asylum with extensive green space from at least the 1860s followed by office accommodation from the mid-1960s, we consider the potential for significant ground contamination to be low.
- 5.7 The potential source-pathway-receptor linkages to potential historical contamination are assessed in the Preliminary Risk Assessment in Section 12.

### **Unexploded Ordnance (UXO)**

- 5.8 A review of the Bomb Sight website (accessed on 6 May 2021), which provides a World War II bomb census, indicates that a high explosive bomb fell to the west of the North Building between October 7, 1940 and June 6, 1941. The potential for UXO would need to be considered in the event of any redevelopment works.

## 6. Geological Setting

- 6.1 From a review of the British Geological Survey (BGS) Solid & Drift Sheet 255, Beaconsfield at a scale of 1:50,000 contained within the Groundsure Insight Report together with the online GeoIndex, the following geological succession has been identified at the site.

Strata	Description	Approx. Thickness
<b>Boyn Hill Gravel Member (southern portion)</b>	Sand and gravel, with possible lenses of silt, clay or peat.	10m
<b>London Clay Formation</b>	Mainly comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.	>100m

- 6.2 The BGS do not map any artificial deposits across the site. However, given the previous development at the site, some Made Ground deposits are anticipated to be present.

### Structural Geology

- 6.3 The BGS map does not indicate the presence of any geological faults within 1km of the site.

### Ground Stability Hazards

- 6.4 The Groundsure Insight Report indicated that the underlying geological conditions have been classified as follows:

Potential Geological Hazard	Risk Rating
Shrinking or Swelling Clay Ground Stability	Low
Running Sand Ground Stability	Very Low
Compressible Ground Stability	Negligible
Collapsible Ground Stability	Very Low
Landslide Ground Stability	Very Low
Ground Dissolution Stability	Negligible

- 6.5 The Groundsure Insight Report does not identify the presence of any natural cavities on site or within 500m of the property.

## Mineral Extraction

- 6.6 According to the British Geological Survey, no evidence of surface mineral extraction or man-made cavities have been identified on the property or within 250m.

## Mining

- 6.7 The property is not located within an area that is affected by coal mining.

## Radon

- 6.8 The property is in a lower probability radon area as less than 1% of homes are above the Residential Action Level of 200Bq/m<sup>3</sup>. No radon protective measures would be necessary in the construction of new dwellings or extensions.

## Previous Site Investigations

- 6.9 No previous ground investigation reports are available for the site.
- 6.10 However, we have been provided with a Phase I Environmental Desk Study, undertaken by WSP Environmental Ltd in June 2011 (Ref: 23677). The report concluded that in the absence of any identified potentially significant contamination sources on the subject site or within the surrounding area, no potentially significant pollutant linkages were identified. Therefore, based on the information contained in this report and with due regard to the continuation of the current commercial use, it was the opinion of WSPE that the site represents a low risk with respect to contaminated land liability issues.
- 6.11 In addition, we have reviewed a copy of a limited Phase 2 Geotechnical Site Investigation Report undertaken by Soil Consultants, 18 November 1998 (Ref.2600/SCW). The report was undertaken ahead of the construction of the North Building and comprised the drilling of 11no. boreholes to depths between 4.5m and 30m.
- 6.12 The geological conditions encountered were as follows:
- Made Ground Deposits, ranging from 0.26m to 2.5m thickness, comprising turf/topsoil with soft to firm brown clay with gravel and brick fragments;
  - Head Deposits, ranging from 0.7m to 2.4m thickness, comprising firm green brown clay with occasional gravel (north eastern area only); and

- London Clay, thickness not fully encountered at 30m, comprising firm to stiff fissured clay with upper weathered horizon locally desiccated near mature trees.

6.13 In summary, no ground contamination testing was undertaken as part of this assessment as the primary objective was to assess geotechnical characteristics. The report concluded that the new building was to be built on CFA piled foundations.

6.14 No reliance is provided on this information which is included for information purposes only.

### **British Geological Survey Online Borehole Records**

6.15 We have undertaken a search of the British Geological Survey online database for historical borehole records. There are no historical borehole records located on or close to the site.

## 7. Hydrogeology

### Aquifer Designation

- 7.1 According to the Groundsure Insight Report, the following aquifer designations are assigned to the geological units beneath the site.

Geological Unit	Aquifer Designation
<b>Boyn Hill Gravel Member (southern portion)</b>	Secondary A Aquifer with permeable layers capable of supporting water supplies and base flow to rivers on a local scale.
<b>London Clay Formation</b>	Unproductive Strata with low permeability and have negligible significance for water supply or for the supply of base flow to streams and rivers.

- 7.2 Regional groundwater flow is considered to be to the south east towards the River Thames. The Water Framework Classification for the groundwater in the Lower Thames Gravels is recorded as having a poor quantitative rating in 2019 and a good chemical rating leading to an overall poor water quality rating.
- 7.3 The Environment Agency's Groundwater Vulnerability maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties of the local area.
- 7.4 The site is shown to be located in an area where the superficial deposits have a medium groundwater vulnerability, which means that groundwater resources have some natural protection and there is a medium pollution risk should spillages occur at the surface. Good practice pollution prevention measures should be used so that activities do not cause groundwater pollution.
- 7.5 The site is shown to be located in area of unproductive strata and as such surface pollutants are unlikely to represent a risk to groundwater due to the low permeability of the deposits and the protection which they provide to any aquifers that may be present beneath. However, water run-off from these areas may represent a risk to surface water or adjacent groundwaters.

### Groundwater Source Protection Zone

- 7.6 The site is not located within a Groundwater Source Protection Zone.

## **Groundwater Abstractions**

- 7.7 The Groundsure Insight Report does not identify any groundwater abstractions authorised by the Environment Agency on site or within 250m of the property.

## 8. Hydrology and Flood Risk

### Hydrology

- 8.1 The closest surface watercourse is a small ditch located just beyond the north eastern boundary. The Yeading Brook is located approximately 800m to the east of the site and is a tributary of the River Thames. The River Thames is located approximately 7km to the south east.
- 8.2 The Yeading Brook is indicated to have had consistently moderate ecological quality between 2013 and 2019, with the chemical quality improved from failing to good between 2013 and 2016 and reducing to failing again in 2019. The overall classification under the Water Framework Directive is moderate.

### Culverted Watercourses

- 8.3 We are unaware of any culverted watercourses being present at the property. Should further clarification on this point be required, it would be necessary to undertake a review of the site's drainage plans, which may lead to an intrusive drainage survey being required.

### Surface Water Abstractions

- 8.4 The Groundsure Insight Report does not identify any surface water abstractions authorised by the Environment Agency on site or within 250m of the property.

### Flood Risk

- 8.5 The Environment Agency's Flood Map for Planning and Flood Risk Maps indicate the following information for the site:

Flood Zone	Fluvial and Coastal Flood Risk Rating
Flood Zone 1	The Environment Agency risk rating at this location means that the site is at 'very low' risk of flooding with an annual probability of river or sea flooding of less than 1 in 1,000. This takes into account the effect of any flood defences that may be in this area. However, whilst flood defences reduce the risk they do not completely stop the chance of flooding and they can overtop or fail.

- 8.6 The Environment Agency Surface Water Flood Map indicates that the majority of the site is at 'very low' risk of surface water flooding, with an annual chance of flooding of less than 1 in 1,000.

- 8.7 There are a number of localised areas that are identified at 'high' risk of surface water flooding with an annual chance of flooding of greater than 1 in 30. These are located in the rear service yard of the North Building, the western side of the car park and the western elevation and courtyard of the South Building. The area next to the gate house off Hayes End Road is also noted to be at high risk. In general, these areas of high risk correlate to topographically low areas where water can collect after heavy rainfall.
- 8.8 In addition, there are a number of areas that are identified as having a 'low' risk of surface water flooding, with an annual chance of flooding between 1 in 1,000 and 1 in 100 to 'medium' risk of surface water flooding with an annual chance of flooding between 1 in 100 and 1 in 30. These areas include the southern elevation of the chiller compound, the northern and eastern elevations of the Central Building and the section of the estate road that leads to the South Building.
- 8.9 Off-site surface water flooding is indicated at the junction of the site exit with Hayes End Road and also the entrance to the east where the exit meets Park Lane. Should flooding occur, access and egress into the site may be affected for a period. It is important to note that surface water flooding can be difficult to predict, much more so than river or sea flooding, as it is hard to forecast exactly where or how much rain will fall in any storm.
- 8.10 From a review of the Groundwater Flooding data contained in the Groundsure Insight Report simulated by Ambiental Risk Analytics and based on the anticipated geological conditions of the site, there is a low risk of groundwater flooding. This is based on a 1 in 100 year return period using the 5m Digital Terrain Model for topographical surface levels.
- 8.11 However, groundwater is known to ingress into the basements of the South Building and Central Building and sump pumps are installed to address this.

### **Flood Risk Limitations**

- 8.12 It is important to note that the above comments are based on the available desk top flood risk information for Main Rivers and flooding can occur from smaller ordinary watercourses that are not mapped by the regulatory bodies.
- 8.13 Flooding can also occur through other mechanisms such as insufficient drainage capacity and breach of water storage infrastructure, such as reservoirs. For the avoidance of doubt, these forms of flooding have not been specifically assessed as they fall outside of the scope of this Environmental Report.
- 8.14 This report does not constitute a Flood Risk Assessment.

## 9. Regulatory Database Entries

- 9.1 We have reviewed the Groundsure Insight Report to assess if there are any relevant entries that may impact the property. These entries are summarised below:

### **Discharge Consents**

- 9.2 The Groundsure Insight Report does not identify any licensed surface water discharge consents authorised by the Environment Agency on site or within 250m of the property.

### **Environmental Permits (Part A(1), Part A(2) and Part B Installations)**

- 9.3 The Groundsure Insight Report does not identify any of the above environmental permits on site or within 250m of the property.

### **Pollution Incidents**

- 9.4 From a review of the Environment Agency substantiated pollution incidents contained within the Groundsure Insight Report, there are no incidents recorded on site or in the immediate vicinity of the site that are likely to have any significant impact.

### **Waste Management Sites**

- 9.5 The Groundsure Insight Report does not identify any historical or operational landfills on site, or within 250m of the property.
- 9.6 Furthermore, there are no operational waste treatment or transfer facilities located within a 250m radius of the site.

### **Hazardous Substances (COMAH etc)**

- 9.7 Industrial operations that involve the storage and use of significant quantities of hazardous substances are regulated by the Local Authority, Environment Agency and Health and Safety Executive.
- 9.8 From a review of the HSE Planning Advice Web App, site does not currently lie within the consultation distance (CD) of a major hazard site or major accident hazard pipeline.

## **Sensitive Land Uses**

- 9.9 The Groundsure Insight Report identifies that deciduous woodland with Priority Habitat Inventory status encroaches across the north eastern site boundary. In addition, there is potential for some of the trees present on site to be protected by Tree Preservation Orders.

## 10. Environmental Sensitivity

10.1 The environmental sensitivity of the site has been assessed using the information in the above sections and is summarised in the following table.

Attribute	Environmental Sensitivity		
	Low	Medium	High
Aquifer designation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Permeability of aquifer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Groundwater abstractions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groundwater Source Protection Zones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sensitivity of receiving waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface water abstractions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity to human occupation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Presence of Site of Special Scientific Interest	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Areas of Outstanding Natural Beauty	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Local and National Nature Reserves	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of RAMSAR sites	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of Special Protection Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.2 On consideration of the hydrology, geology, hydrogeology and ecological receptors, the site and its surrounding area is considered to be of 'medium' environmental sensitivity. This means that there is potential for contaminants to leach and migrate due to the permeability of the soils and the local environment may be sensitive to the effects of contaminants in the soil and groundwater should they be present.

## 11. Regulatory Enquiries

### London Borough of Hillingdon Council

11.1 We have made regulatory enquiries to Hillingdon Council regarding environmental issues that may impact the future development of the property. Their response is as follows:

- Mapping records from 1800's show the land on which the property is situated was part of Frogmore Farm. Part of the western side of the property was once occupied by a building which is annotated on mapping as "Hayes Park (Private Lunatic Asylum)". The Council's land contamination records do not show any evidence of other past contaminative uses at the site prior to the current development. However, in accordance with the Council's Contaminated Land Inspection Strategy, it is considered land at the property is suitable for its current use, and based on available details the site has not been prioritised for inspection under Part 2A of the Environmental Protection Act (1990).
- The Council's land contamination records do not contain any site specific details of land condition at the property.
- GIS and historic mapping shows evidence of a pond located a short distance from the Southwest corner of the central building at the property. (it is possible the pond may have been infilled or became dry sometime prior to construction of the current building). The Council have no records of landfill, waste management sites or regulated premises (Pollution Prevention and Control Authorisations) at the property.
- The Council does not hold any records of pollution incidents at the property.
- GIS (Epoch\_2\_1888-1915) mapping shows evidence of two locations identified as "historical water" which may be water boreholes. There are no other specific records of private abstraction wells/water supplies on site.

## 12. Preliminary Risk Assessment

12.1 In order to assess the risks associated with the presence of ground contamination, the linkages between the sources and potential receptors need to be established and evaluated. This is in accordance with Part 2A of the Environmental Protection Act (EPA) 1990, which provides a statutory definition of Contaminated Land.

12.2 To fall within this definition it is necessary that, as a result of the condition of the land, substances may be present in, on or under the land such that:

- Significant harm is being caused or there is a significant possibility of such harm being caused; or
- Significant pollution of controlled waters is being, or is likely to be, caused.

### **Risk Exposure**

12.3 In consideration of the above regulatory regime and available information, the overall risk with respect to issues identified on the site has been assessed qualitatively as low, moderate or high. A risk exposure matrix for plausible pollutant linkages for future use is shown below:

Potential Contamination	Pathways	Receptors	Risk Evaluation of Pollutant Linkage
<b>Historical contaminants –</b> <u>On site –</u> Potential for localised hotspots from fuel oil supply tanks, coal bunkers, asbestos etc. during sites use as a Lunatic Asylum and offices	Direct contact / ingestion of contaminated soil	Site Users	<b>Low</b> - The site has been largely in greenfield use since at least the 1860s and since the 1960s as office accommodation. Significant contamination is not considered likely to be present and therefore risk is considered low. In addition, significant sources of contamination from off site areas have not been identified.
		Construction Workers (if redeveloped)	<b>Low</b> - Construction workers are unlikely to be exposed to significant contamination in soil during any future ground works. Localised areas of Made Ground could be present, most likely derived from reworked natural materials and / or inert construction materials.
<u>Off site –</u> Potential for localised areas of unfilled ground e.g. ditches, fuel supply tanks, asbestos, etc.	Inhalation of ground gases / dust / fibres	Site Users	<b>Low</b> - No sources of significant ground gas have been identified therefore, exposure is considered low. <b>Low to Moderate</b> - Asbestos containing materials may remain in the Central and South Buildings. Pre Demolition surveys will be required prior to any refurbishment/demolition work.
		Construction Workers (If redeveloped)	<b>Low</b> - Construction workers are unlikely to be exposed to ground gases during any future ground works given absence of identified sources. <b>Low to Moderate</b> - Asbestos containing materials may remain within fabric of South and Central buildings and refurbishment / pre-demolition surveys will be required prior to any works.
<b>Current contaminants –</b> <u>On site –</u> Storage of diesel in chiller compound, PCBs from electrical substation, asbestos, etc. <u>Off site –</u> No significant sources noted, off site uses are mainly residential.	Direct contact with contaminated soils	Buildings and Services	<b>Low</b> – No significant sources of contamination have been identified that are likely to cause the deterioration of concrete or permeate water supply pipes.
	Plant uptake from soil	Landscaped areas	<b>Low</b> - No evidence of vegetation die back noted.
	Leaching to groundwater	Secondary A Aquifer (southern portion)	<b>Low</b> - No significant sources of contamination noted that would generate leachate.
	Migration in groundwater	Water Abstractions	<b>Low</b> – No groundwater abstractions have been identified locally to the site.

Potential Contamination	Pathways	Receptors	Risk Evaluation of Pollutant Linkage
	Migration in groundwater to watercourse	Small ditch approx. 50m north east	<b>Low</b> - Unlikely given absence of significant sources of contamination. There are no surface water abstractions down hydraulic gradient that may be impacted.
	Surface water runoff		<b>Low</b> - No bulk chemicals noted and any chemicals used in plants rooms or for cleaning are held internally.
	Surface water runoff to adjacent land	Off-site property	<b>Low</b> - No significant current sources of contamination noted, therefore, runoff of contamination onto third party land is unlikely.
	Migration in groundwater to adjacent land		<b>Low</b> - Site and adjacent property have not had a contaminative history and migration of contaminants in groundwater is unlikely.

## 13. Conclusion and Recommendations

- 13.1 The Avison Young Environmental Services Team has completed a Phase 1 Environmental Due Diligence Report for the subject property.
- 13.2 The report has been commissioned to examine the entire Hayes Park site, but as part of this work, we have considered the Hayes Park North site in relation to the Prior Approval application to change the use from office to residential under permitted development rights.
- 13.3 The wider subject site is occupied by three office buildings arranged over basement, ground and two upper floors, known as: North Building (occupied by Pladis and subject to the Prior Approval application), Central Building (vacant) and South Building (vacant). A compound containing plant rooms, above ground fuel tank and a back-up generator is located in the west of the site and a two storey car park is located within the northwest corner. The rest of the site comprises landscaped grounds.
- 13.4 From a review of historical mapping and planning records, we understand that the site was occupied by Hayes Park Lunatic Asylum from at least 1889, until the early 1960s when H.J Heinz constructed an Administration (South Building) and Research buildings (Central Building). We further understand that the 1960s buildings were completely refurbished at the same time as the North Building was constructed in c.2002.
- 13.5 We have not been provided with any Asbestos Register(s) for any of the site buildings. Given the age of North Building (2001) which is subject to the Prior Approval application, we consider that asbestos is unlikely to be present. However, the Central and South Buildings which do not form part of the Prior Approval application were built c.1960s and despite being subject to major refurbishment in c.2002, the potential for asbestos cannot be discounted without further validation. Asbestos demolition/refurbishment survey will be required in the event of any redevelopment work.
- 13.6 Based on our site inspection, no visual evidence of significant ground contamination and/or hazardous processes was noted on any part of the property. There is a large fuel tank located within the chiller compound, however, this was noted to be empty and no staining to the ground surface noted. A further smaller tank is known to be present but this is contained in a secure room with concrete floor and no issues are known. The planning records make reference to the installation of a below ground fuel tank, but no record of this is known.

- 13.7 No evidence of Japanese Knotweed or other invasive plant species were noted, however, this can only be confirmed by a specialist survey.
- 13.8 From information provided, Soil Consultants Ltd completed a limited Phase 2 investigation in 1998 as part of the North Building development. This report was undertaken primarily for geotechnical purposes and no contamination testing was undertaken. The report concluded that the North Building should be founded on CFA piles located in the London Clay.
- 13.9 The site is located in an area where there is a low risk of fluvial / coastal flooding. Localised areas of the site are at risk of surface water flooding as identified on the Environment Agency maps. These correspond to topographically low areas and no issues of surface water flooding are known. Nevertheless, surface water drains should be regularly maintained to prevent surface water flooding in these areas. The basement levels of the Central and South Buildings have the provision of sump pumps to deal with the ingress of groundwater.
- 13.10 Based on our review of information available, we have not identified any material environmental liabilities that would affect the future redevelopment of the property, which includes the conversion of the North Building to residential through the Prior Approval application. In conclusion, we consider the site represents a **Low Environmental Risk** for future use from a ground a contamination or flood risk perspective.
- 13.11 However, we recommend that an intrusive Pre Demolition or Refurbishment Asbestos Survey be undertaken in the event that any significant modification, refurbishment or demolition is undertaken of the Central and South buildings undertake further asbestos survey(s) to ensure compliance with the Control of Asbestos Regulations 2012.
- 13.12 In the event of redevelopment an intrusive ground investigation would be required.
- 13.13 Definitions and Reservations are provided in **Appendix IV**.

# Appendix I

## Avison Young Standard Terms of Appointment

# Avison Young (UK) Limited Standard Terms of Appointment

## PARTIES

- (1) Avison Young (UK) Limited incorporated and registered in England and Wales with company number 6382509 whose registered office is at 3 Brindleyplace, Birmingham, B1 2JB, United Kingdom (**Avison Young**).
- (2) The Client named in the Letter of Appointment (**Client**)

### 1. Interpretation

The following definitions and rules of interpretation apply in this appointment:

**Additional Services:** any additional services which Avison Young agrees to provide in accordance with clause 6.

**Fee:** the fees for the Services and any Additional Services (if any) as set out in the Letter of Appointment.

**Force Majeure Event:** means any circumstance not within a party's reasonable control including, without limitation: acts of God, flood, drought, earthquake or other natural disaster; epidemic or pandemic; terrorist attack, civil war, civil commotion or riots, war, threat of or preparation for war, armed conflict, imposition of sanctions, embargo, or breaking off of diplomatic relations; nuclear, chemical or biological contamination or sonic boom; any law or any action taken by a government or public authority, including without limitation imposing an export or import restriction, quota or prohibition, or failing to grant a necessary licence or consent; collapse of buildings, fire, explosion or accident; any labour or trade dispute, strikes, industrial action or lockouts; any interruption or failure of utility service

**Insolvent:** a party is insolvent if: a party is making a voluntary arrangement with its creditors, entering administration or going into liquidation; or a security holder taking possession, or a receiver or an administrative receiver being appointed over all or any part of the property or the assets of the party; or any other similar or analogous event in another jurisdiction.

**Letter of Appointment:** the letter by Avison Young which sets out the details of the Client and the Services and the Fee together with other details relating to the Service which may be appropriate to this appointment.

**Material:** all designs, drawings, models, plans, specifications, design details, photographs, brochures, reports, notes of meetings, CAD materials, calculations, data, databases, schedules, programmes, bills of quantities, budgets and any other materials provided in connection with the Services and all updates, amendments, additions and revisions to them and any works, designs, or inventions incorporated or referred to in them for any purpose relating to the Services.

**Services:** the Services set out in the Letter of Appointment and the Additional Services (if any).

**VAT:** value added tax imposed by the Value Added Tax Act 1994, or any similar tax in addition to or replacing it from time to time.

### 2. Appointment

- 2.1. The Client appoints Avison Young to carry out the Services, subject to the terms of this appointment.
- 2.2. This appointment takes effect from the date when Avison Young begins performing the Services, regardless of the date of this appointment.
- 2.3. This appointment consists of these Avison Young Terms and the Letter of Appointment.
- 2.4. Avison Young shall deem the Client to have accepted the terms of this appointment (including the details set out in the Letter of Appointment) within 30 days of their issue unless the Client has notified Avison Young otherwise in writing.

### 3. Consultant's Obligations

- 3.1. Avison Young warrants and undertakes that it shall comply with the terms of this appointment.
- 3.2. Avison Young warrants and undertakes that it shall act with reasonable skill and care:
  - 3.2.1. when performing the Services;
  - 3.2.2. to comply with any Act of Parliament, any instrument, rule or order made under any Act of Parliament; and any regulation or bye-law of any local authority, statutory undertaker or public or private utility or undertaking that has any jurisdiction over the Services or with those systems or property the Services is or will be connected.

# Avison Young (UK) Limited Standard Terms of Appointment

## 4. Client Obligations

- 4.1. The Client undertakes promptly to provide Avison Young with all information, assistance and materials that Avison Young may request from time to time to facilitate the proper and timely performance of the Services. The Client warrants that all information provided by it to Avison Young will be accurate and complete, and that it is entitled to provide the same to Avison Young for its use without recourse to any third party.
- 4.2. The Client undertakes promptly to carry out all such actions and provide all such resources (if any) as may be required of the Client in the Letter of Appointment.
- 4.3. The Services will be provided at Avison Young's premises when the nature of the work permits. If any of Avison Young's personnel are to perform any Services at the Client's premises, the Client shall ensure that such personnel are allowed access to such premises upon reasonable prior notice during normal business hours and shall take full responsibility for the safety and security of Avison Young's personnel whilst at such premises.

## 5. Remuneration

- 5.1. The payment terms set out in clauses 5.5 to 5.7 shall apply to all Services not covered under the Housing Grants, Construction and Regeneration Act 1996. The payments terms set out in clauses 5.8 to 5.14 apply to Services which are covered under the Housing Grants, Construction and Regeneration Act 1996.
- 5.2. The Client shall pay the Fee, together with any reasonable expenses and disbursements, which shall be Avison Young's entire remuneration under this appointment.
- 5.3. The Client shall pay Avison Young any VAT properly chargeable on the Services. Any amount expressed as payable to Avison Young under this appointment is exclusive of VAT unless stated otherwise.
- 5.4. The Fee shall be calculated and paid in instalments in accordance with the dates set out in the Letter of Appointment or if not set out, the Fee shall be paid at intervals of not less than one month, beginning one month after Avison Young begins performing the Services.

To the extent that the Fee is not set out in the Letter of Appointment, Avison Young will be entitled to charge a Fee based on its current hourly rates (which are available on request), and on the number of hours it has worked on the matter.

- 5.5. Avison Young shall submit to the Client an invoice for each instalment of the Fee, together with any supporting documents that are reasonably necessary to check the invoice. The invoice and supporting documents (if any) shall specify the sum that Avison Young considers will become due on the relevant instalment date.
- 5.6. Payment shall be made within 30 days of the date of the Invoice.
- 5.7. Avison Young reserves the right to charge interest and debt recovery costs in respect of any amounts not paid in accordance with clause 5.6. Interest will be calculated in accordance with the "Late Payment of Commercial Debts (Interest) Act 1998".
- 5.8. Avison Young shall submit to the Client an invoice for each instalment of the Fee, together with any supporting documents that are reasonably necessary to check the invoice. The invoice and supporting documents (if any) shall specify the sum that Avison Young considers will become due on the payment due date in respect of the instalment of the Fee, and the basis on which that sum is calculated.
- 5.9. Payment shall be due on the date Avison Young submits each invoice (**payment due date**).
- 5.10. No later than five days after the payment due date, the Client shall notify Avison Young of the sum that the Client considers to have been due at the payment due date in respect of the payment and the basis on which that sum is calculated.
- 5.11. The **final date for payment** shall be 30 days after the payment due date.
- 5.12. Unless the Client has served a notice under clause 5.13, it shall pay Avison Young the sum referred to in the Client's notice under clause 5.10 (or, if the Client has not served notice under clause 5.10, the sum in the invoice referred to in clause 5.8) (the **notified sum**) on or before the final date for payment.
- 5.13. Not less than five days before the final date for payment (the **prescribed period**), the Client may give Avison Young notice that it intends to pay less than the notified sum (a pay less notice). Any pay less notice shall specify:

# Avison Young (UK) Limited Standard Terms of Appointment

5.13.1. the sum that the Client considers to be due on the payment due date; and

5.13.2. the basis on which that sum is calculated.

5.14. If the Client fails to pay an amount due to Avison Young by the final date for payment and fails to give a pay less notice, then the Client shall pay interest calculated in accordance with the "Late Payment of Commercial Debts (Interest) Act 1998".

## 6. Additional Services

6.1. Each party shall notify the other as soon as reasonably practicable if it becomes apparent that Additional Services are likely to be required, and such notice will identify the required services.

6.2. Additional Services may arise as a result of the following:

6.2.1. a change in the scope, size, complexity or duration of the Services;

6.2.2. any other changes to the Services as set out in the Letter of Appointment;

6.2.3. any material delay or disruption to the Services; or

6.2.4. any other cause outside Avison Young's reasonable control and which it could not reasonably have foreseen at the date of this appointment.

6.3. If the Client provides a notice under clause 6.1, then as soon as reasonably practicable after receiving the notice, Avison Young shall provide the Client with a written estimate of the change to the Fee in respect of the Additional Services. If Avison Young provides a notice under clause 6.1, Avison Young shall provide the Client with a written estimate of the change to the Fee in respect of the Additional Services at the same time it provides the notice.

6.4. The Fee for the Additional Services shall be calculated by agreement between the parties.

6.5. At the Client's discretion, acting reasonably, it may instruct Avison Young to carry out the Additional Services. For the avoidance of doubt, Avison Young shall only perform Additional Services on receipt of a written instruction to do so by the Client.

6.6. Any Fee payable by the Client in respect of Additional Services shall be included in the next invoice following performance of the Additional Services.

## 7. Limitation of Liability – PLEASE READ THIS SECTION CAREFULLY

7.1. Without affecting any other limitation in this appointment, Avison Young's liability under or in connection with this appointment shall be limited to £5,000,000 in total for all claims arising. This limit shall apply however that liability arises including a liability arising by breach of contract, arising by tort (including the tort of negligence) or arising by breach of statutory duty. Nothing in this appointment shall exclude or limit Avison Young's liability for:

7.1.1. death or personal injury caused by Avison Young's negligence; or

7.1.2. fraud or fraudulent misrepresentation.

7.2. None of Avison Young's employees, directors or consultants individually has a contract with the Client or owes the Client a duty of care or personal responsibility. The Client agrees that it will not bring any claim against any such individuals personally in connection with the Services.

7.3. If the Client suffers loss as a result of Avison Young's breach of contract or negligence, Avison Young's liability shall be limited to a just and equitable proportion of the Client's loss having regard to the extent of responsibility of any other party. Avison Young's liability shall not increase by reason of a shortfall in recovery from any other party, whether that shortfall arises from an appointment between the Client and them, difficulty in enforcement, or any other cause.

7.4. Avison Young shall have no liability to the Client under this appointment in respect of loss of profits, loss of revenue or business, loss of goodwill or reputation or any other indirect or consequential losses.

7.5. The Services and any Material produced in connection with the Services are provided for the Client's benefit alone and solely for the purposes of the instruction to which it relates. The Services or any Material may not, without Avison Young's written consent, be used or relied upon by any third party, even if that party pays all or part of Avison Young's Fees, or is permitted to see a copy of the Materials Avison Young create. If Avison Young provides written consent for a third party to rely on the Services or the Materials, it may be subject to a further fee, and any such third party will be deemed to have accepted the terms and conditions set out in this appointment.

# Avison Young (UK) Limited Standard Terms of Appointment

7.6. Avison Young shall not be liable for any loss or damage suffered or incurred by the Client arising from Avison Young's delay in performing or failure to perform the Services and/or any of its obligations under this appointment where such delay or failure results from a Force Majeure Event.

## 8. Suspension

- 8.1. The Client may, at any time, suspend performance of all or part of the Services by giving written notice to Avison Young. Subject to clause 9.1, Avison Young shall resume performance of the Services as soon as reasonably practicable after receiving a written notice to do so from the Client.
- 8.2. Avison Young may suspend the performance of any or all of its Services and other obligations under this appointment by giving not less than seven days' notice to the Client of its intention to do so in the event that the Client fails to pay an invoice in accordance with the relevant payment provisions set out in clause 5.
- 8.3. In the event of a suspension in accordance with this appointment, the Client shall pay Avison Young an amount in respect of any costs and expenses reasonably incurred by Avison Young as a result of such suspension.

## 9. Termination

- 9.1. Avison Young may immediately terminate its engagement under this appointment by giving written notice to the Client if:
- 9.1.1. a suspension of the Services in accordance with clause 8.1 continues for a continuous period of six months; and
- 9.1.2. the Client does not instruct Avison Young to resume the Services within 30 days of receiving a written notice from Avison Young requiring it to do so.
- 9.2. Either party may immediately terminate this appointment by giving written notice to the other party if:
- 9.2.1. the other party is in material breach of its obligations under this appointment and fails to remedy that breach within 14 days of receiving written notice requiring it to do so; or
- 9.2.2. the other party becomes Insolvent; or
- 9.2.3. a Force Majeure Event continues for a period of more than 30 days.

9.3. Either party may terminate this appointment at any time for any reason by giving no less than 30 days written notice to the other party.

## 10. Consequences of Termination

- 10.1. On termination the Client shall immediately pay Avison Young:
- 10.1.1. any amount properly due for payment under this appointment at the date of termination; and
- 10.1.2. a fair and reasonable proportion of the next instalment of the Fee, together with any expenses and disbursements, commensurate with the Services properly performed at the date of termination; and
- 10.1.3. any expenses, disbursements or costs necessarily incurred by Avison Young as a direct result of termination (unless the termination arises as a result of Avison Young's default).
- 10.2. Termination of Avison Young's engagement under this appointment shall not affect any rights, remedies, obligations or liabilities of the parties that have accrued up to the date of termination, including the right to claim damages in respect of any breach of this appointment which existed at or before the date of termination.

## 11. Copyright and Intellectual Property

- 11.1. Avison Young owns all intellectual property rights (including copyright) relating to the Material it produces.
- 11.2. On payment of the Fee, Avison Young grants to the Client an irrevocable, non-exclusive, non-terminable, royalty-free licence to copy and make full use of any Material prepared by, or on behalf of, Avison Young for any purpose relating to the project or the property to which the Services relate.
- 11.3. Avison Young shall not be liable for use of the Material for any purpose other than that for which it was prepared and/or provided.
- 11.4. The Client may, at any time (whether before or after completion of the Services, or after termination of Avison Young's engagement under this appointment), request a copy or copies of (some or all of) the Material from Avison Young. On the Client's payment of Avison Young's reasonable charges for providing the copy (or copies), Avison Young shall provide the copy (or copies) to the Client.

# Avison Young (UK) Limited Standard Terms of Appointment

## 12. Confidentiality

- 12.1. Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party or of any member of the group of companies to which the other party belongs, except as permitted by clause 12.2.
- 12.2. Each party may disclose the other party's confidential information:
  - 12.2.1. to its employees, officers, representatives, contractors, sub-contractors or advisers who need to know such information for the purposes of exercising the party's rights or carrying out the party's obligations under or in connection with this appointment. Each party shall ensure that its employees, officers, representatives, contractors, sub-contractors or advisers to whom it discloses the other party's confidential information comply with this clause 12; and
  - 12.2.2. as may be required by law, to a court of competent jurisdiction or any governmental or regulatory authority.
- 12.3. No party shall use any other party's confidential information for any purpose other than to exercise its rights and perform its obligations under or in connection with this appointment.

## 13. Anti-Money Laundering

- 13.1. Avison Young operate an anti-money laundering policy in compliance with the Money Laundering Regulations 2007 and the Money Laundering Regulations 2017, The Proceeds of Crime Act 2002, The Terrorism Act 2000 and subordinate legislation. Avison Young may require the Client to provide information (including proof of identity or income) from time to time to enable Avison Young to verify the Client's identity. For the avoidance of doubt this may require Avison Young to request and retain information relating to the directors and the "beneficial owners" of the Client, as is required under the legislation.
- 13.2. Any failure to provide such information within seven days of such a request shall give Avison Young the right to terminate this appointment in accordance with Clause 9.2.1 of this appointment.

## 14. Bribery Act

- 14.1. In order to Comply with the Bribery Act 2010, either party must inform the other if it becomes aware of any person (employee, agent, intermediary, contractor, private individual, commercial organisation or public official) connected (in any way) with this appointment who has committed an offence under the Bribery Act 2010 (or any equivalent legislation).
- 14.2. Avison Young reserves the right to terminate this appointment in accordance with Clause 9.2.1 should it reasonably believe that a breach or likely breach of the Bribery Act 2010 (or any equivalent legislation) has occurred.

## 15. Data Protection

As a result of Avison Young's relationship with the Client, Avison Young may collect or retain personal data about the Client. If the Client is a company, this may include information about the Client's employees, officers, or shareholders. If the Client is a person, this may include information about the Client's family members. Avison Young will only use such data for the purposes of providing the Services, or for related purposes such as updating Client records, money laundering compliance and other legal and regulatory compliance, and we may need to disclose this information to appropriate persons in relation to such matters. In providing any personal data to Avison Young, the Client confirms that it has informed the individuals concerned and obtained any necessary consent to the transfer to Avison Young and for Avison Young's use of their data for these purposes.

## 16. Professional Indemnity Insurance

- 16.1. Avison Young shall maintain professional indemnity insurance to cover its liabilities arising out of this appointment for a period beginning on the date of this appointment and ending 6 years after the date of completion of the Services provided that such insurance is available at commercially reasonable rates and terms with reputable insurers lawfully carrying on insurance business in the UK.
- 16.2. Whenever the Client reasonably requests, Avison Young shall send the Client a broker letter/certificate to evidence that Avison Young's professional indemnity insurance is in force.

# Avison Young (UK) Limited Standard Terms of Appointment

## 17. Complaints

In the event that the Client has a complaint the Client shall be entitled to have access to the complaints handling procedure maintained by Avison Young which contains a dispute resolution process as required by the Royal Institution of Chartered Surveyors (RICS) rules of conduct (details of which are available from Avison Young on request).

## 18. Unoccupied Premises or Properties

Avison Young accepts no liability or responsibility for the security, maintenance or repair of, or for any damage to any premises or properties to which the Services relate. The Client shall take all necessary action to protect such premises or property and to ensure that they have adequate insurance cover in place.

## 19. Joint and Several Liability

If at any time the Client shall consist of more than one person, the obligations on the Client under this appointment shall be enforceable against each of them on a joint and several basis.

## 20. Assignment and Subcontracting

- 20.1. Neither party shall assign or subcontract its rights or obligations under this appointment without the prior written consent of the other party such consent not to be unreasonably withheld or delayed.
- 20.2. If the Client wishes to instruct Avison Young to use a specific contractor or consultant, Avison Young shall instruct such contractor on the Client's behalf. The Client retains all responsibility for any such contractors or consultants and will undertake all due diligence and investigation in relation to their competences and resources. Avison Young accepts no responsibility or liability for the acts of any consultants or contractors appointed at the Client's request.

## 21. Notice

A notice given to a party under or in connection with this appointment shall be in writing and delivered by hand or by recorded delivery post to the address recorded in the Letter of Appointment or such other address as the party may specify from time to time by written notice to the other.

## 22. Liability Period

Neither party shall commence any legal action against the other under this appointment after six years from the date of completion of the Services.

## 23. Third Party Rights

Except in relation to clause 7.2, a person who is not a party to this appointment shall not have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this appointment.

## 24. Entire Agreement

- 24.1. This appointment constitutes the entire agreement between the parties and supersedes and extinguishes all previous discussions, correspondence, negotiations, drafts, agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.
- 24.2. Each party agrees that in entering into this appointment it does not rely on, and shall have no remedies in respect of, any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this appointment.
- 24.3. Each party agrees that it shall have no claim for innocent or negligent misrepresentation or negligent misstatement based on any statement in this appointment.
- 24.4. No variation to this appointment will be binding unless agreed in writing by both parties.
- 24.5. Nothing in this clause shall limit or exclude any liability for fraud.

## 25. Severance

If any provision or part-provision of this appointment is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this clause shall not affect the validity and enforceability of the rest of this appointment.

# Avison Young (UK) Limited Standard Terms of Appointment

## 26. Non-Solicitation

- 26.1. The Client agrees that both during and for a period of twelve months after the term of this Appointment, the Client shall not (and shall procure that none of its subsidiary or associated companies shall) without the prior written consent of Avison Young:
- 26.1.1. directly or indirectly employ or engage any person who is (or was at any time during the term of this Appointment) a director, member, employee, agent or contractor of Avison Young and with whom the Client has had dealings pursuant to this Appointment (a "relevant person"), or solicit or induce any such relevant person to terminate their employment or engagement with Avison Young;
- 26.1.2. engage or accept services from or otherwise deal with any company, partnership or other entity of which any relevant person is a director, member, employee, agent or contractor.
- 26.2. In granting its consent hereunder, if it agrees to do so, Avison Young shall be entitled to make such consent conditional upon the payment by the Client to Avison Young of a fee equal to 50% of the relevant person's average annual salary or earnings during the preceding 12 months, which equates roughly to the cost to Avison Young of replacing such relevant person.

## 27. Governing Law and Jurisdiction

- 27.1. This appointment and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of England and Wales and each party irrevocably agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with the appointment.
- 27.2. If the Services are provided primarily in Scotland then the appointment and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with Scots law and each party irrevocably agrees that the courts of Scotland shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with the appointment.

# Appendix II

## Historical Maps

#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1868

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1864  
Revised 1868  
Edition 1868  
Copyright N/A  
Levelled N/A

Surveyed 1865  
Revised 1865  
Edition 1868  
Copyright N/A  
Levelled N/A

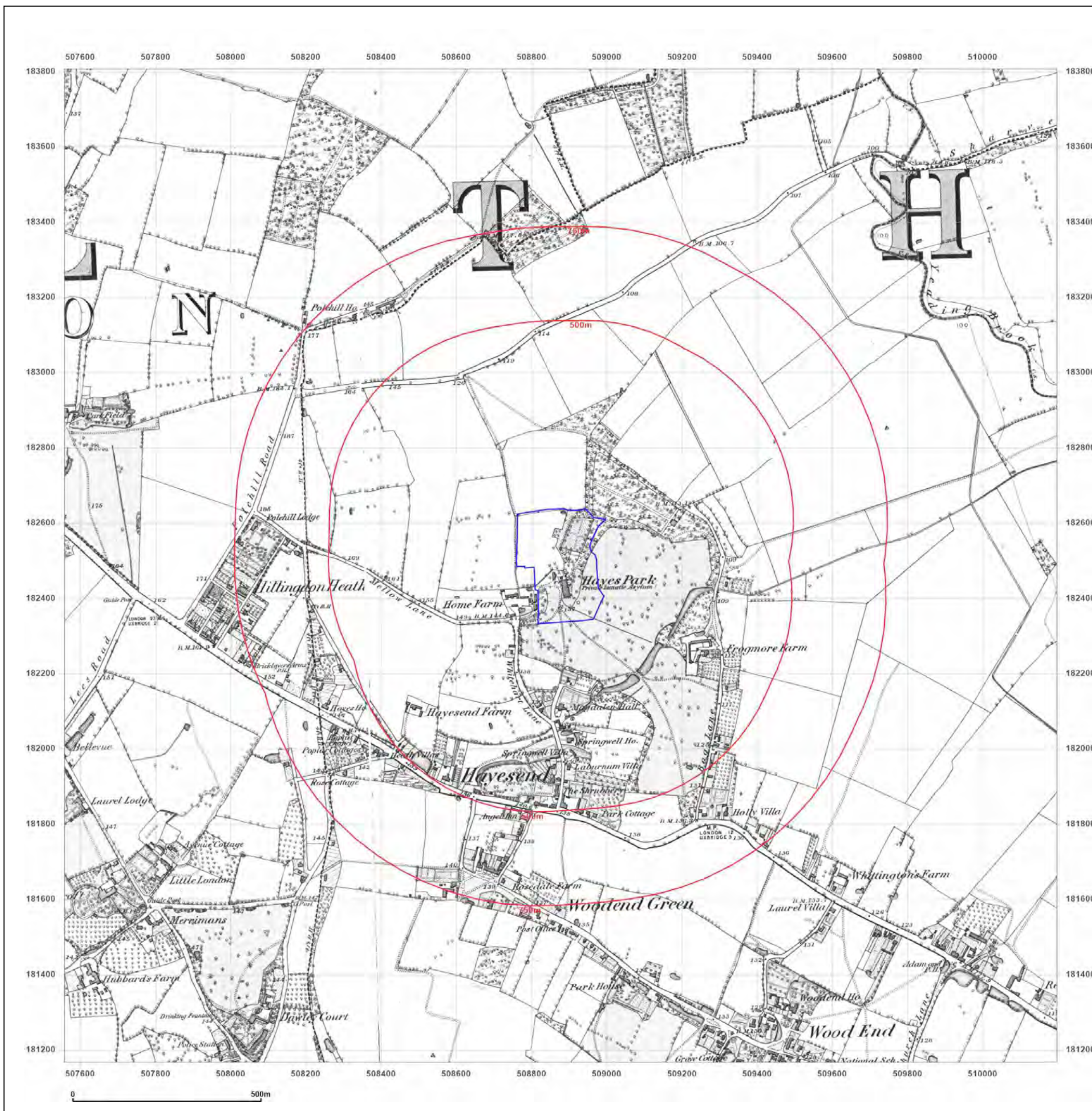


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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1881

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1875  
Revised N/A  
Edition 1881  
Copyright N/A  
Levelled N/A

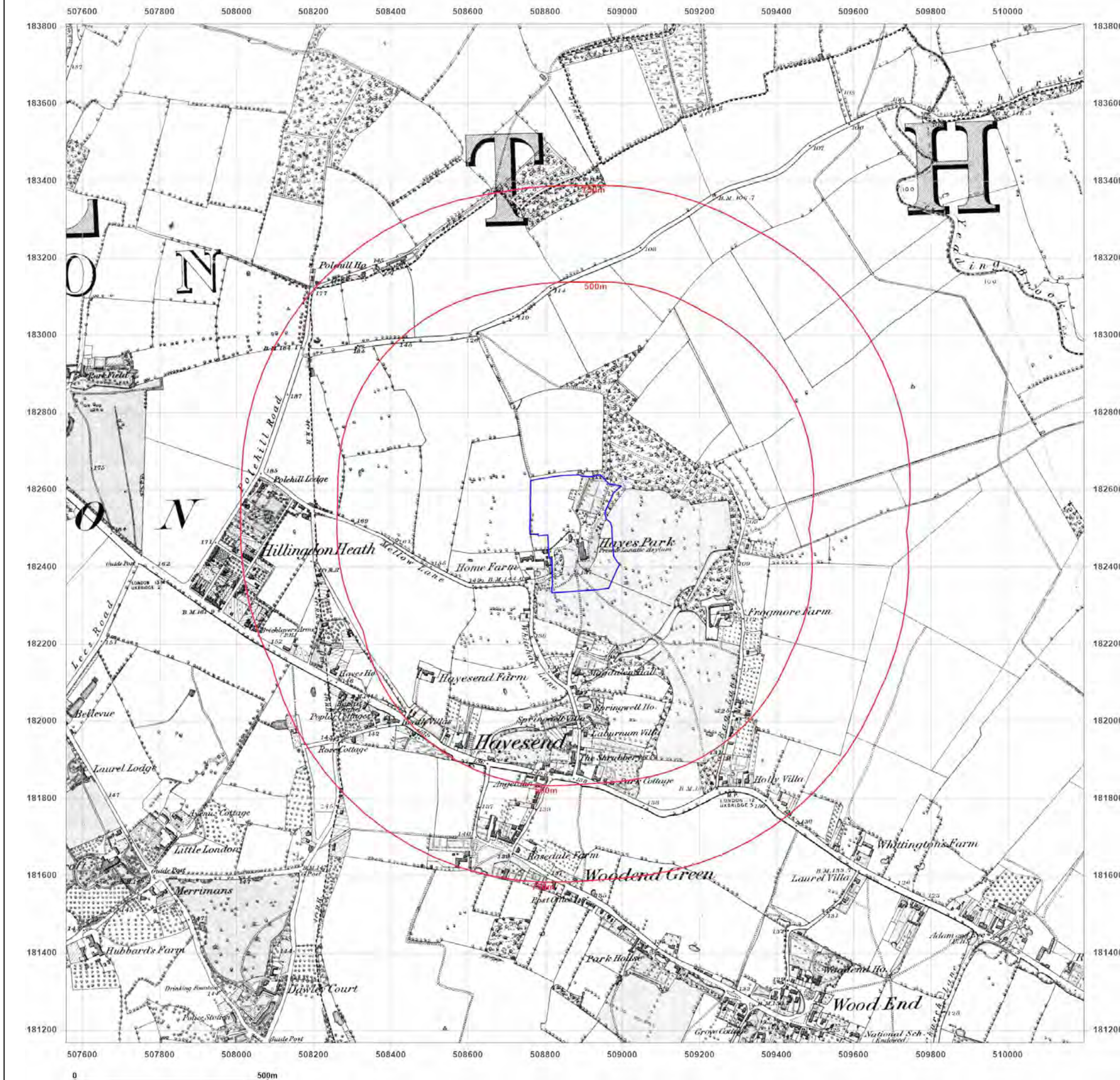


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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1894

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1864 Revised 1894 Edition N/A Copyright N/A Levelled N/A	Surveyed 1865 Revised 1894 Edition N/A Copyright N/A Levelled N/A
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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

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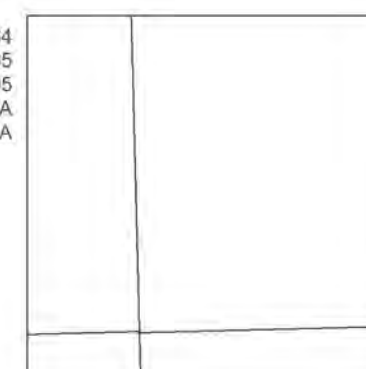
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**Printed at:** 1:10,560



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



Surveyed 1865  
Revised 1894  
Edition 1897  
Copyright N/A  
Levelled N/A

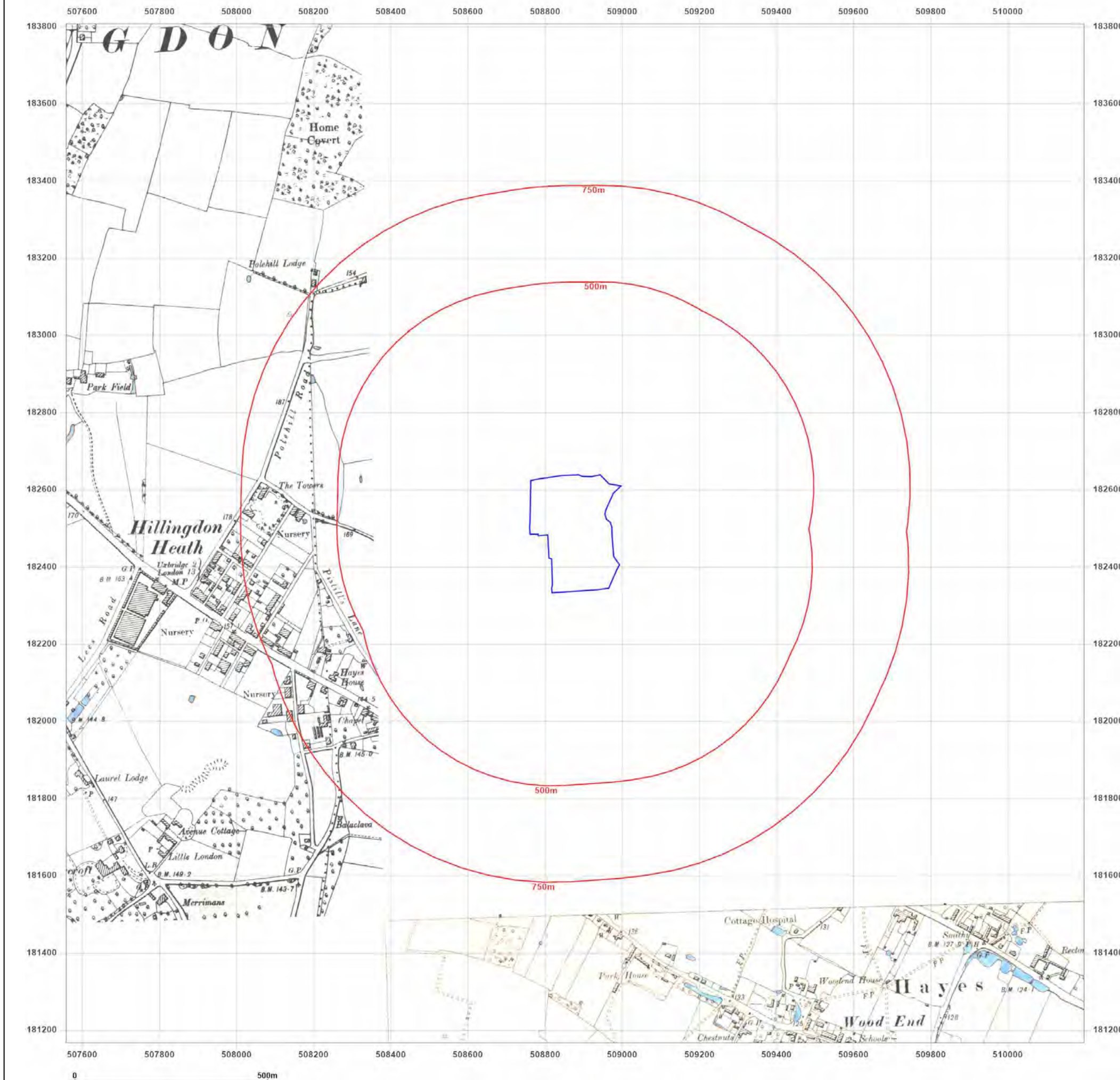


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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1897

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1864  
Revised 1894  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1874  
Revised 1894  
Edition N/A  
Copyright N/A  
Levelled N/A

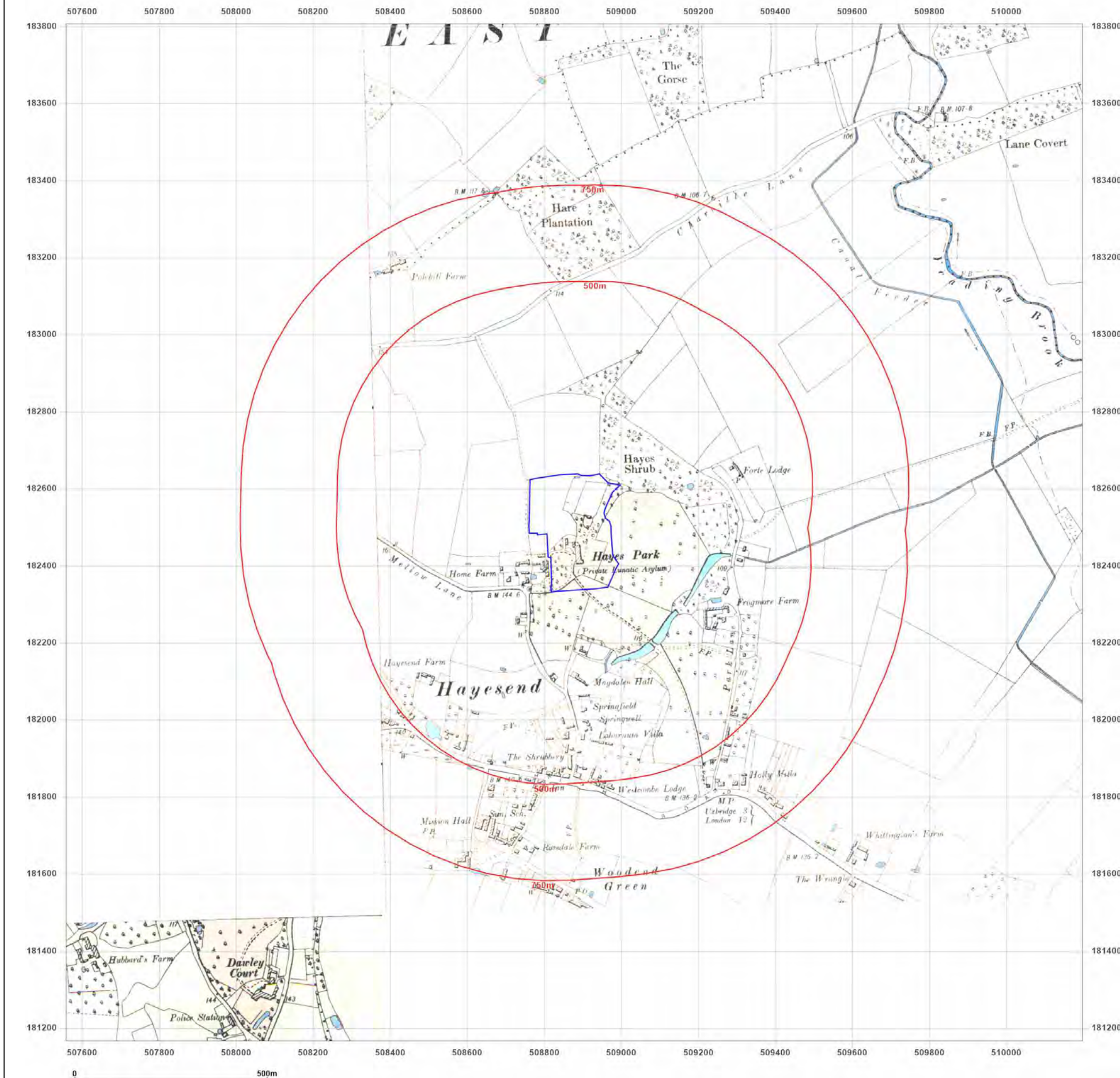


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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

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**Report Ref:** GS-7780589  
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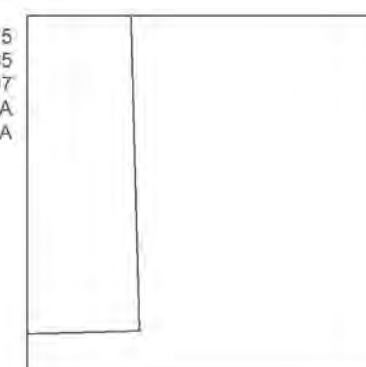
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Surveyed 1875  
Revised 1895  
Edition 1897  
Copyright N/A  
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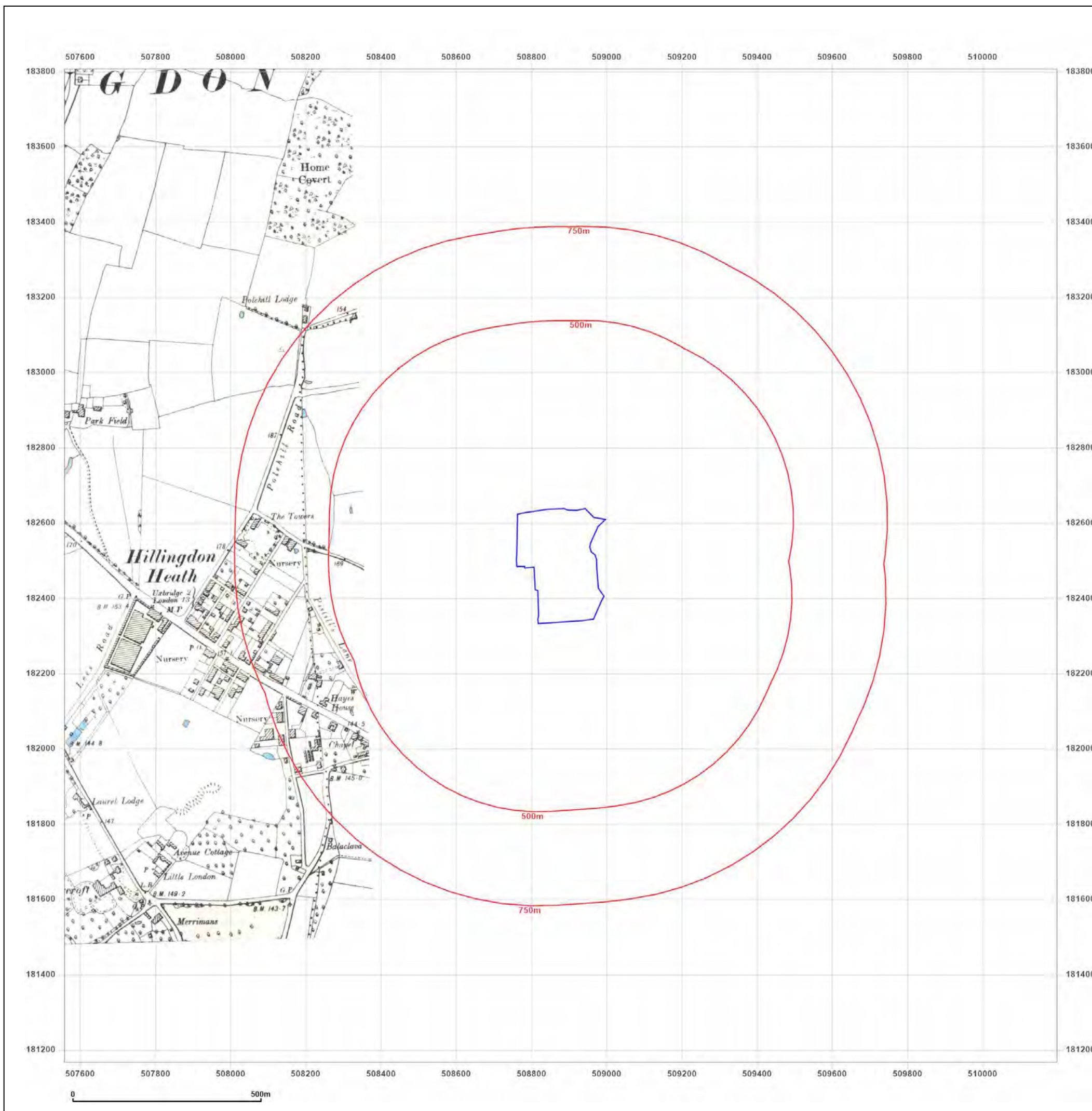


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#### Site Details:

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BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

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**Map Name:** County Series

**Map date:** 1900

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Surveyed 1875  
Revised 1900  
Edition 1900  
Copyright N/A  
Levelled N/A

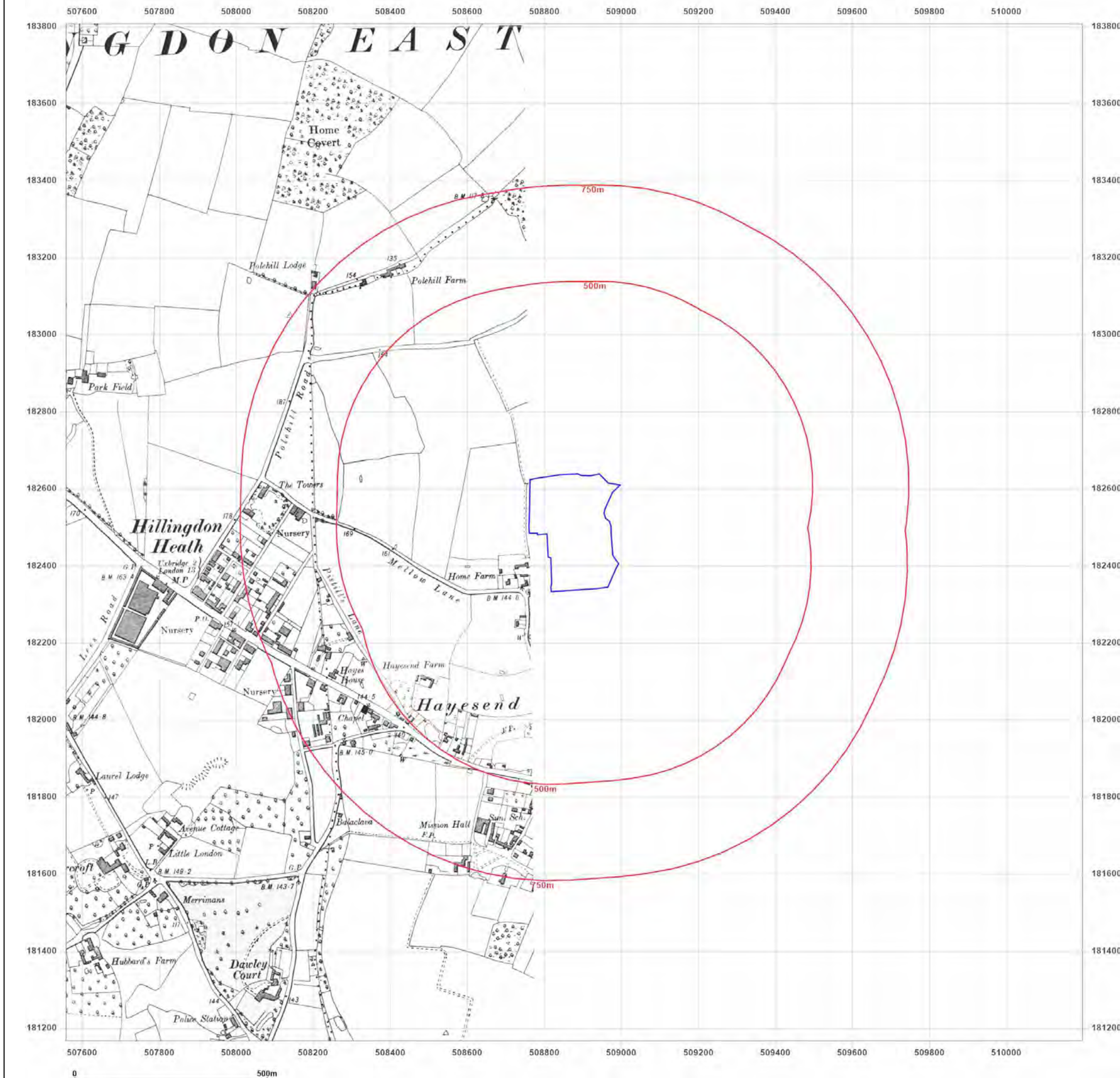


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#### Site Details:

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HAYES, UB4 8FE

**Client Ref:** 461-01  
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**Map Name:** County Series

**Map date:** 1913

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1864  
Revised 1913  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1865  
Revised 1913  
Edition N/A  
Copyright N/A  
Levelled N/A

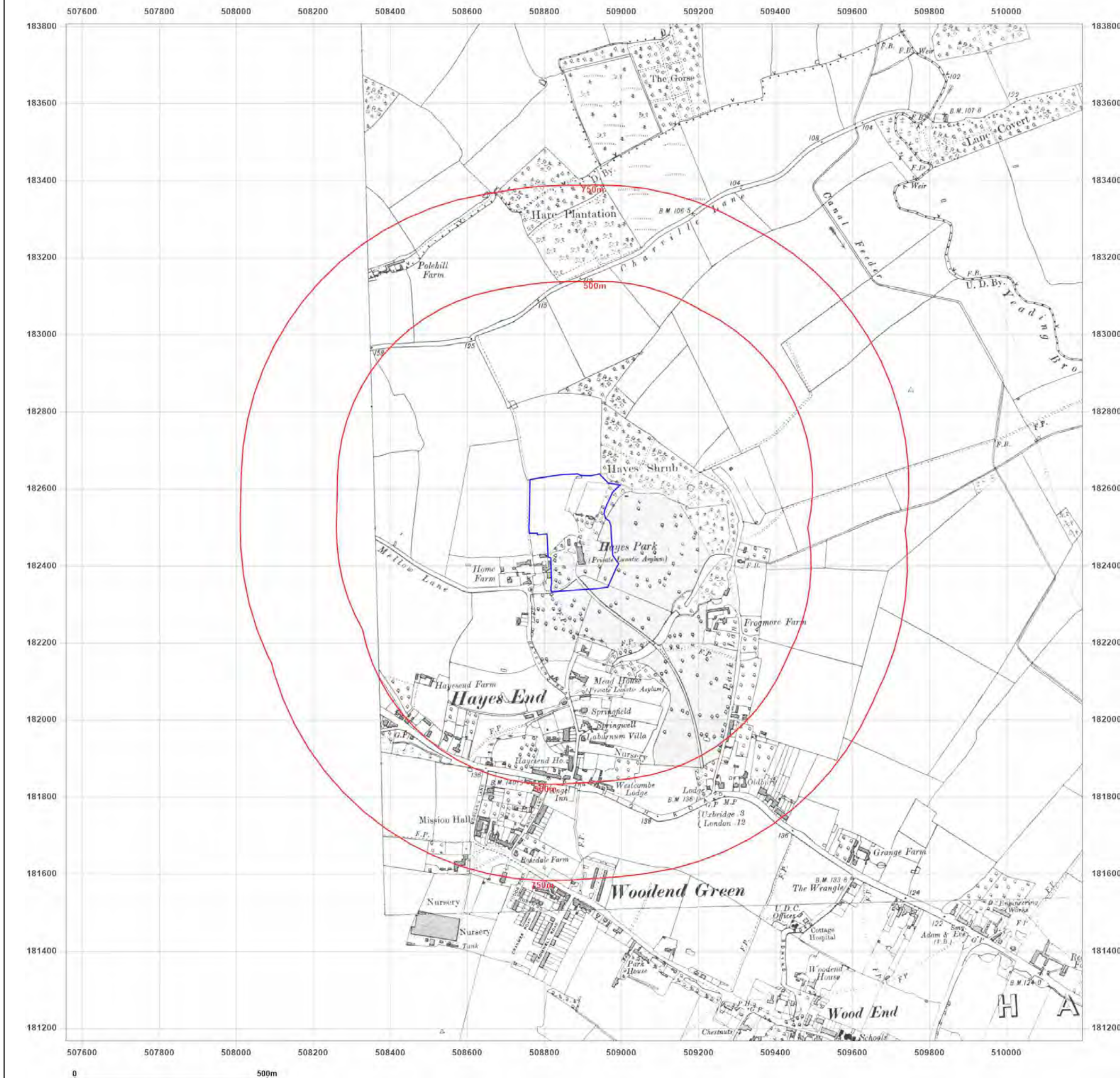


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#### Site Details:

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**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
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**Map Name:** County Series

**Map date:** 1920

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1864  
Revised 1913  
Edition 1920  
Copyright N/A  
Levelled 1913

Surveyed 1865  
Revised 1913  
Edition 1920  
Copyright N/A  
Levelled 1912

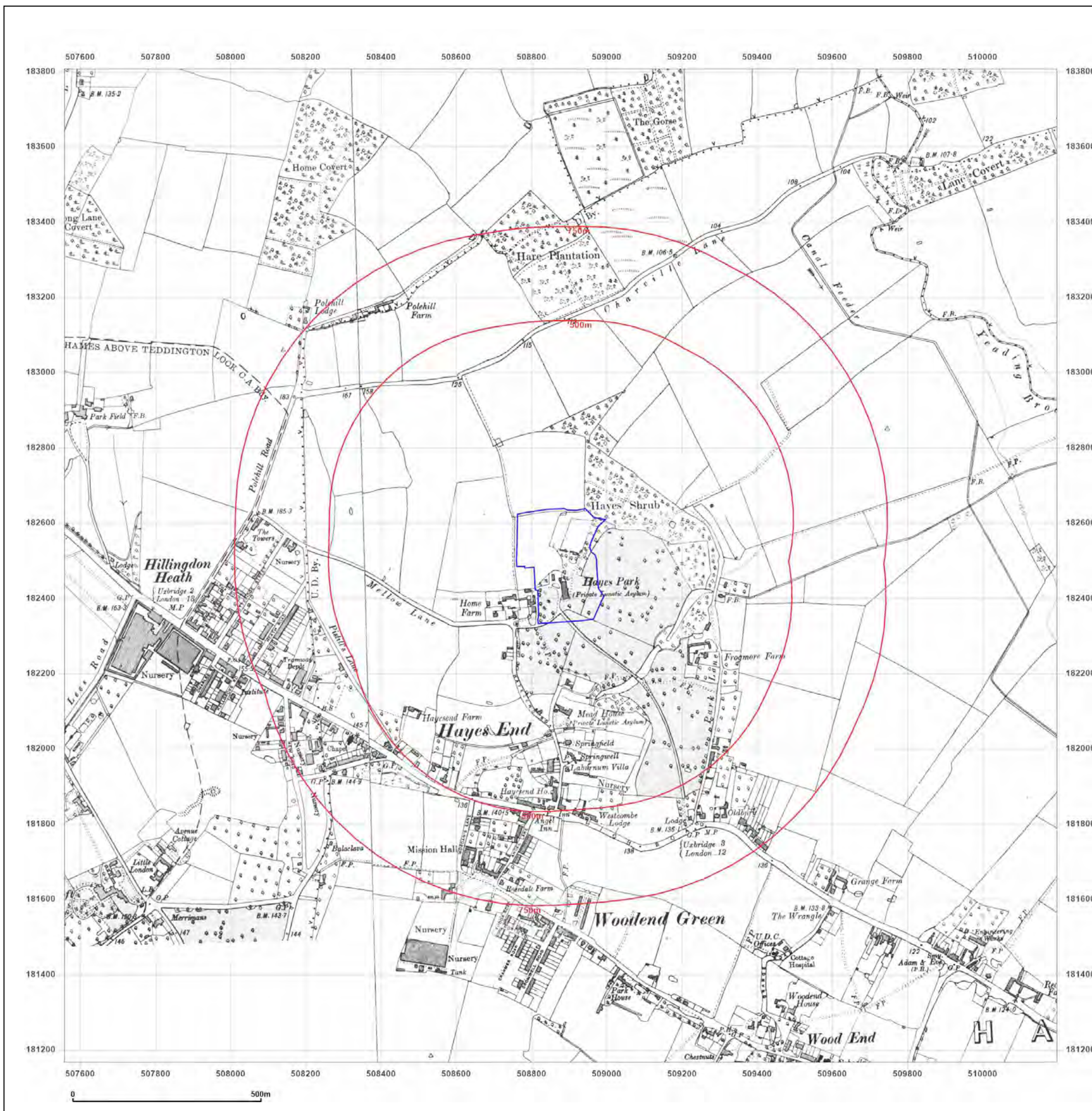


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HAYES, UB4 8FE

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**Map date:** 1932

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Surveyed 1874  
Revised 1932  
Edition 1932  
Copyright N/A  
Levelled 1923

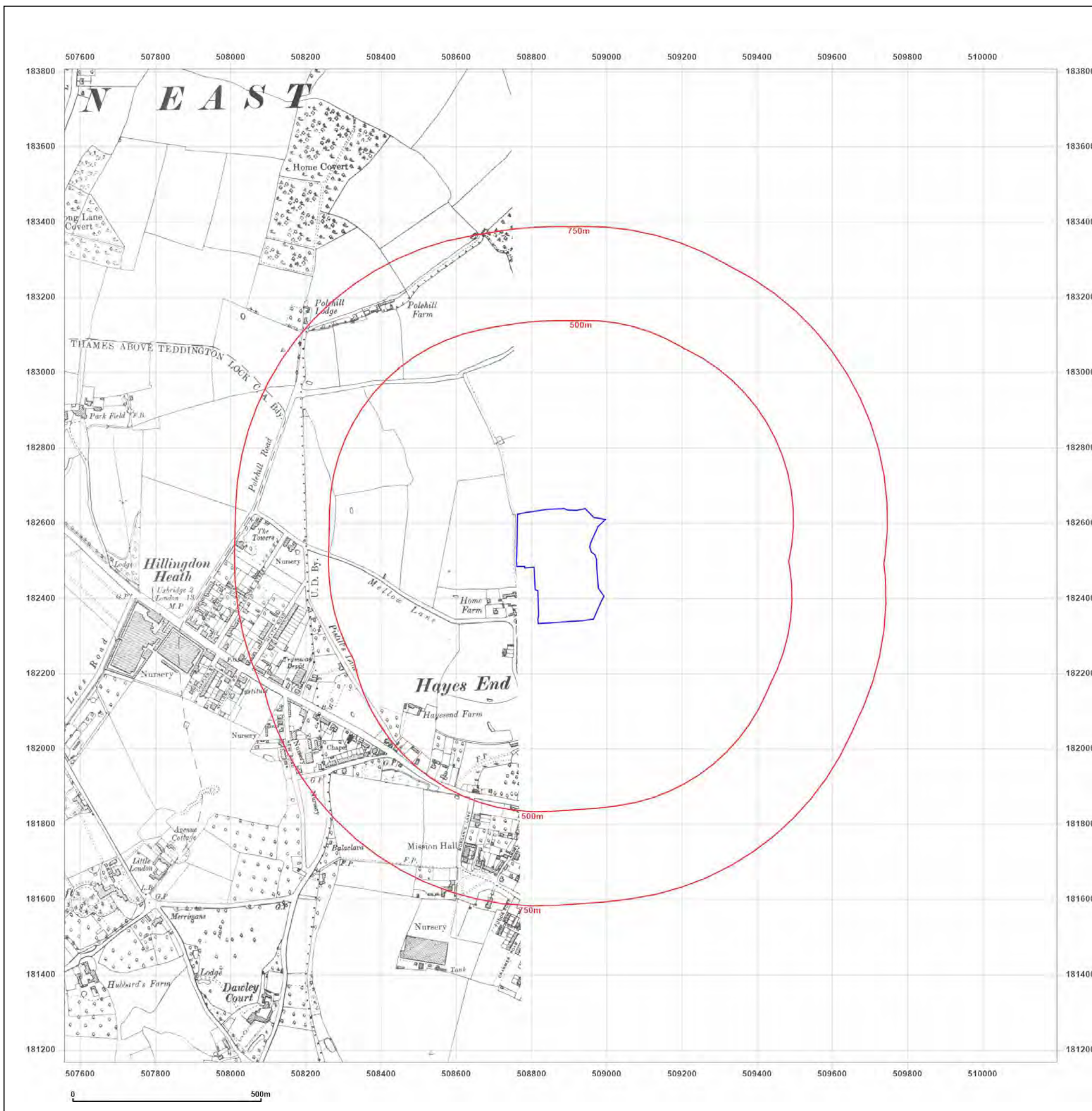


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#### Site Details:

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HAYES, UB4 8FE

**Client Ref:** 461-01  
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**Map Name:** County Series

**Map date:** 1935

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Revised 1935  
Edition N/A  
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Levelled N/A

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Revised 1935  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1864  
Revised 1935  
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Levelled N/A

Surveyed 1865  
Revised 1935  
Edition N/A  
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Levelled N/A

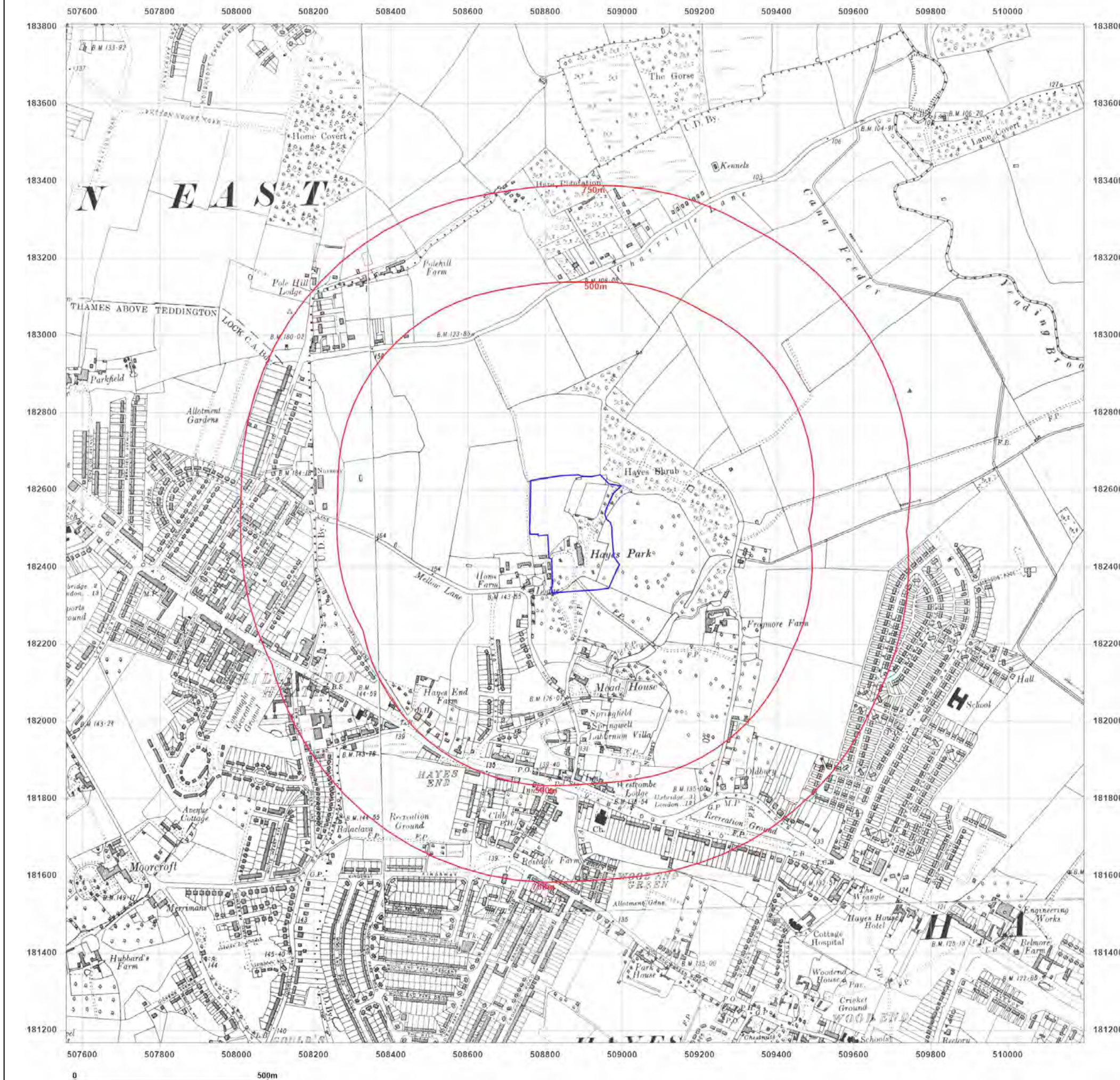


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**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1938

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Edition N/A  
Copyright N/A  
Levelled N/A

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Revised 1938  
Edition 1938  
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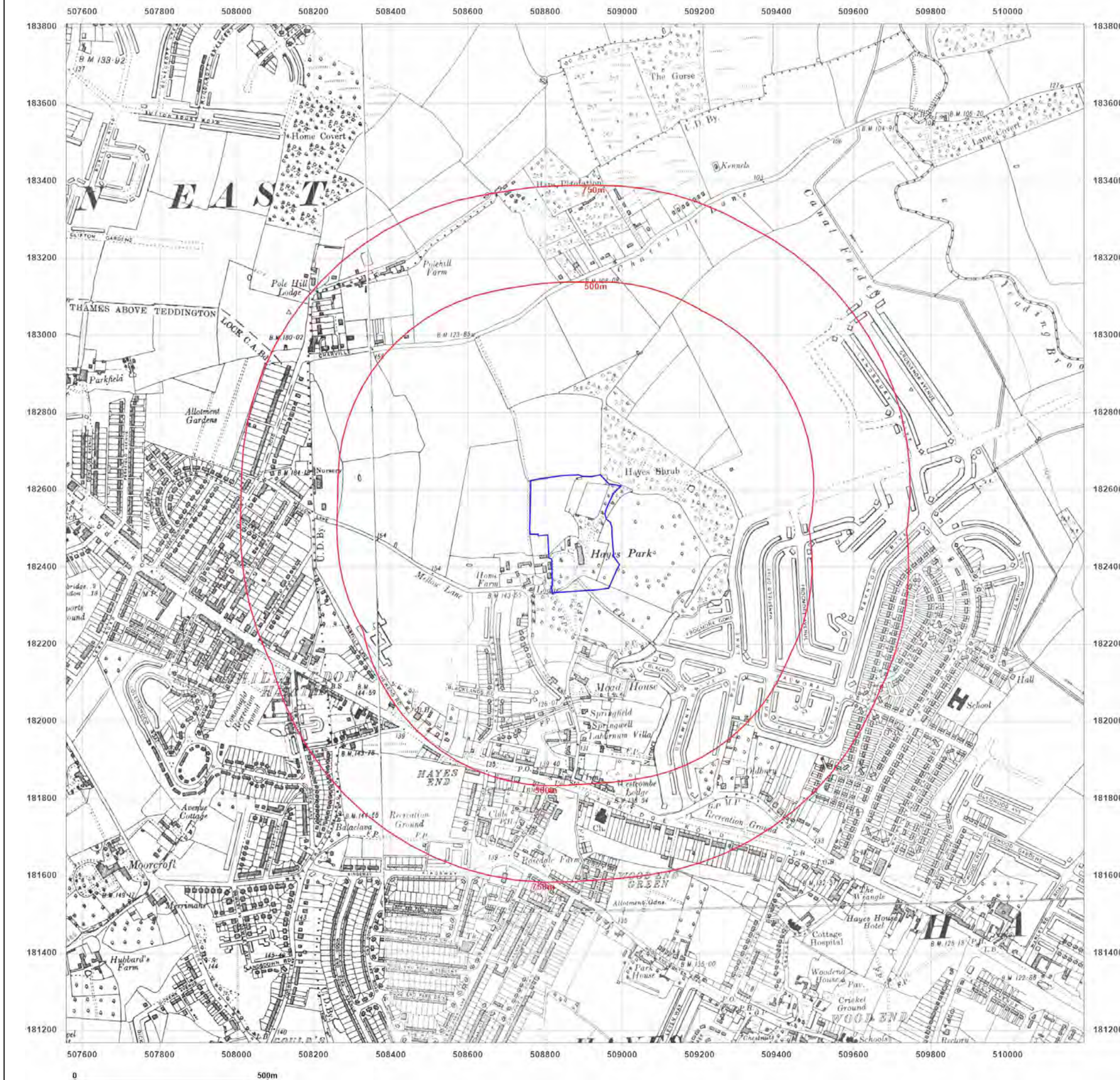


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#### Site Details:

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HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** County Series

**Map date:** 1938

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Copyright N/A  
Levelled N/A

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

Surveyed 1864  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1865  
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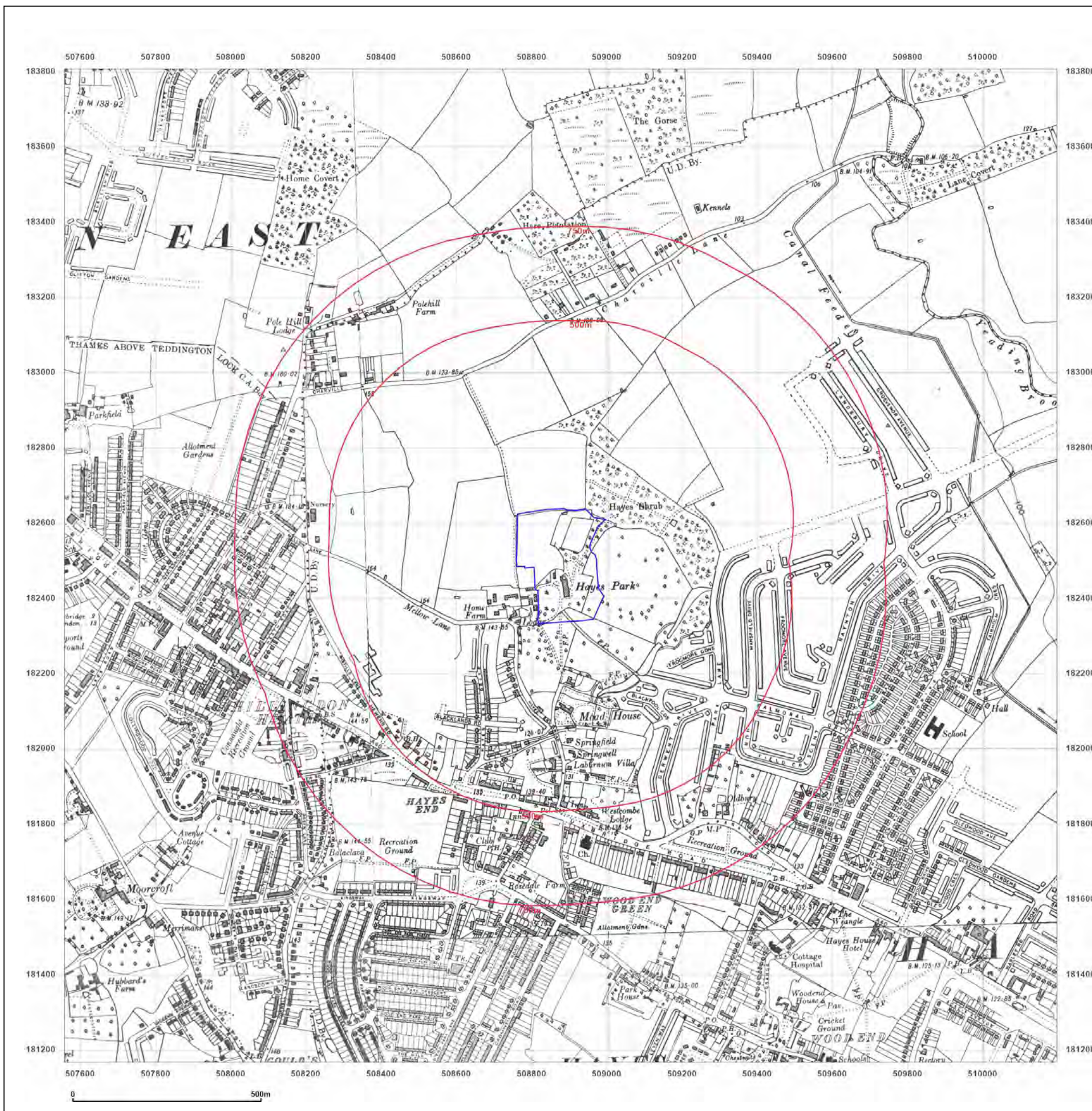


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#### Site Details:

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**Map Name:** Provisional

**Map date:** 1960

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed N/A  
Revised 1959  
Edition N/A  
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Levelled N/A

Surveyed N/A  
Revised 1959  
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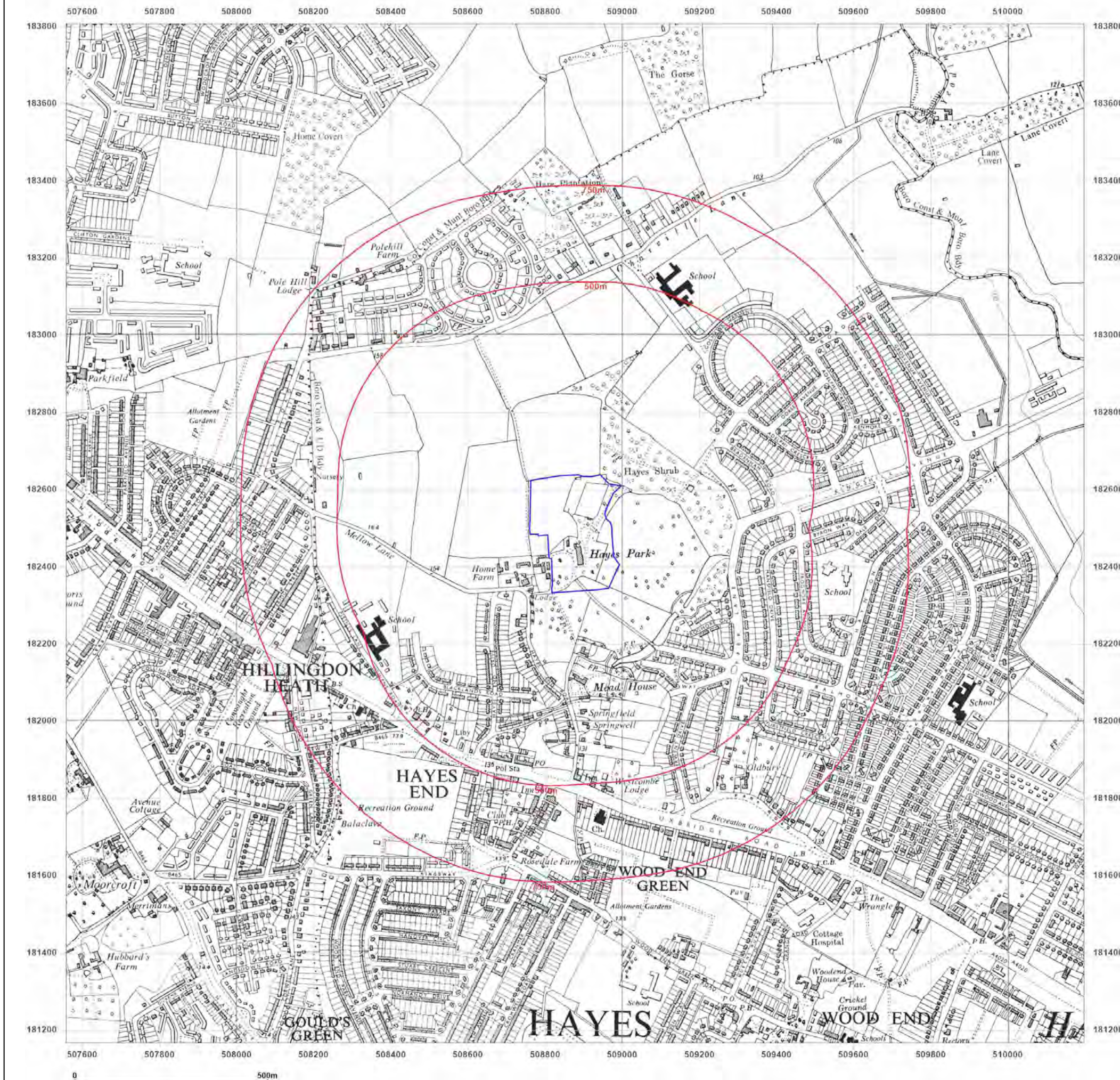


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#### Site Details:

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BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

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**Map date:** 1966-1970

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed N/A  
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Levelled N/A

Surveyed 1966  
Revised 1966  
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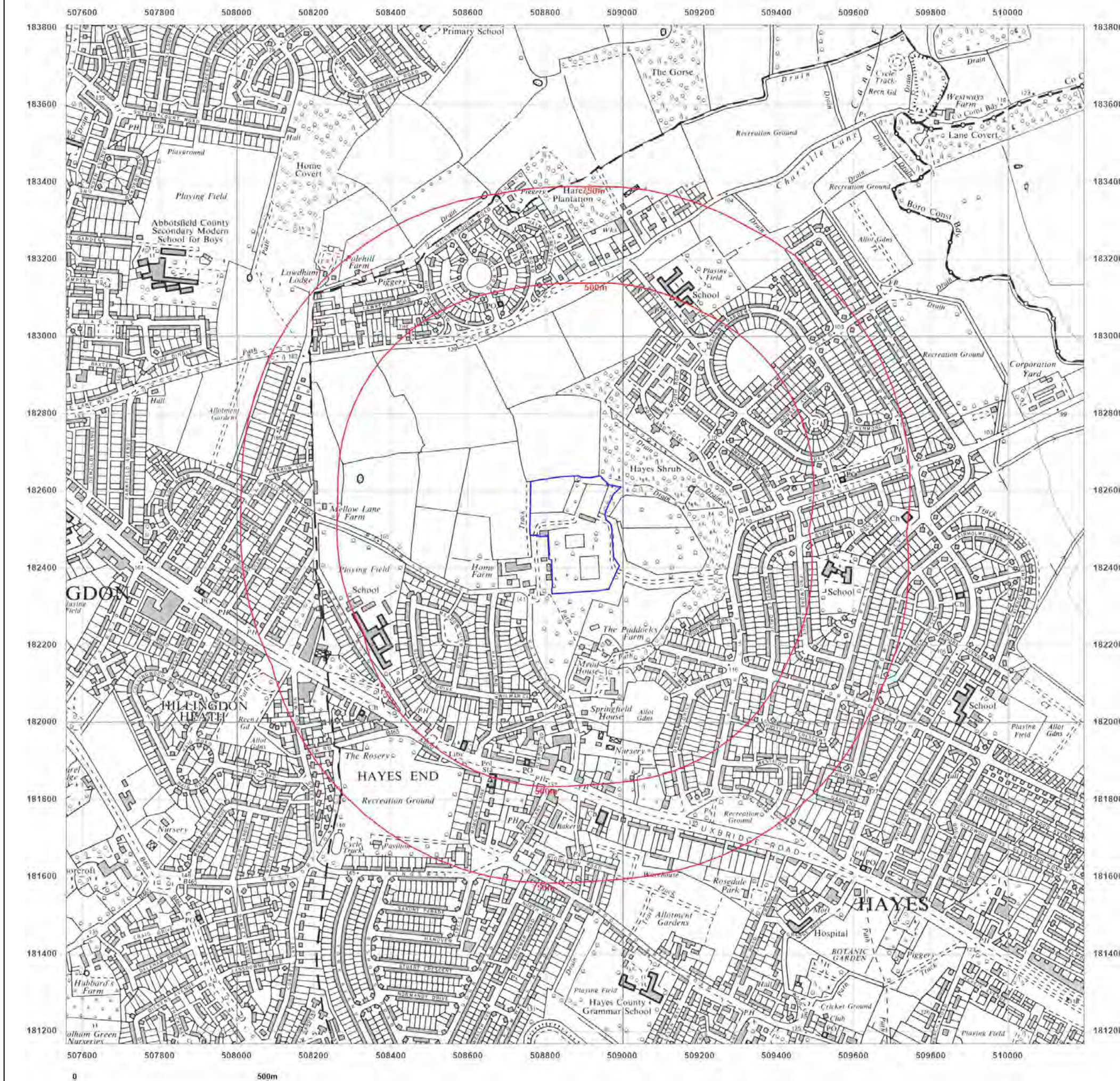


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#### Site Details:

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HAYES, UB4 8FE

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**Printed at:** 1:10,000



Surveyed 1975  
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Surveyed 1973  
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Edition N/A  
Copyright N/A  
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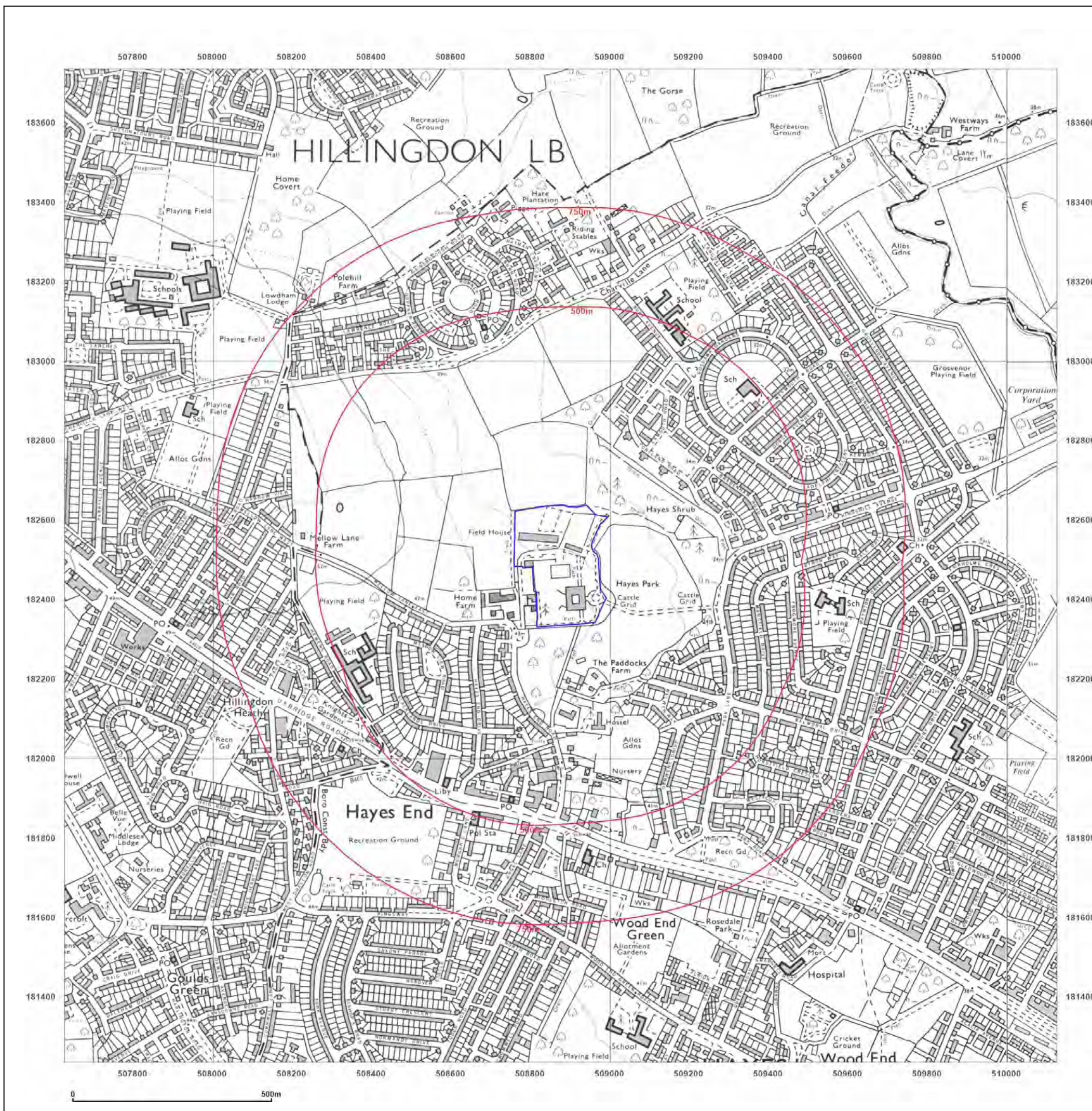


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#### Site Details:

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HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** National Grid

**Map date:** 1990-1994

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1988  
Revised 1989  
Edition N/A  
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Levelled 1972

Surveyed 1983  
Revised 1994  
Edition N/A  
Copyright N/A  
Levelled N/A

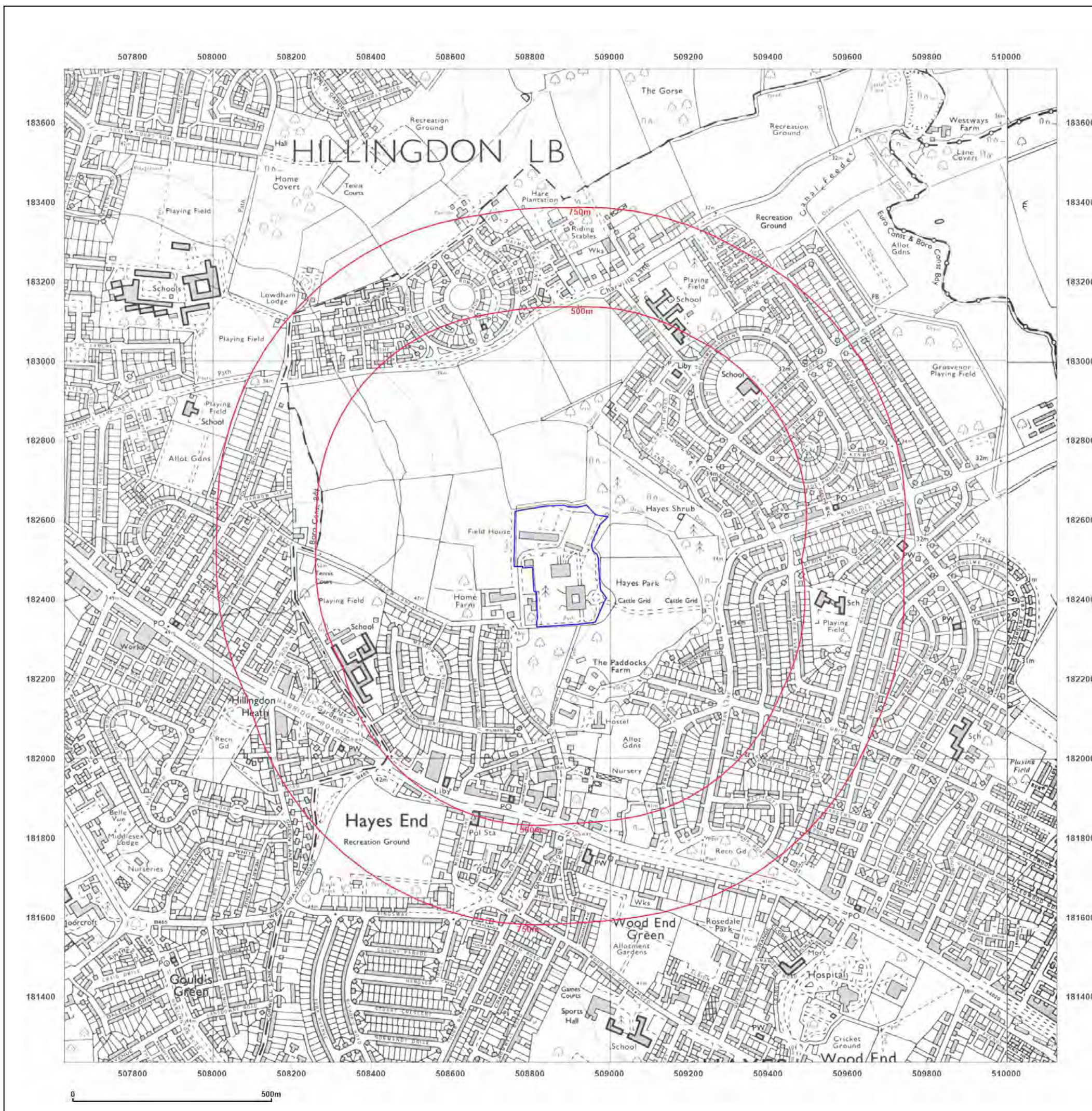


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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

**Printed at:** 1:10,000



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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

Client Ref: 461-01  
Report Ref: GS-7780589  
Grid Ref: 508877, 182486

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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#### Site Details:

HAYES PARK CENTRAL  
BUILDING, HAYES END ROAD,  
HAYES, UB4 8FE

**Client Ref:** 461-01  
**Report Ref:** GS-7780589  
**Grid Ref:** 508877, 182486

**Map Name:** National Grid

**Map date:** 2021

**Scale:** 1:10,000

**Printed at:** 1:10,000

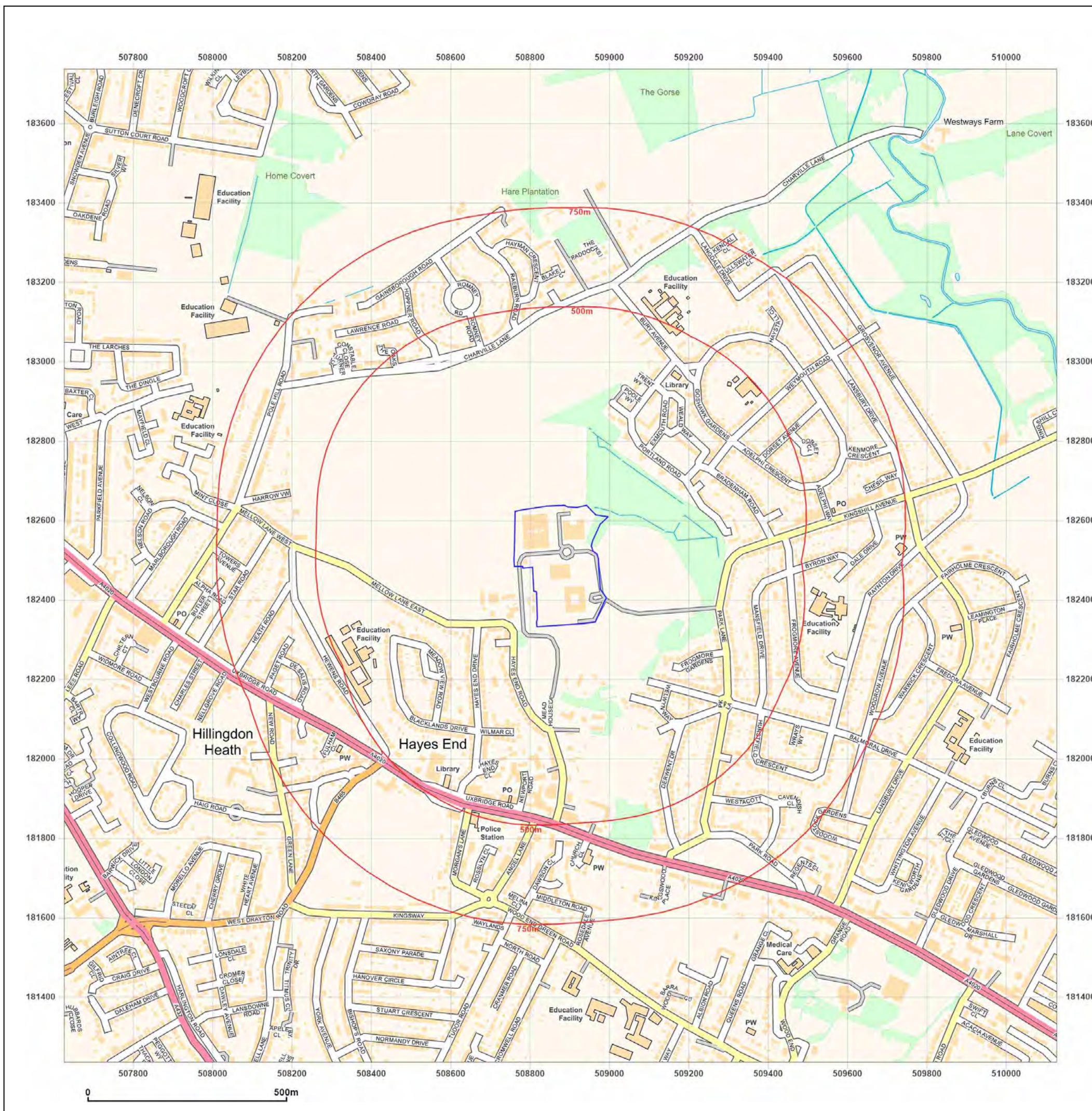


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# Appendix III

## Supporting Information

Contains British Geological Survey Materials © UKRI 2020

## Advice : HSL-210520162911-429 Does Not Cross Any Consultation Zones

**Your Ref:** 01C100434

**Development Name:** Hayes Park

**Comments:**



The proposed development site which you have identified does not currently lie within the consultation distance (CD) of a major hazard site or major accident hazard pipeline; therefore at present HSE does not need to be consulted on any developments on this site. However, should there be a delay submitting a planning application for the proposed development on this site, you may wish to approach HSE again to ensure that there have been no changes to CDs in this area in the intervening period.

This advice report has been generated using information supplied by Helen Bayliss at Avison Young on 20 May 2021.

# Appendix IV

## Definitions and Reservations

# Environmental Definitions

## 1. Environmental Reports

Any reference to environmental reports should be taken to mean one or all of the following types of report:

### Phase 1

This is a desk-based study (supported by a site inspection if agreed) of past and present uses of the site, geological and hydrogeological conditions, regulatory review and qualitative risk assessment.

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the site and meetings and discussions with relevant authorities and other interested parties.

The opinions given in the report have been dictated by the finite data on which it is based and is relevant only to the purpose for which the report was commissioned.

The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions.

Should additional information become available which may affect the opinions expressed in this report, Avison Young reserves the right to review such information and, if warranted, to modify the opinions accordingly.

It should be noted that any risks identified in this report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

### Phase 2

This is an intrusive phase of works involving the drilling of boreholes/trial pits and the testing of soil, groundwater and soil gas samples for environmental and geotechnical purposes.

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, geotechnical characteristics, and ground and groundwater conditions to provide a reasonable assessment of the environmental risks together with engineering and development implications. If costs have been included in relation to site remediation these must be confirmed by a qualified quantity surveyor.

The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site can only provide a general indication of site conditions.

The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site of each of the exploratory holes.

There may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.

The comments made on groundwater conditions are based on observations made at the time that site work was carried out.

It should be noted that groundwater levels will vary owing to seasonal, tidal and weather related effects.

The scope of the investigation was selected based on the specific development proposed by the Client and may be inappropriate to another form of development or scheme.

The risk assessment and opinions provided, inter alia, take into consideration currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

Avison Young accepts no liability what so ever for the content or conduct of the Environmental Consultant/Engineer of Sub Consultants/ Contractors appointed on behalf of the client by us.

## 2. Geology and Mining

### 2.1. Ground Conditions

Ground conditions consider the underlying geology, the presence of mining or quarrying, geological faults and the potential for contaminated land.

### 2.2. Superficial Deposits

Superficial deposits are the youngest geological deposits that rest on older deposits or rocks referred to as bedrock. They generally comprise unconsolidated sediments such as gravels, sand, silt and clay. They may be present as relatively thin discontinuous patches or larger spreads.

### 2.3. Bedrock Geology

The bedrock geology (sometimes referred to as solid geology) is the term used for the main units of rocks that have formed the Earth over millions of years. They may be present at the surface or concealed beneath younger superficial deposits. Bedrock is classified as either igneous, metamorphic or sedimentary.

### 2.4. Geological Fault

A fracture in the rock along which movement takes place.

## Environmental Definitions

### 2.5. Underground Workings

Areas where coal or other minerals and rock has been mined, or is currently being mined under the surface. Historic mining may have been undertaken from bell pits, pillar and stall workings or longwall techniques.

### 2.6. Mine Entries

Refers to a mineshaft or adit which provides an opening to gain access to underground workings.

### 2.7. Brine Compensation District

Formed by the Cheshire Brine Pumping (Compensation for Subsidence) Act 1952 as a District within which a person can serve a notice on the Brine Board if they think their property has suffered damage resulting from subsidence caused by extraction of brine.

## 3. Hydrogeology and Hydrology

### 3.1. Controlled Water

Section 104 of the Water Resources Act 1991 defines Controlled Waters as all inland freshwaters, i.e. rivers, watercourses, lakes and ponds (other than public sewers or sewers or drains which drain into a public sewer), groundwater, coastal waters (extending landward from the limit of the highest tide or freshwater limit) and relevant territorial waters (extending seaward for three miles from the baseline from which the breadth of the territorial sea is measured).

### 3.2. Groundwater

Groundwater is all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

### 3.3. Surface Water

Any inland freshwaters, coastal waters or relevant territorial waters i.e. water that is above the surface of the ground.

### 3.4. Tributary

A stream or river that flows into a larger stream or river.

### 3.5. Confluence

The point at which two rivers or streams join together.

### 3.6. Catchment

The total area from which rainfall flows into a river or stream.

### 3.7. Discharge Consents

For England, discharge consents to Controlled Waters (surface water and groundwater) are authorised by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2010. In considering whether or not to grant consents the Environment Agency takes account of whether the point source discharges into the water environment has the potential to cause pollution relevant to quality standards and whether it will affect the appropriate uses of the water. These consents do not apply to discharges to sewers, since the sewerage undertaker regulates these.

Discharges for sewage effluent are exempt where they are 5m<sup>3</sup>/day or less to surface water or 2m<sup>3</sup>/day to ground. Exempt discharges are not required to be reported and as such they are not considered within our assessments.

### 3.8. Water Abstractions

The Environment Agency has a duty under the Water Resources Acts 1963 and 1991 to take action, when necessary, in order to conserve, re-distribute, or increase water resources in England, and to secure its proper use. They may also draw up provisions for determining acceptable flows or minimum volumes for inland waters. Those wishing to abstract water above a specified quantity must apply to the Agency for Abstraction Licences and adhere to the conditions that apply. Premises abstracting less than 20m<sup>3</sup> water per day from watercourses and the ground can do so without the need of a licence and as such these locations are not recorded.

These records are held under Scottish legislation to protect the public water supply. These records therefore relate only to public water supplies.

### 3.9. Water Industry Act Referrals

The Environment Agency is given powers to regulate some discharges to public sewers or certain dangerous substances under the Water Industry Act 1991.

### 3.10. Aquifer Designations

An aquifer is a geological unit containing sufficient saturated permeable rock that will yield water. The following aquifer designations are consistent with the Water Framework Directive and reflect their importance in terms of groundwater as a resource (drinking water supply) but also their role in supporting surface water flows and wetland ecosystems.

#### Unproductive Strata

Defined as rock layers or drift deposits with low permeability that has negligible significance for water supply or river base flow.

## Environmental Definitions

### Principal Aquifer

Defined as rock layers or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

### Secondary Aquifers

These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into two types ('A' and 'B').

#### Secondary 'A' Aquifers

Defined as rock layers or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

#### Secondary 'B' Aquifers

Defined as predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

### Secondary Undifferentiated

The Secondary Undifferentiated classification is assigned in cases where it has not been possible to attribute either category Secondary A or Secondary B to a rock type.

### 3.11. Groundwater Source Protection Zones

The Environment Agency has defined Source Protection Zones (SPZ) for 2000 groundwater sources such as wells, boreholes and springs used for public water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. There are three main zones:

Inner Zone (Zone 1) – defined as the 50 day travel time from any point below the water table to the source. This zone has a minimum radius of 50m;

Outer Zone (Zone 2) – defined as a 400 day travel time from a point below the water table. The previous methodology gave an option to define SPZ2 as the minimum recharge area required to support 25% of the protected yield;

Total Catchment (Zone 3) – defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final source catchment protection zone can be defined as the whole aquifer recharge area where the ratio of the groundwater abstraction to aquifer recharge is  $>0.75$ .

In the past, the Environment Agency has also applied a fourth zone of special interest:

Special Interest (Zone 4) – this represents a surface water catchment which drains into the aquifer feeding the groundwater supply.

### 3.12. Groundwater Vulnerability

The pollution hazard of an activity will be greater in certain hydrological, geological and soil situations than in others. Superficial aquifers are the most vulnerable to pollution due to their shallow water table and little or no protective cover. Bedrock aquifers can be equally vulnerable where drift deposits are absent and where the unsaturated zone is thin or fractured.

Activities in areas of unproductive strata do not represent a risk to groundwater resources and therefore are not assigned a groundwater vulnerability.

#### High

These are high priority groundwater resources that have very limited natural protection. This results in a high overall pollution risk to groundwater from surface activities. Operations or activities in these areas are likely to require additional measures over and above good practice pollution prevention requirements to ensure that groundwater isn't impacted.

#### Medium-high

These are high priority groundwater resources that have limited natural protection. This results in a medium-high overall pollution risk to

groundwater from surface activities. Activities in these areas may require additional measures over and above good practice to ensure they do not cause groundwater pollution.

#### Medium

These are medium priority groundwater resources that have some natural protection resulting in a moderate overall groundwater risk. Activities in these areas should as a minimum follow good practice to ensure they do not cause groundwater pollution.

## Environmental Definitions

### Medium-low

These are lower priority groundwater resources that have some natural protection resulting in a moderate to low overall groundwater pollution risk. Activities in these areas should follow good practice to ensure they do not cause groundwater pollution.

### Low

These are low priority groundwater resources that have a high degree of natural protection. This reduces their overall risk of pollution from surface activities. However, activities in these areas may be a risk to surface water due to increased run-off from lower permeability soils and near-surface deposits. Activities in these areas should be adequately managed to ensure they do not cause either surface or groundwater pollution.

Further information relating to groundwater vulnerability is provided in the Environment Agency report (Ref: SC040016/R) 'New groundwater vulnerability mapping methodology in England and Wales'.

### 3.13. Soil Leaching

The potential for soil leaching considers a range of soil properties such as moisture content, soil clay content and carbon content. There are three soil leaching classes:

#### High (H)

Soils of high leaching potential with little ability to attenuate diffuse soil pollutants and in which non-adsorbed diffuse source pollutants and liquid discharges have the potential to move rapidly to underlying strata or groundwater. Three subclasses are recognised:

H1 – soils that readily transmit liquid discharges because they are either shallow or susceptible to rapid flow;

H2 – deep, permeable, coarse-textured soils that readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential;

H3 – coarse-textured or moderately shallow soils that rapidly transmit non-adsorbed pollutants and liquid discharges, but which have some ability to attenuate adsorbed pollutants because of their clay or organic matter.

#### Intermediate (I)

Soils of intermediate leaching potential that have a moderate ability to attenuate diffuse source pollutants or in which it is possible that some non-adsorbed diffuse source pollutants and liquid discharges could penetrate the soil layer. Two subclasses are recognised:

I1 – soils that can potentially transmit a wide range of pollutants;

I2 – Soils that can potentially transmit a wide range of pollutants and liquid discharges but are unlikely to transmit adsorbed pollutants.

### Low (L)

Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal or they have a significant ability to attenuate diffuse source pollutants.

## 4. Flood Risk

### 4.1. National Planning Policy Framework (Flooding)

This relates to the National Planning Policy Framework and the associated Technical Guidance.

### 4.2. Floodplain

A floodplain is the area that would naturally be affected by flooding if a river rises above its banks, or high tides and stormy seas cause flooding in coastal areas.

### 4.3. Flood Zones

#### Flood Zone 1

The area where flooding from rivers or sea is very unlikely as defined by the Environment Agency. There is less than 0.1% (1 in 1000) chance of flooding occurring each year.

#### Flood Zone 2

The area of medium probability of flooding as defined by the Environment Agency – a flood with an annual chance of occurring of between 1% (1 in 100) to 0.1% (1 in 1000) for river flooding and 0.5% (1 in 200) to 1% (1 in 1000) for coastal flooding.

#### Flood Zone 3A

The area of high probability of flooding as defined by the Environment Agency – a flood with an annual chance of occurring of 1% (1 in 100) or greater for river flooding and 0.5% (1 in 200) or greater for coastal flooding.

#### Flood Zone 3B

The boundary between 3a and 3b is a planning decision made by the Local Authority. This information is usually in the strategic flood risk assessment. This area is a functional floodplain as defined by the Environment Agency. It is an area which is designed to flood – a flood return period of 1 in 20 or less.

### 4.4. Flood Return Period

A return period is an estimate of the likelihood of an event occurring. Flood return periods are commonly expressed as either a ratio or a percentage, for example, a 1% or 1 in 100 year event, means there is a 1% (1 in 100) chance of flooding occurring each year.

## Environmental Definitions

### 4.5. Pluvial (Surface Water) Flooding

Pluvial flooding results from rainfall running over ground before entering a watercourse or sewer. It is usually associated with high intensity rainfall events (typically greater than 30mm per hour) but can also occur with lower intensity rainfall or melting snow where the ground is already saturated, frozen, developed (for example in an urban setting) or otherwise has low permeability.

### 4.6. Groundwater Flooding

Groundwater flooding is defined as the emergence of groundwater at the surface, rising up from the underlying rocks and tends to after long periods of sustained rainfall.

### 4.7. Flood Risk Rating

Low – The site is at little or no risk of flooding from any sources.

Low to Moderate – It is possible that flooding could arise and the presence of features such as watercourses, canals, flood defences or flood storage areas in the locality may suggest that the site could be at risk of flooding. Flood resilient materials may be required in the construction of properties.

Moderate - Information from existing datasets suggests that there are certain features which may present a risk of flooding to the site and its occupants. Appropriate measures to manage flood risk may be required in addition to the use of water resistant materials in the construction of properties.

Moderate to High - Information from existing datasets suggests that there are certain features which may present a significant risk to the site and its occupants. Flood defences may be required to reduce the risk of flooding and flood storage areas may be required.

High – There is a risk to life and property. This means that existing datasets reveal significant flood risk issues which will need to be addressed.

### 4.8. Flood Resistance

Flood resistance refers to products that may be permanent or temporary and are designed to stop water entering a property through existing openings (doors, windows, vents and pipes). Permanent measures do not need to be deployed, whilst temporary measures need to be installed before flood water arrives.

### 4.9. Flood Resilience

Flood resilience measures are designed to reduce the amount of damage to a property when water enters a building. They will enable the clean-up to take place more easily without the need for major refurbishment.

### 4.10. Flood Defence

Infrastructure used to protect an area against floods such as floodwalls and embankments. They are designed to a specific standard of protection (design standard).

### 4.11. Standard of Protection

The flood event return period above which significant damage and possible failure of the flood defences could occur.

### 4.12. Flood Storage

A temporary area that stores excess runoff or river flow, which are often ponds or reservoirs.

## 5. Drainage

### 5.1. Attenuation

The storing of water to reduce the peak discharge of water.

### 5.2. Below Ground Attenuation Storage

Large below ground voided spaces used to temporarily store surface water runoff before infiltration, controlled release to the public sewer network or re-use. The storage structure can be formed by a tank, oversized pipework or geocellular modular crates.

### 5.3. Brownfield Site

A site that has been previously developed as either residential, commercial or industrial use.

### 5.4. CCTV Survey

A survey of inaccessible below ground drainage assets by controlled closed-circuit television, which is operated remotely.

### 5.5. Culvert

A tunnel (pipe or box-shaped) carrying a stream or open drain under a road, railway or land.

### 5.6. Design for Exceedance

Designing a system to manage effectively events that exceed (bigger or rarer than) the drainage systems required level of service so that they do not impact upon life or property.

### 5.7. Design Life

The period of time during which a component or product is expected by its designers to work within its specified parameters.

## Environmental Definitions

### 5.8. Detention Basins

During a rainfall event, surface water runoff drains to a landscaped depression with an outlet that restricts flow, so that the basin fills and provides attenuation. Basins are generally designed to be vegetated dry features, except during and immediately following the rainfall event. Runoff is treated filtered as it flows across the vegetation in the base of the basin.

### 5.9. Exceedance Flow

Surface water flows during rainfall events bigger or rarer than the design standard of the drainage system.

### 5.10. Filter Strips

Runoff from an impermeable area is allowed to flow across a grassed or planted area to promote sedimentation and filtration.

### 5.11. Filter Drains

Runoff is temporarily stored below the surface in a shallow trench filled with stone / gravel and provides attenuation, conveyance and treatment.

### 5.12. Flow Control Device

A device used to limit the flow rate on surface water from the outlet of drainage or SuDS component. This is usually limited to meet a required discharge rate.

### 5.13. Freeboard

The height above the designed water level in a pond or infiltration basin or the distance between the base of a soakaway and the resting groundwater level.

### 5.14. Greenfield

Land that has never been developed and has only been used for agricultural or recreational use.

### 5.15. Greenfield Run-off

The rate of surface water run-off from a site before development.

### 5.16. Green Roofs

A planted soil layer constructed on the roof of a building to create a living roof. Water is stored in the soil layer and absorbed by the vegetation.

### 5.17. Infiltration Systems

These systems collect and store runoff allowing it to infiltrate into the ground. Pollution risk to underlying groundwater can be reduced by the overlying vegetation or unsaturated soils.

### 5.18. Peak Discharge Rate

The highest rate of flow of water from a given rainfall event.

### 5.19. Pervious Pavements

Surface water runoff is allowed to soak through structural paving i.e. the gaps between block paving or porous paving where water filters through the block itself. Water can be stored in the sub-base of the pavement/roadway and potentially allowed to infiltrate to the ground or passed forward to a carrier drain.

### 5.20. Ponds and Wetlands

Features that have a permanent pool of water that can be used to provide attenuation. The outfall has a controlled discharge and the water levels increase following rainfall events. Ponds and wetlands also enhance the treatment of rainwater and promote biodiversity.

### 5.21. Rainwater Harvesting Systems

Rainwater is collected from the roof of a building or other paved impermeable surfaces in an over ground or underground tank, which then allows the water to be reused either for landscape irrigation or for flushing or toilets. Some treatment may be required depending on the reuse of the water.

### 5.22. Return Period (Drainage)

An estimate of the likelihood of a particular event occurring. A 100 year storm refers to the storm that occurs on average once every hundred years. In other word, its annual probability of exceedance is 1% (or 1 in 100 years).

### 5.23. Sewer Flooding

Flooding caused by a blockage or overflowing in a sewer or urban drainage system.

### 5.24. Surface Water Runoff

The flow of water from rainfall over the ground surface.

### 5.25. Sustainable Drainage Systems (SuDS)

Sustainable Drainage Systems are designed to manage and use rainwater close to where it falls on the surface incorporating vegetation to improve water quality, amenity and biodiversity. They can take the form of both above and below ground features and most SUDS schemes use a combination of components to achieve the overall design objectives.

### 5.26. Swales

A grassed channel used to convey and treat surface water runoff at the surface. They can be designed to infiltrate water to the ground or lined so that water is passed forward to other SuDS features. Swales can be designed to be wet or dry features.

## Environmental Definitions

### 6. Environmental Regulatory Information

#### 6.1. Pollution Incidents

The Environment Agency and Natural Resource Wales have a duty to investigate pollution incidents reported to them by members of the public, emergency services, local authorities, government departments, other regulators, industry, and agency staff. Substantiated incidents are held on a public register of information and relate to specific events that fall within their responsibility given that they may have an environmental and/or operational impact.

Examples may include reports that may affect land, air, and water, fish kills, illegal abstraction, low river flows, speeding vessels, and flooding. Public register information is provided by regional offices.

Incidents are graded from category 1 (Major Incident) to category 4 (No Impact). An impact category must be assigned for each affected environmental media; air, land, and water. An impact level is assigned to a particular incident but is determined by the maximum severity affecting one of the three media.

#### 6.2. Landfill

Sites accepting waste were not required to be licensed until the introduction of the Control of Pollution Act 1974 and landfilling prior to this is often unrecorded unless captured through planning records or on historic plans.

Information on landfill sites relates to open and closed site and is captured from a number of sources within the Landmark Envirocheck Report to include:

- A survey of active landfill sites conducted on behalf of the Department of Environment in 1973, which over 3,000 sites accepting waste prior to the Control of Pollution Act 1974, and would therefore not have been subject to any strict regulation or monitoring;
- Information sourced from individual Local Authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act 1974;
- Information from the British Geological Survey which includes outline plans, site descriptions, waste types and tipping histories;
- Consents for landfill sites issued by the Environment Agency under Section 64 of the Environmental Protection Act 1990 (Part 2), prescribed by Regulation 10 of SI No.1056 the Waste Management Licensing Regulations 1994 and the Environmental Permitting (England Wales) Regulations 2010; and

- Information sourced from consents that were issued by the Environment Agency and the Scottish Environment Protection Agency, under the Control of Pollution Act 1974 and Section 36 of the Environmental Protection Act 1990.

#### 6.3. Environmental Permitting

The Environmental Permitting (England and Wales) Regulations 2010 (as amended) (EPR 2010) have been introduced over a number of years so that they now encompass licences that were previously held under the several sets of legislation. The Landmark Envirocheck Report provides information on open and closed sites under each of the following pieces of legislation:

- Integrated Pollution Controls (IPC) held under the former Environment Protection (Prescribed Processes and Substances) Regulations 1991;
- Records of Local Authority Integrated Pollution Prevention and Control (LAIPPC) and Integrated Pollution Prevention and Control (IPPC) were previously maintained under the Pollution Prevention and Control Act 1999, originally set up under the Environmental Protection Act 1990. LAIPPC continue to be regulated by the Local Authority and are referred to as Part A2 Installations and Part B Installations, whilst the IPPC continue to be regulated the Environment Agency and are referred to as Part A1 Installations.
- Registered Waste Transfer, Treatment and Disposal Sites were previously recorded under the Control of Pollution Act (COPA) 1974, Section 36 of the Environmental Protection Act (EPA) 1990 and the Environmental Permitting (England and Wales) Regulations 2007.
- All waste activities now fall within EPR 2010 under a number of waste exemptions, standard rules environmental permits and bespoke environmental permits.

#### 6.4. Waste Exemptions

Waste exemptions allow the use, storage, disposal and treatment of specific wastes that only create a low risk of pollution, when the quantities of waste are limited and stored in a specific manner.

#### 6.5. Standard Rules Environmental Permits

Standard Rules environmental permits allow low to medium risk waste storage, transfer and treatment activities to occur at specific locations and are issued where the Environment Agency does not need to make a site specific decision about whether the regulated activity can take place at a specific location.

## Environmental Definitions

### 6.6. Bespoke Environmental Permits

A Bespoke Environmental Permit is required where there are no exemptions or Standard Rules Environmental Permits available for the proposed activity. The Environment Agency makes a site specific assessment about the proposed regulated activity in relation to its environment to ensure waste and emissions do not have a detrimental effect.

## 7. Land Designations

### 7.1. Areas of Outstanding Natural Beauty (AONB)

The National Parks and Access to the Countryside Act 1949 as amended by the Countryside Act 1968, Wildlife and Countryside Act 1981 and Environment Act 1995, allowed for the designation of Areas of Outstanding Natural Beauty (AONB). The equivalent designations for Scotland are National Scenic Areas.

AONBs are landscapes of national conservation importance for their distinctive character and natural beauty. They are generally smaller than National Parks, and are owned by individuals e.g. farmers. Some are adjacent to National Parks and many include areas of Heritage Coast. Planning law protects development within them.

### 7.2. Sites of Special Scientific Interest

Sites of Special Scientific Interest (SSSI) have been designated under the Wildlife and Countryside Act 1981 Section 28 to protect areas of important flora, fauna, geological and/or physiographical features. They provide the basis for other national and international designations. Parties notified include site owner(s) and occupier(s), local planning authorities, water and sewerage companies, and the appropriate Secretary of State. The Land Registry also records these as local land changes.

The appropriate party must be consulted on developments, or notified of potentially damaging operations, which may affect an SSSI.

Most SSSIs are privately owned or managed. Others are owned or managed by public bodies such as the Forestry Commission, Ministry of Defence and the Crown Estate, or by the voluntary conservation movement. Some SSSIs are also designated as Special Protection Areas and Ramsar Sites.

### 7.3. RAMSAR Sites

Under the Convention on Wetlands of International Importance especially as Waterfowl Habitat, the Government is committed to designate 'Wetlands of International Importance'. The Convention was adopted in Ramsar, Iran in 1971 and ratified by the UK Government in 1976.

The purpose is to stem progressive encroachment on and loss of wetlands now and in the future. Aims include the conservation, management and wise use of migratory wildfowl stocks and to promote the conservation of wetlands.

Wetlands are areas of peat land, fen, marsh or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water.

### 7.4. Local Nature Reserves

These reserves are areas created by Local Authorities in conjunction with their appropriate national authority in the interest of conservation, amenity value and public enjoyment of the countryside. Some, but not all Local Nature Reserves (LNRs) are also designated SSSIs. They are controlled by bylaws.

### 7.5. National Nature Reserves

These reserves have been designated under the Wildlife and Countryside Act 1981 or the National Parks and Access to the Countryside Act 1949, Section 19, as areas of high national or international importance for nature conservation. They are designated by Natural England, Scottish Natural Heritage and the Countryside Council for Wales.

National Nature Reserves are Sites of Special Scientific Interest, and may have coastal frontage or be offshore islands.

### 7.6. Special Areas of Conservation

Special Areas of Conservation are lands designated under the ECC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (92/43/EEC), commonly known as the Habitats and Species Directive. These sites are to be afforded absolute protection subject to 'imperative reasons of overriding public interest, including those of a social or economic nature.

### 7.7. Special Protection Areas

Special Protection Areas are classified under Article 4 of the EC Directive on the Conservation of Wild Birds 1979, commonly known as the Wild Birds Directive.

The purpose of Special Protection Areas is to safeguard the habitats of migratory and certain particularly threatened bird species. Together with Special Areas of Conservation, they constitute 'Natura 2000' areas for protection.

## Environmental Definitions

### 8. Hazardous Substances

#### 8.1. Asbestos Containing Materials (ACM's)

Includes any of the following materials; crocidolite, amosite, chrysotile, fibrous actinolite, fibrous anthophyllite, fibrous tremolite and any mixture containing any of these materials.

#### 8.2. Asbestos Surveys

Any reference to asbestos surveys is given the same meaning as that given in HSE Guidance Document HSG 264 entitled 'Asbestos: The Survey Guide'.

#### 8.3. Control of Major Accident Hazard Sites

The Health and Safety Executive in conjunction with the Environment Agency and the Scottish Environment Protection Agency keeps records of those sites, which manufacture or store dangerous toxic or flammable chemicals (including petrochemicals, pharmaceuticals and agrochemicals) and explosives in excess of threshold quantities specified in the Control of Major Accident Hazards (COMAH) Regulations 2015. Sites are divided into upper and lower tier sites based on the type and quantities of substances being stored or manufactured.

The COMAH Regulations require emergency plans to be kept up to date and regularly tested.

#### 8.4. Planning Hazardous Substance Consents

This data is collected, collated and geo-coded by Landmark. The records relate to consents granted under the Planning (Hazardous Substances) Act 1990 as amended, for England and Wales and the Planning (Hazardous Substances) (Scotland) Act 1997, in Scotland.

The regulations require a consent to be granted by the Local Authority for sites where the storage of certain hazardous substances is above the specified or controlled quantity.

### 9. Non-Native Invasive Plants

The Wildlife and Countryside Act 1981 (as amended) is the principal legislation which regulates the release of non-native species. Section 14(2) prohibits the release of certain invasive non-native plants into the wild in Great Britain; it is an offence under Section 14(2) to "plant or otherwise cause to grow in the wild" any plants listed on Part II of Schedule 9. The most common plant species found on brownfield and urban sites include Japanese Knotweed, Giant Hogweed and Himalayan Balsam.

#### Japanese Knotweed

Japanese knotweed is a strong-growing, clump-forming perennial, with tall, dense stems. Stem growth is renewed each year from the existing crown of the rhizomes which grows underground. Japanese Knotweed is a particular problem as not only does it out compete native species, it also has the potential to damage buildings, pavements, roads, etc.

#### Himalayan Balsam

This is a non-native invasive terrestrial plant species that has spread to most parts of UK, particularly along the banks of watercourse and in damp woodland. Individual plants reach 2m in height and its rapid growth shades out most of our native species.

#### Giant Hogweed

Giant Hogweed is part of the same family as Cow Parsley and Hogweed, but is significantly larger in size extending up to 4m in height. The sap of Giant Hogweed contains toxic chemicals known as furanocoumarins, which when contact with the skin, and in the presence of sunlight cause a condition called phyto-photodermatitis (reddening of the skin, burns and blistering).

### 10. Environmental Risk Assessment

#### 10.1. Contamination

This is taken to mean specifically, the presence of toxic, noxious or polluting substances in, on or under land.

#### 10.2. Contaminated Land

Any reference to contaminated land should be construed in the statutory sense.

Land is defined as being contaminated land under Section 78 of the Environmental Protection Act 1990 where any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that:

Significant harm is being caused or there is a significant possibility of such harm being caused; or

Significant pollution of controlled waters is being, or is likely to be caused.

#### 10.3. Conceptual Site Model (CSM)

The conceptual site model is the initial phase of the environmental risk assessment process which identifies the all potential sources of contamination, the receptors capable of being harmed and the pathways capable of exposing a receptor to the contaminant source. Only where there are complete source-pathway-receptor linkages is there considered to be a potential risk.

## Environmental Definitions

### 10.4. Environmental Risk

Any reference to environmental risk shall be taken to mean:

#### High Risk

Those properties where environmental risks have been identified that will affect land value, business interruption, lead to regulatory intervention and/or result in material financial expenditure by the client in the short term.

#### Moderate Risk

Those properties where environmental risks have been identified that have the potential to affect land value, lead to regulatory intervention and/or result in material financial expenditure by the client in the medium to long term.

#### Low Risk

Those properties where no environmental risks have been identified that have the potential to affect land value, lead to regulatory intervention and/or result in material financial expenditure by the client.

# Environmental Reservations

## Composite Panels and Insurance

We will not test any panels within the property to see whether there are any polystyrene insulated composite panels. The presence of such panels may result in the property being uninsurable, which would have an adverse impact on value.

## Enquiries

Where necessary, any enquiries (verbal and written) undertaken by Avison Young of local authorities and statutory undertakers are made in respect of environmental issues. Local searches are not undertaken and no responsibility is accepted for any inaccurate information provided.

## Environmental Liability

Any reference to environmental liability should be taken to mean a combination of the following types of liabilities:

### Actual Liabilities

These are known present obligations of the business arising from past or future events, the settlement of which will require future expenditure.

These will include costs associated with regulatory compliance e.g. known monitoring, decommissioning requirements, fines, damages, and surrender provisions imposed by statute and /or contract.

### Latent and Contingent Liabilities

These are unknown obligations arising from past or future events that exist, but where the outcome will only be known following the occurrence or non-occurrence of future events that are outside the control of the business.

These might include, unknown costs associated with site remediation, decommissioning and the possibility of unforeseen future events such as a pollution incident.

## Ground Conditions

Any discussion of ground conditions in this report have been based on a review of existing documentary information prepared by British Geological Survey, the Coal Authority and/or other parties. Avison Young accepts no responsibility for the accuracy or completeness of information prepared by third parties.

## Information

All information supplied by the Client, the Client's staff and professional advisers, local authorities, other statutory bodies, investigation agencies and other stated sources is accepted as being correct unless otherwise specified.

## Legal issues

Any interpretation of leases and other legal documents and legal assumptions is given in our capacity as Property Consultants (including Chartered Surveyors and Chartered Town Planners) and must be verified by a suitability qualified lawyer if it is to be relied upon. No responsibility or liability is accepted for the true interpretation of the legal position of the client or other parties.

Where opinions expressed in this report are based on current available guidelines and legislation, no liability can be accepted by Avison Young for the effects of any future changes to such guidelines and legislation.

## Plans

Any plans supplied are for identification purposes only unless otherwise stated. The Report assumes site boundaries are as indicated to us. The reproduction of Ordnance Survey sheets has been sanctioned by the Controller of Her Majesty's Stationery Office, Crown Copyright reserved.

## Property Condition

Our inspection of a property does not constitute a structural survey. When preparing our report we have regard to apparent defects and wants of repair and take into account the age of the property. We do not however carry out a detailed search for defects which is undertaken as part of the structural survey neither do we necessarily set out the various defects when making the report. We do not inspect woodwork or other parts of the structure which are covered, unexposed or inaccessible. We do not arrange for any investigation to be carried out to determine whether or not high alumina cement concrete or calcium chloride additive or any other deleterious materials or permanent woodwool shuttering or composite panelling has been used in the construction.

Unless so instructed we do not arrange for any investigations to be carried out to determine whether or not any deleterious or hazardous material or techniques have been used in the construction of the property or has since been incorporated and the services are not tested.

We are therefore unable to report that the property is free from defect in these respects.

For reporting purposes we assume unless otherwise stated that the property (including associated plant and machinery, fixtures and fittings) is in serviceable order and will remain so for the foreseeable future. It will be assumed that the building(s) is/are in good repair, except for defects specifically noted.

# Environmental Reservations

## Services Installations

Unless otherwise instructed, we do not inspect or test any of the water, mechanical, heating, electrical or drainage installations. Where appropriate we will make recommendations in relation to the execution of specialist tests to establish the condition. The implementation of such work would normally involve an additional fee.

## Site Areas

Site areas are normally computed from plans or the Ordnance Survey and not from a physical site survey. They are approximate unless otherwise indicated.

## Tenure

Title Deeds and Leases are not inspected (unless specifically stated) and, unless we are informed to the contrary, it is assumed that a property is free of any onerous covenants, easements, other restrictions or liabilities including mortgages, grants and capital allowances that may affect the value.

## Warranties

The client warrants and represents that, to the best of its knowledge, information and belief, the information supplied by and on its behalf to Avison Young is true and accurate and that it will advise and instruct its third party advisers to advise Avison Young in the event that it and/they receive notice that any such information is either misleading or inaccurate.

# Contact Details

## Enquiries

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