

Watercycle Runcorn Facility Environmental Permit Application: Baseline Site Condition Report

Air Quality Consultants Ltd for Watercycle Technologies Ltd

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1. Introduction

1.1 Background

This report is in support of an application for an environmental permit for a facility for the recovery of critical minerals from refined black mass (RBM) and water (mined brine water and industrial wastewater). The proposed facility is at Block 8, Heath Business and Technical Park, Heath Rd South, Weston, Runcorn, Cheshire, WA7 4QX (the site, Figure 1).

Watercycle Technologies Ltd (WTL) proposes to undertake processes at the site which are expected to be permitted under Schedule 1, Section 4.2 of the Environmental Permitting (England and Wales) Regulations 2016 (EPR) as a Part A(1) inorganic chemicals activity. The proposed facility will have two lines of operation for recovery of minerals from RBM and the other from industrial wastewater to produce end products of refined metal salts.

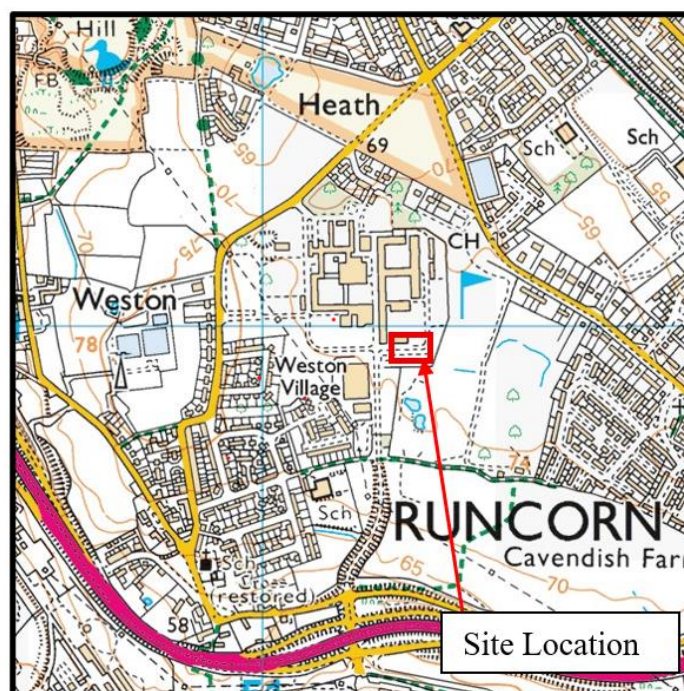
1.2 The Site

The 0.12 hectare site lies within The Heath Business and Technical Park, a purpose-built business park formerly owned and operated by the chemical company ICI. ICI closed the site in the year 2000, and the park was acquired by SOG Ltd, which has since operated it as a multi-tenanted business park, subletting individual units to a range of occupiers.

The Block 8 building where the facility will be located is in the south-eastern part of the business park, as shown on **Figure 1**, below. WTL will have sole occupancy of the building.

The site consists of existing laboratory and process buildings with external yard space currently used for wastewater treatment laboratory and Research and Development (R&D) activities by WTL. WTL have had a waste carrier, broker and dealer's environmental permit registered in their name since July 2024.

Figure 1: Site Location



Reproduced from Ordnance Survey Open Map – Local with the permission of the controller of Her Majesty's Stationary Office Crown Copyright Reserved (boundary is approximate, not to scale)

1.3 Site Condition Report (SCR)

This Application SCR follows the Environment Agency's (EA) H5 guidance (ref: LIT 8001 Version 3.0 May 2013), which has a set template. Sections 1.0-3.0 are concerned with the Application SCR. Sections 4.0-7.0 are relevant during the life of the permit and sections 8.0-10.0 relevant for site surrender stage. This Application SCR thus only concerns itself with Sections 1.0-3.0, which are presented in Section 2 of this report.

A SCR under the Environmental Permitting Regulations (EPR) is only concerned with Potentially Polluting Substances (PPS) that may impact land or water. The report forms a baseline at the outset of an operation and can be used for future comparisons during the lifetime of the permit and at surrender.

1.4 Objectives

The purpose of this report is to describe the condition of the land and groundwater at this point in time. This involves collecting information regarding the substances used in the permitted process to undertake an environmental risk assessment, specifying the hazards from the operation and which environmental receptors could be affected; in the case of this SCR: land and water. The condition may be an iterative process, starting with desk-based information (i.e. this report) and if deemed required, supplemented by site investigation data/information.

This report considers the past pollution history of the site, to determine what substances could already be present beneath the site, to form a baseline of site conditions for the new permit application. This will be achieved through the following scope of works:

- Establish the environmental setting and context of the site.
- Determine the historical land use of the site.
- Consider Pollution Likelihood.
- Develop a preliminary Conceptual Site Model (CSM).
- Conduct a preliminary risk assessment of potential contamination at the site.
- Comment on the baseline condition.
- Make recommendations for further works, as necessary.

1.5 Description of the Proposed Permitted Activities

The proposed facility will comprise:

- External raw material offloading and finished products dispatch;
- Inside the building:
 - Liquid storage IBCs for input effluent;
 - RBM storage room;
 - Acids, alkali and peroxide storage rooms;
 - Process plant for RBM and wastewater;
 - Finished product drying and packing area;
 - Offices and maintenance stores.

When the facility is operational, it will be operated under Schedule 1, Section 4.2 of the EPR as a Part A(1) inorganic chemicals activity. Non permitted activities and areas include offices, hygiene facilities and parking.

1.6 Information Sources

The following information sources have been used in this report:

- Site Plans (**Appendix A**).
- Groundsure EnviroInsight Report (reference: GS-FOI-E1L-W5I-ICQ), dated 27th March 2026 (**Appendix B**).
- Historical Ordnance Survey Mapping (**Appendix C**).
- British Geological Survey (BGS) Borehole Records (**Appendix D**).
- BGS geological mapping Sheet 97, Runcorn, (1:50,000 scale) dated 1987.
- Hydrogeological map of England and Wales (1:625,000 scale) dated 1977.
- Griffiths, Kate; Shand, P.; Ingram, J.. 2002 Baseline report series. 2, The Permo-Triassic Sandstones of West Cheshire and The Wirral. Environment Agency (CR02109N).
- Open Source aerial images.
- Defra's Open Source MAGIC website (<https://magic.defra.gov.uk/magicmap.aspx>).
- Defra's Open Source historic landfill database (<https://environment.data.gov.uk/>).
- Planning Pages: Halton Borough Council (<https://www3.halton.gov.uk/Pages/planning/planningandenvironment.aspx>);
- Watercycle Technologies Ltd Supplementary Information report for Local Enforcement Position (LEP) Application, Logika Group, dated 15 December 2025 (reference 16335A-10-R01-D01);
- Grace's Guide to British Industrial History, Registered UK Charity (No. 1154342), https://www.gracesguide.co.uk/ICI_Mond_Division
- Runcorn & District Historical Society, "Runcorn: A Historical Sketch" https://www.runcornhistsoc.org.uk/runcorn_historical_sketch.html
- Process and Control Today: (11 April 2018), Anglian Water successfully trials Arvia technology <https://www.pandct.com/news/anglian-water-successfully-trials-arvia-technology>.

1.7 Report Limitations and Reliance on 3rd Party Data

This report has been produced by Turnkey for use by Air Quality Consultants and Watercycle Technologies Ltd in connection with the proposed development. It is not intended for and should not be relied upon by any third party except as provided for in Turnkey's agreement with Air Quality Consultants.

Turnkey has based this report on the sources of information detailed within the report and believes them to be reliable but cannot and does not guarantee the authenticity or reliability of third-party information. Notwithstanding the reasonable skill and care exercised by the professional team in undertaking this assessment, it is possible that ground conditions and constraints other than those potentially indicated by this report may exist at the site.

This report has been prepared based on current legislation, statutory requirements, planning policy and industry good practice prevalent at the time of writing. Any subsequent changes or new guidance may require the findings, conclusions and recommendations made in this report to be reassessed in light of the circumstances.

2. Application Site Condition Report

As noted in Section 1 above, the tabular format below takes the format and numbering referencing as per the SCR EA template. Sections 1.0-3.0 are concerned with the Application SCR. Sections 4-7 are relevant during the life of the permit and sections 8-10 relevant for site surrender stage and are beyond the scope of this report.

1.0 Site Details	
Name of the applicant	Watercycle Technologies Ltd
Activity address	Block 8, Heath Business and Technical Park, Heath Rd South, Weston, Runcorn, Cheshire, WA7 4QX
National Grid Reference	351303 380973 SJ 51297 80974
Document reference and dates for Site Condition Report at permit application and surrender	Turnkey Report Ref: 0216-R002i1 dated 26 th May 2026.
Document references for site plans (including location and boundaries)	Appendix A: Watercycle Permit Boundary Watercycle Technologies Limited – Block 8 Layout and Materials Storage Plan Ordnance Survey Mastermap

2.0 Condition of Land at Permit Issue	
Environmental setting including: - geology - hydrogeology - surface waters	For details of the environmental setting, geology, hydrogeology and surface waters, refer to Section 3.2 .
Pollution history including: - pollution incidents that may have affected land - historical land-uses and associated contaminants - any visual/olfactory evidence of existing contamination - evidence of damage to pollution prevention measures	For Site history, including pollution incidents and associated contaminants, refer to Section 3.10 , Supporting Information.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	No previous site investigation or remediation information is available.
Baseline soil and groundwater reference data	No previous site investigation information is available.
Supporting Information	Review of Historical Ordnance Survey plans (Appendix C).

3.0 Permitted Activities

Permitted activities	Details of the permitted activities are presented in Section 1.5 .
Non-Permitted Activities undertaken	Details of the non-permitted activities are presented in Section 1.5 .
Document references for: • plan showing activity layout; and • environmental risk assessment.	For plans showing the activity layout, refer to Appendix A . For the Environmental Risk Assessment, refer to Section 5 .

3. Site Environmental Setting

3.1 Site Description

The site is currently formed of a brick and steel frame factory, a laboratory and office buildings within the existing business and technical park, in the south-west of Runcorn town. The site is currently used for wastewater treatment laboratory testing and treatability trials operated by WTL. These processes would be continued under the operation of the permit.

3.2 Environmental Setting

Ground conditions underlying the site and controlled waters vulnerability are presented in **Table 3.1** and the Groundsure EnviroInsight data report is presented in **Appendix B**.

Table 3.1 Ground Conditions

Geology	Based on information published by the BGS, the site is directly underlain by solid geology of the Mercia Mudstone Formation (MMF), which is predominately mudstone but may contain subordinate siltstone and rarely sandstone. The MMF includes beds of halite (mineral rock salt), gypsum and anhydrite (calcium sulphate). The MMF is faulted in the region with the closest running approximately north to south at 280m west and 390m east of the site. Superficial deposits are mapped as close as 40m north-east comprising Glacial Till or Diamicton, principally formed of clay with variable sand, gravel, cobble and boulder content. BGS Borehole records were located 480m north-west (reference SJ58SW5) and 1.25km south (SJ57NW2) (Appendix D). Record SJ58SW5 recorded mudstone to 15m depth¹ where it intersected a fault line and changed into sandstone of the Sherwood Sandstone Group (SSG) to the full depth of the borehole at 122m depth. Groundwater rested at 54m depth within the SSG. Record SJ57NW2 encountered 12m superficial deposits overlying SSG to the full depth of 123m and rest groundwater level was at 7m depth.
Hydrogeology	The MMG is classed as a Secondary B Aquifer and the underlying SSG is classed as a Principal Aquifer. Groundwater Vulnerability is rated as high, due to having soils of a high leaching class, no superficial geology and fracture flow within the bedrock aquifer. The site is not located within an area classified by the EA as a Source Protection Zone (SPZ). The SSG is not abstracted locally due to saline intrusion arising from historical over abstraction.
Surface Waters	The nearest surface water feature is a drain 100m south-east that flows east into the adjacent golf course and away to the south-east, from where it is culverted. Historical maps show the watercourse flowing south-east towards the River Weaver 2km south and River Mersey which flows 1.6km south-west of the site at its closest point.

¹ All depths expressed as metres below existing ground level unless stated otherwise.

Sensitive Environments:	Mersey Estuary Ramsar site is recorded as 1552m south-west.

3.3 Landfill Sites

A single record exists for a historical landfill site at 323m north-west for a site operated by Halton Borough Council. No further information is available on the age and waste types.

3.4 Waste Treatment and Disposal Sites

No other waste treatment or disposal sites were identified within 500m.

3.5 Hazardous Substances / Permits

A single record was found for a site 84m west which is regulated under the Radioactive Substances Act 1993.

3.6 Industrial Land Uses

Numerous records exist for an electrical substation, chemical supplier and other industrial activities within 500m. The closest (an electrical substation) is 100m north-west from site.

3.7 Pollution Incidents

There are no records of any pollution incidents within 500m. In addition to the information in the Groundsure Report, there's no information available from previous/current site operations.

3.8 Water Discharges and Abstraction Licenses

- There are no records of any Discharge Consents within 500m.
- The closest groundwater abstraction is 1097m south for industrial cooling water.
- There were no potable water or surface water abstractions identified within 1km.

3.9 Statutory Sensitive / Sensitive Environmental Receptors

There are no records of sensitive sites within 500m.

3.10 Site History

3.10.1 Aerial Photography and Map Search

A review of available historical mapping and aerial imagery was undertaken using historical Ordnance Survey (OS) maps and plans dating from the 1874 OS County Series to the 2025 OS Plans. Open source aerial images were used to identify details from the past 25 years., These are presented within the Groundsure report in **Appendix B**. The historical OS maps reviewed have been reproduced in **Appendix C**.

Key points of the historical development of the site and surrounding area are summarised below in **Table 3.2**.

Table 3.2 Site Development History: OS Mapping Summary

Date	Description
1874-1911	Site is undeveloped agricultural land.
1937-1993	Site is identified as a golf course according to OS mapping.
1993-2025	Site is identified on historical maps as having been developed into the present-day building layout.

The Heath Business and Technical Park is reported to have opened in 1959 as the headquarters of ICI's Mond Division, which became the Chemicals and Polymers Division in the 1980s. Publicly available information on the operation of the facility is limited but it is referred to as offices and laboratories in the historical records cited in this report.

Publicly available images show the site being operated by Arvia Technologies Ltd in 2022. They were an industrial wastewater treatment technology company involved in the design, manufacture and supply of wastewater treatment solutions for the treatment of persistent organic chemicals in effluent.

The company was formed in 2007 as Arvia Technology Ltd and was first mentioned as being present at The Heath Business and Technology Park in a 2018 press article. This information suggests that following the closure of the facility by the ICI chemical company in 2000 the site was in a similar wastewater R&D use as the present day facility, at least from 2018 but possibly another 10 years prior to that.

Off-site, other buildings and infrastructure associated with the present day business park layout were mapped from around 1970 in a layout resembling the present day.

Off-site development began from the 1960s with office buildings 150m north-west and manufacturing factory 80m south-west.

3.11 Potential Historical Contaminative Uses

On-site potential contaminants are likely to be limited based on the single phase of site development history and the use of the site as an R&D facility.

Contaminants are limited to what contamination may have occurred during site development, and what may have occurred during the operation of the R&D facility from the 1950s to the present comprising ICI chemicals from 1950s to 2000 and wastewater R&D which may have started in 2008 up to the present day.

Contamination that may have occurred during initial site development may be asbestos, petroleum hydrocarbons and polycyclic aromatic hydrocarbons (PAH), although the likelihood of their prevalence beneath the site is considered to be low.

Contamination that may have occurred during the previous operation of the site is potentially more diverse due to the types of raw materials and wastewater that have been used historically and if any raw material and wastewater storage failed. Again, as it has been involved with research and development rather than factory output, the likelihood of their prevalence is also likely to be low.

Off-site sources of potential contaminants are considered to be associated with historical use of the wider Heath Business and Technology Park associated with the former use of the site by ICI and subsequent tenants of the business park from the year 2000.

There is little more information on the surrounding site uses beyond R&D facilities, and with careful consideration, the potential off-site contaminants are considered to be similar to those potentially on site.

Potential contaminants are shown in **Table 3.3** below. The range of contaminants is wide as trials may have covered a variety of input wastewater types and treatment chemicals.

Table 3.3 Potential Contaminants: On Site and Off Site

Inorganic elements and compounds	Organic compounds
Metals, metalloids and their compounds	Semi-volatile organic compounds (SVOC) including PAHs and phenols
Cyanide free and total	Volatile organic compounds (VOC) including BTEX ² and chlorinated solvents
Sulphates, sulphides	Dioxins and furans
Chlorides, fluorides	Per and polyfluoroalkyl substances (PFAS)
Ammonium, nitrates, phosphates	Pesticides
pH	Petroleum Hydrocarbons

² Benzene, Toluene, Ethyl benzene and Xylenes

4. Site Pollution Likelihood

4.1 Potentially Polluting Substances (PPS)

PPS that may be present during the operation of the facility are in two streams:

1. there are PPS within the wastewater and RBM brought into and processed at the site, and
2. there are PPS used as raw materials and in the operation of the process plant.

PPS that may be present at the facility are summarised in **Table 4.1**, together with the control measures to ensure protection of the environment.

4.2 Storage and Containment

All containers containing liquids potentially hazardous to the environment will be sited on hardstanding and have appropriate containment systems in accordance with CIRIA C736 Containment Systems for the Prevention of Pollution.

Incoming material will be in appropriate containers including IBCs and FIBCs³ in dedicated storage areas within the enclosed process building with bunds in accordance with CIRIA C736 for liquids and with solid walls separating the solid waste. IBCs used for other purposes including temporary waste storage are subject to the same controls prior to leaving the site.

Level monitors and leak detection systems within process tanks and bunds will alert operators in the event of loss of containment from the primary storage vessels.

Programmes of preventative repair and maintenance are to be undertaken by WTL as part of the quality and environmental management systems operation.

³ IBC: Intermediate Bulk Container
FIBC: Flexible Intermediate Bulk Container

Table 4.1 Potential Polluting Substances

Substances	State	Environmental Fate and Behaviour	Quantity Stored on site	Delivery, Storage and Containment			Use	Site Specific Risk
				Primary	Secondary	Tertiary		
Non-waste product water and industrial wastewater to be processed: Product waters and brines containing lithium and other metals May also contain Hydrocarbons, phenols, SVOCs	Liquid	Aquatic toxicity	48 m ³	Delivered in 1,000 litre IBCs and stored within the enclosed process building	IBCs within bunds meeting CIRIA C736	Process building has an impermeable surface connected to a sealed drainage system	Input raw material - liquid	Low Risk – control measures in place and bunds
RBM: Refined Black Mass – containing Lithium, aluminium, cobalt, copper, manganese, may also contain VOC, SVOC, PFAS	Solid	Ecotoxic to soil and sediment if spilled Leachate can contaminate controlled waters	7.8 tonnes	Delivered in an FIBC	Stored in quarantine area, Within a building with sealed drainage system	None	Input raw material - solid	Low risk primarily due to solid state and low mobility
Sulphuric acid (96-98% aqueous solution)	Liquid	Large amounts will harm aquatic organisms	4 m ³	In IBC	Within enclosed process building with secondary containment	Impermeable surface connected to a sealed drainage system	Material processing	Low risk with control measures in place

Substances	State	Environmental Fate and Behaviour	Quantity Stored on site	Delivery, Storage and Containment			Use	Site Specific Risk
				Primary	Secondary	Tertiary		
					measures meeting CIRIA C736			
Hydrogen peroxide (max. 37% aqueous solution)	Liquid	Harmful to aquatic organisms	<1 m ³	In IBC	Within enclosed process building with secondary containment measures meeting CIRIA C736	Impermeable surface connected to a sealed drainage system	Material processing	Low risk with control measures in place
Sodium hydroxide (32% aqueous solution)	Liquid	Large amounts will harm aquatic organisms	8 m ³	In IBC	Within enclosed process building with secondary containment measures meeting CIRIA C736	Impermeable surface connected to a sealed drainage system	Material processing	Low risk with control measures in place
Sodium carbonate (anhydrous)	Solid	Harmful to aquatic organisms	3 tonnes	In manufacturer supplied containers	Within enclosed process building	Impermeable surface connected to a sealed drainage system. Dry powder with any spillages cleaned up with spill kits	Lithium carbonate production	Low risk with control measures in place
Sodium phosphate (hydrated)	Solid	May be harmful to aquatic organisms	3 tonnes	In manufacturer supplied containers	Within enclosed process building	Impermeable surface connected to a	Lithium phosphate production	Low risk with control measures in place

Substances	State	Environmental Fate and Behaviour	Quantity Stored on site	Delivery, Storage and Containment			Use	Site Specific Risk
				Primary	Secondary	Tertiary		
						sealed drainage system		

4.3 Site Management Procedures

4.3.1 Systems

Watercycle Technologies Ltd operates management systems within ISO:9001 (Quality Management) and ISO:14001 (Environmental Management).

The Quality Management System (QMS) provides the following:

- Document control and process control to ensure operating procedures, dosing rates, and treatment parameters are consistently followed, reducing process variability that leads to off-specification products, additional processing and waste.
- Corrective and preventive action ensures environmental incidents and near-misses are investigated and recurrence prevented.
- Management review of processes create governance accountability for environmental performance at senior level.
- Equipment calibration control ensures monitoring instruments (e.g. pH, flow, meters) are accurate, enabling process flaws to be identified and rectified and reliable monitoring of system parameters.

The Environmental Management System (EMS) provides the following:

- Requires identification and control of significant environmental aspects, which drives systematic assessment of the facility's emissions, effluent and waste across the black mass and wastewater treatment processes.
- Sets measurable environmental objectives and targets, driving continual improvement in areas such as waste quantities and raw material consumption.
- Requires legal compliance evaluation against all applicable environmental legislation, reducing risk of permit breaches.
- Drives supplier and contractor environmental requirements, ensuring incoming reagents and waste disposal routes meet environmental standards.

In addition, the EMS establishes emergency preparedness and response procedures for spills and accidental releases and requires the operator to undergo mock environmental incidents to test their preparedness. These procedures can reduce pollution incident risk from raw materials, process chemicals and waste storage. Practising the drills can teach the operators how to handle extreme events such as vehicle impact, flooding and fire.

Operating under both systems provides a structured, audited system to operate the facility, which, over time, provides operating efficiencies and minimises pollution risks.

4.3.2 Staff

WTL is a 9 year old business formed of scientists, engineers and business managers as a mix of permanent and contract staff. The company's management systems include comprehensive staff training, development and competency assessments and clearly defined roles. All of these aspects synergise to minimise pollution risk.

Operations are managed by a dedicated operations team and waste acceptance team that works on a fixed day shift pattern overseen by appropriately qualified facility managers and a Quality, Health, Safety and Environmental Manager.

The company will have a Technically Competent Manager (TCM) with the right experience and qualifications to operate under the permit conditions.

4.3.3 Critical Equipment Inspections

Environmentally critical equipment is subject to inspection, maintenance and record keeping in accordance with the integrated management system. This includes all plant and equipment, environmentally critical equipment such as bunds, tanks, pipework and minor items and components such as flexible hoses, nozzles, lubricants and greases, filters and seals.

4.4 Pollution Likelihood Assessment

There are no planned emissions to land or water from the site, as the future proposed processes operate in sealed drainage systems, with spilled substances contained, cleaned up, and waste products disposed off-site using licensed waste management contractors. The circumstances under which emissions may occur include accidents and / or incidents and routine operations.

Given the management procedures in place at the site and the site design, potential pollutant releases as a result of routine operations and as a result of accident and/or incident are considered to represent a **very low risk** for the facility in terms of contaminating land, groundwater or surface water.

Further assessment is undertaken in **Section 5**.

5. Environmental Risk Assessment

The risk evaluation is centred around the site Conceptual Site Model, which considers the PPS and the receptors of concern for this SCR. Each of these is covered in Sections 5.1 to 5.3 and evaluated in **Table 5.1**.

5.1 Receptors

Under this Application SCR, the only receptors of concern under EPR are land, groundwater and off-site surface water.

Land

Potential releases to land include:

- Spillage of raw input materials, process chemicals or waste.
- Leaks from tanks, containers, valves or pipework.
- Contaminated surface run-off.
- Aerial deposition from fumes or dust.

In addition to the material containers, transport, reception and offloading procedures, waste reception and quarantine areas have impermeable surfaces with connections to a sealed drainage system and/or containment kerbing.

Procedures are in place for the use of spill kits and operators will be trained in how to manage spillages in accordance with the spill response plan.

In addition to the design and engineering of the site, potential releases will be managed through operator checks and high standards of housekeeping. All tanks, pipes and valves will be designed to appropriate industry standards, will have a preventative maintenance programme to ensure on-going integrity and effectiveness, and are subject to operator checks for signs of leakage.

Fugitive and point source emissions from liquids and gases under pressure are mitigated by the maintenance and inspection schedules from the management systems in place.

Aerial deposition e.g. from mobilised dusts are not likely to arise to significant land quality deterioration due to the minimal opportunity for dust generation considering the enclosed containers combined with the storage and handling methods for the RBM.

Groundwater and Surface Water

The site is underlain by mudstone geology of unknown thickness which is classed as a Secondary B Aquifer. This is underlain by sandstone geology which is classed as a Principal Aquifer which is not subject to groundwater abstraction locally. There are no SPZ nearby. The closest surface watercourse is 100m south-east of the site.

There are no point source releases to groundwater at the installation, and for pollution to enter groundwater requires there to be failure of more than one element of a system that is actively managed.

The surface water drainage system drains to two oil – water interceptors that can temporarily contain small spills within the combined volumes of the chambers. They can intercept and temporarily retain hydrocarbon-based spills that allows time to pump out the liquid. However, they have no meaningful retention of miscible contaminants and a finite holding capacity. One of the interceptors is reported to be gravity fed and the other pumped, providing a means of isolating the system should an accident occur during offloading which may result in loss of containment.

In emergency situations the drainage system can be isolated / mitigated using drain mats and inflatable drain seals and liquids can be pumped into IBCs for treatment or off-site disposal.

Potential releases to surface water are largely mitigated by the small scale and controlled processes occurring on site.

Table 5.2 Conceptual Site Model and Summary of Risk Evaluation

Source	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk
Discharge to Land Sulphuric acid, hydrogen peroxide, sodium hydroxide, sodium carbonate/phosphate; refined black mass (Ni, Co, Mn, Cu, Fe, Al, graphite, residual electrolyte solvents, potential PFAS); process effluents	Soil	- Spillage during delivery, transfer or storage - Leaks from tanks, IBCs, valves or pipework Aerial deposition of dust or fumes	- Processing within enclosed building on impermeable hardstanding - IBC bunding to CIRIA C736 (110% of largest vessel) - Local Exhaust Ventilation with fabric filter and carbon adsorption controls fugitive dust and VOCs - Daily inspection of containment; spill kits and trained operators ISO 14001 system with preventative maintenance schedule	Low Likelihood	Medium Localised soil contamination	Low Risk
Discharge to Groundwater As above	Groundwater Mudstone (Secondary B Aquifer) over sandstone (Principal Aquifer). No local abstraction; no SPZ.	Loss of primary containment migrating through hardstanding to underlying strata Infiltration via failed drainage	- No point source discharge to groundwater - Multiple-barrier containment: enclosed building, bunded storage, sealed drainage Pollution would require failure of more than one managed system element	Low Likelihood	Medium Aquifer contamination; severity reduced by absence of local abstractions and SPZs	Low Risk
Discharge to Surface Water As above, plus firefighting water in an emergency	Off-site Surface Water Nearest watercourse approximately 100 m southeast.	Loss of containment entering surface water drainage	- Two interceptors (one gravity-fed, one pumped) allow drainage isolation; combined capacity approximately 3 m³ - Interceptors retain hydrocarbon-based spills only; limited retention of miscible contaminants	Low Likelihood	Medium Release to nearest watercourse	Low Risk

Source	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk
	Mersey Estuary Ramsar 1.6 km south-west.	Contaminated surface run-off from external offloading area	Drain mats, inflatable seals and IBC pumping available for emergency containment Small-scale, controlled processes limit on-site inventories to low quantities.			

5.2 Conclusions and Recommendations

Proposed permitted operations at the site have an overall assessment of low risk, predominately based on the small-scale of operations which are subject to organisational operating controls using trained and competent personnel.

The SCR is intended to be a live document that is updated through the life of the permit and at surrender (i.e. Sections 4.0 - 10.0 of the SCR template).

Quantitative data in the form of intrusive site investigation would provide baseline data at or close to the commencement of trials which would consider the site's previous history.

Quantifying the levels of pre-existing contamination at the site with site investigation information would provide the operator with a legally and technically defensible "line in the sand" at the point of permit surrender.

When the permit is eventually surrendered, the EA will require the operator to demonstrate that the site is in no worse condition than it was at the time the permit was granted and this comparison is made directly against the SCR baseline. Without quantified pre-existing contamination data, the operator may be held responsible for contamination that predates their operations.

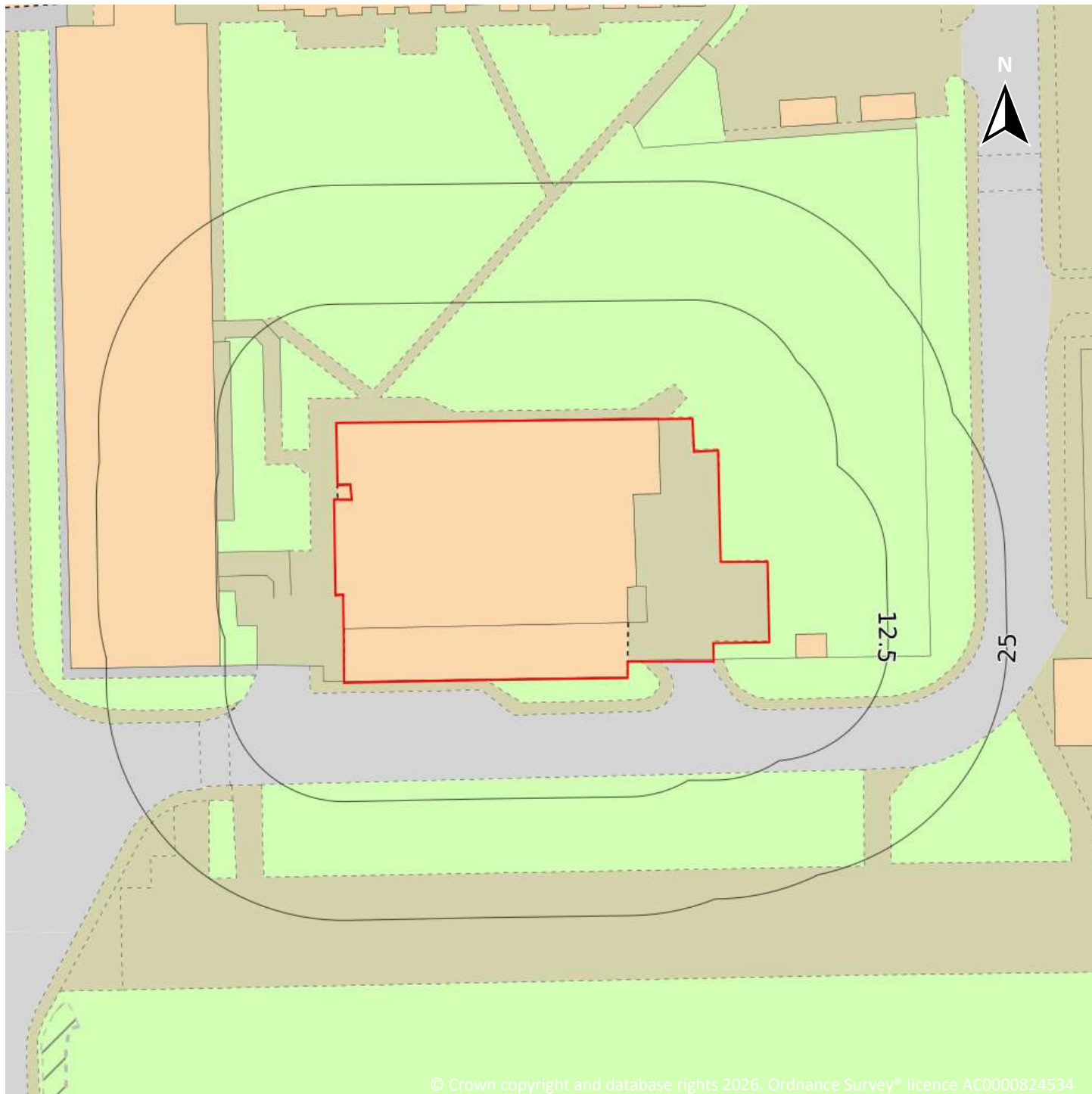
The quantified baseline sets the land quality endpoint that the operator must achieve at surrender, which may not be a background condition, but the condition that existed when they took on the permit.

Quantified contamination data allows a more precise and defensible pollutant linkage assessment, potentially demonstrating that certain contaminant concentrations are attributable to historical sources rather than the permitted activity.

Appendix A – Plans

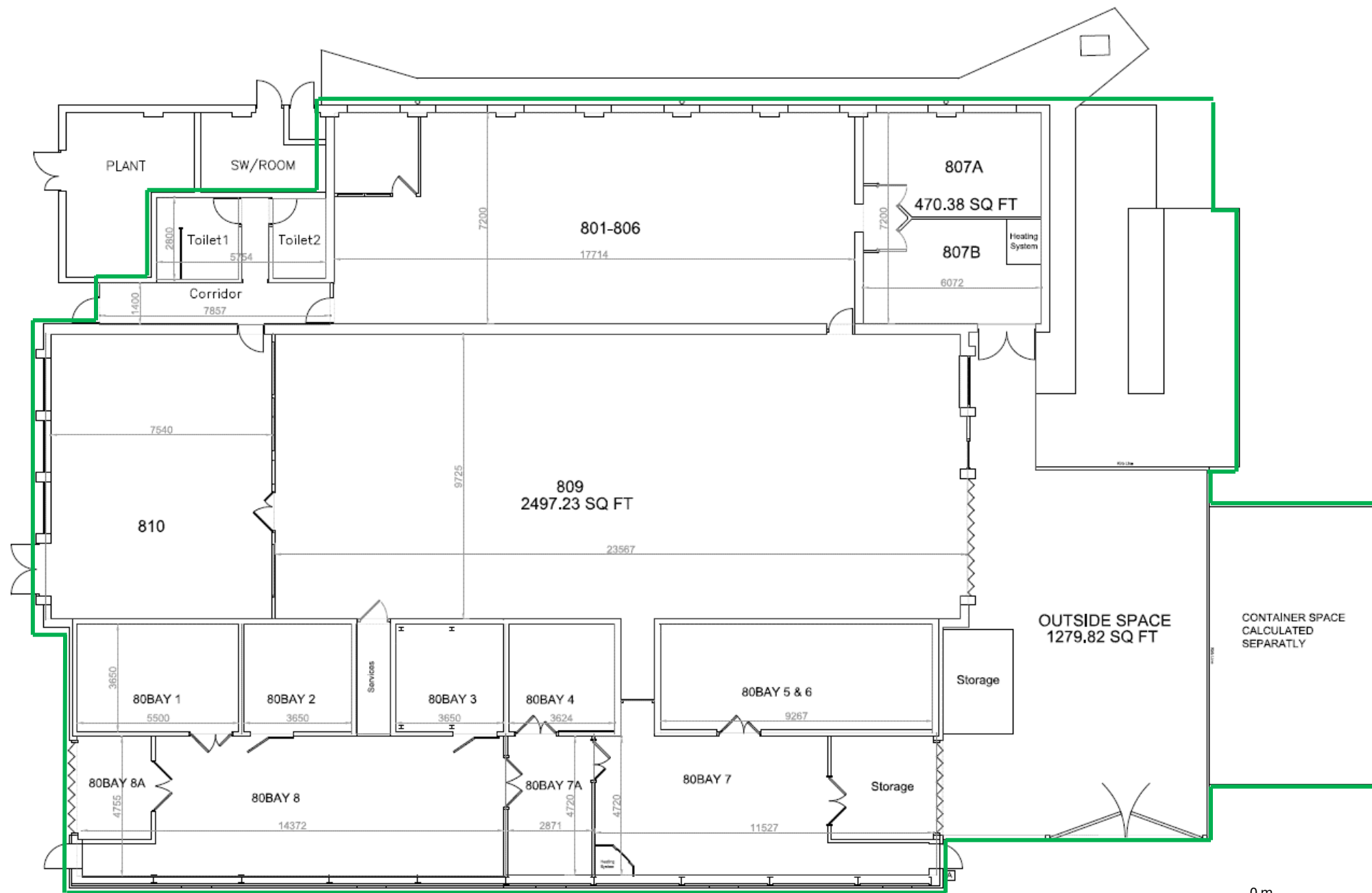
- Watercycle Permit Boundary
- Watercycle Technologies Limited – Block 8 Layout and Materials Storage Plan
- Ordnance Survey Mastermap

OS MasterMap site plan



Site Area: 0.12ha

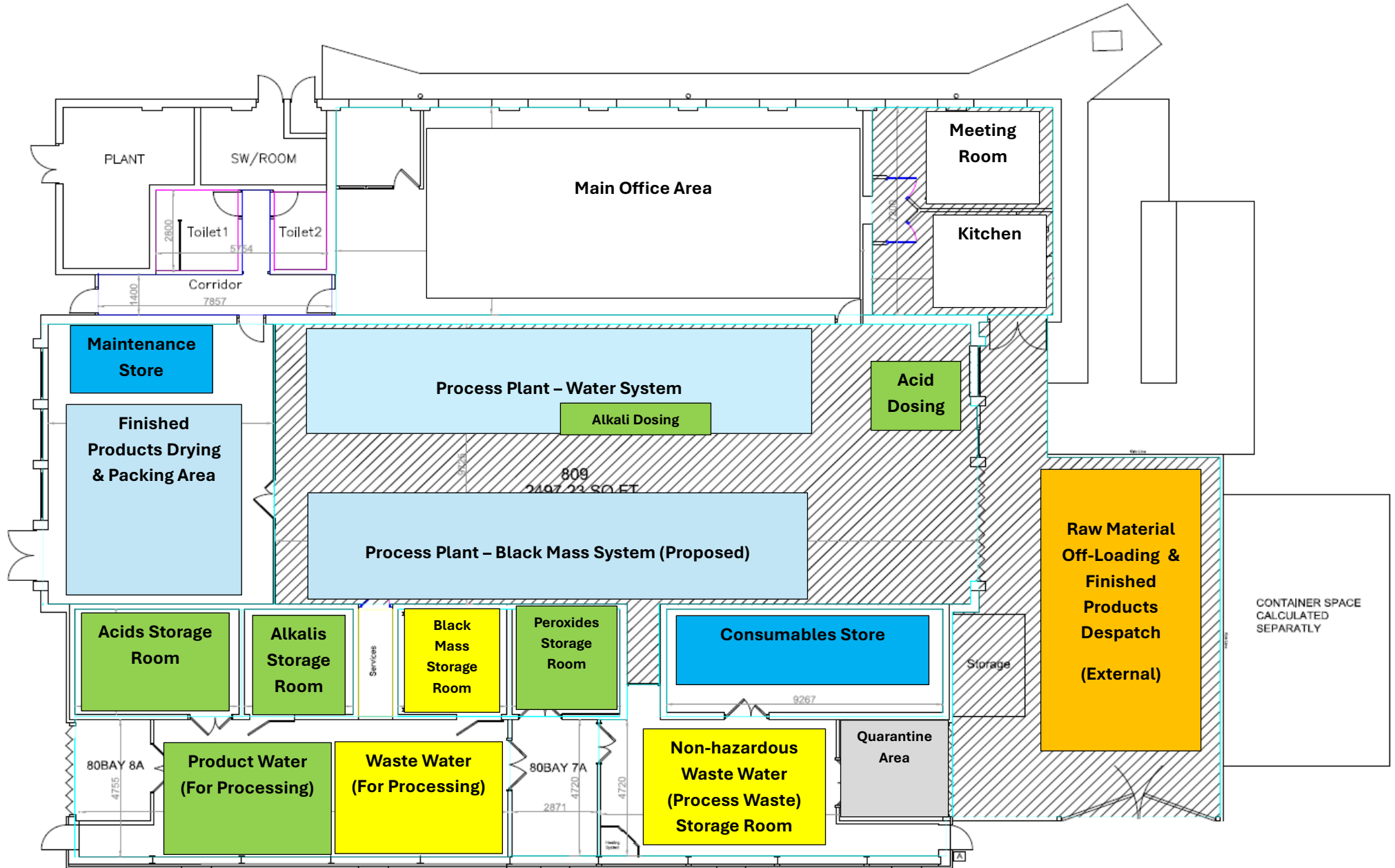




BLOCK 8



Watercycle Technologies Limited – Block 8 Layout and Materials Storage Plan



BLOCK 8

Appendix B – Groundsure EnviroInsight Report

0216 Logika Runcorn

Order Details

Date: 27/03/2026
Your ref: 0216 Logika Runcorn
Our Ref: GS-FOI-E1L-W5I-ICQ

Site Details

Location: 351303 380973
Area: 0.12 ha
Authority: [Halton Borough Council](#) ↗

Site plan



Quick Links

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

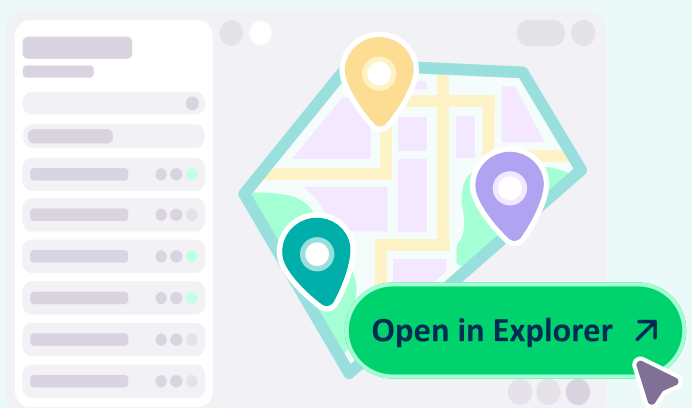
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

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

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



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	3	16	-
16 >	1.2 >	Historical tanks >	0	0	0	1	-
17 >	1.3 >	Historical energy features >	0	0	0	3	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
18	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
19 >	2.1 >	Historical industrial land uses >	0	0	3	18	-
20 >	2.2 >	Historical tanks >	0	0	0	1	-
21 >	2.3 >	Historical energy features >	0	0	0	5	-
21	2.4	Historical petrol stations	0	0	0	0	-
21	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
23 >	3.3 >	Historical landfill (LA/mapping records) >	0	0	0	1	-
23	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
23	3.5	Historical waste sites	0	0	0	0	-
23	3.6	Licensed waste sites	0	0	0	0	-
23 >	3.7 >	Waste exemptions >	0	0	6	2	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
25 >	4.1 >	Recent industrial land uses >	0	0	12	-	-
26 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	1	-	-
27	4.3	Current or recent petrol stations	0	0	0	0	-
27	4.4	Electricity cables	0	0	0	0	-
27	4.5	Gas pipelines	0	0	0	0	-



27	4.6	Sites determined as Contaminated Land	0	0	0	0	-
27	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
28	4.8	Regulated explosive sites	0	0	0	0	-
28	4.9	Hazardous substance storage/usage	0	0	0	0	-
28	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
28	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
28	4.12	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
29 >	4.13 >	<u>Radioactive Substance Authorisations</u> >	0	0	3	0	-
29	4.14	Licensed Discharges to controlled waters	0	0	0	0	-
29	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
30	4.16	Pollutant release to public sewer	0	0	0	0	-
30	4.17	List 1 Dangerous Substances	0	0	0	0	-
30	4.18	List 2 Dangerous Substances	0	0	0	0	-
30	4.19	Pollution Incidents (EA/NRW)	0	0	0	0	-
30	4.20	Pollution inventory substances	0	0	0	0	-
31	4.21	Pollution inventory waste transfers	0	0	0	0	-
31	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology</u> >	On site	0-50m	50-250m	250-500m	500-2000m
32 >	5.1 >	<u>Superficial aquifer</u> >	Identified (within 500m)				
33 >	5.2 >	<u>Bedrock aquifer</u> >	Identified (within 500m)				
35 >	5.3 >	<u>Groundwater vulnerability</u> >	Identified (within 50m)				
36	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
36	5.5	Groundwater vulnerability- local information	None (within 0m)				
37 >	5.6 >	<u>Groundwater abstractions</u> >	0	0	0	0	7
39 >	5.7 >	<u>Surface water abstractions</u> >	0	0	0	0	24
46	5.8	Potable abstractions	0	0	0	0	0
46	5.9	Source Protection Zones	0	0	0	0	-
46	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology</u> >	On site	0-50m	50-250m	250-500m	500-2000m



47 >	6.1 >	Water Network (OS MasterMap) >	0	0	6	-	-
48 >	6.2 >	Surface water features >	0	0	8	-	-
48 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
49	6.4	WFD Surface water bodies	0	0	0	-	-
49 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
50	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
50	7.2	Historical Flood Events	0	0	0	-	-
50	7.3	Flood Defences	0	0	0	-	-
51	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
51	7.5	Flood Storage Areas	0	0	0	-	-
52	7.6	Flood Zone 2	None (within 50m)				
52	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
53 >	8.1 >	Surface water flooding >	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
55 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	1
57 >	10.2 >	Conserved wetland sites (Ramsar sites) >	0	0	0	0	2
57	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
58 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	2
58	10.5	National Nature Reserves (NNR)	0	0	0	0	0
58 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
59	10.7	Designated Ancient Woodland	0	0	0	0	0
59	10.8	Biosphere Reserves	0	0	0	0	0
59	10.9	Forest Parks	0	0	0	0	0
59	10.10	Marine Conservation Zones	0	0	0	0	0
60 >	10.11 >	Green Belt >	0	0	0	0	2



60	10.12	Proposed Ramsar sites	0	0	0	0	0
60	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
60	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
61	10.15	Nitrate Sensitive Areas	0	0	0	0	0
61 >	10.16 >	Nitrate Vulnerable Zones >	0	0	1	0	0
62 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
63 >	10.18 >	SSSI Units >	0	0	0	0	1
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
65	11.1	World Heritage Sites	0	0	0	-	-
65	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
65	11.3	National Parks	0	0	0	-	-
65	11.4	Listed Buildings	0	0	0	-	-
66	11.5	Conservation Areas	0	0	0	-	-
66	11.6	Scheduled Ancient Monuments	0	0	0	-	-
66	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
67 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
68	12.2	Open Access Land	0	0	0	-	-
68 >	12.3 >	Tree Felling Licences >	0	0	3	-	-
68	12.4	Environmental Stewardship Schemes	0	0	0	-	-
68	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
70 >	13.1 >	Priority Habitat Inventory >	0	1	4	-	-
71	13.2	Habitat Networks	0	0	0	-	-
71	13.3	Open Mosaic Habitat	0	0	0	-	-
71	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
72 >	14.1 >	10k Availability >	Identified (within 500m)				
73	14.2	Artificial and made ground (10k)	0	0	0	0	-

74 >	14.3 >	Superficial geology (10k) >	0	1	0	0	-
75	14.4	Landslip (10k)	0	0	0	0	-
76 >	14.5 >	Bedrock geology (10k) >	1	0	0	4	-
77 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	0	2	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
78 >	15.1 >	50k Availability >	Identified (within 500m)				
79	15.2	Artificial and made ground (50k)	0	0	0	0	-
79	15.3	Artificial ground permeability (50k)	0	0	-	-	-
80 >	15.4 >	Superficial geology (50k) >	0	1	0	0	-
81 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
81	15.6	Landslip (50k)	0	0	0	0	-
81	15.7	Landslip permeability (50k)	None (within 50m)				
82 >	15.8 >	Bedrock geology (50k) >	1	0	0	4	-
83 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
83 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	0	2	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
84	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
85 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
86 >	17.2 >	Running sands >	Very low (within 50m)				
88 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
89 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
90 >	17.5 >	Landslides >	Very low (within 50m)				
91 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	18.1 >	BritPits >	0	0	0	1	-
94 >	18.2 >	Surface ground workings >	0	0	5	-	-
94 >	18.3 >	Underground workings >	0	0	0	0	26
96	18.4	Underground mining extents	0	0	0	0	-



96	18.5	Historical Mineral Planning Areas	0	0	0	0	-
96	18.6	Non-coal mining	0	0	0	0	0
96 >	18.7 >	<u>JPB mining areas</u> >	Identified (within 0m)				
97	18.8	The Coal Authority non-coal mining	0	0	0	0	-
97	18.9	Researched mining	0	0	0	0	-
97	18.10	Mining record office plans	0	0	0	0	-
97	18.11	BGS mine plans	0	0	0	0	-
98	18.12	Coal mining	None (within 0m)				
98	18.13	Brine areas	None (within 0m)				
98	18.14	Gypsum areas	None (within 0m)				
98	18.15	Tin mining	None (within 0m)				
98	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
99	19.1	Natural cavities	0	0	0	0	-
99	19.2	Mining cavities	0	0	0	0	0
99	19.3	Reported recent incidents	0	0	0	0	-
99	19.4	Historical incidents	0	0	0	0	-
Page	Section	<u>Radon</u> >					
101 >	20.1 >	<u>Radon</u> >	Less than 1% (within 0m)				
Page	Section	<u>Soil chemistry</u> >	On site	0-50m	50-250m	250-500m	500-2000m
103 >	21.1 >	<u>BGS Estimated Background Soil Chemistry</u> >	1	3	-	-	-
103	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
103	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
105	22.1	Underground railways (London)	0	0	0	-	-
105	22.2	Underground railways (Non-London)	0	0	0	-	-
105	22.3	Railway tunnels	0	0	0	-	-
105	22.4	Historical railway and tunnel features	0	0	0	-	-
105	22.5	Royal Mail tunnels	0	0	0	-	-



106	22.6	Historical railways	0	0	0	-	-
106	22.7	Railways	0	0	0	-	-
106	22.8	Crossrail 2	0	0	0	0	-
106	22.9	HS2	0	0	0	0	-



Recent aerial photograph

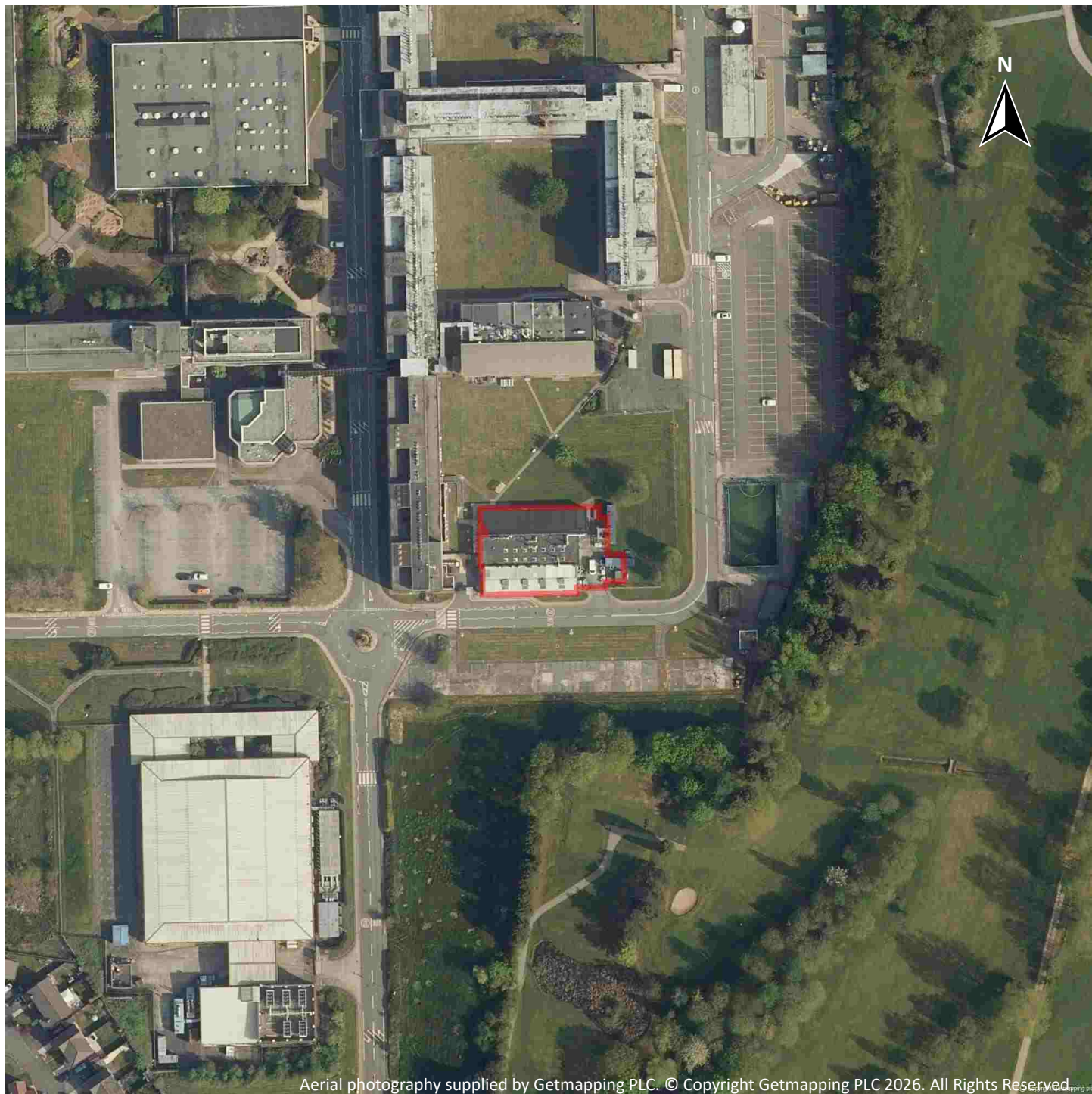


Capture Date: 28/09/2022

Site Area: 0.12ha



Recent site history - 2019 aerial photograph



Capture Date: 22/04/2019

Site Area: 0.12ha



Recent site history - 2010 aerial photograph



Capture Date: 17/10/2010

Site Area: 0.12ha



Recent site history - 2005 aerial photograph

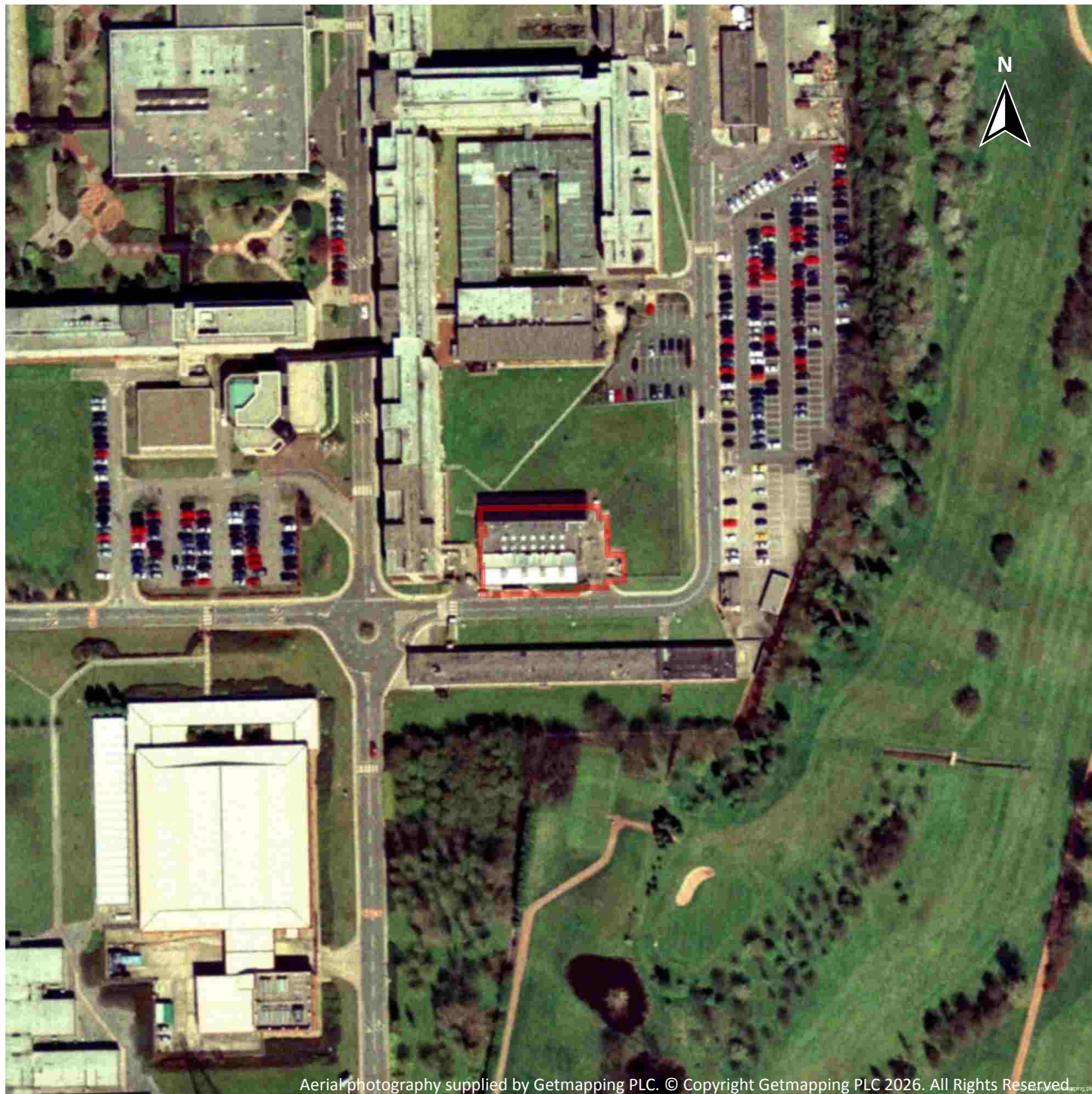


Capture Date: 15/05/2005

Site Area: 0.12ha



Recent site history - 2000 aerial photograph

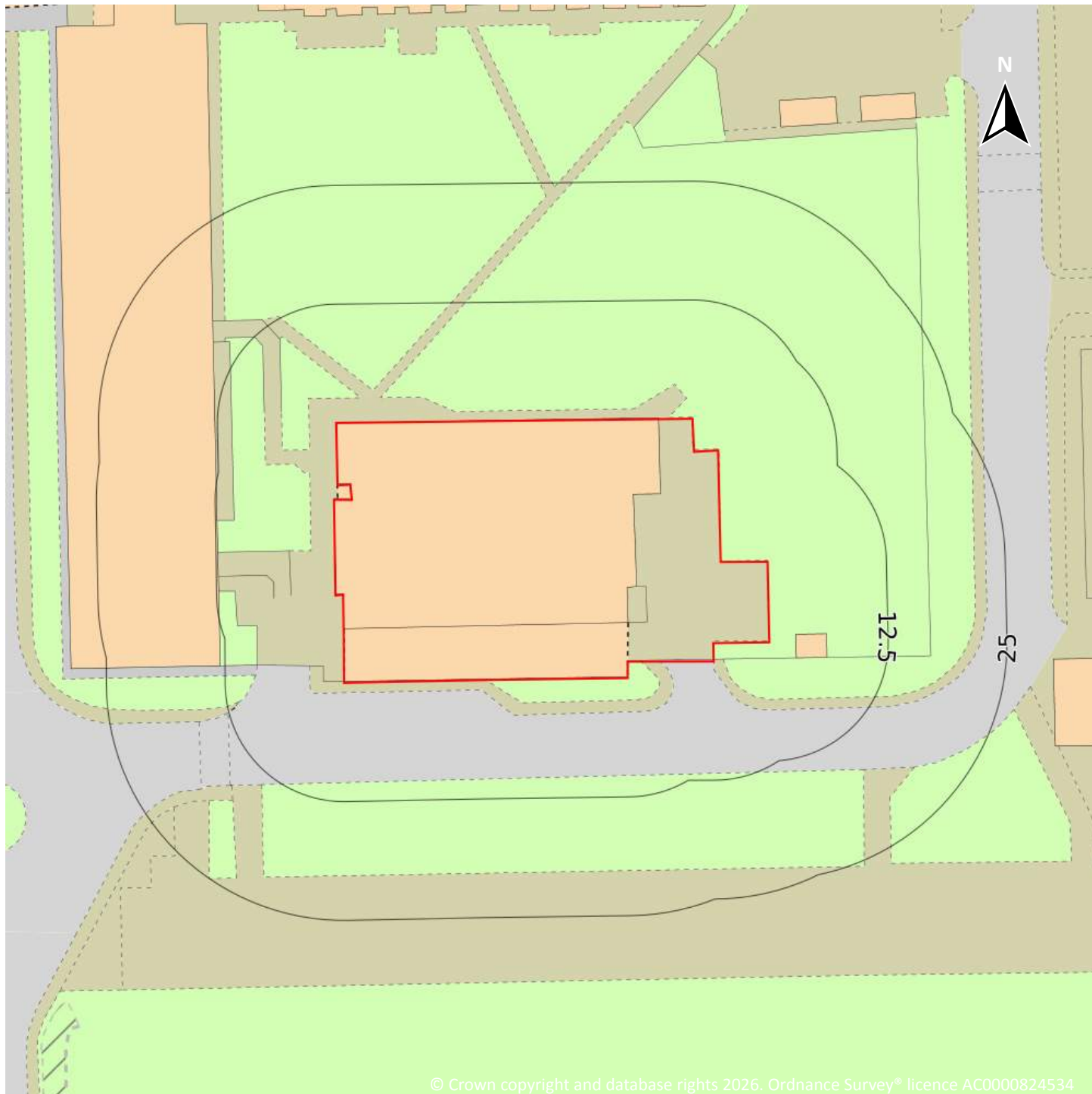


Capture Date: 21/07/2000

Site Area: 0.12ha



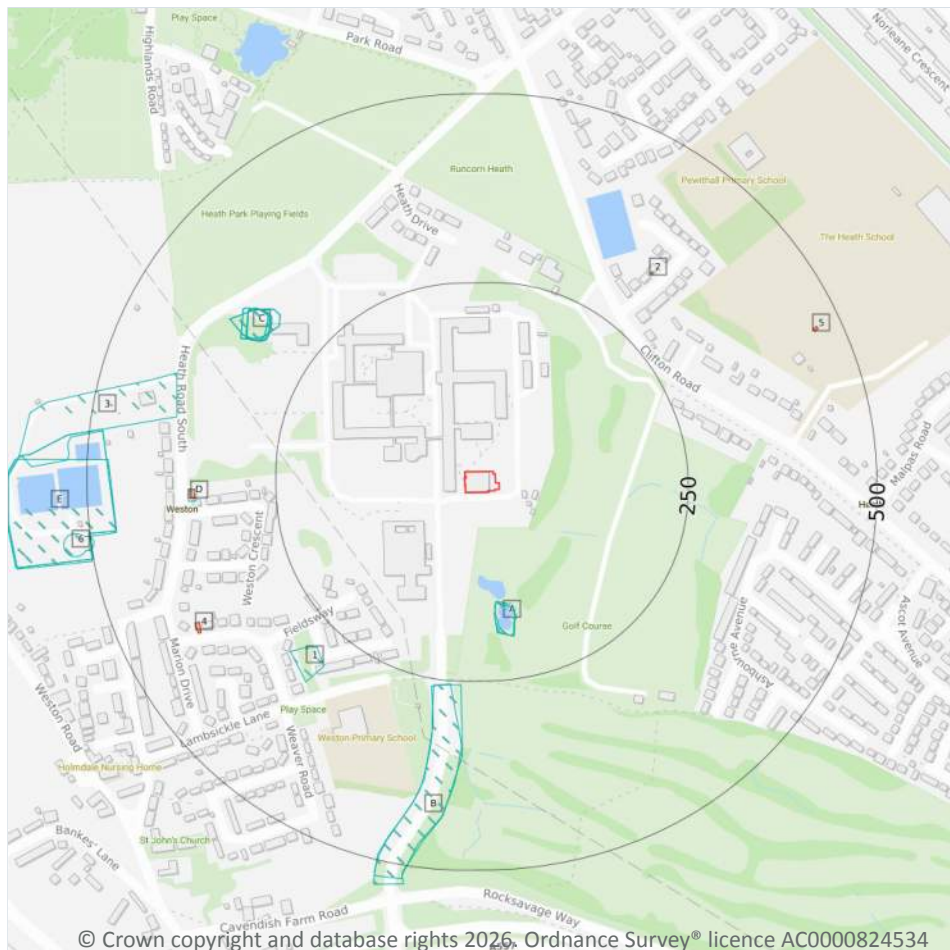
OS MasterMap site plan



Site Area: 0.12ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

19

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

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

ID	Location	Land use	Dates present	Group ID
A	145m S	Unspecified Pits	1968	855769



ID	Location	Land use	Dates present	Group ID
A	146m S	Unspecified Ground Workings	1994	883063
A	146m S	Unspecified Ground Workings	1982	902009
B	254m S	Cuttings	1982	971318
B	255m S	Cuttings	1994	975927
1	284m SW	Unspecified Pit	1968	831146
C	313m NW	Unspecified Pit	1982	953068
C	313m NW	Unspecified Pit	1994	1006994
C	316m NW	Unspecified Pit	1908	897047
C	316m NW	Unspecified Pit	1912	989702
C	317m NW	Unspecified Pit	1964 - 1968	1004144
C	321m NW	Unspecified Old Quarry	1897	812868
C	321m NW	Unspecified Pit	1938	952398
D	355m W	Water Tower	1908	806973
3	388m W	Nursery	1994	831835
E	465m W	Unspecified Works	1968	865480
E	465m W	Unspecified Works	1994	947703
E	465m W	Unspecified Works	1982	928534
6	496m W	Unspecified Tank	1964 - 1968	911374

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m

1

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

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



ID	Location	Land use	Dates present	Group ID
2	335m NE	Unspecified Tank	1899	116355

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

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

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

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

ID	Location	Land use	Dates present	Group ID
D	357m W	Electricity Substation	1972 - 1993	91204
4	392m SW	Electricity Substation	1972 - 1993	80495
5	462m NE	Electricity Substation	1971	66431

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

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

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

This data is sourced from Ordnance Survey® / Groundsure.

1.5 Historical garages

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

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



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

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

Records within 500m

0

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

21

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

Features are displayed on the Past land use - un-grouped map on [page 19](#) >

ID	Location	Land Use	Date	Group ID
A	145m S	Unspecified Pits	1968	855769
A	146m S	Unspecified Ground Workings	1994	883063
A	146m S	Unspecified Ground Workings	1982	902009



ID	Location	Land Use	Date	Group ID
B	254m S	Cuttings	1982	971318
B	255m S	Cuttings	1994	975927
1	284m SW	Unspecified Pit	1968	831146
C	313m NW	Unspecified Pit	1994	1006994
C	313m NW	Unspecified Pit	1982	953068
C	316m NW	Unspecified Pit	1908	897047
C	316m NW	Unspecified Pit	1912	989702
C	316m NW	Unspecified Pit	1912	989702
C	317m NW	Unspecified Pit	1968	1004144
C	317m NW	Unspecified Pit	1964	1004144
C	321m NW	Unspecified Pit	1938	952398
C	321m NW	Unspecified Old Quarry	1897	812868
D	355m W	Water Tower	1908	806973
3	388m W	Nursery	1994	831835
F	465m W	Unspecified Works	1994	947703
F	465m W	Unspecified Works	1968	865480
F	465m W	Unspecified Works	1982	928534
5	496m W	Unspecified Tank	1964	911374

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

1

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

Features are displayed on the Past land use - un-grouped map on [page 19 >](#)

ID	Location	Land Use	Date	Group ID
2	335m NE	Unspecified Tank	1899	116355

This data is sourced from Ordnance Survey® / Groundsure.



2.3 Historical energy features

Records within 500m

5

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

Features are displayed on the Past land use - un-grouped map on [page 19 >](#)

ID	Location	Land Use	Date	Group ID
D	357m W	Electricity Substation	1972	91204
D	358m W	Electricity Substation	1993	91204
E	392m SW	Electricity Substation	1993	80495
E	392m SW	Electricity Substation	1972	80495
4	462m NE	Electricity Substation	1971	66431

This data is sourced from Ordnance Survey® / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.

2.5 Historical garages

Records within 500m

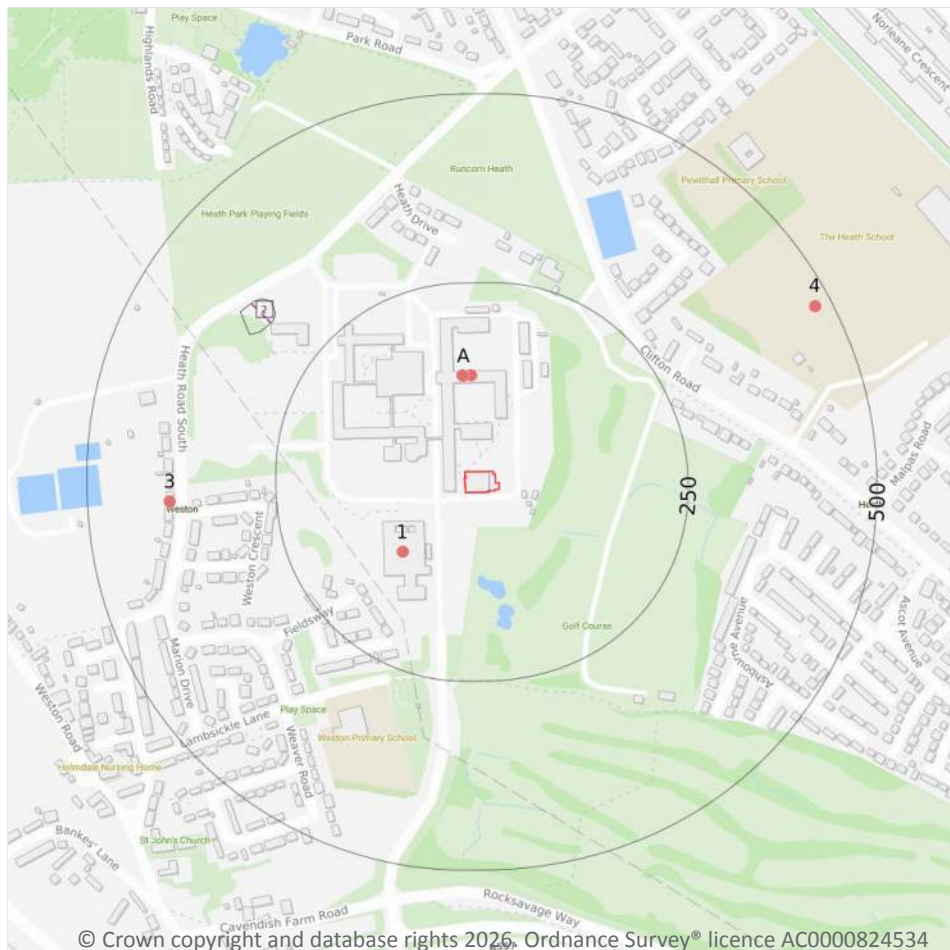
0

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

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (LA/OS)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

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

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

Features are displayed on the Waste and landfill map on [page 22 >](#)

ID	Location	Site address	Source	Data type
2	323m NW	Heath Road South, Runcorn	Halton Borough Council and historical mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

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

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

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

3.5 Historical waste sites

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

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

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

3.6 Licensed waste sites

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

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

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

3.7 Waste exemptions

Records within 500m	8
---------------------	---

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

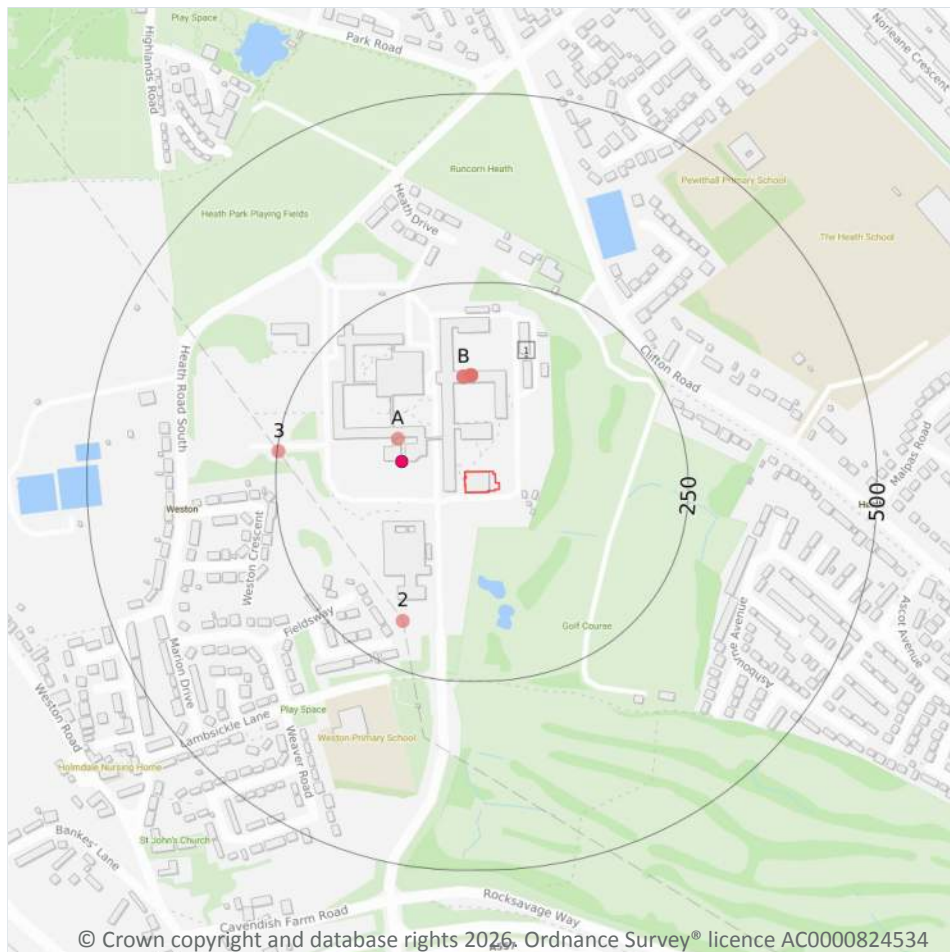
Features are displayed on the Waste and landfill map on [page 22 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
1	116m SW	The Babbage Centre The Heath Business & Technical Park Runcorn Halton Wa7 4qx	EPR/NF0002N C/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
A	126m N	Science Centre, The Heath Business & Technical Park, Runcorn, Wa7 4qx	WEX086342	Disposing of waste exemption	Not on a farm	Depositing samples of waste for the purposes of testing or analysing them
A	126m N	The Babbage Centre, The Heath Business And Technical Park, Runcorn, Wa7 4qx	WEX151358	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	127m N	The Babbage Centre, The Heath Business And Technical Park, Runcorn, Wa7 4qx	WEX288099	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	127m N	The Babbage Centre, The Heath Business And Technical Park, Runcorn, Wa7 4qx	WEX417384	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	127m N	The Heath Business & Technical P Runcorn Cheshire Wa7 4qx	EPR/HH0079H B/A001	Disposing of waste exemption	Non-agricultural waste only	Depositing samples of waste for the purposes of testing or analysing them
3	392m W	18, Heath Road South, Weston, Runcorn, Wa7 4qq	WEX433636	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
4	478m NE	Clifton Road, Runcorn, Wa7 4sy	WEX148427	Using waste exemption	Not on a farm	Use of waste in construction

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- NGD current or recent tanks
- Radioactive Substance Authorisations

4.1 Recent industrial land uses

Records within 250m

12

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 25 >](#)

ID	Location	Company	Address	Activity	Category
A	99m NW	Electricity Sub Station	Cheshire, WA7	Electrical Features	Infrastructure and Facilities
B	126m N	Manchester Organics	The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7	Colours, Chemicals and Water Softeners and Supplies	Industrial Products



ID	Location	Company	Address	Activity	Category
B	126m N	Arvia Water Technologies	The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7	Air and Water Filtration	Industrial Products
B	127m N	Heath Leisure	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Business Parks and Industrial Estates	Industrial Features
B	127m N	Millstone Durbax Ltd	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Colours, Chemicals and Water Softeners and Supplies	Industrial Products
B	127m N	Streamline Site Solutions Ltd	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Construction and Tool Hire	Hire Services
B	127m N	Koura	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Cooling and Refrigeration	Industrial Products
B	127m N	Octave Design Services Ltd	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Civil Engineers	Engineering Services
B	127m N	Harvey Walsh Ltd	402 The Heath Business & Technical Park, Heath Road South, Runcorn, Cheshire, WA7 4QX	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
B	127m N	Maltacourt	Room 501 The Heath Business & Technical Park, Runcorn, Cheshire, WA7 4QX	Distribution and Haulage	Transport, Storage and Delivery
2	189m SW	Pylon	Cheshire, WA7	Electrical Features	Infrastructure and Facilities
3	248m W	Pylon	Cheshire, WA7	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.

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

Records within 250m

1

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

Features are displayed on the Current industrial land use map on [page 25 >](#)

ID	Location	Tank description	Activity	Date first identified
1	156m N	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	08/08/2018



This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

Records within 500m	0
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Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

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

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

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

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

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

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

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

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

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

This data is sourced from the Health and Safety Executive.



4.8 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.11 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

0

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

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m

3

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

Features are displayed on the Current industrial land use map on [page 25](#) >

ID	Location	Address	Details	
A	84m W	Protherics Molecular Design Ltd, Heath Business And Technical Park, Runcorn, WA7 4QF	Operator: Protherics Molecular Design Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BM2322 Date of approval: 08/01/2002	Effective from: 08/01/2002 Last date of update: 01/01/2015 Status: Superseded By Variation
A	84m W	Protherics Molecular Design Ltd, Heath Business And Technical Park, Runcorn, WA7 4QF	Operator: Protherics Molecular Design Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BM2322 Date of approval: 01/12/2003	Effective from: 01/01/2004 Last date of update: 01/01/2015 Status: Revoked/cancelled
A	84m W	Protherics Molecular Design Ltd, Heath Business And Technical Park, Runcorn, WA7 4QF	Operator: Protherics Molecular Design Ltd Type: Keeping And Use Of Radioactive Materials (was Rsa60 Section 1). Permission number: BM2314 Date of approval: 08/01/2002	Effective from: 08/01/2002 Last date of update: 01/01/2015 Status: Revoked/cancelled

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

4.14 Licensed Discharges to controlled waters

Records within 500m

0

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

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

4.15 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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



4.16 Pollutant release to public sewer

Records within 500m**0**

Discharges of Special Category Effluents to the public sewer.

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

4.17 List 1 Dangerous Substances

Records within 500m**0**

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

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

4.18 List 2 Dangerous Substances

Records within 500m**0**

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

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

4.19 Pollution Incidents (EA/NRW)

Records within 500m**0**

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

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

4.20 Pollution inventory substances

Records within 500m**0**

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

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

4.21 Pollution inventory waste transfers

Records within 500m

0

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

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

4.22 Pollution inventory radioactive waste

Records within 500m

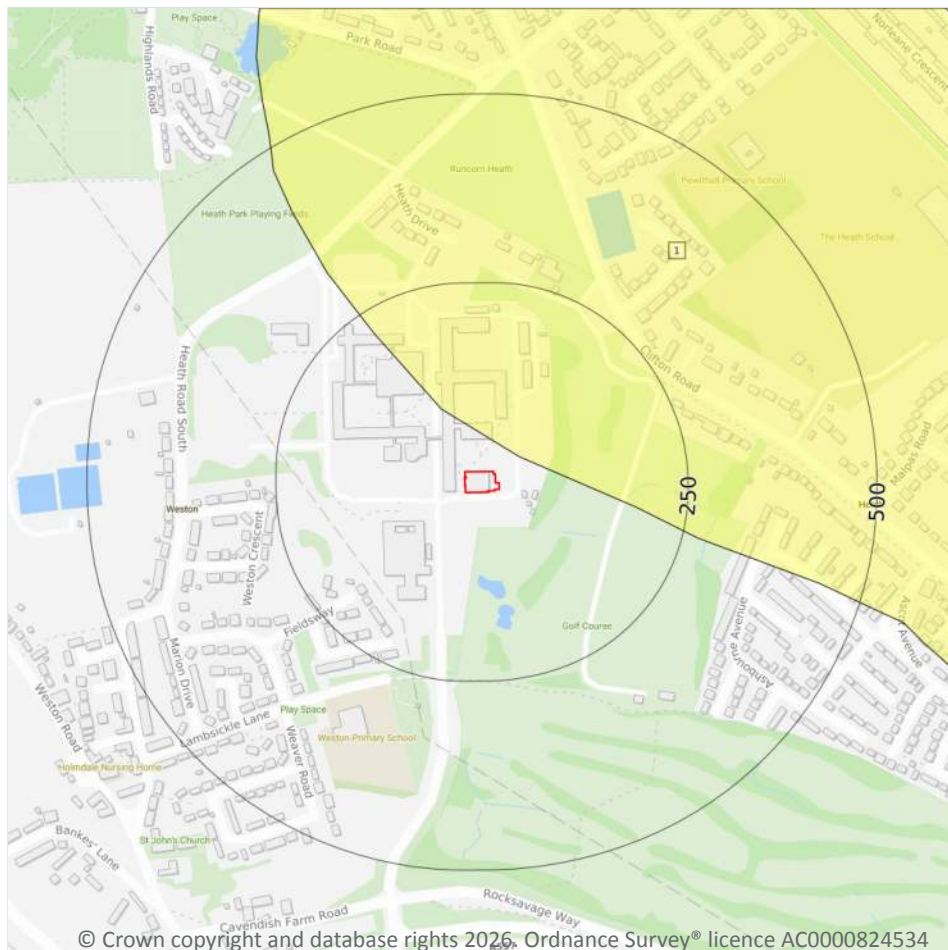
0

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

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



5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

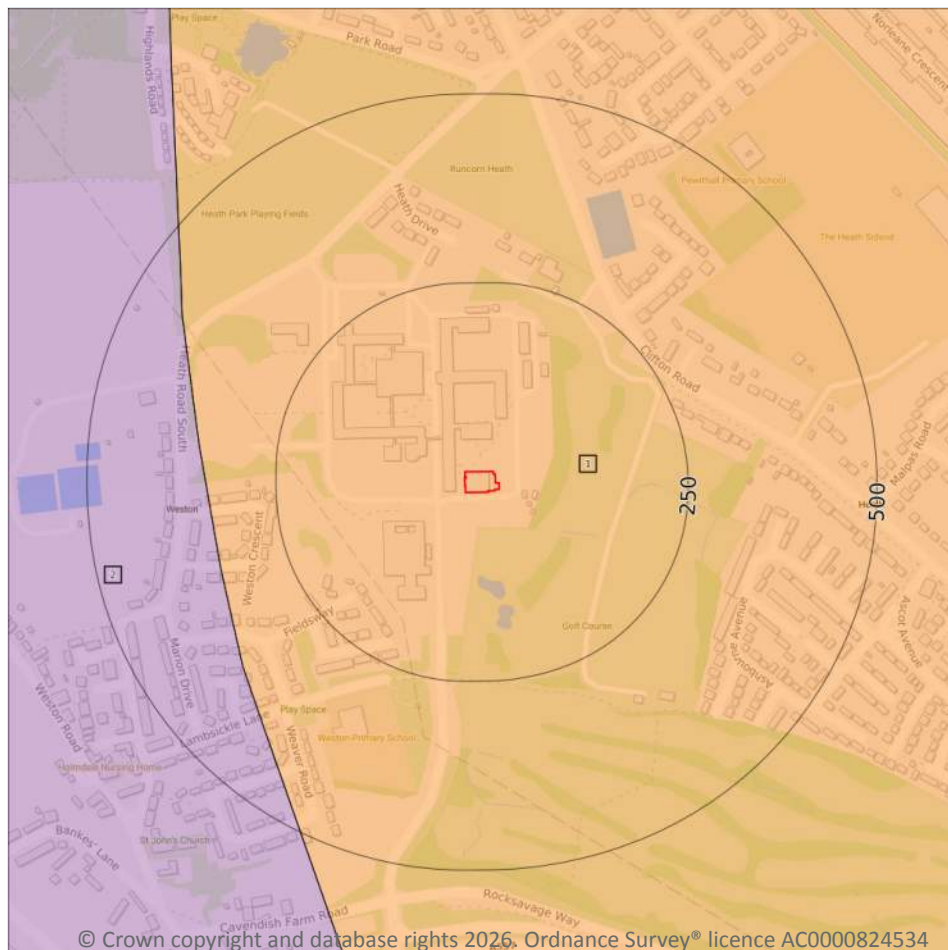
Features are displayed on the Hydrogeology map on [page 32](#) >

ID	Location	Designation	Description
1	35m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

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

ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/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
2	336m W	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers



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



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ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	13m N	Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
3	35m NE	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site

0

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

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

5.5 Groundwater vulnerability- local information

Records on site

0

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

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



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

7

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 37 >](#)



ID	Location	Details	
-	1097m S	Status: Active Licence No: 2568003088 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES AT ROCKSAVAGE WORKS RUNCORN Data Type: Point Name: INOVYN Chlorvinyls Limited Easting: 351600 Northing: 379900	Annual Volume (m ³): 1991148 Max Daily Volume (m ³): 5455.2 Original Application No: NPS/WR/020265 Original Start Date: 24/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 13/07/2015 Version End Date: -
-	1097m S	Status: Historical Licence No: 2568003088 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES AT ROCKSAVAGE WORKS, RUNCORN" Data Type: Point Name: INEOS CHLOR LTD Easting: 351600 Northing: 379900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 09/01/2001 Version End Date: -
-	1097m S	Status: Historical Licence No: 2568003088 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES AT ROCKSAVAGE WORKS, RUNCORN Data Type: Point Name: INEOS CHLOR LTD Easting: 351600 Northing: 379900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 09/01/2001 Version End Date: -
-	1212m W	Status: Active Licence No: 2568004012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT WESTON POINT, RUNCORN Data Type: Point Name: INOVYN Chlorvinyls Limited Easting: 350100 Northing: 380700	Annual Volume (m ³): 1000120 Max Daily Volume (m ³): 3273.12 Original Application No: NPS/WR/020265 Original Start Date: 18/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2024 Version End Date: -



ID	Location	Details	
-	1212m W	Status: Historical Licence No: 2568004012 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT WESTON POINT, RUNCORN" Data Type: Point Name: INEOS CHLOR LTD Easting: 350100 Northing: 380700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 09/01/2001 Version End Date: -
-	1890m NW	Status: Historical Licence No: 2568004027 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT WESTON POINT, RUNCORN Data Type: Point Name: SALT UNION LTD Easting: 349550 Northing: 381740	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 30/03/1998 Expiry Date: 30/03/2008 Issue No: 100 Version Start Date: 30/03/1998 Version End Date: -
-	1890m NW	Status: Historical Licence No: 2568004027 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE AT WESTON POINT, RUNCORN Data Type: Point Name: SALT UNION LTD Easting: 349550 Northing: 381740	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 30/03/1998 Expiry Date: 30/03/2008 Issue No: 100 Version Start Date: 30/03/1998 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

24

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 37 >](#)



ID	Location	Details	
-	1135m S	Status: Historical Licence No: 2568004997 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE63 Data Type: Point Name: BRITISH WATERWAYS Easting: 351550 Northing: 379850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1135m S	Status: Historical Licence No: 2568004997 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE \$63" Data Type: Point Name: BRITISH WATERWAYS Easting: 351550 Northing: 379850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1191m S	Status: Active Licence No: 2568004997 Details: General Washing/Process Washing Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379850	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -
-	1191m S	Status: Active Licence No: 2568004997 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379850	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -

ID	Location	Details	
-	1191m S	Status: Active Licence No: 2568004997 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379850	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -
-	1200m S	Status: Active Licence No: 2568004997 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT WESTON POINT RUNCORN CHESHIRE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379840	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -
-	1200m S	Status: Active Licence No: 2568004997 Details: General Washing/Process Washing Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT WESTON POINT RUNCORN CHESHIRE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379840	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -
-	1200m S	Status: Active Licence No: 2568004997 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT WESTON POINT RUNCORN CHESHIRE Data Type: Point Name: Canal and River Trust Easting: 351750 Northing: 379840	Annual Volume (m ³): 5000000 Max Daily Volume (m ³): 13700 Original Application No: NPS/WR/045225 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 103 Version Start Date: 25/06/2025 Version End Date: -



ID	Location	Details	
-	1200m S	Status: Historical Licence No: 2568004997 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE WORKS Data Type: Point Name: BRITISH WATERWAYS Easting: 351750 Northing: 379840	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1200m S	Status: Historical Licence No: 2568004997 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "WESTON CANAL, RUNCORN, [I.C.I. ROCKSAVAGE WORKS" Data Type: Point Name: BRITISH WATERWAYS Easting: 351750 Northing: 379840	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1200m S	Status: Historical Licence No: 2568004997 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT WESTON POINT, RUNCORN, CHESHIRE Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 351750 Northing: 379840	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 101 Version Start Date: 30/05/2003 Version End Date: -
-	1200m S	Status: Historical Licence No: 2568004997 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT WESTON POINT, RUNCORN, CHESHIRE Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 351750 Northing: 379840	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 101 Version Start Date: 30/05/2003 Version End Date: -

ID	Location	Details	
-	1297m SE	Status: Active Licence No: 2568003109 Details: Conveying Materials Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL (WEAVER NAVIGATION) AT PUMPING STATION, FRODSHA Data Type: Point Name: Canal and River Trust Easting: 351900 Northing: 379800	Annual Volume (m ³): 65462.4 Max Daily Volume (m ³): 272.76 Original Application No: NPS/WR/045189 Original Start Date: 19/04/1978 Expiry Date: - Issue No: 101 Version Start Date: 25/06/2025 Version End Date: -
-	1297m SE	Status: Historical Licence No: 2568003109 Details: Conveying Materials Direct Source: "Surface, Non-Tidal - North West Region" Point: "WESTON CANAL (WEAVER NAVIGATION) AT PUMPING STATION, FRODSHA" Data Type: Point Name: BRITISH WATERWAYS Easting: 351900 Northing: 379800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 19/04/1978 Expiry Date: - Issue No: 100 Version Start Date: 15/06/1983 Version End Date: -
-	1344m SE	Status: Active Licence No: 2568003095 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: WESTON CANAL AT SUTTON,RUNCORN [ICI][SUTTON CAUSEWAY/WEST CL Data Type: Point Name: Canal and River Trust Easting: 352000 Northing: 379800	Annual Volume (m ³): 70000 Max Daily Volume (m ³): 286 Original Application No: NPS/WR/045190 Original Start Date: 28/09/1973 Expiry Date: - Issue No: 101 Version Start Date: 25/06/2025 Version End Date: -
-	1344m SE	Status: Historical Licence No: 2568003095 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "WESTON CANAL AT SUTTON,RUNCORN [ICI][SUTTON CAUSEWAY/WEST CL" Data Type: Point Name: BRITISH WATERWAYS Easting: 352000 Northing: 379800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 28/09/1973 Expiry Date: - Issue No: 100 Version Start Date: 28/09/1973 Version End Date: -

ID	Location	Details	
-	1532m W	Status: Active Licence No: 2568009009 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT RUNCORN Data Type: Point Name: INOVYN Chlorvinyls Limited Easting: 349810 Northing: 380540	Annual Volume (m ³): 70518000 Max Daily Volume (m ³): 396000 Original Application No: NPS/WR/020265 Original Start Date: 18/03/1966 Expiry Date: - Issue No: 106 Version Start Date: 15/07/2015 Version End Date: -
-	1532m W	Status: Active Licence No: 2568009009 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT RUNCORN Data Type: Point Name: INOVYN Chlorvinyls Limited Easting: 349810 Northing: 380540	Annual Volume (m ³): 70518000 Max Daily Volume (m ³): 396000 Original Application No: NPS/WR/020265 Original Start Date: 18/03/1966 Expiry Date: - Issue No: 106 Version Start Date: 15/07/2015 Version End Date: -
-	1624m W	Status: Historical Licence No: 2568009009 Details: Non-Evaporative Cooling Direct Source: "Surface, Non-Tidal - North West Region" Point: "MANCHESTER SHIP CANAL AT WESTON POINT, RUNCORN" Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -
-	1624m W	Status: Historical Licence No: 2568009009 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "MANCHESTER SHIP CANAL AT WESTON POINT, RUNCORN" Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -



ID	Location	Details	
-	1624m W	Status: Historical Licence No: 2568009009 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT, RUNCORN Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -
-	1624m W	Status: Historical Licence No: 2568009009 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT, RUNCORN Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -
-	1624m W	Status: Historical Licence No: 2568009009 Details: Non-Evaporative Cooling Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT RUNCORN Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): 70518000 Max Daily Volume (m ³): 396000 Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -
-	1624m W	Status: Historical Licence No: 2568009009 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT WESTON POINT RUNCORN Data Type: Point Name: INEOS CHLOR LTD Easting: 349700 Northing: 380600	Annual Volume (m ³): 70518000 Max Daily Volume (m ³): 396000 Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 104 Version Start Date: 24/01/2001 Version End Date: -

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



5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

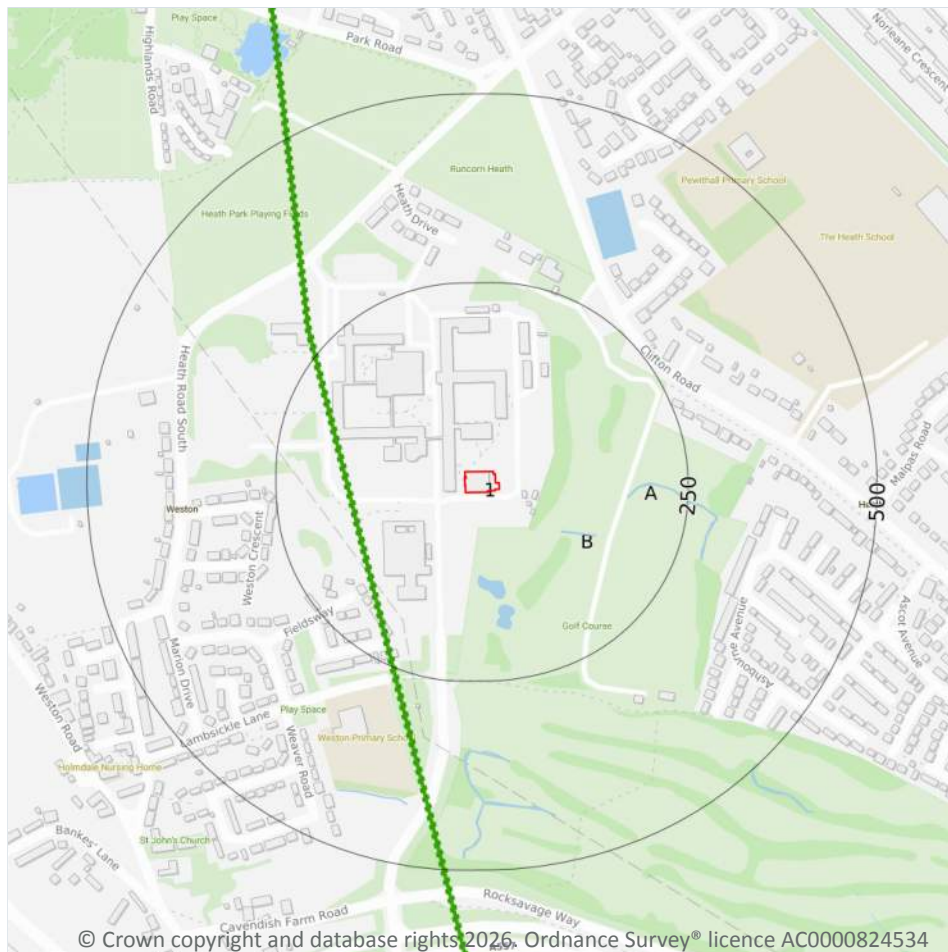
0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

6

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

Features are displayed on the Hydrology map on [page 47 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
B	99m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
A	170m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	215m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	230m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	242m E	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	247m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

8

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

Features are displayed on the Hydrology map on [page 47 >](#)

This data is sourced from the Ordnance Survey®.

6.3 WFD Surface water body catchments

Records on site

1

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

Features are displayed on the Hydrology map on [page 47 >](#)



ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	Coastal Catchment	Not part of a river WB catchment	169	Weaver Lower	Weaver Gowy

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

6.4 WFD Surface water bodies

Records identified	0
---------------------------	----------

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

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

6.5 WFD Groundwater bodies

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

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

Features are displayed on the Hydrology map on [page 47 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Weaver and Dane Quaternary Sand and Gravel Aquifers	GB41202G991700 ↗	Poor	Poor	Good	2019

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

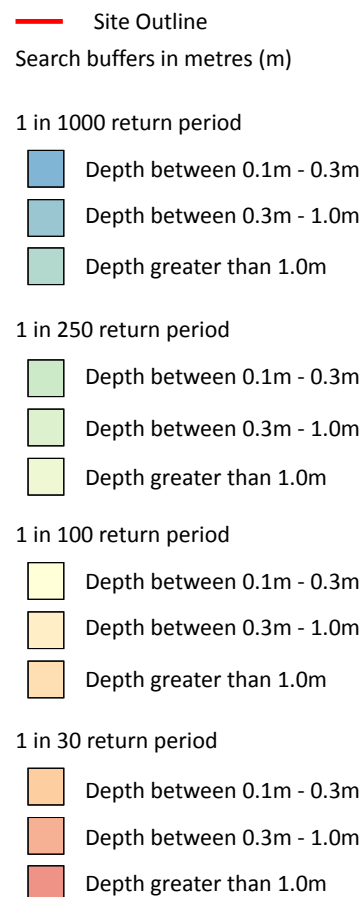
0

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

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

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

Features are displayed on the Surface water flooding map on [page 53](#) >

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

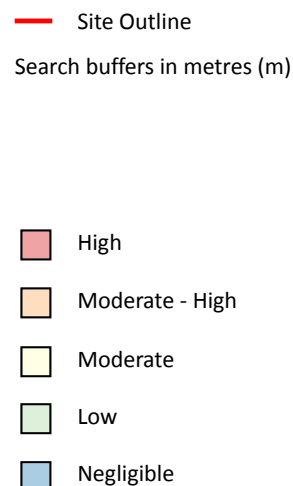
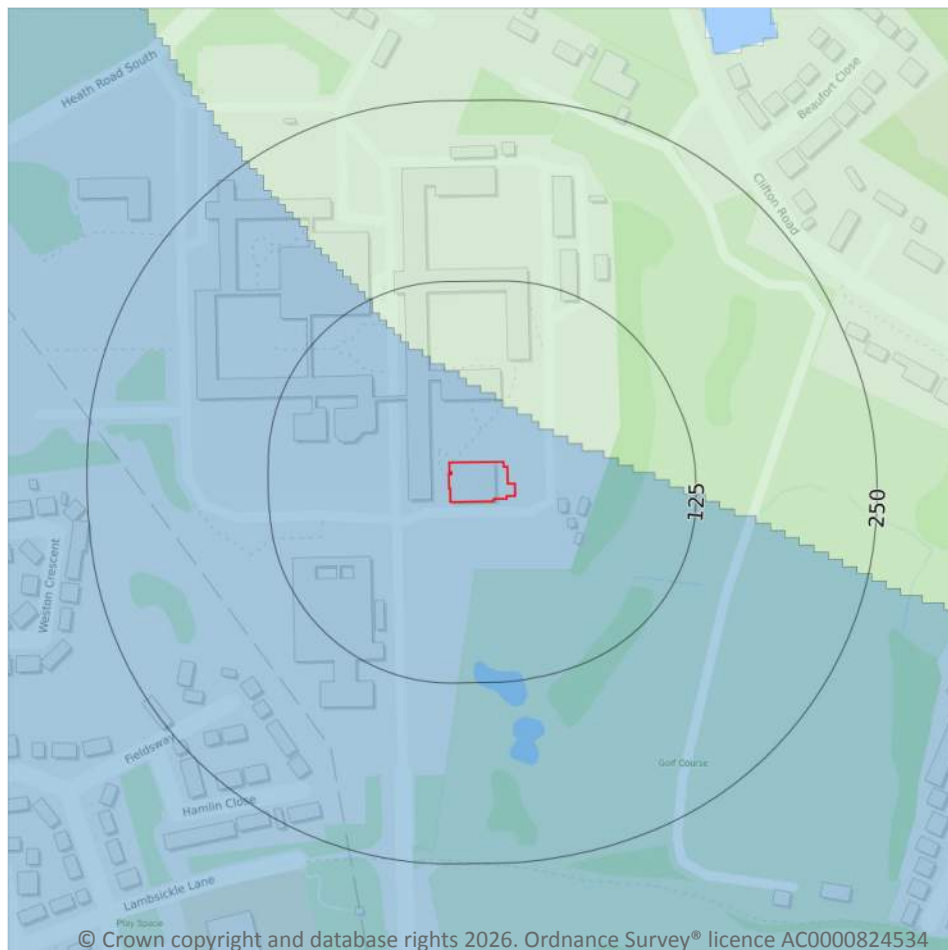
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

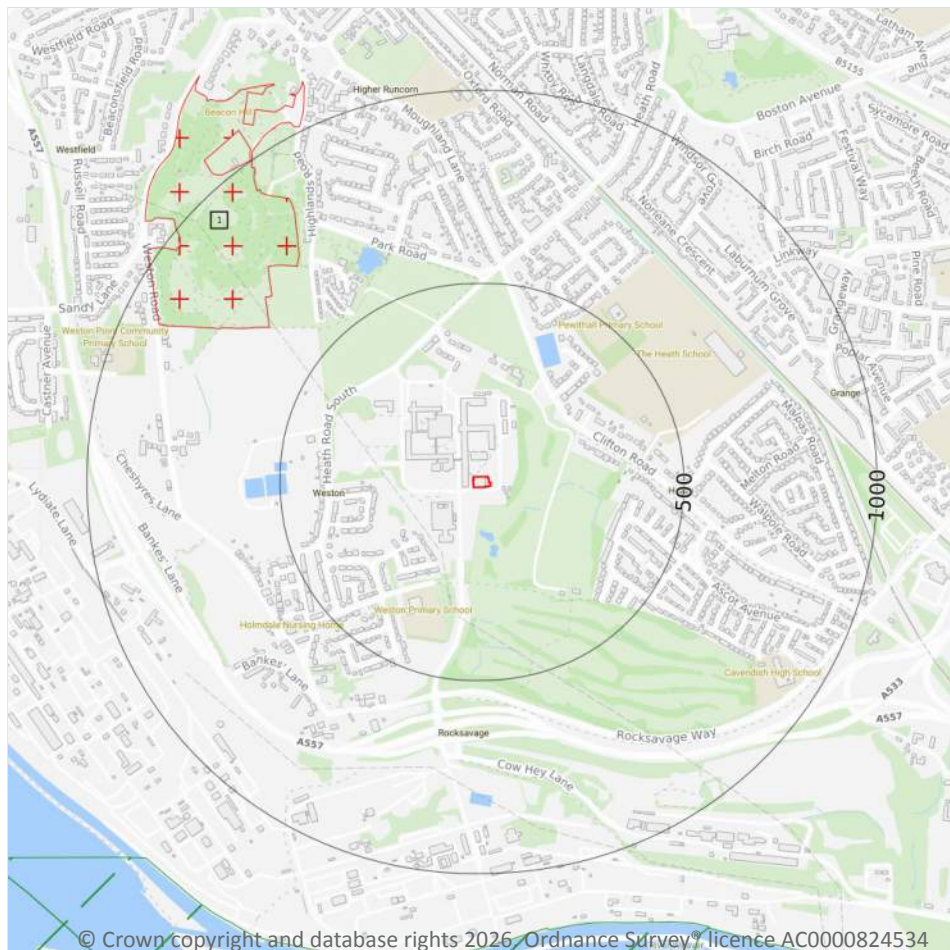
Low

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

Features are displayed on the Groundwater flooding map on [page 55 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- X Conserved wetland sites (Ramsar sites)
- Special Protection Areas (SPA)
- + Local Nature Reserves (LNR)
- X Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

1

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

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

ID	Location	Name	Data source
-	1547m SW	Mersey Estuary SSSI	Natural England



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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

2

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

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

ID	Location	Site	Details
-	1552m SW	Name: Mersey Estuary Site status: Listed Data source: Natural England	Overview: The Mersey is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large and internationally important populations of waterfowl. During the winter, the site is of major importance for duck and waders. The site is also important during spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain. Ramsar criteria: -
-	1660m SW	Name: Mersey Estuary Site status: Listed Data source: Natural England	Overview: The Mersey is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large and internationally important populations of waterfowl. During the winter, the site is of major importance for duck and waders. The site is also important during spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain. Ramsar criteria: -

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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



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

10.4 Special Protection Areas (SPA)

Records within 2000m

2

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

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

ID	Location	Name	Species of interest	Habitat description	Data source
-	1552m SW	Mersey Estuary	Great crested grebe; Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Ringed plover; European golden plover; Grey plover; Northern lapwing; Eurasian curlew; Common redshank; Common redshank; Black-tailed godwit; Dunlin	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes	Natural England
-	1660m SW	Mersey Estuary	Great crested grebe; Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Ringed plover; European golden plover; Grey plover; Northern lapwing; Eurasian curlew; Common redshank; Common redshank; Black-tailed godwit; Dunlin	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Salt marshes, Salt pastures, Salt steppes	Natural England

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

1

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



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

ID	Location	Name	Data source
1	655m NW	Runcorn Hill	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	0
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Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

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

10.8 Biosphere Reserves

Records within 2000m	0
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Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

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

10.9 Forest Parks

Records within 2000m	0
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These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0
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A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

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

10.11 Green Belt

Records within 2000m

2

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

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

ID	Location	Name	Local Authority name
2	1153m S	Merseyside and Greater Manchester Green Belt	Halton
3	1246m S	Merseyside and Greater Manchester Green Belt	Cheshire West and Chester

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.



10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

1

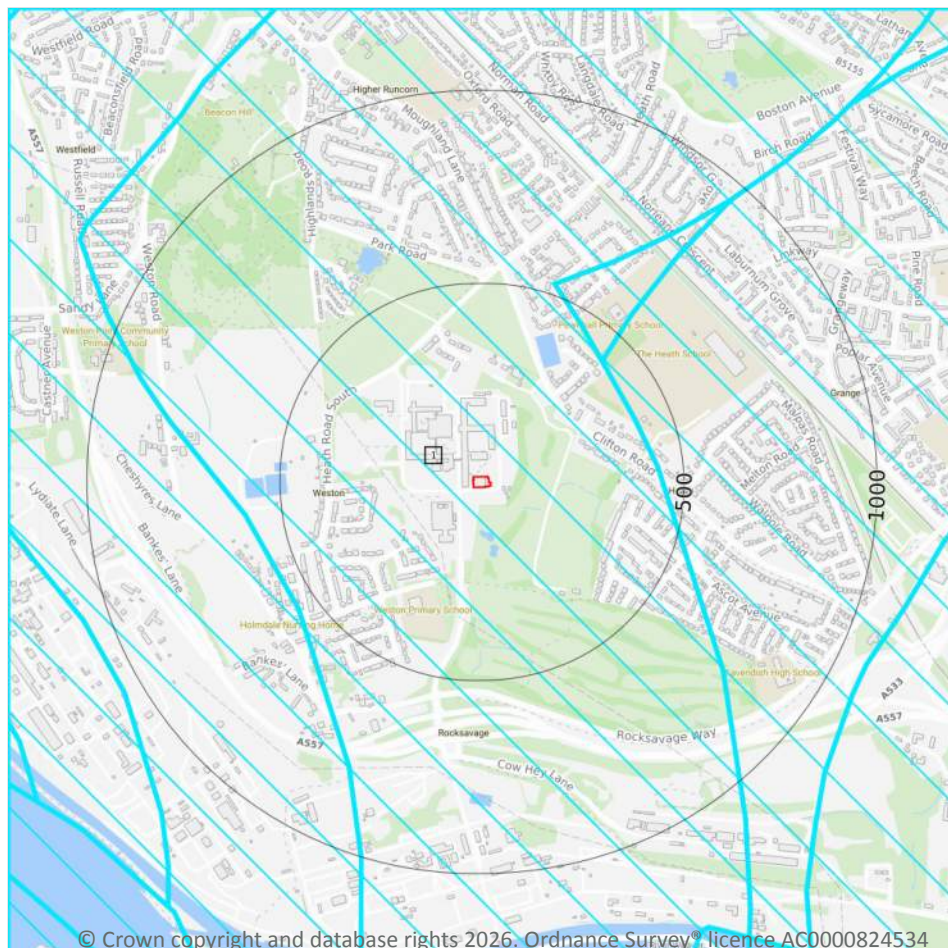
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
243m SW	River Weaver (Dane to Frodsham) NVZ	Surface Water	636	Existing

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



SSSI Impact Zones and Units



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

10.17 SSSI Impact Risk Zones

Records on site

1

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

Features are displayed on the SSSI Impact Zones and Units map on [page 62](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0112242322340&notes=11408&location=346147,383891%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

1

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

Features are displayed on the SSSI Impact Zones and Units map on [page 62 >](#)

ID: -
 Location: 1547m SW
 SSSI name: Mersey Estuary
 Unit name: Frodsham Score To Runcorn Bridge
 Broad habitat: Littoral Sediment
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Golden plover, Pluvialis apricaria	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Teal, Anas crecca	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Wigeon, Anas penelope	Not Recorded	01/01/1900
Black-tailed godwit, Limosa limosa islandica - A616, nb	-	-
Dunlin, Calidris alpina alpina - A672, nb	-	-
Golden plover, Pluvialis apricaria - A140, nb	-	-
More than 20,000 Non-breeding waterbirds	-	-
Pintail, Anas acuta - A054, nb	-	-
Redshank, Tringa totanus - A162, nb	-	-
SM4-28 - Saltmarsh	Not Recorded	01/01/1900
Shelduck, Tadorna tadorna - A048, nb	-	-
Teal, Anas crecca - A704, nb	-	-



Feature name	Feature condition	Date of assessment
Waterbird assemblage	-	-

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



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

0

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



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

11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

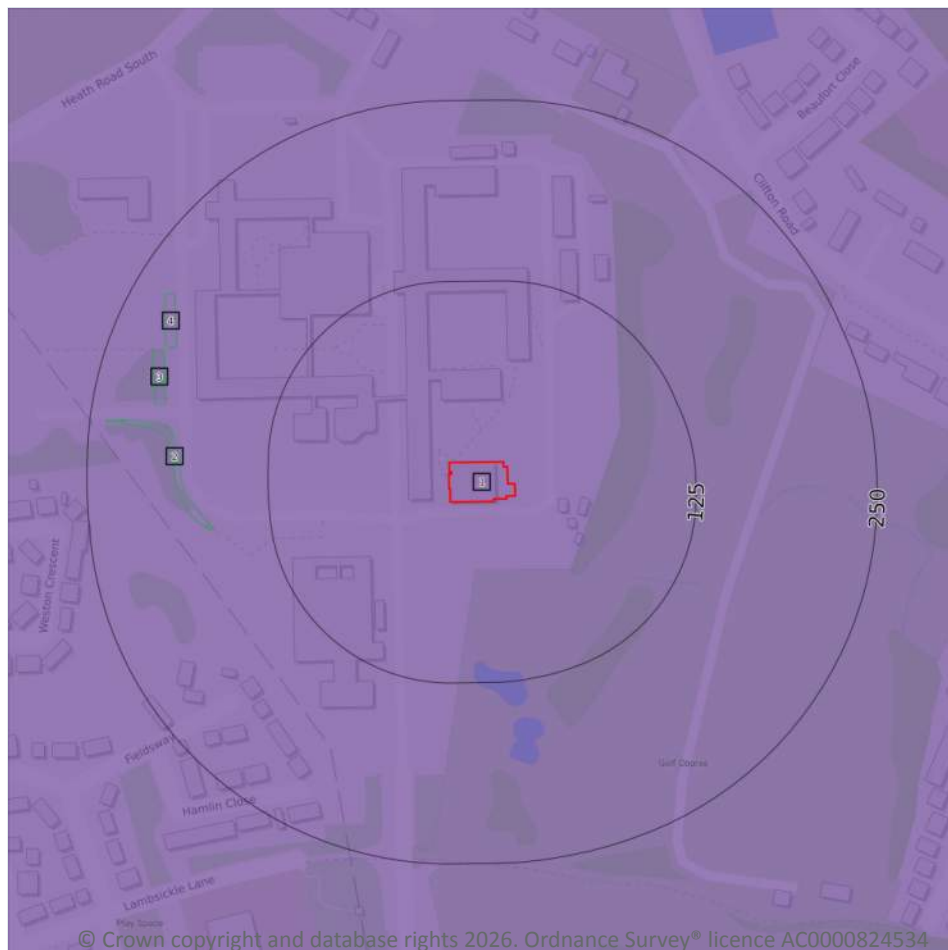
0

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

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



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

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

Features are displayed on the Agricultural designations map on [page 67](#) >

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

This data is sourced from Natural England.



12.2 Open Access Land

Records within 250m**0**

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

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

12.3 Tree Felling Licences

Records within 250m**3**

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

Features are displayed on the Agricultural designations map on [page 67 >](#)

ID	Location	Description	Reference	Application date
2	164m W	Clear Fell (Unconditional)	010/15/17-18	28/04/2017
3	200m W	Clear Fell (Unconditional)	010/15/17-18	28/04/2017
4	205m NW	Clear Fell (Unconditional)	010/15/17-18	28/04/2017

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m**0**

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



This data is sourced from Natural England.



13 Habitat designations



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

13.1 Priority Habitat Inventory

Records within 250m

5

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

Features are displayed on the Habitat designations map on [page 70 >](#)

ID	Location	Main Habitat	Other habitats
1	19m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	53m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	160m N	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
4	186m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	239m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

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

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

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

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

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

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 72](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	SJ58SW

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

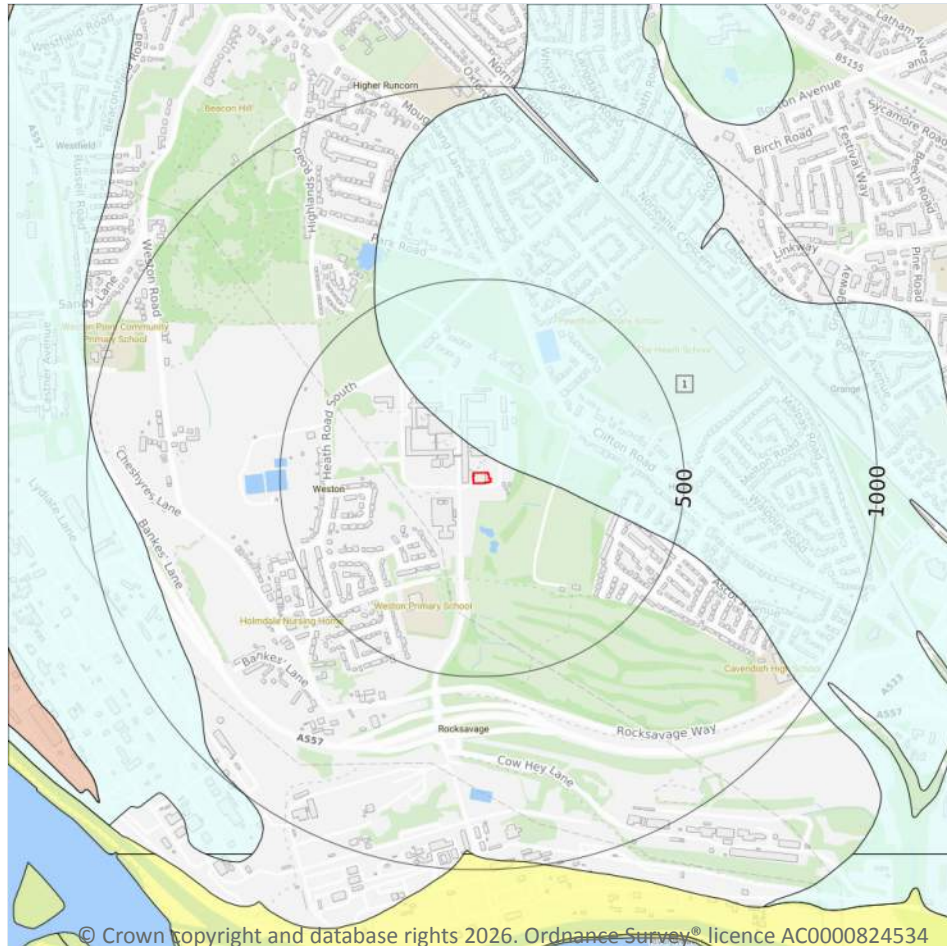
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

1

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

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

ID	Location	LEX Code	Description	Rock description
1	38m NE	TILLD-DMTN	Till, Devensian-Diamicton	Diamicton

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

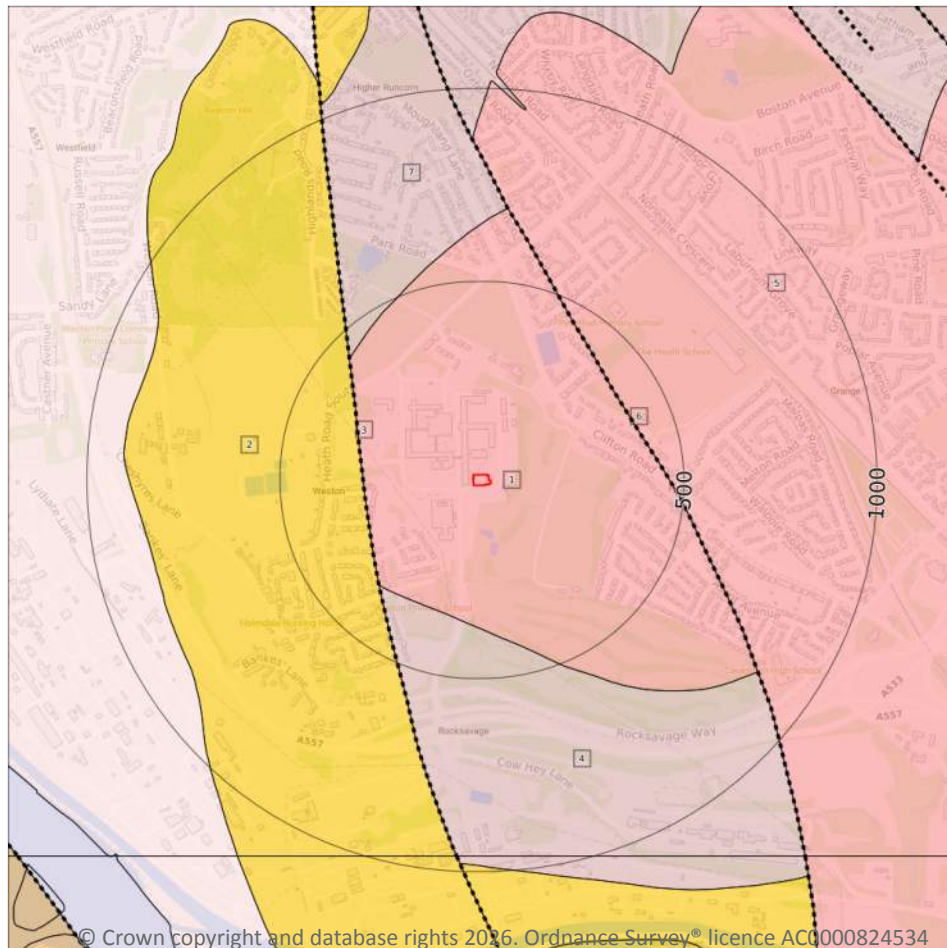
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m

5

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 76 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	BOM-MDST	Bollin Mudstone Member-Mudstone	Anisian
2	283m W	HEY-PESST	Helsby Sandstone Formation-Pebbly (Gravelly) Sandstone	Anisian
4	336m S	TPSF-SISD	Tarporley Siltstone Formation-Siltstone And Sandstone	Anisian
5	391m NE	BOM-MDST	Bollin Mudstone Member-Mudstone	Anisian



ID	Location	LEX Code	Description	Rock age
7	440m NW	TPSF-SISD	Tarporley Siltstone Formation-Siltstone And Sandstone	Anisian

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

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

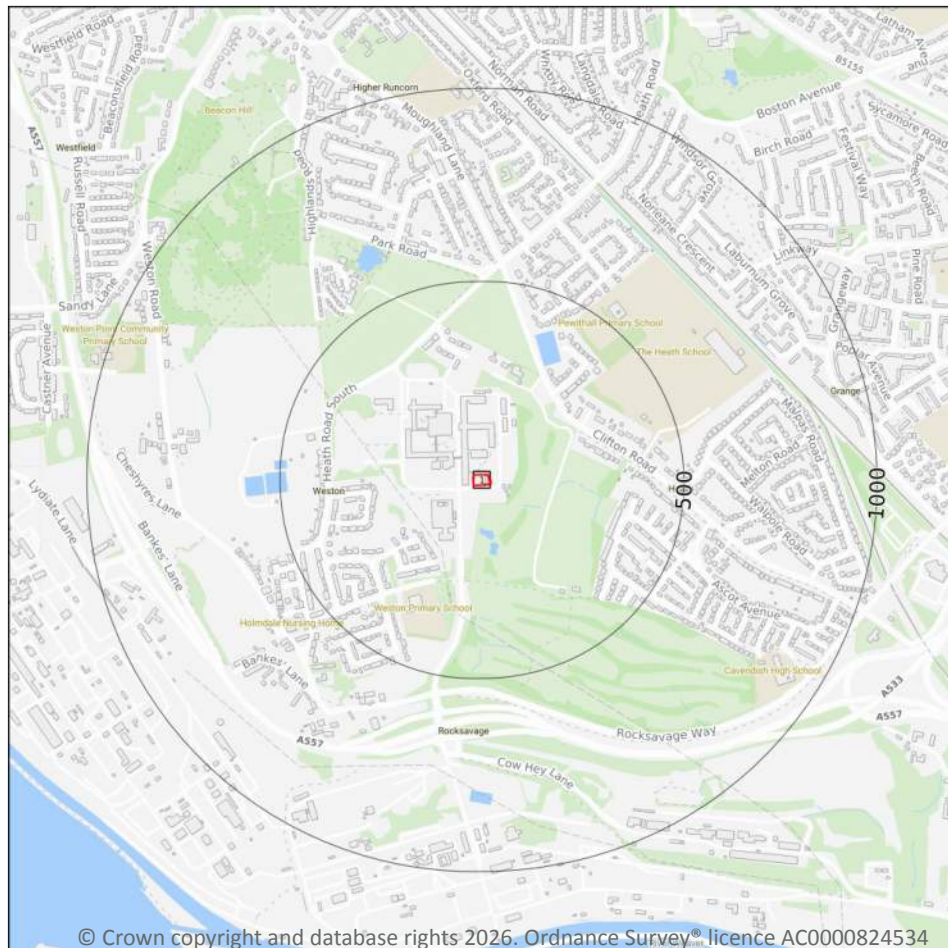
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 76 >](#)

ID	Location	Category	Description
3	283m W	FAULT	Fault, inferred, displacement unknown
6	391m NE	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- Geological map tile

15.1 50k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 78](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW097_runcorn_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

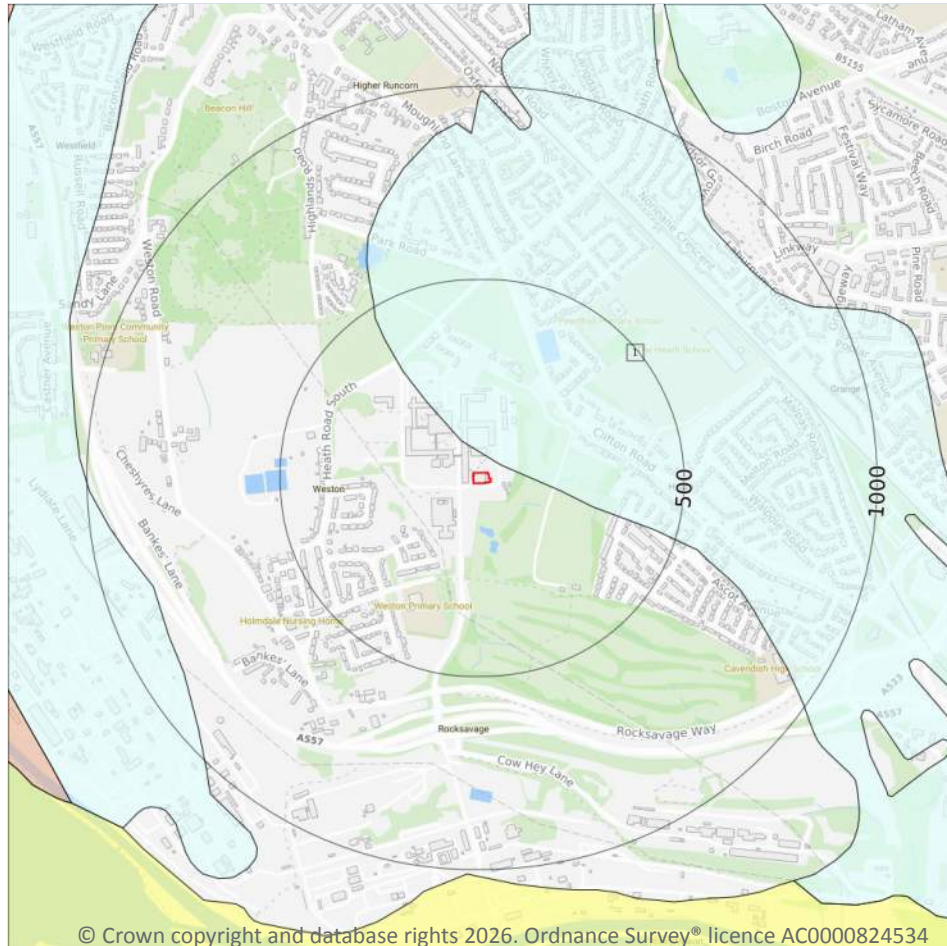
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

▣ Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

1

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

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

ID	Location	LEX Code	Description	Rock description
1	35m NE	TILLD-DMTN	Till, Devensian	Diamicton

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
35m NE	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

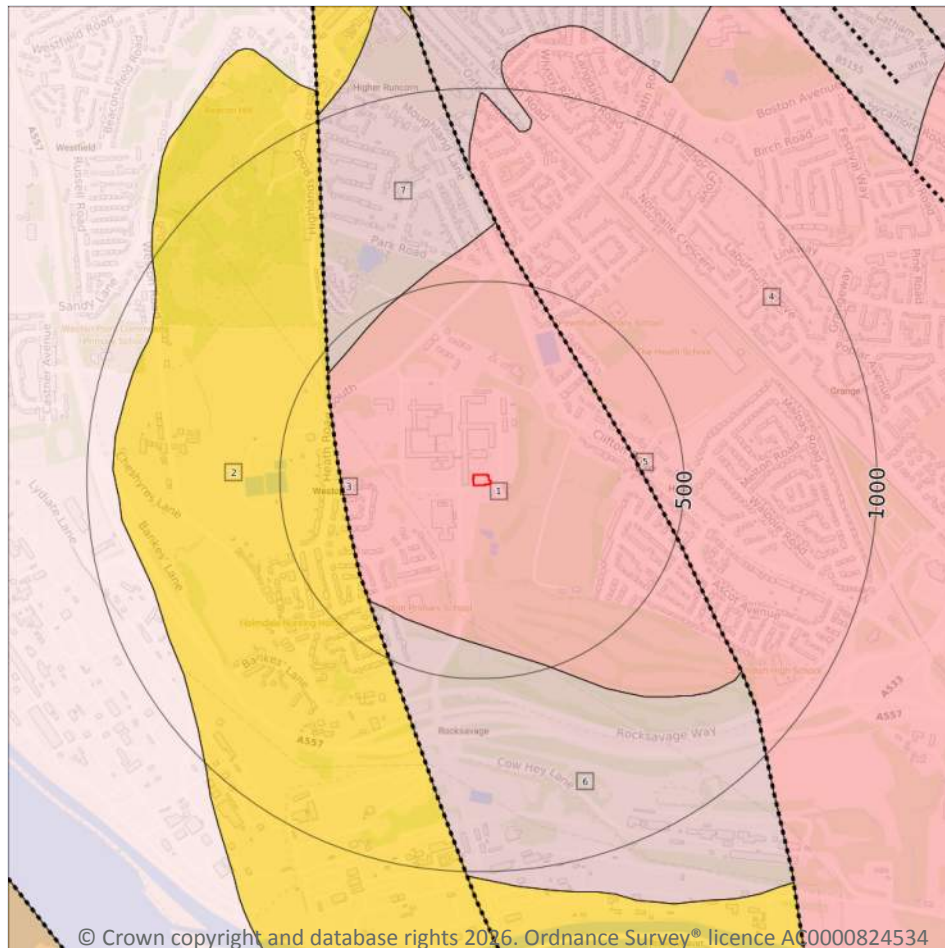
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

5

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 82 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	BOM-MDST	Bollin Mudstone Member-Mudstone	Anisian
2	336m W	HEY-PESST	Helsby Sandstone Formation-Pebbly (gravelly) sandstone	Anisian
4	349m NE	BOM-MDST	Bollin Mudstone Member-Mudstone	Anisian



ID	Location	LEX Code	Description	Rock age
6	385m S	TPSF-SIMS	Tarporley Siltstone Formation-Siltstone, mudstone and sandstone	Anisian
7	455m NW	TPSF-SIMS	Tarporley Siltstone Formation-Siltstone, mudstone and sandstone	Anisian

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 82](#) >

ID	Location	Category	Description
3	336m W	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
5	349m NE	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

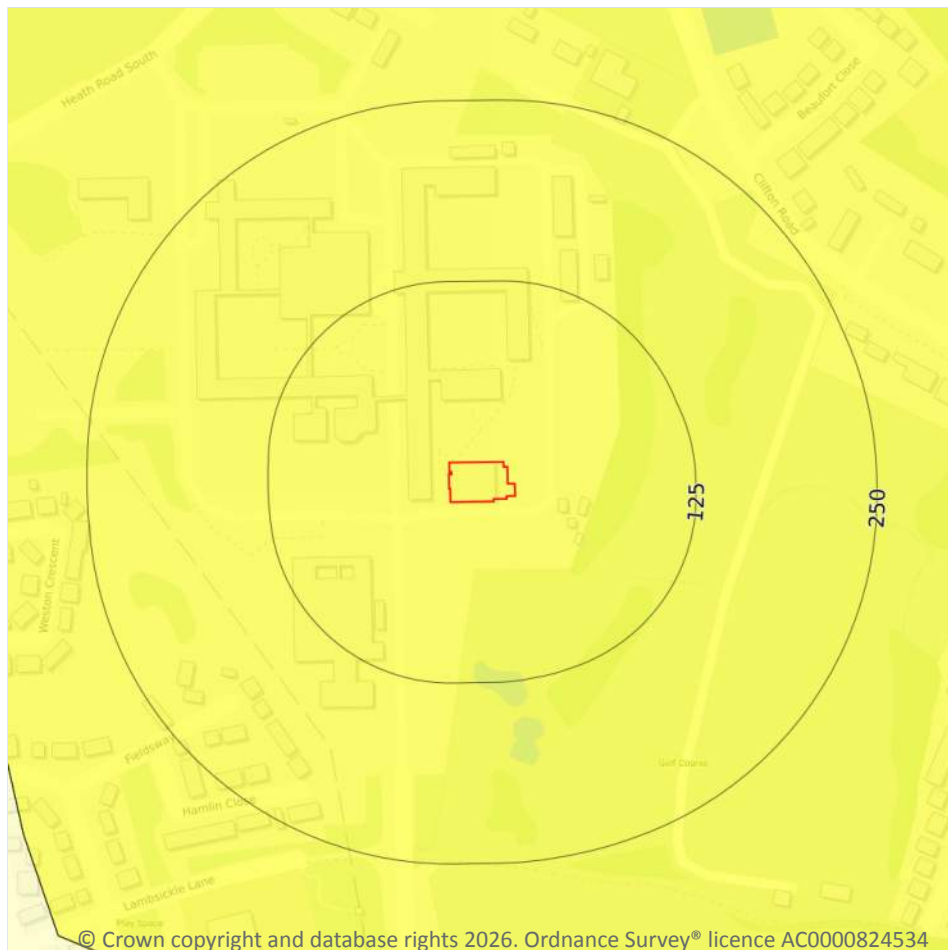
0

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

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



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

17.1 Shrink swell clays

Records within 50m

1

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

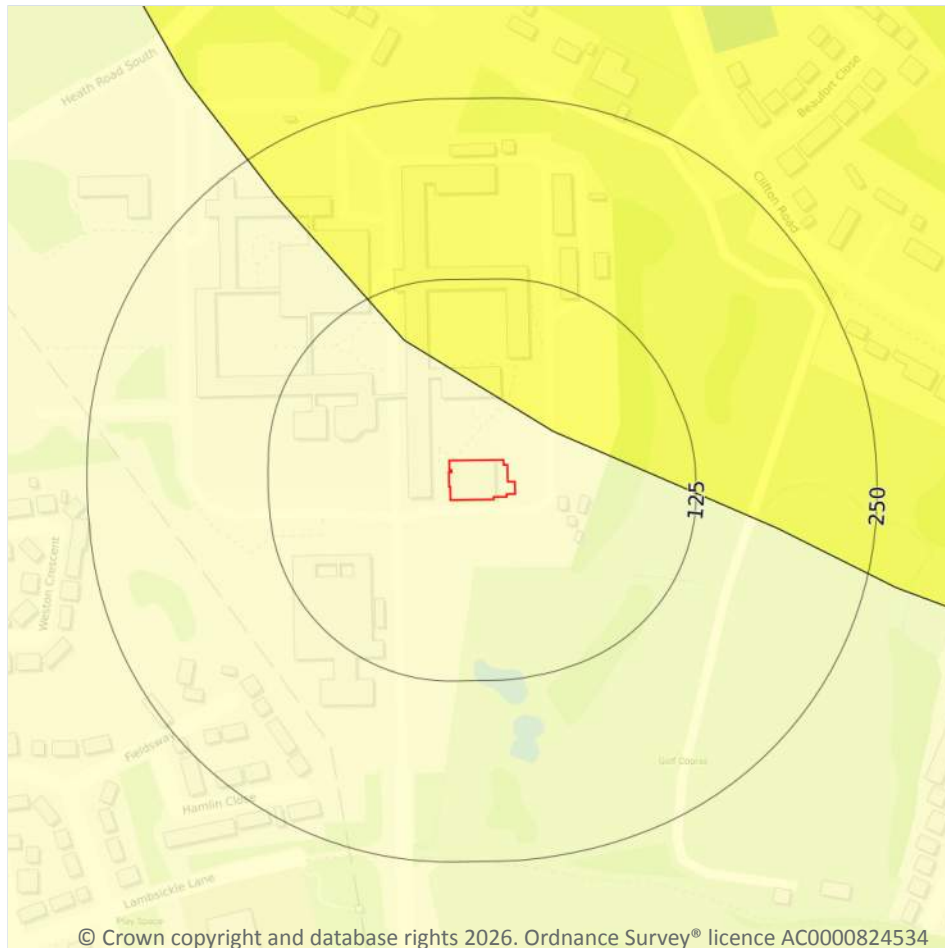
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 85 >](#)

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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

17.2 Running sands

Records within 50m

2

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

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

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

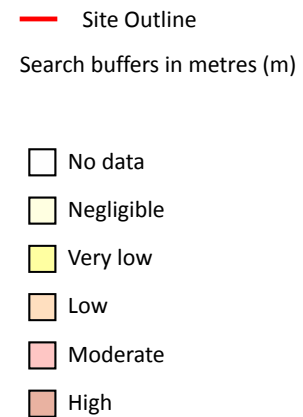
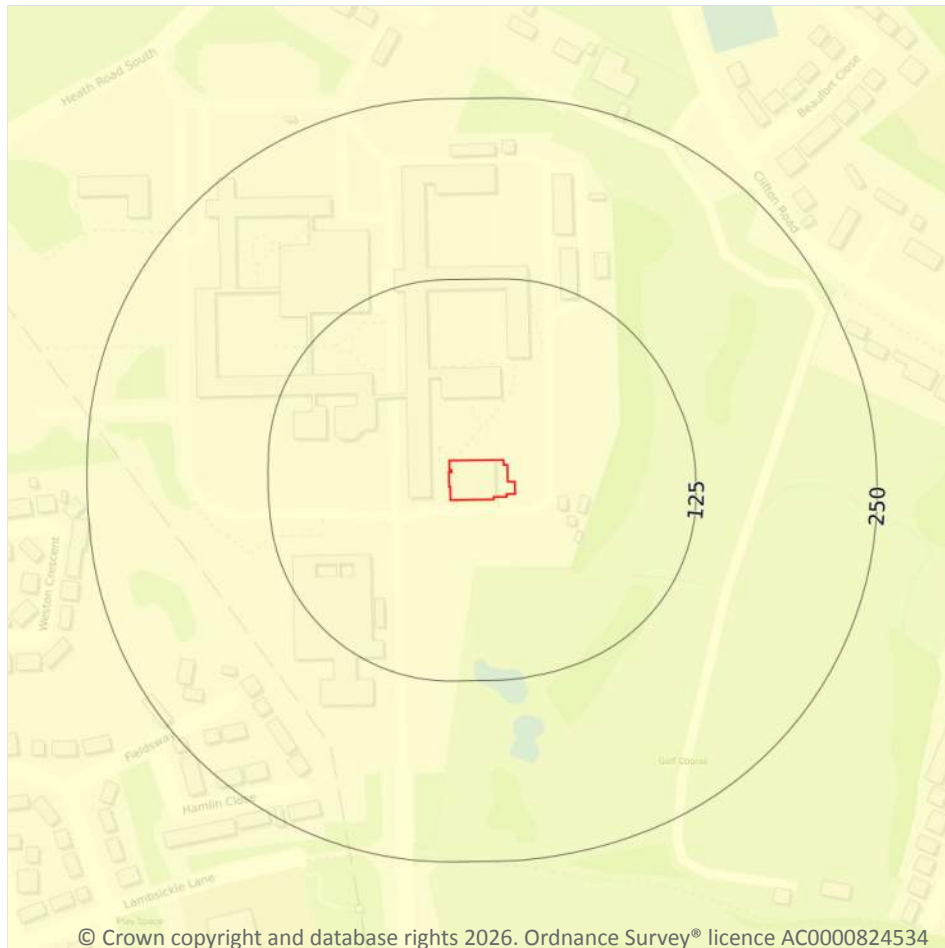


Location	Hazard rating	Details
35m NE	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

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

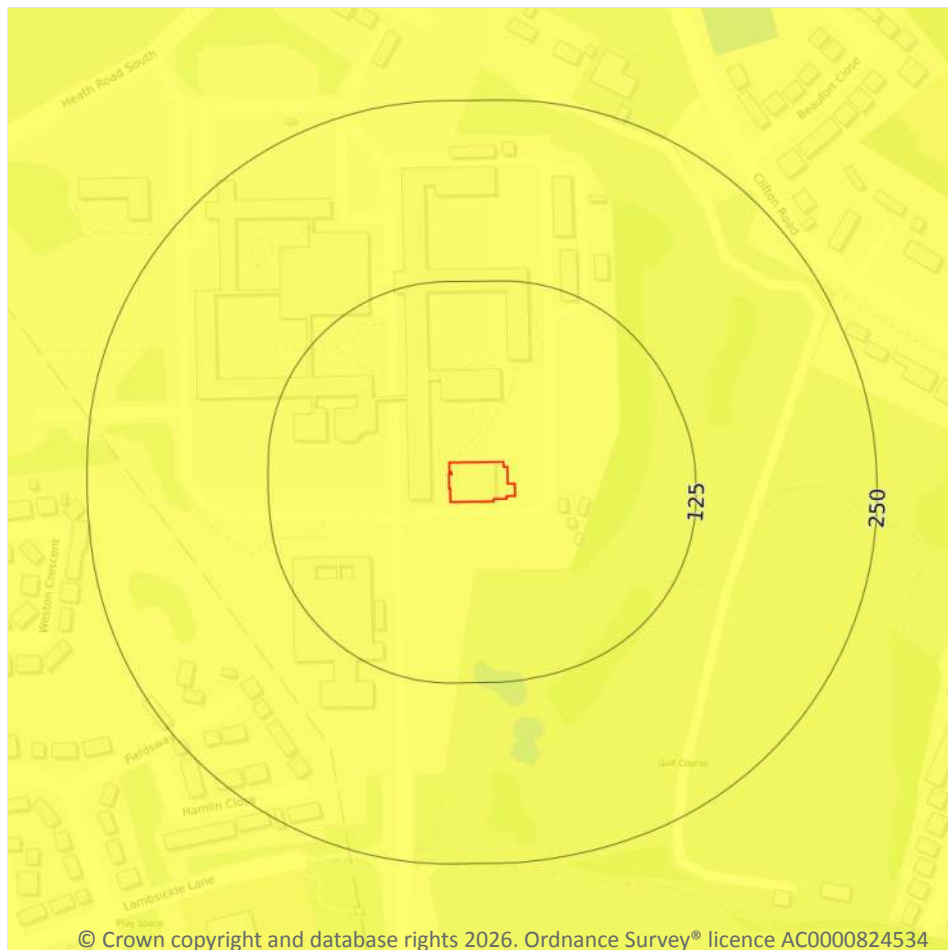
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 88](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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

17.4 Collapsible deposits

Records within 50m

1

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

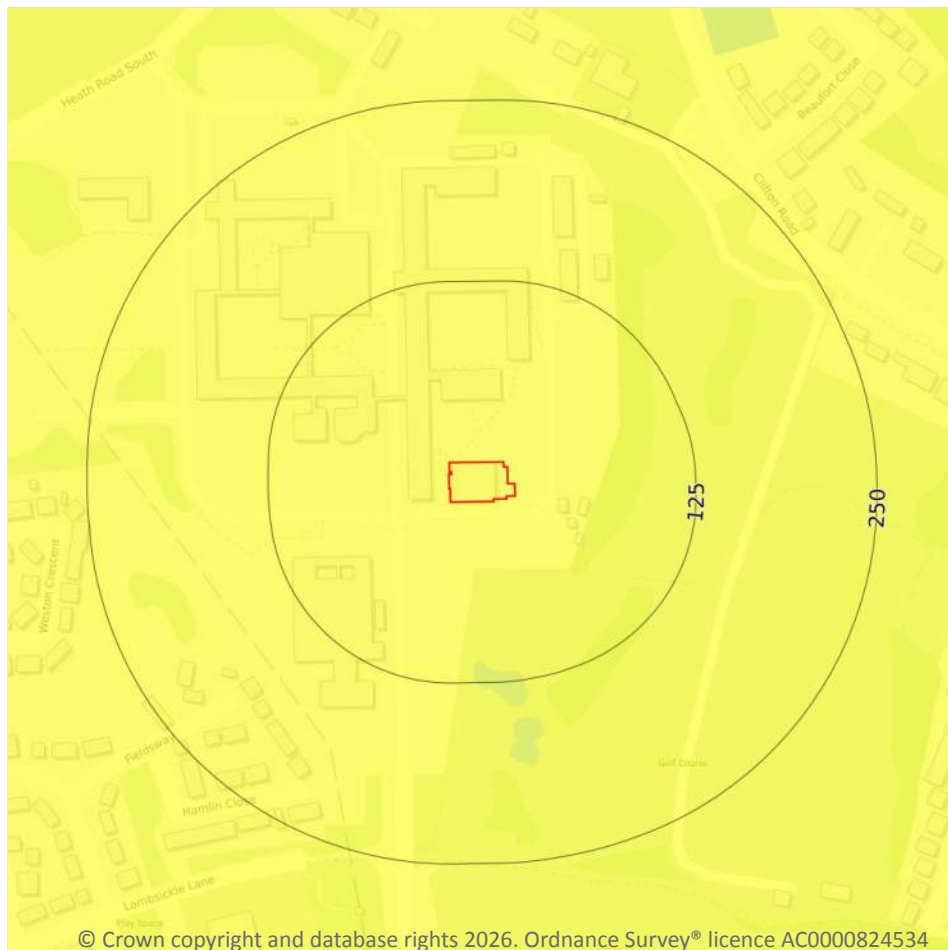
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 89 >](#)

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



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

17.5 Landslides

Records within 50m

1

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

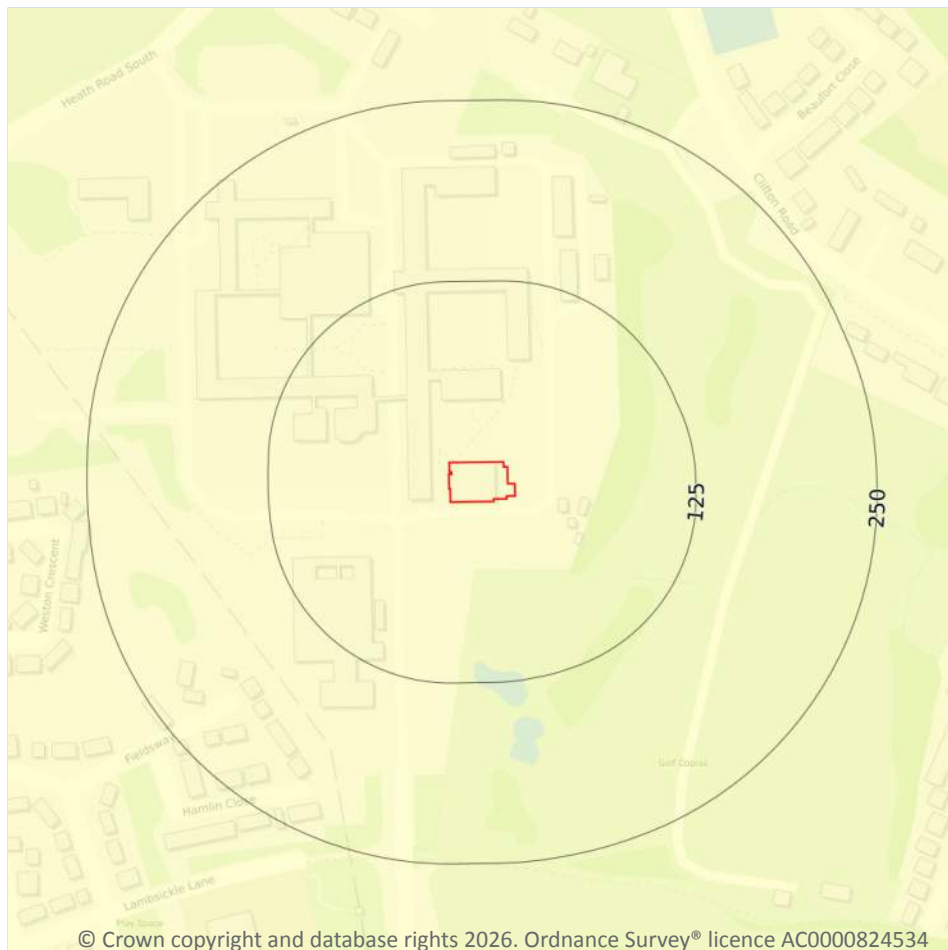
Features are displayed on the Natural ground subsidence - Landslides map on [page 90](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



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

17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 91](#) >

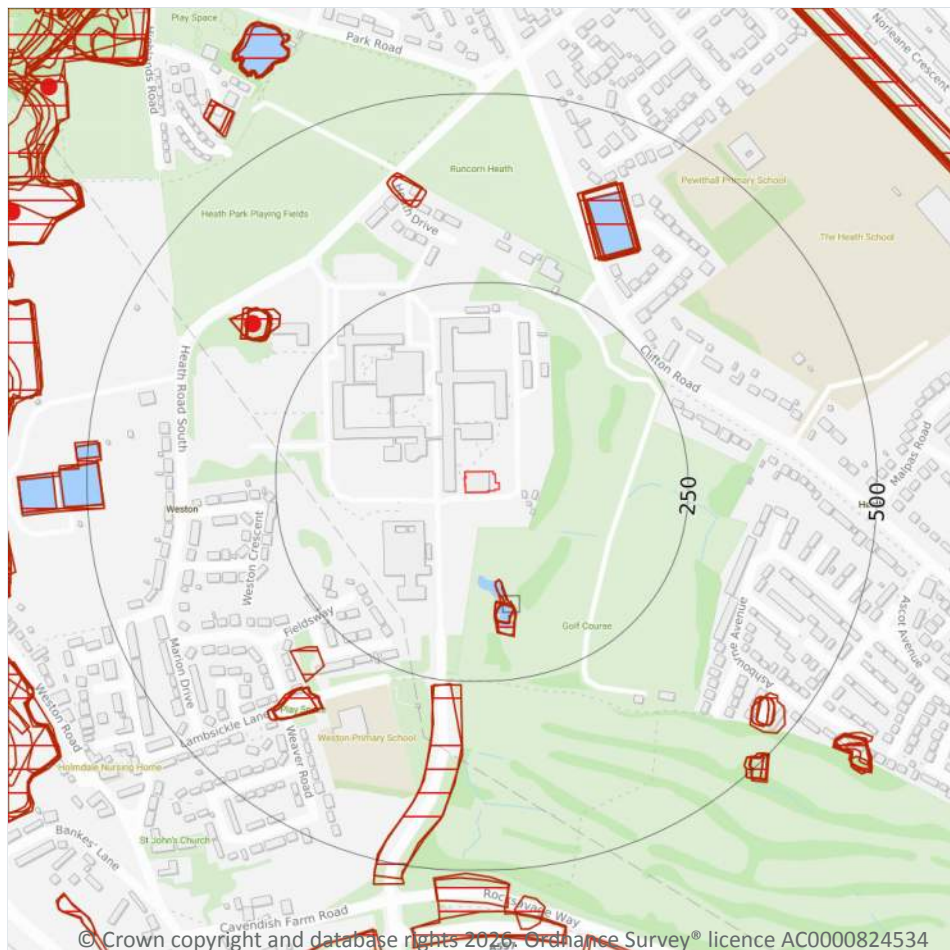
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▤ Surface ground workings
- ▥ Underground workings
- ▦ Underground mining extents
- ▧ Historical mineral planning areas
- ▨ TCA non-coal mining
- Non Coal Mining
- ▩ Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- ▬ Underground mining known or likely within or in close proximity
- ▭ Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

1

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

Features are displayed on the Mining and ground workings map on [page 93](#) >

ID	Location	Details	Description
D	343m NW	Name: Runcorn Heath Marl Pit Address: Weston, RUNCORN, Cheshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

5

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

Features are displayed on the Mining and ground workings map on [page 93 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	117m S	Ponds	1938	1:10560
A	117m S	Ponds	1912	1:10560
A	145m S	Unspecified Pits	1968	1:10560
A	146m S	Unspecified Ground Workings	1994	1:10000
A	146m S	Unspecified Ground Workings	1982	1:10000

This is data is sourced from Ordnance Survey®/Groundsure.

18.3 Underground workings

Records within 1000m

26

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

Features are displayed on the Mining and ground workings map on [page 93 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
-	712m W	Tunnel	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	712m W	Tunnel	1897	1:10560
-	748m NW	Unspecified Shaft	1964	1:10560
-	748m NW	Unspecified Shaft	1938	1:10560
-	748m NW	Unspecified Shaft	1938	1:10560
-	748m NW	Unspecified Shaft	1897	1:10560
-	750m NW	Tunnel	1938	1:10560
-	753m NW	Tunnel	1964	1:10560
-	769m W	Tunnel	1897	1:10560
-	787m W	Tunnel	1938	1:10560
-	787m W	Tunnel	1925	1:10560
-	787m W	Tunnel	1905	1:10560
-	790m W	Tunnel	1894	1:10560
-	790m W	Tunnel	1894	1:10560
-	800m W	Tunnel	1938	1:10560
-	800m W	Tunnel	1925	1:10560
-	800m W	Tunnel	1905	1:10560
-	804m W	Tunnel	1894	1:10560
-	804m W	Tunnel	1894	1:10560
-	830m W	Tunnel	1938	1:10560
-	830m W	Tunnel	1925	1:10560
-	830m W	Tunnel	1905	1:10560
-	860m W	Tunnel	1894	1:10560
-	860m W	Tunnel	1894	1:10560
-	861m W	Tunnel	1938	1:10560
-	861m W	Tunnel	1905	1:10560

This data is sourced from Ordnance Survey®/Groundsure.



18.4 Underground mining extents

Records within 500m**0**

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

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m**0**

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m**0**

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

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site**1**

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

Location	Details
On site	Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk ↗.

This data is sourced from Johnson Poole and Bloomer.



18.8 The Coal Authority non-coal mining

Records within 500m**0**

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m**0**

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m**0**

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m**0**

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

This data is sourced from Groundsure.



18.12 Coal mining

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

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

This data is sourced from the Coal Authority.

18.13 Brine areas

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

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

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

18.14 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

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

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

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

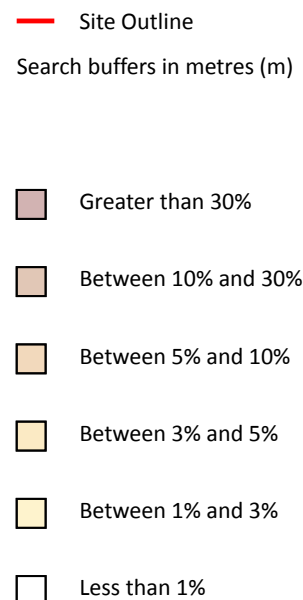
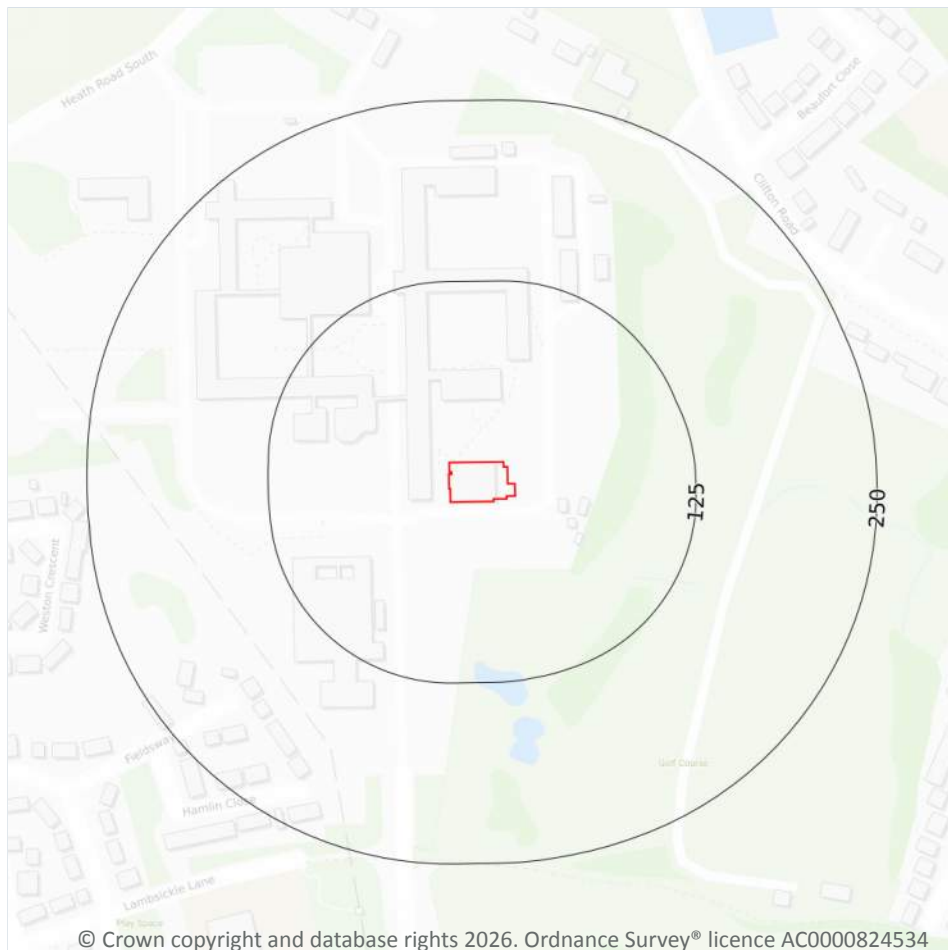
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

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

Features are displayed on the Radon map on [page 101](#) >

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



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



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

4

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
13m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
13m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
35m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².



This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m**0**

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m**0**

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m**0**

Railway tunnels taken from contemporary Ordnance Survey® mapping.

This data is sourced from the Ordnance Survey®.

22.4 Historical railway and tunnel features

Records within 250m**0**

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

This data is sourced from Ordnance Survey®/Groundsure.

22.5 Royal Mail tunnels

Records within 250m**0**

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



This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey® and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.

Data providers

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

Terms and conditions

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



Appendix C –Historical Maps

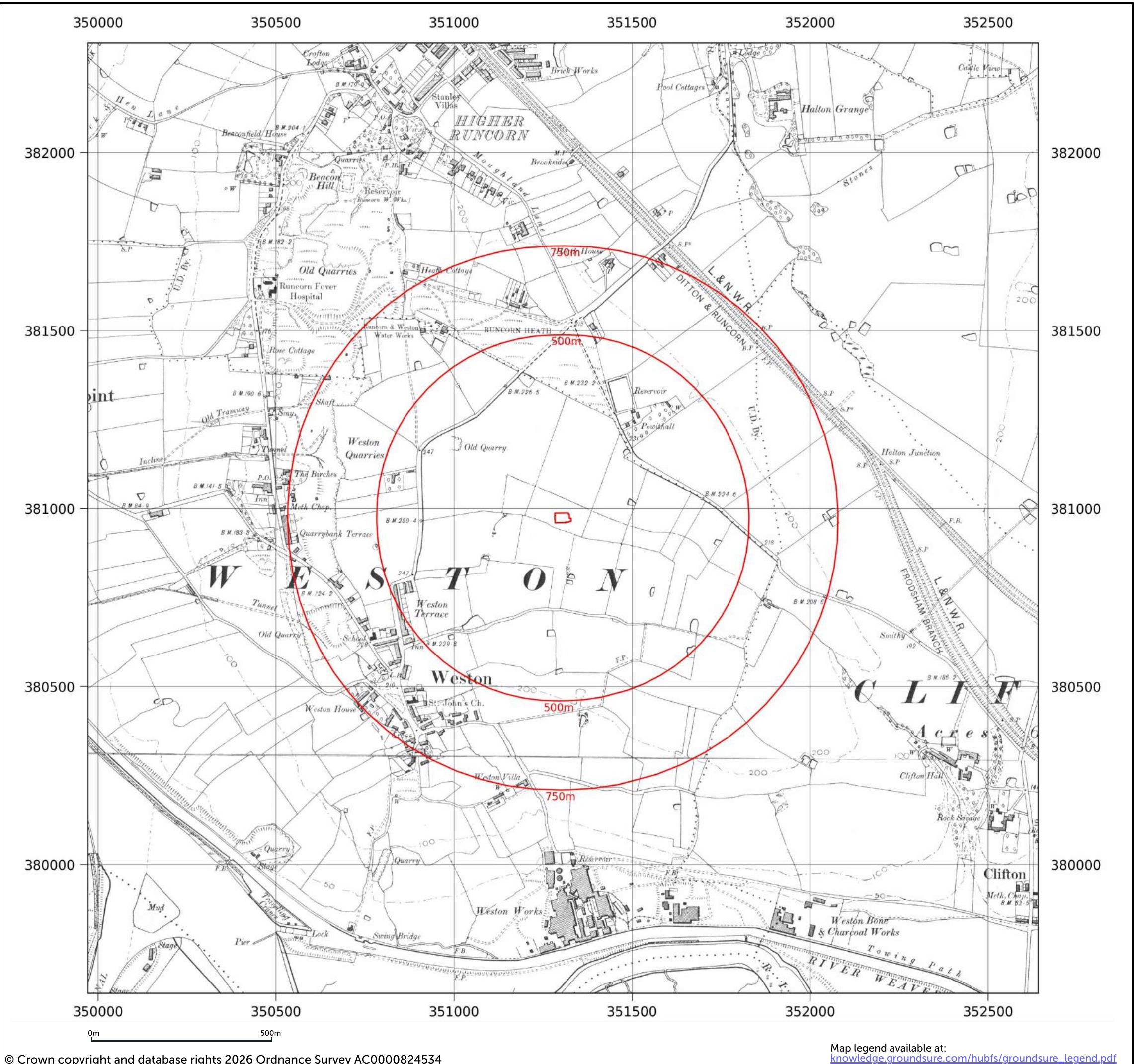
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Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	County Series
Map date:	1897
Scale:	1:10,560
Printed at:	1:10,560



Date: 1897 Surveyed: 1874 Revised: 1897
Date: 1897 Surveyed: 1874 Revised: 1897

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info@groundsure.com
01273 257 755



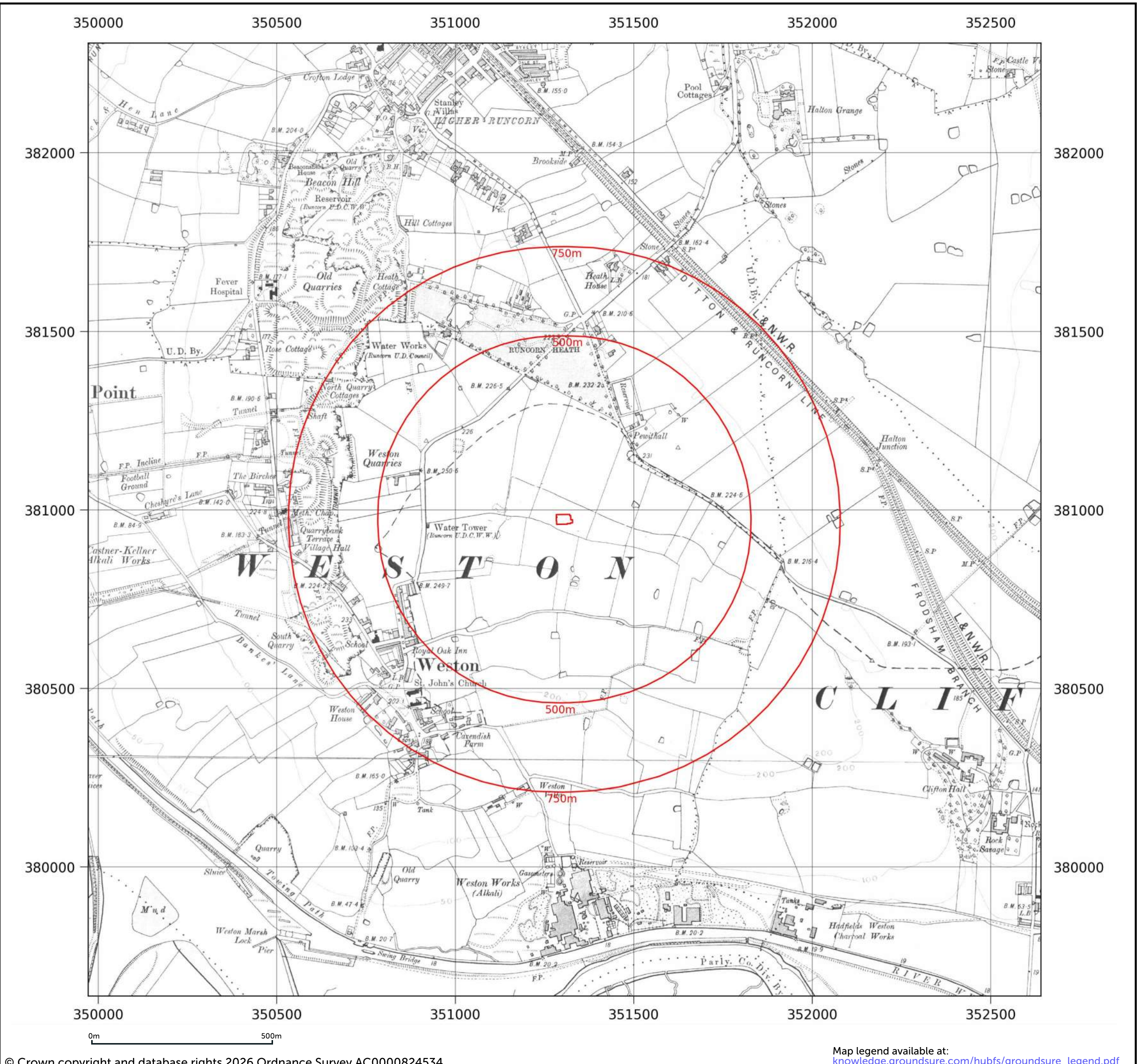
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Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

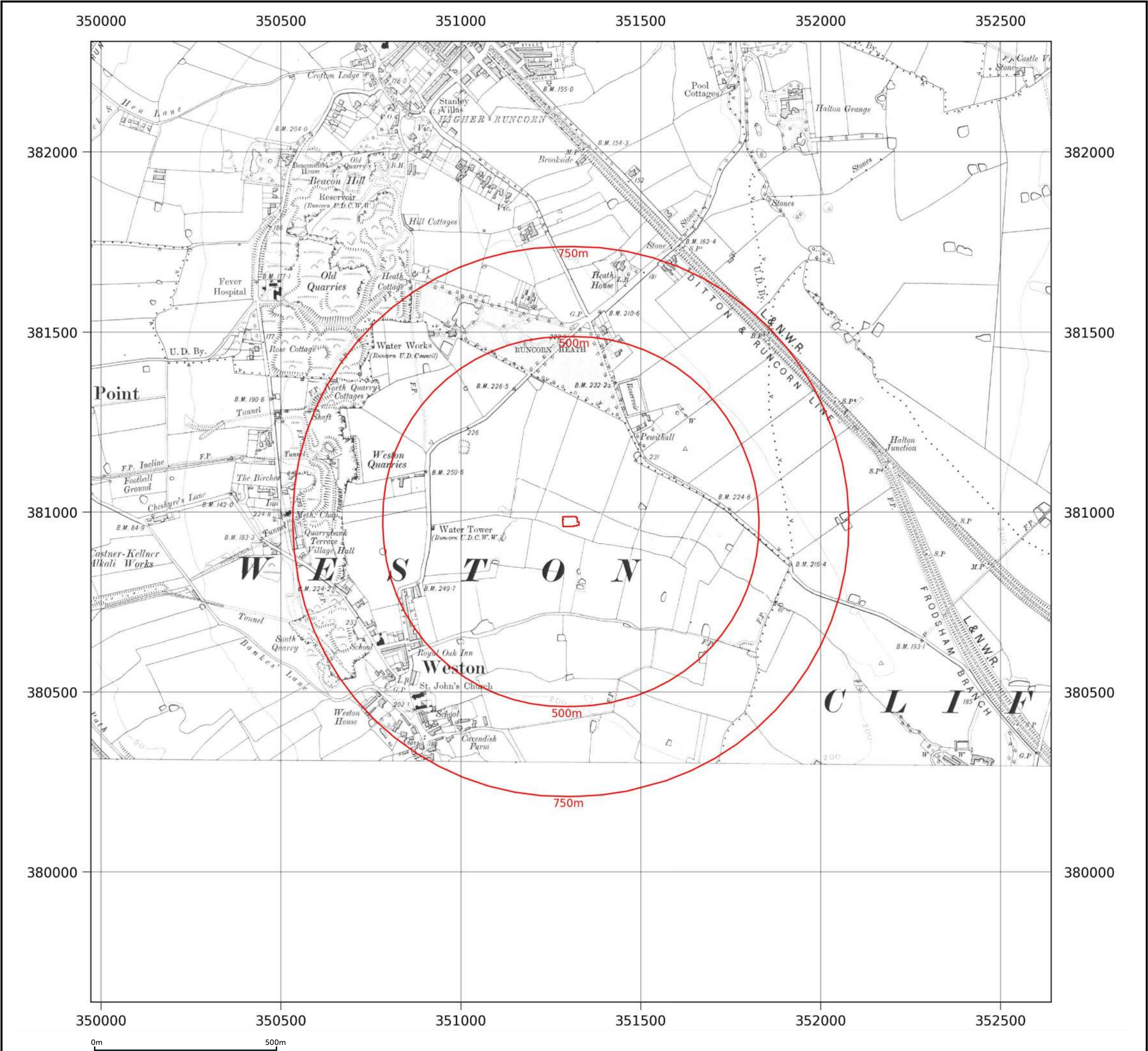
Map name:	County Series
Map date:	1908
Scale:	1:10,560
Printed at:	1:10,560



Date: 1908 Surveyed: 1874 Revised: 1908
Date: 1908 Surveyed: 1872 Revised: 1908

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Site details:	0216 Logika Runcorn
Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	County Series
Map date:	1908
Scale:	1:10,560
Printed at:	1:10,560

Date: 1908
Surveyed: 1874
Revised: 1908



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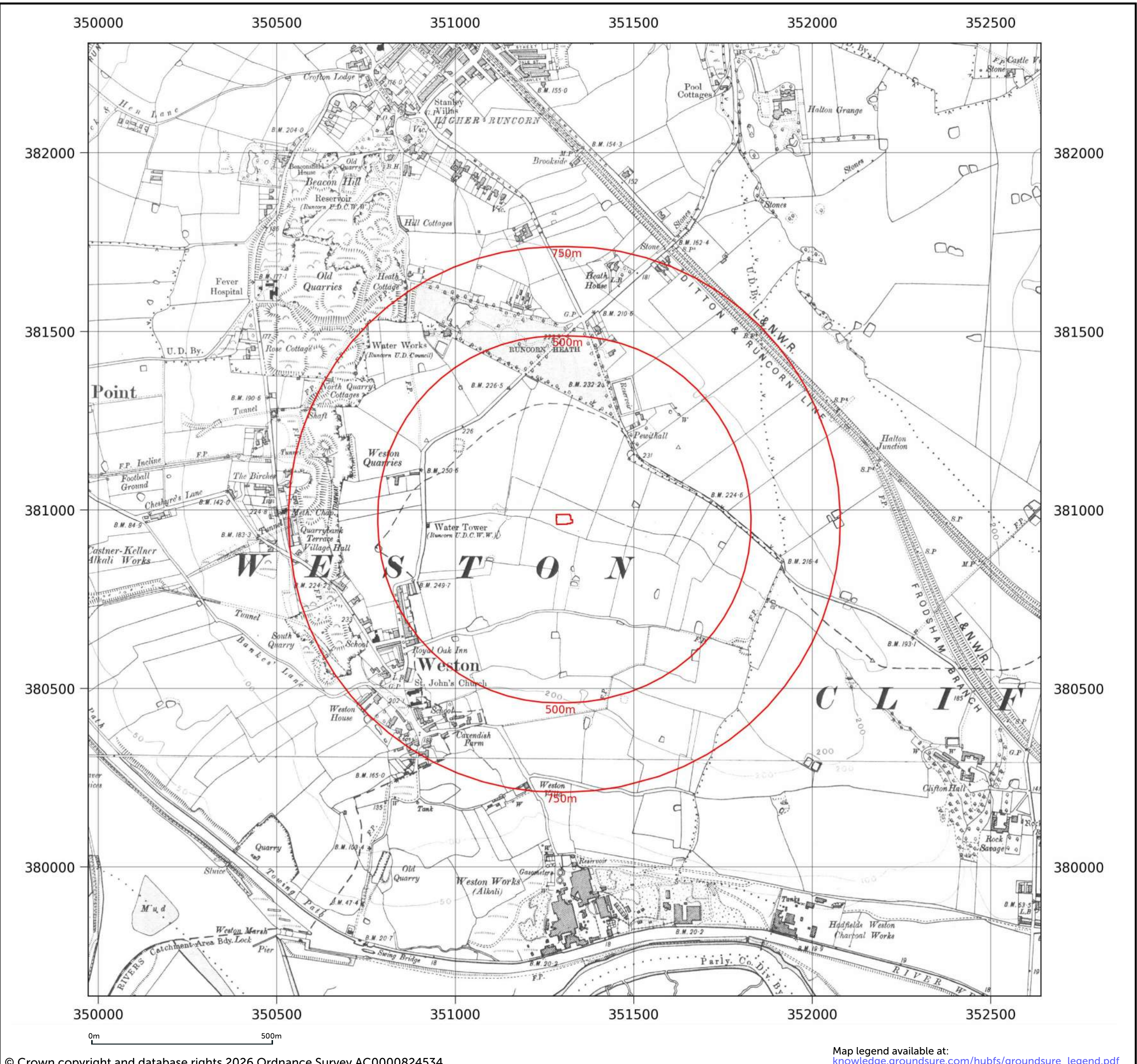
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Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	County Series
Map date:	1908-1912
Scale:	1:10,560
Printed at:	1:10,560



Date: 1908 Surveyed: 1874 Revised: 1908
Date: 1912 Surveyed: 1872 Revised: 1912 Edition: 1912

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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

County Series

Map date:

1912

Scale:

1:10,560

Printed at:

1:10,560

W

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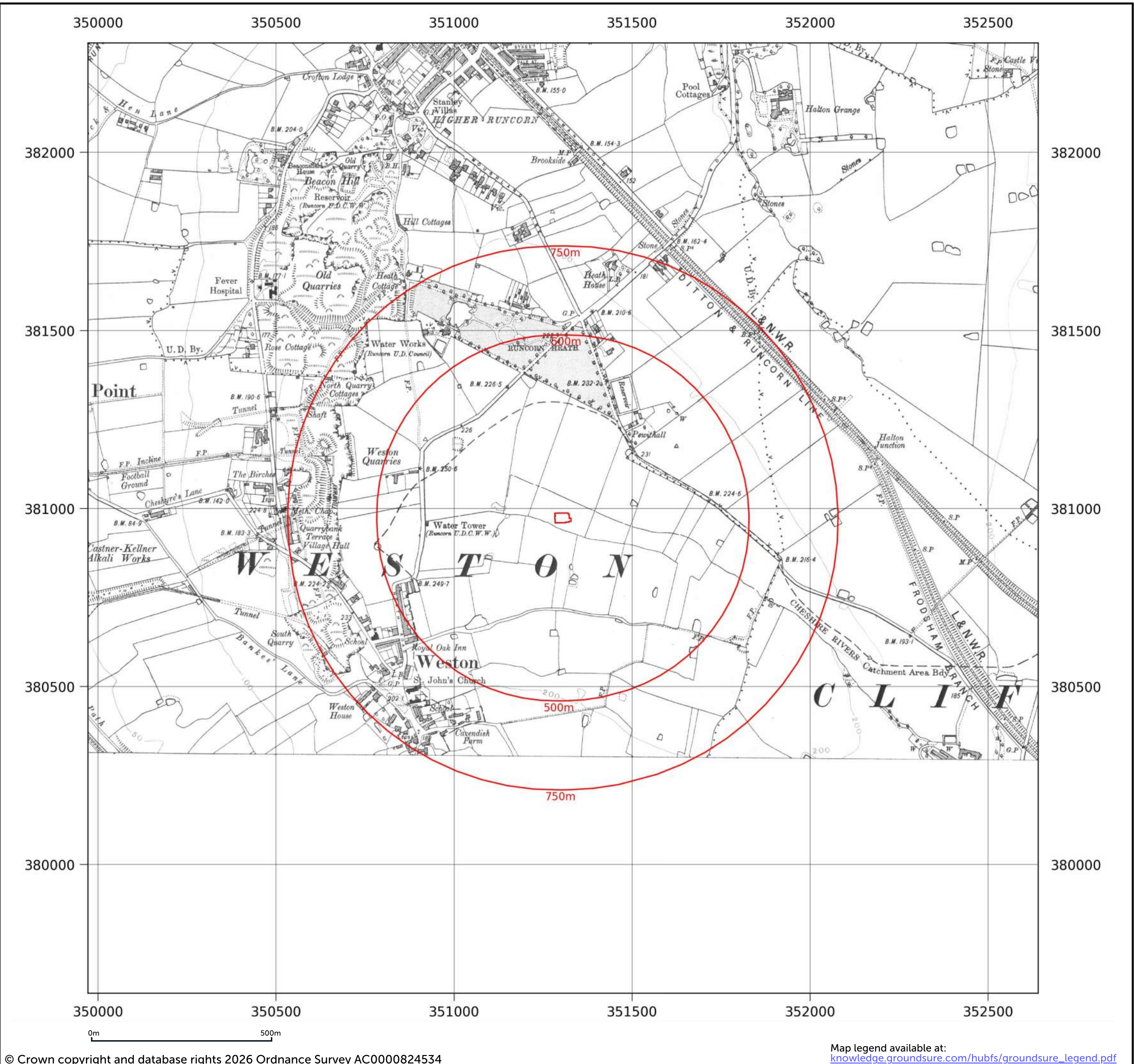
Date: 1912

Surveyed: 1874

Revised: 1912

Edition: 1912

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Site details: 0216 Logika Runcorn
Client ref: 0216 Logika Runcorn
Report ref: GS-4S6-Q3E-59X-8QT
Grid ref: 351303.88, 380973.38
Production date: 27 March 2026

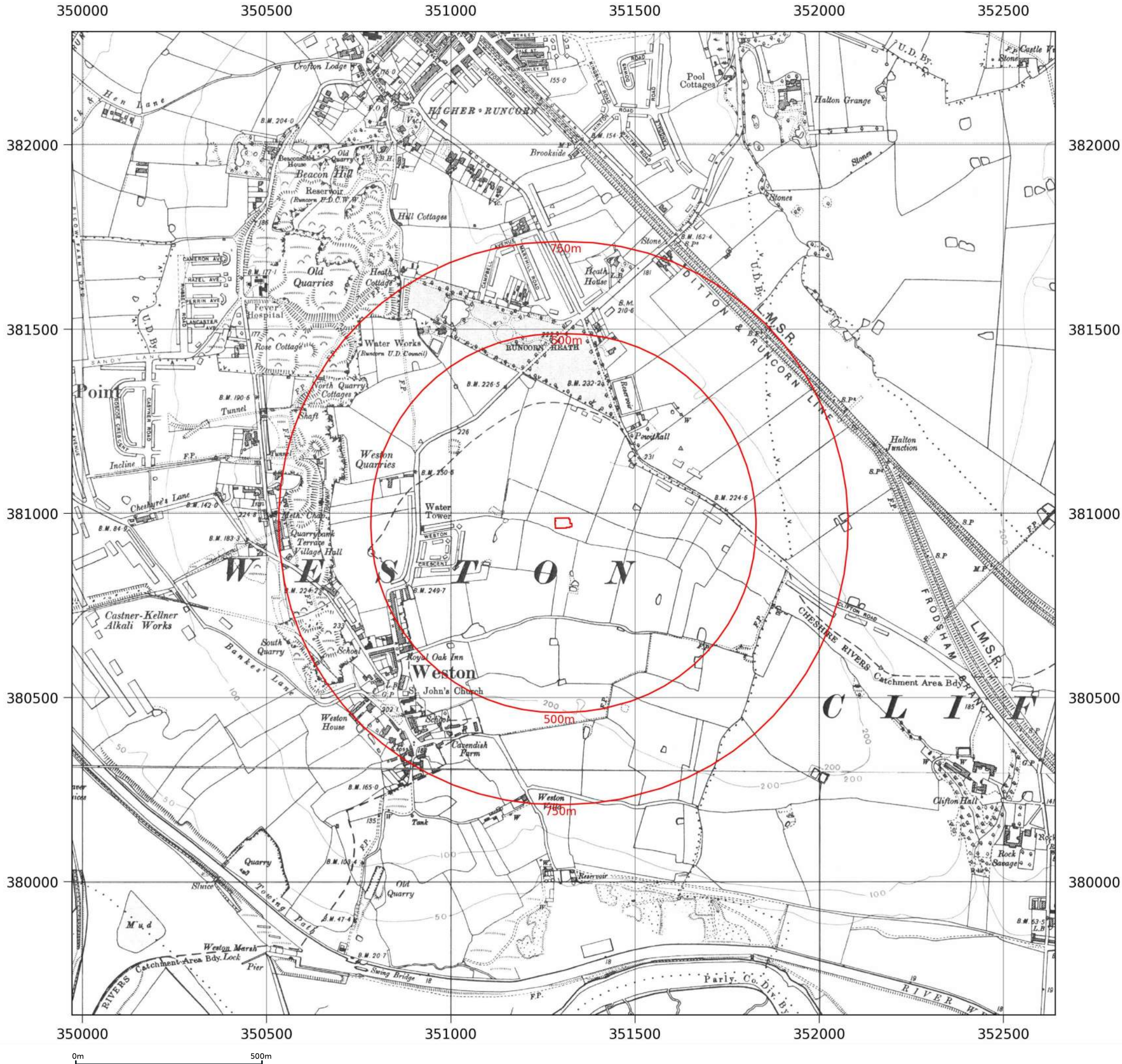
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Map date: 1938
Scale: 1:10,560
Printed at: 1:10,560



Date: 1938
Surveyed: 1874
Revised: 1938

Date: 1938
Surveyed: 1872
Revised: 1938

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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

Provisional

Map date:

1964-1968

Scale:

1:10,560

Printed at:

1:10,560

W

N

E

S

Date: 1964

Surveyed: 1949

Revised: 1964

Date: 1968

Surveyed: 1968

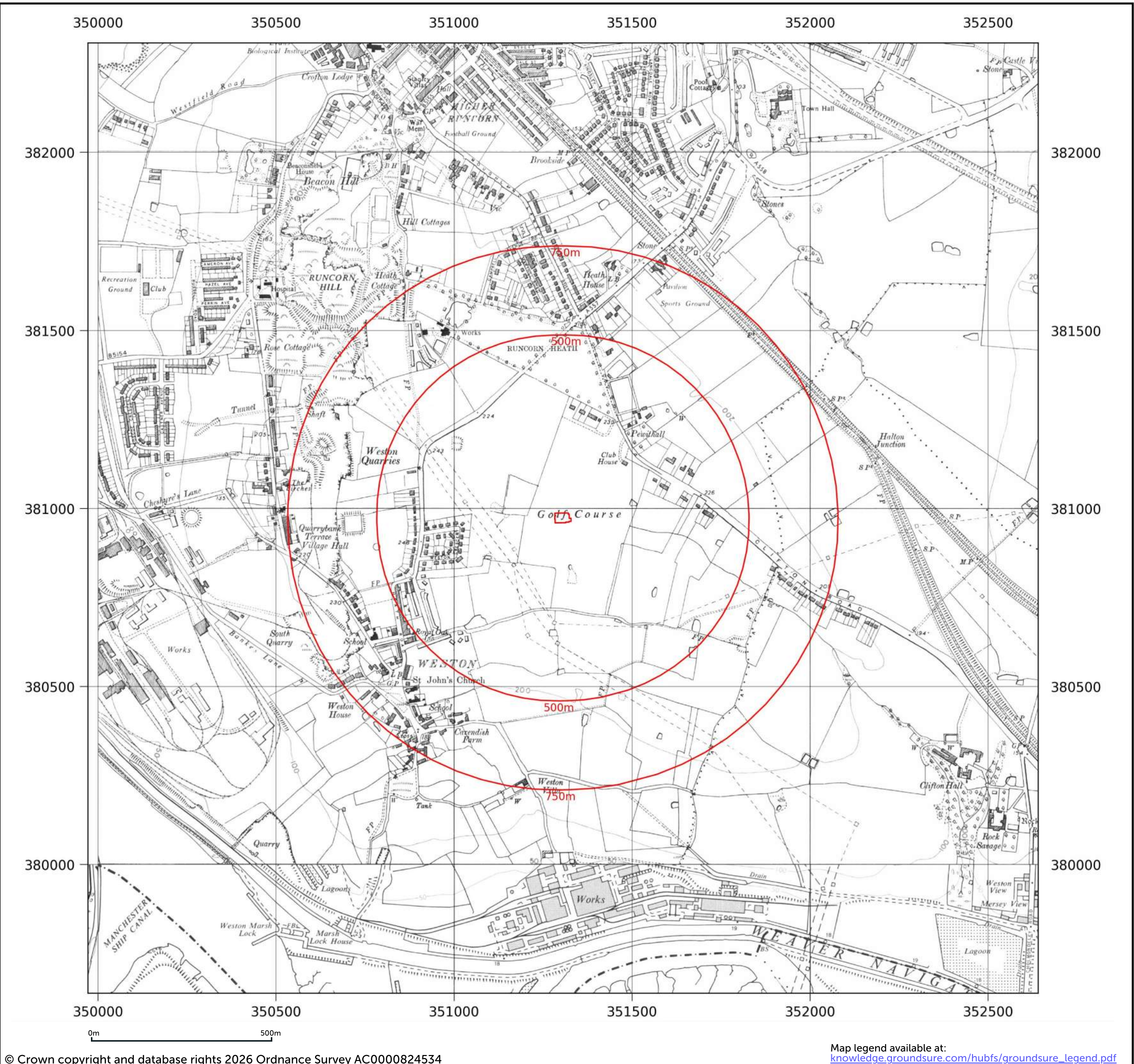
Revised: 1968

Date: 1968

Surveyed: 1968

Revised: 1968

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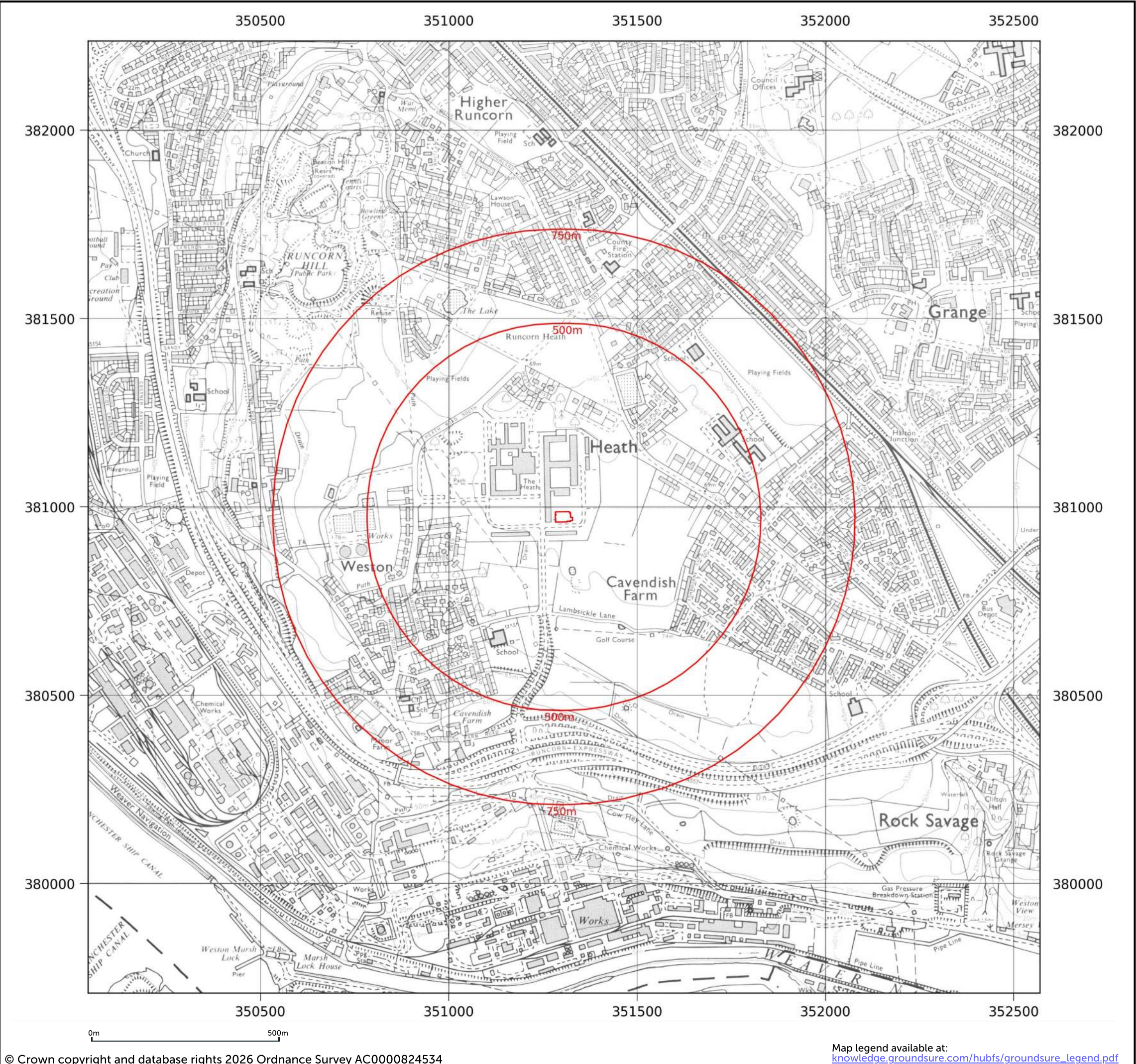
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Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	National Grid
Map date:	1982
Scale:	1:10,000
Printed at:	1:10,000

Date: 1982
Surveyed: 1979
Revised: 1981
Copyright: 1982
Levelled: 1979

Date: 1982
Surveyed: 1973
Revised: 1981
Copyright: 1982
Levelled: 1969

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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

National Grid

Map date:

1994

Scale:

1:10,000

Printed at:

1:10,000

W

N

E

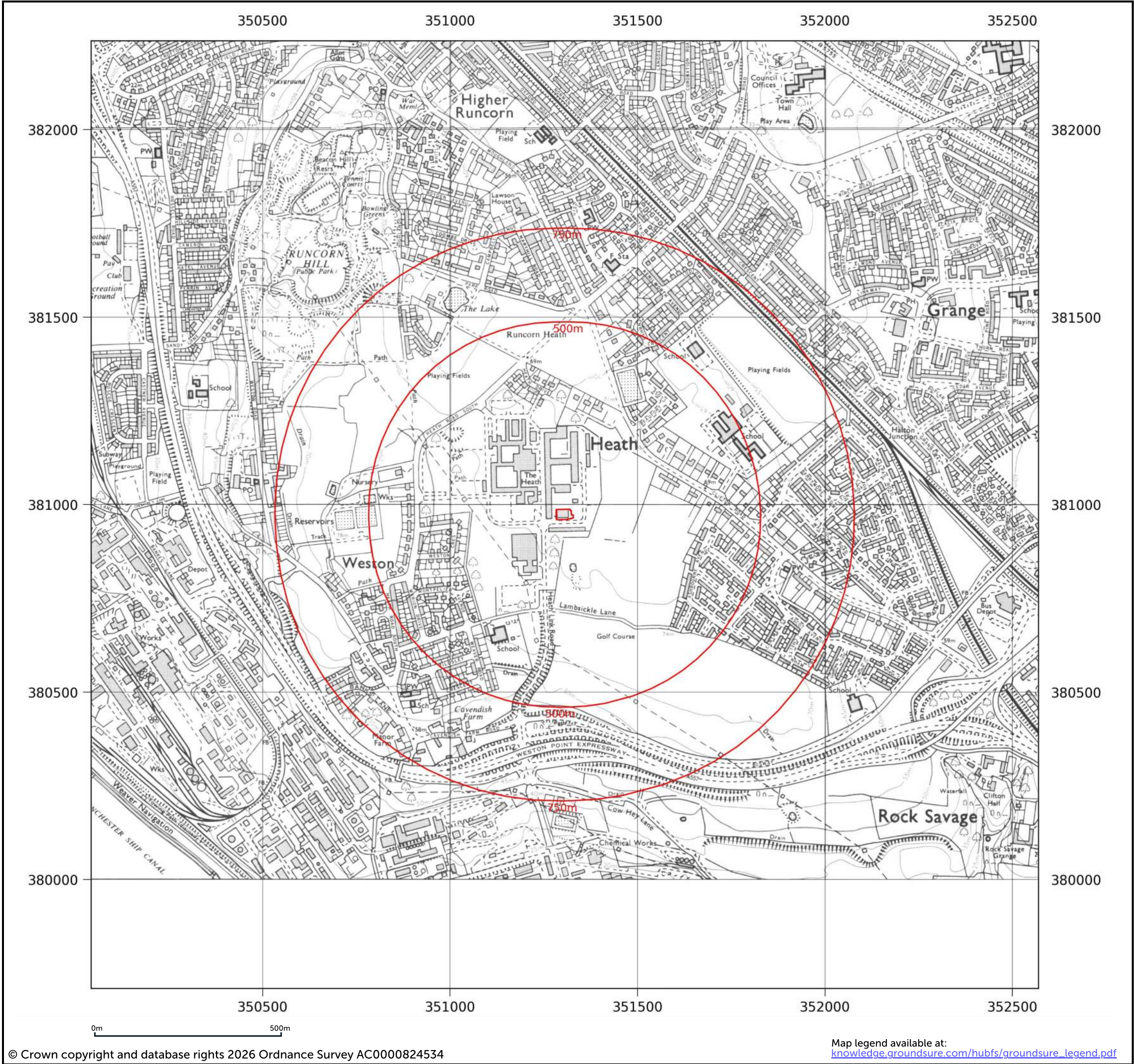
S

Date: 1994

Surveyed: 1991

Revised: 1994

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info@groundsure.com
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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

National Grid

Map date:

2001

Scale:

1:10,000

Printed at:

1:10,000

Date: 2001

Date: 2001

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Site details: 0216 Logika Runcorn
Client ref: 0216 Logika Runcorn
Report ref: GS-4S6-Q3E-59X-8QT
Grid ref: 351303.88, 380973.38
Production date: 27 March 2026

Map name: National Grid
Map date: 2010
Scale: 1:10,000
Printed at: 1:10,000



Date: 2010

Date: 2010

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Site details:	0216 Logika Runcorn
Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	National Grid
Map date:	2015
Scale:	1:10,000
Printed at:	1:10,000



Date: 2015
Date: 2015

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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

National Grid

Map date:

2025

Scale:

1:10,000

Printed at:

1:10,000

North arrow

Date: 2025

Date: 2025

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info@groundsure.com
01273 257 755



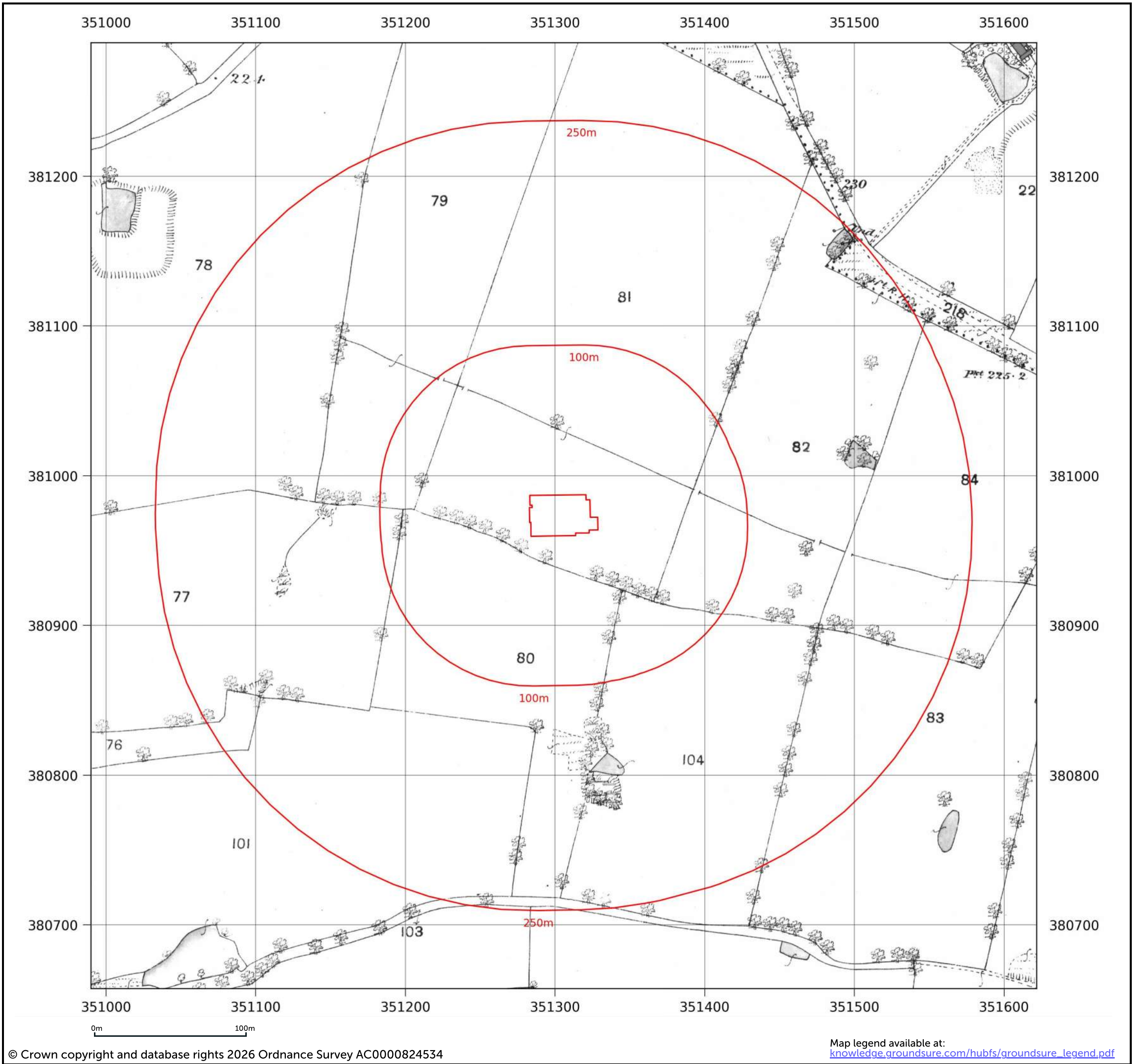
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Production date:	27 March 2026

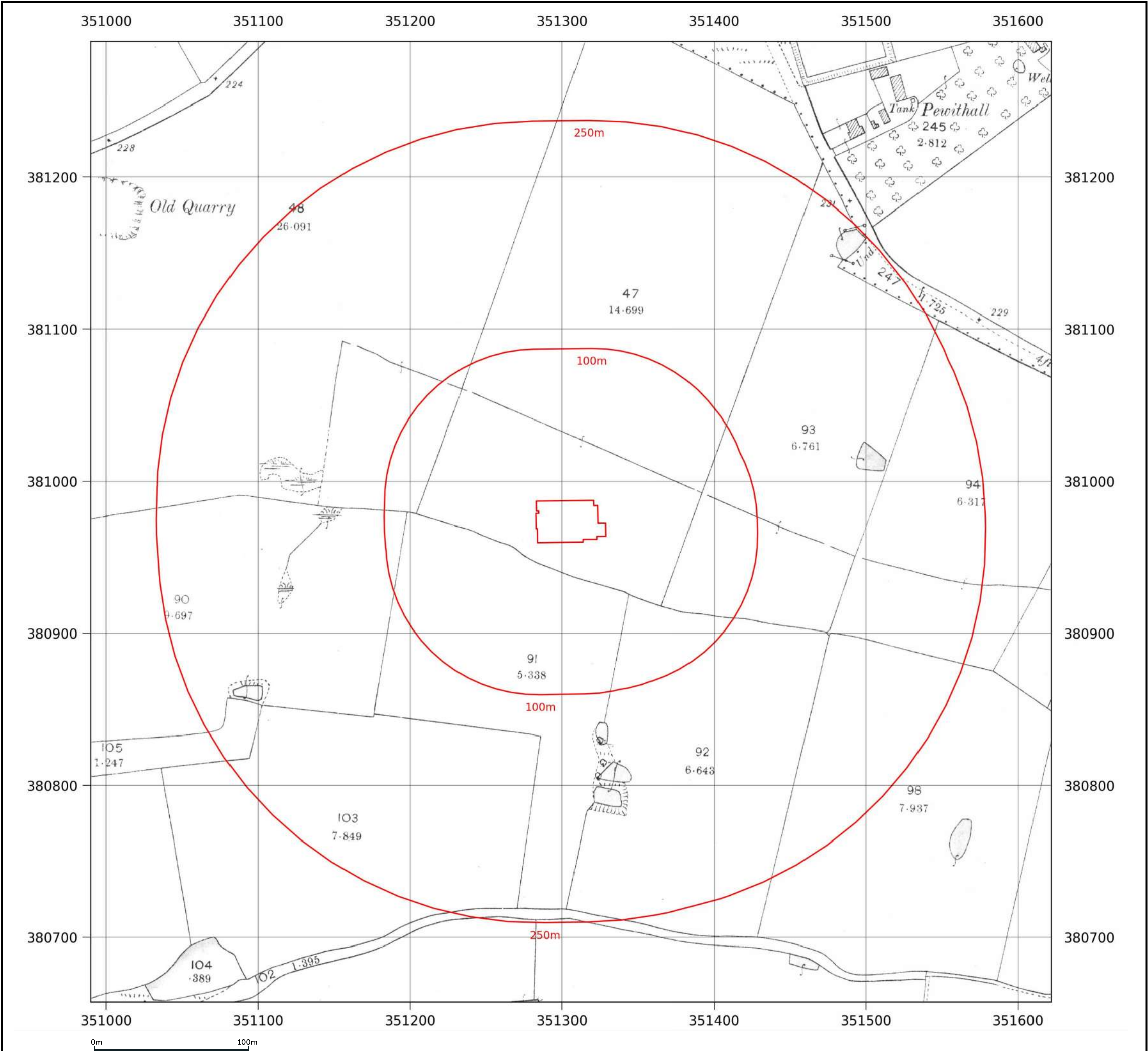
Map name:	County Series
Map date:	1874
Scale:	1:2,500
Printed at:	1:2,500



Date: 1874
Surveyed: 1874
Revised: 1874

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Site details:	0216 Logika Runcorn
Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	County Series
Map date:	1899
Scale:	1:2,500
Printed at:	1:2,500

Date: 1899
Surveyed: 1899
Revised: 1899

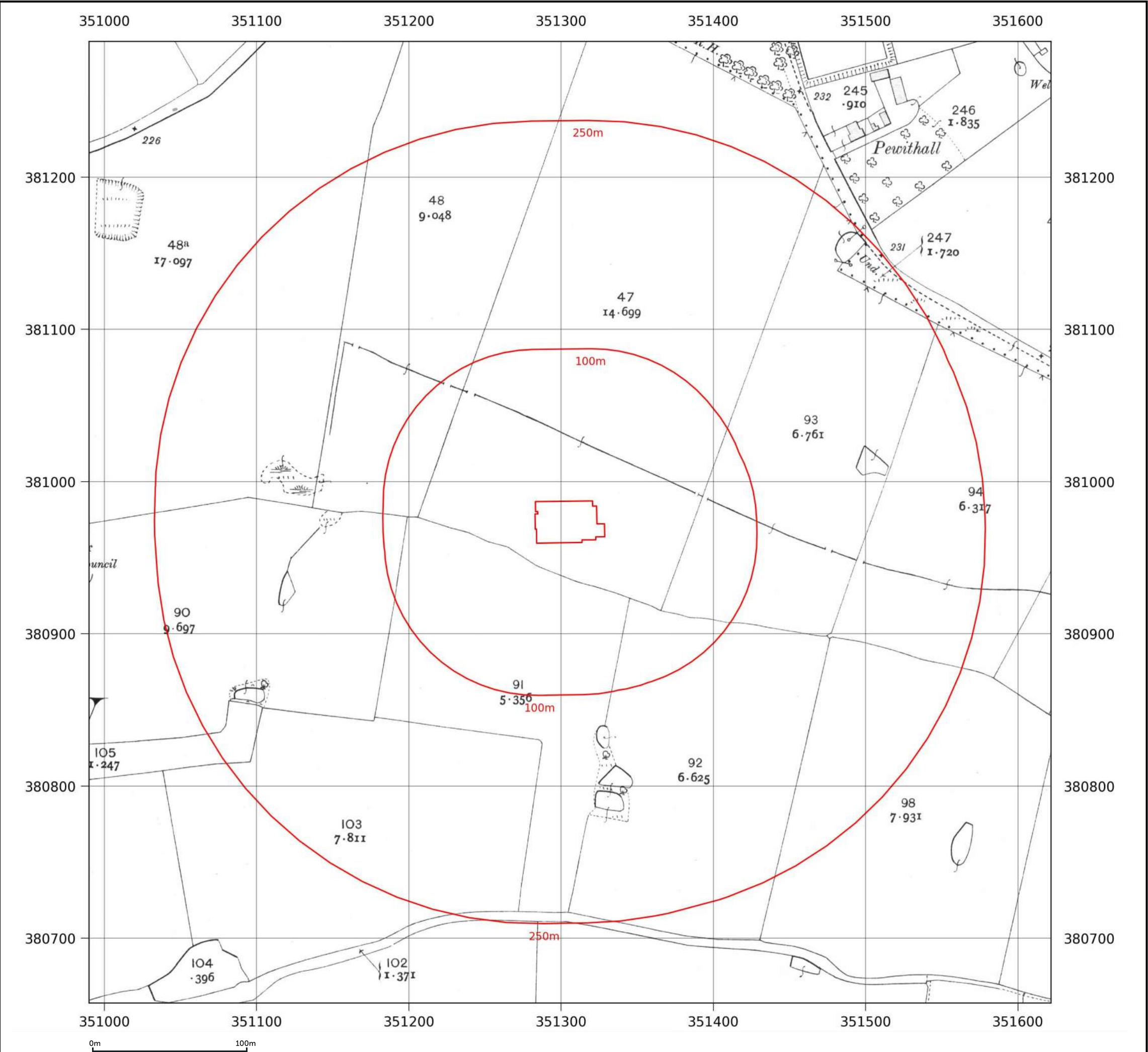
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Site details:	0216 Logika Runcorn
Client ref:	0216 Logika Runcorn
Report ref:	GS-4S6-Q3E-59X-8QT
Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	County Series
Map date:	1911
Scale:	1:2,500
Printed at:	1:2,500

Date: 1911
Surveyed: 1911
Revised: 1911

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Site details:

0216 Logika Runcorn

Client ref:

0216 Logika Runcorn

Report ref:

GS-4S6-Q3E-59X-8QT

Grid ref:

351303.88, 380973.38

Production date:

27 March 2026

Map name:

County Series

Map date:

1937

Scale:

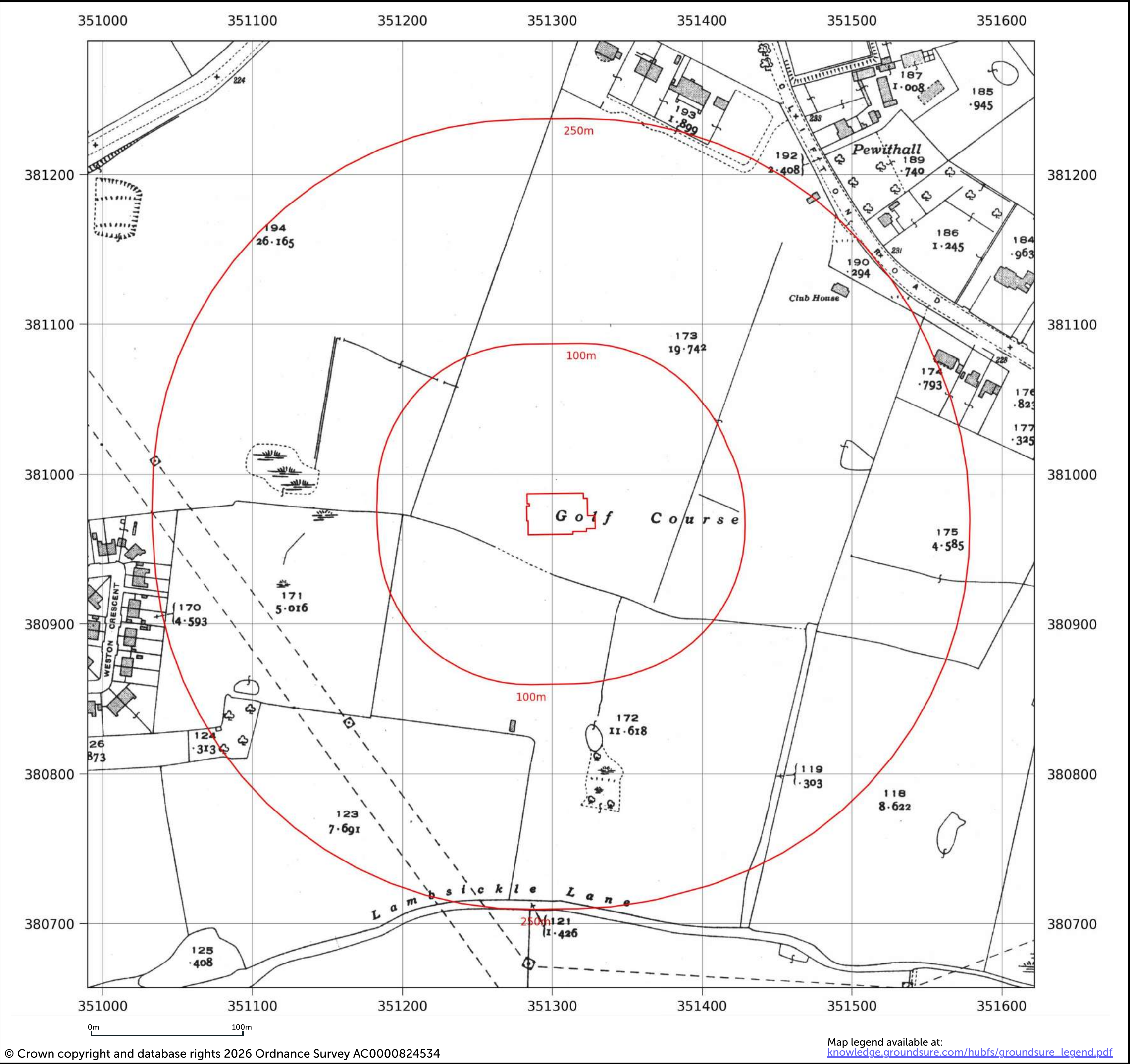
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Printed at:

1:2,500

Date: 1937
Surveyed: 1937
Revised: 1937

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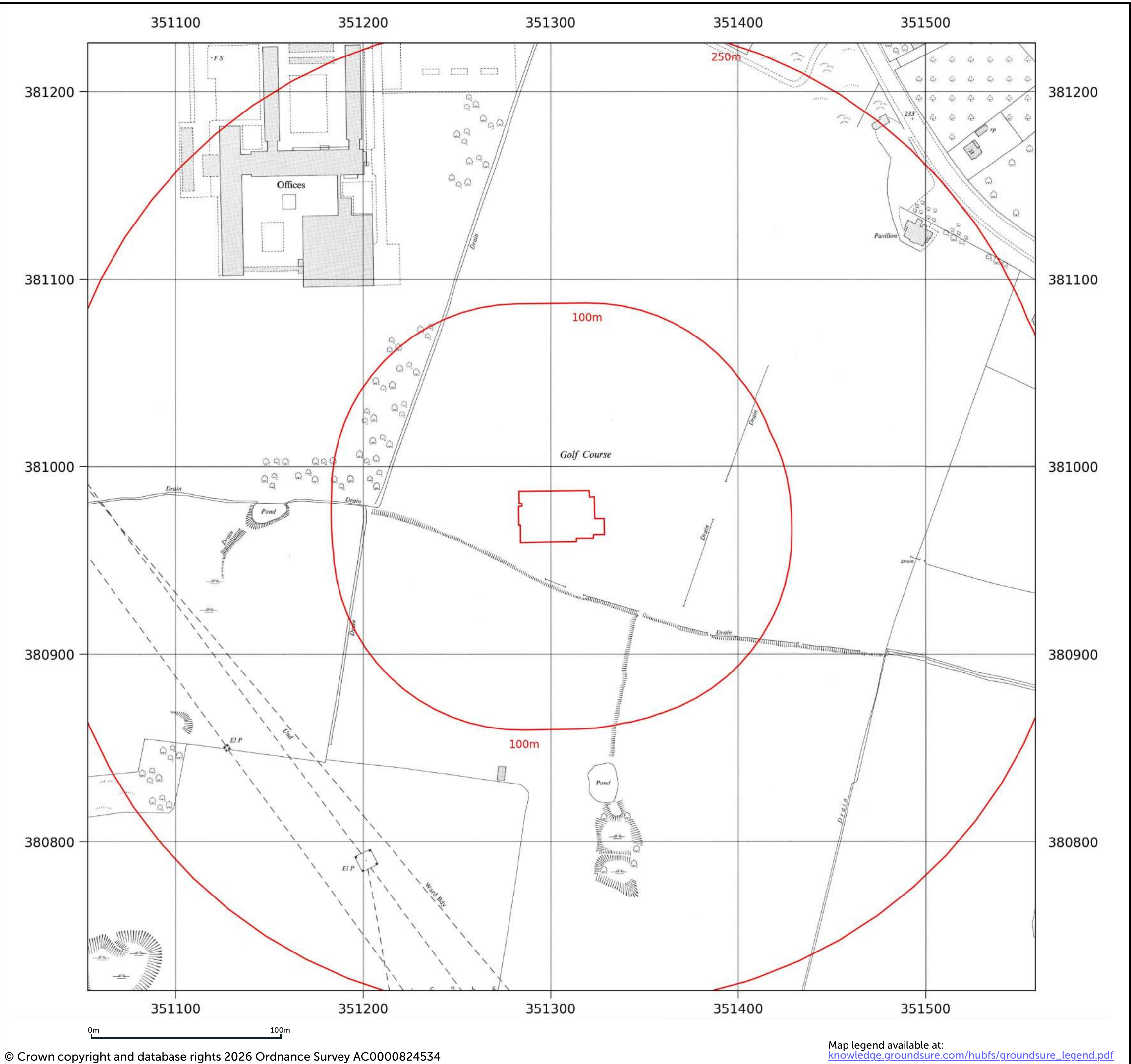
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Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	National Grid
Map date:	1962
Scale:	1:1,250
Printed at:	1:2,000



Date: 1962 Surveyed: 1961 Revised: 1961 Copyright: 1962 Levelled: 1960	Date: 1962 Surveyed: 1961 Revised: 1961 Copyright: 1962 Levelled: 1960
Date: 1962 Surveyed: 1961 Revised: 1961 Copyright: 1962 Levelled: 1960	Date: 1962 Surveyed: 1961 Revised: 1961 Copyright: 1962 Levelled: 1960

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Site details:

Client ref:

Report ref:

Grid ref:

Production date:

0216 Logika Runcorn

0216 Logika Runcorn

GS-4S6-Q3E-59X-8QT

351303.88, 380973.38

27 March 2026

Map name:

Map date:

Scale:

Printed at:

National Grid

1962-1963

1:2,500

1:2,500

Date: 1962

Surveyed: 1961

Revised: 1961

Copyright: 1962

Levelled: 1960

Date: 1963

Surveyed: 1961

Revised: 1961

Edition: 1963

Copyright: 1963

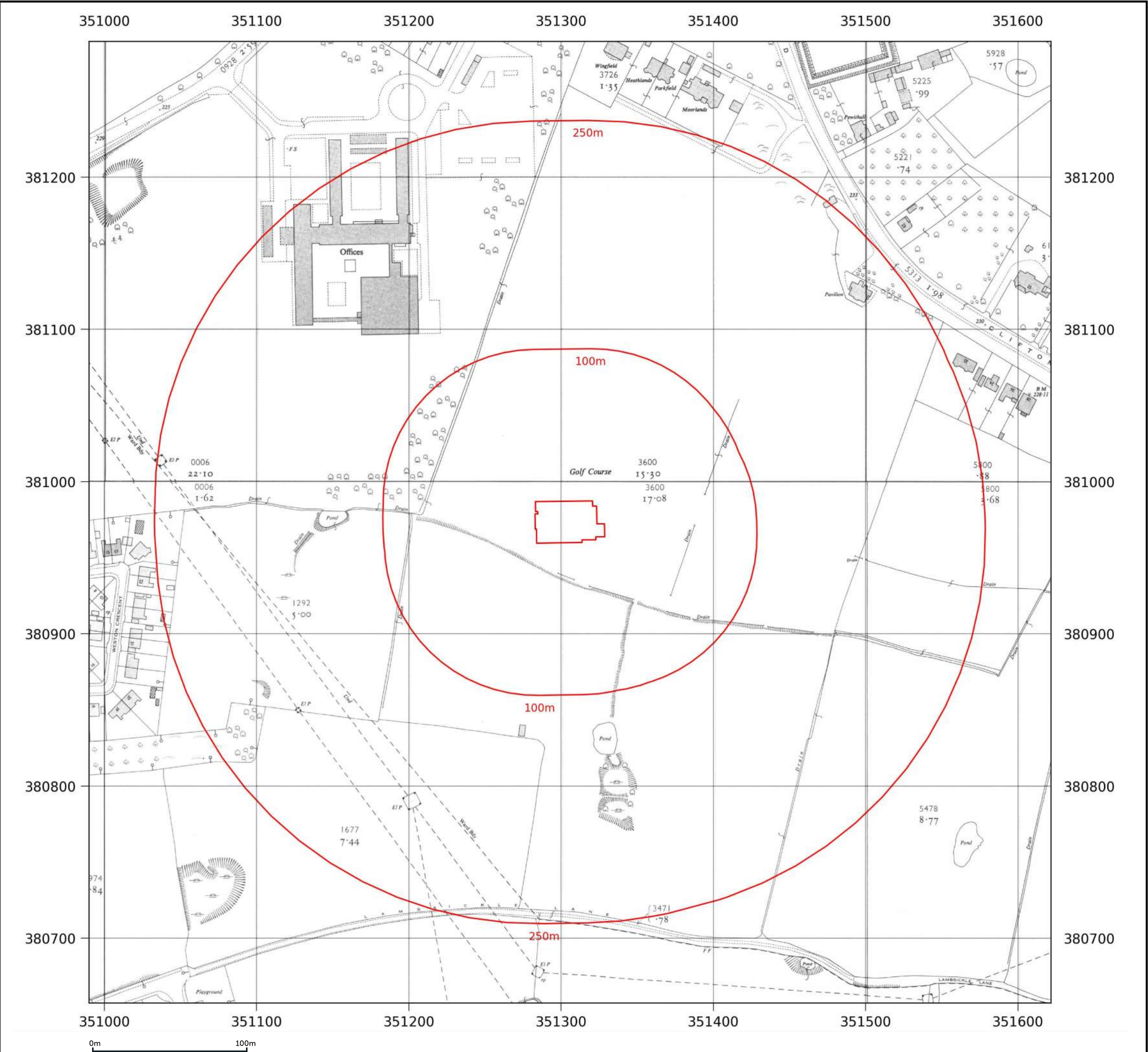
Levelled: 1960

W

E

N

S





Site details:	0216 Logika Runcorn
Client ref:	0216 Logika Runcorn
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Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	National Grid
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Printed at:	1:2,000



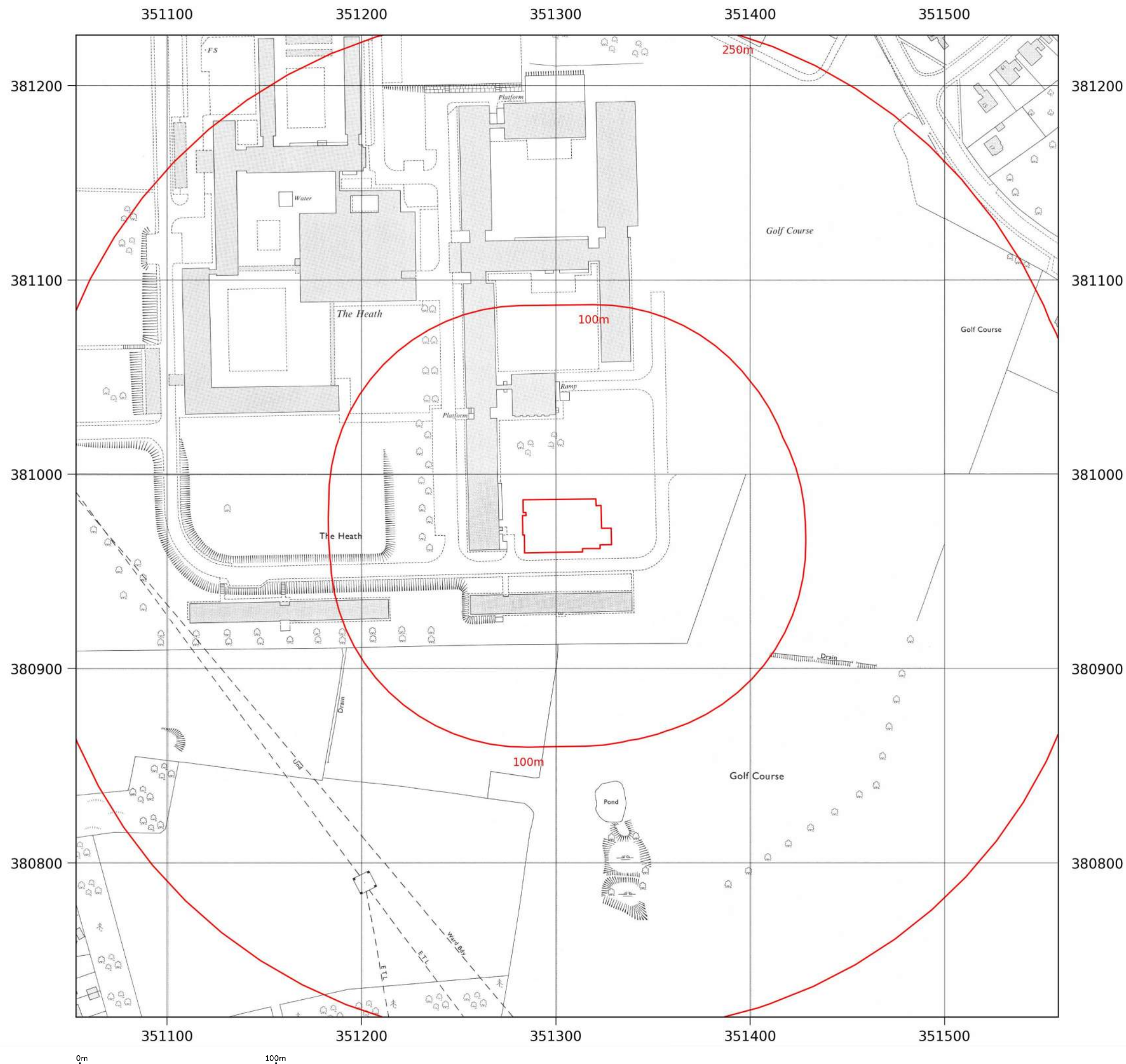
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Revised: 1967	Revised: 1971
Copyright: 1967	Copyright: 1971
Levelled: 1960	Levelled: 1960

Date: 1971
 Surveyed: 1961
 Revised: 1971
 Copyright: 1971
 Levelled: 1960

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf



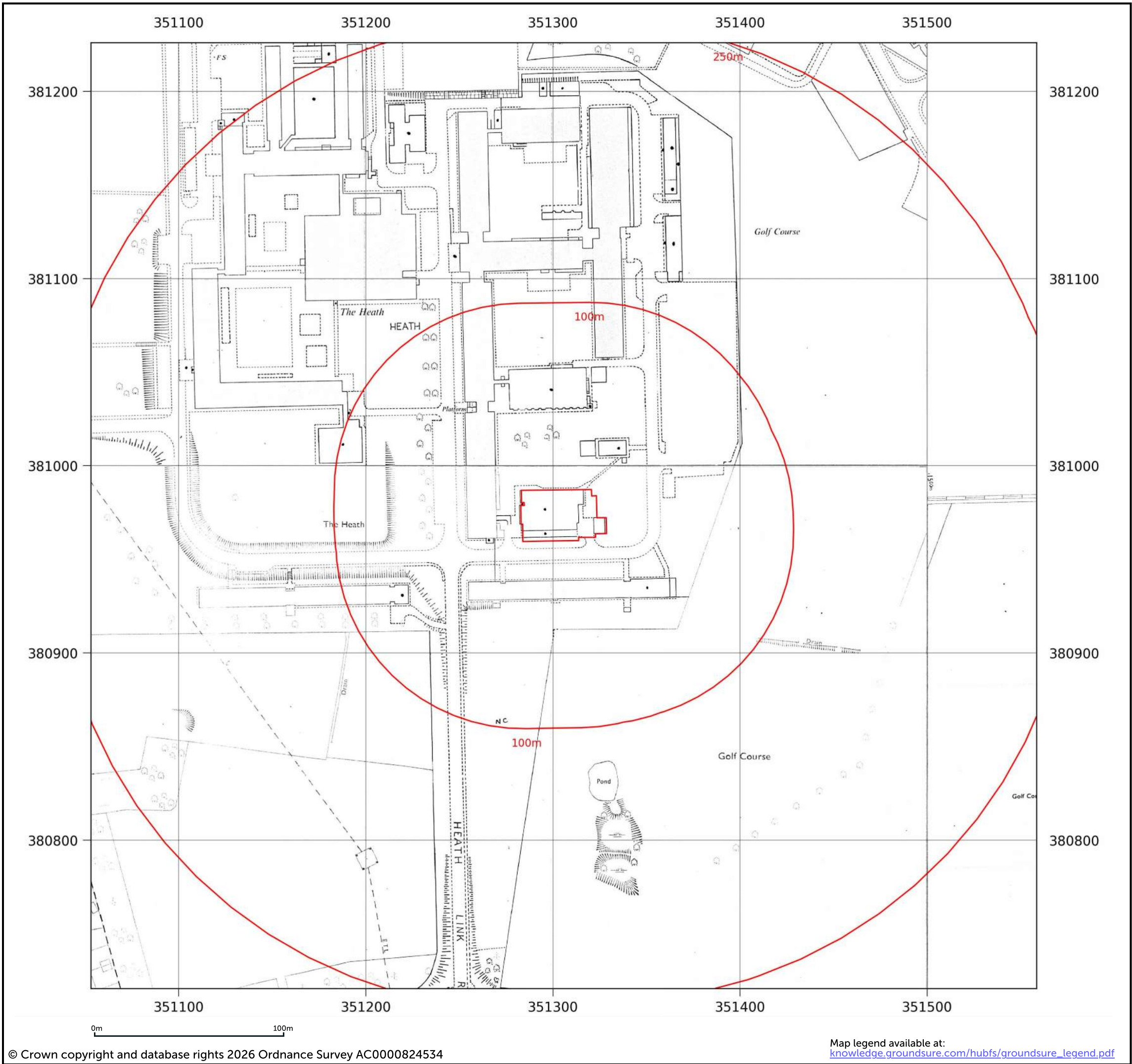
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Grid ref:	351303.88, 380973.38
Production date:	27 March 2026

Map name:	National Grid
Map date:	1979-1982
Scale:	1:1,250
Printed at:	1:2,000



Date: 1982 Copyright: 1982 Levelled: 1960	
Date: 1982 Copyright: 1982 Levelled: 1960	Date: 1979 Surveyed: 1979 Revised: 1979 Copyright: 1979

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Site details:

Client ref:

Report ref:

Grid ref:

Production date:

0216 Logika Runcorn

0216 Logika Runcorn

GS-4S6-Q3E-59X-8QT

351303.88, 380973.38

27 March 2026

Map name:

Map date:

Scale:

Printed at:

National Grid

1986-1990

1:1,250

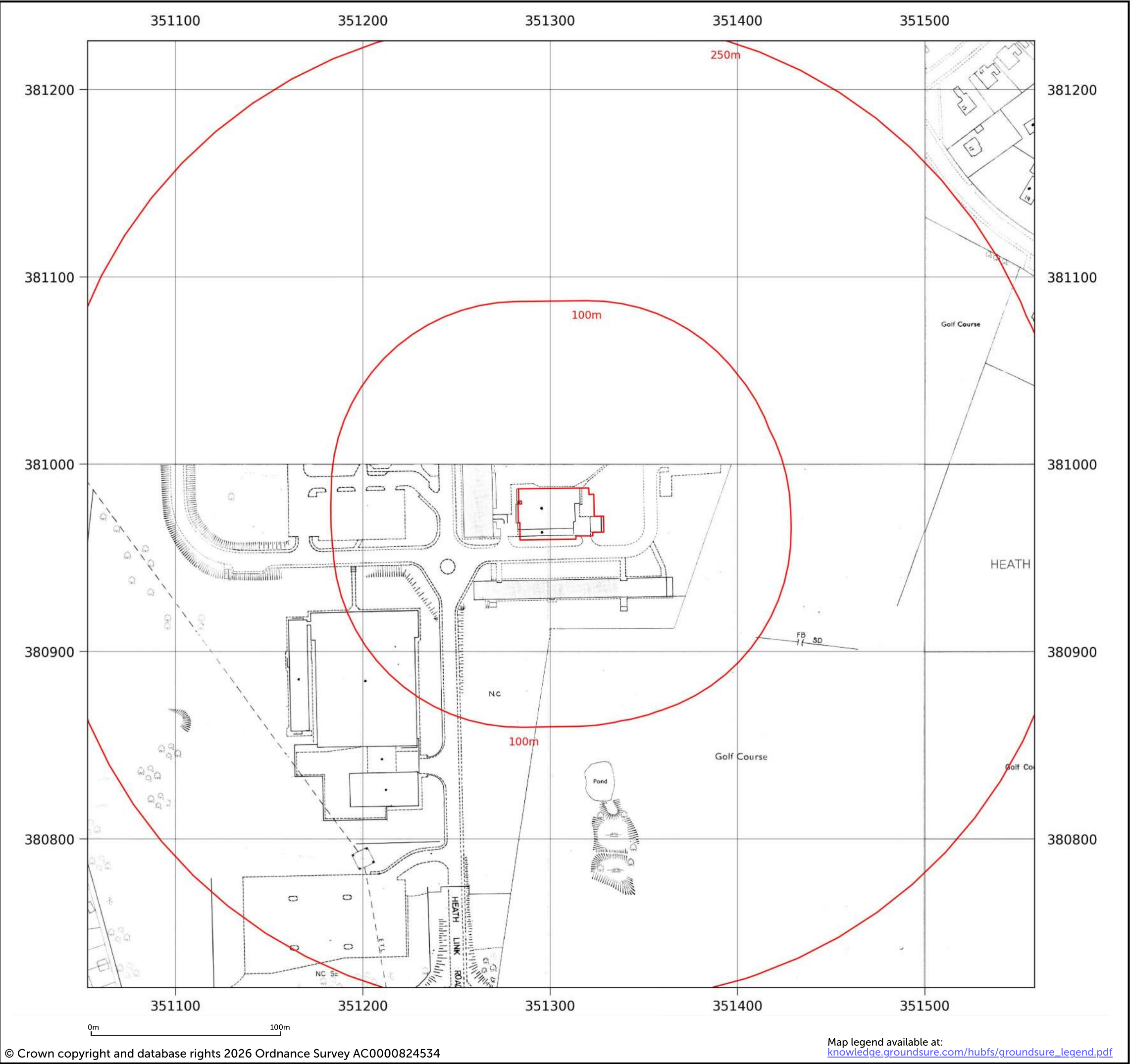
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Date: 1986

Date: 1990
Surveyed: 1960
Revised: 1990
Copyright: 1990
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Date: 1990
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Revised: 1990
Copyright: 1990

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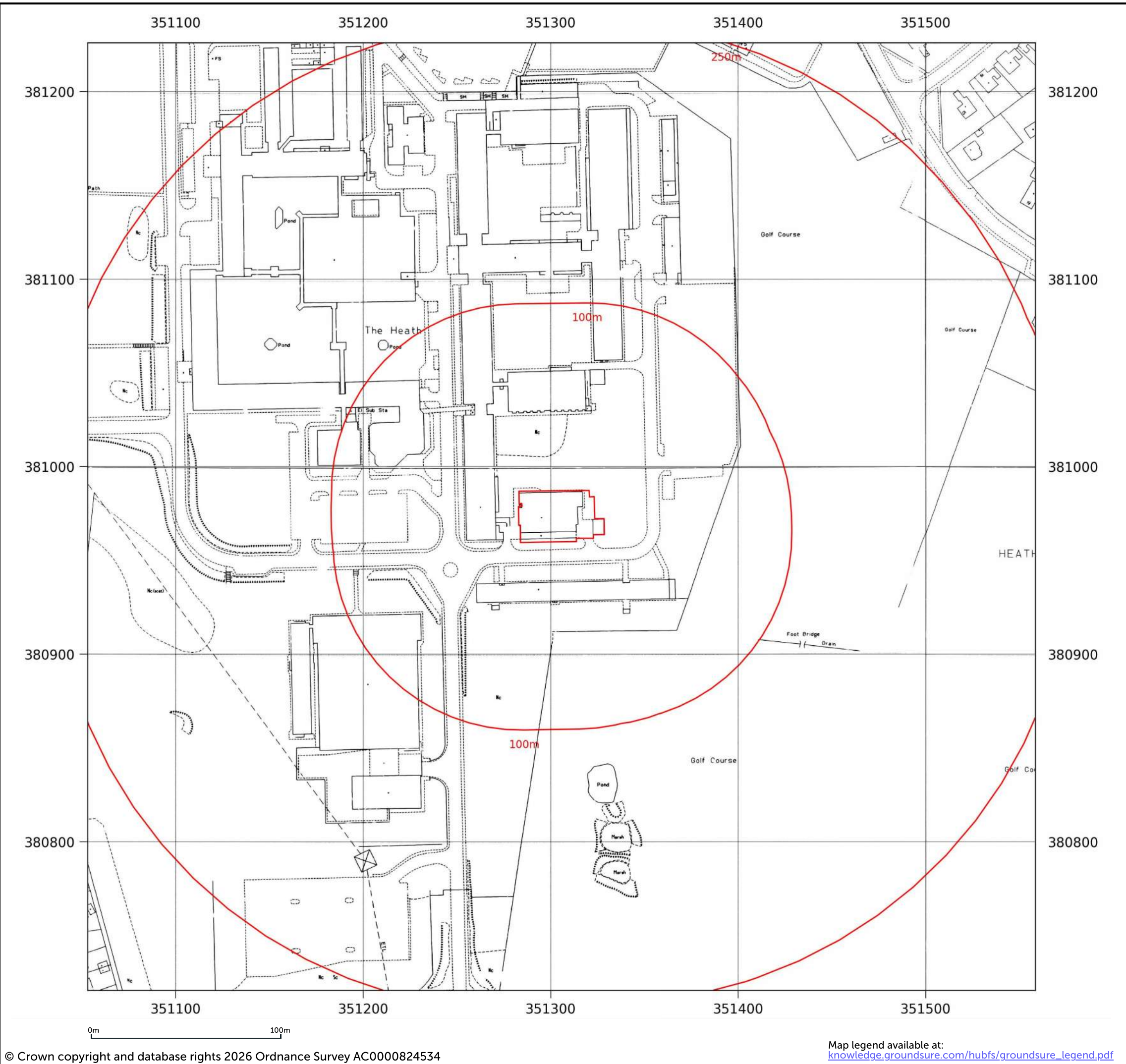
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Client ref:0216 Logika Runcorn
Report ref:GS-4S6-Q3E-59X-8QT
Grid ref:351303.88, 380973.38
Production date:27 March 2026

Map name:National Grid
Map date:1993
Scale:1:1,250
Printed at:1:2,000



Date: 1993 Copyright: 1993	Date: 1993 Copyright: 1993
Date: 1993 Copyright: 1993	Date: 1993 Copyright: 1993

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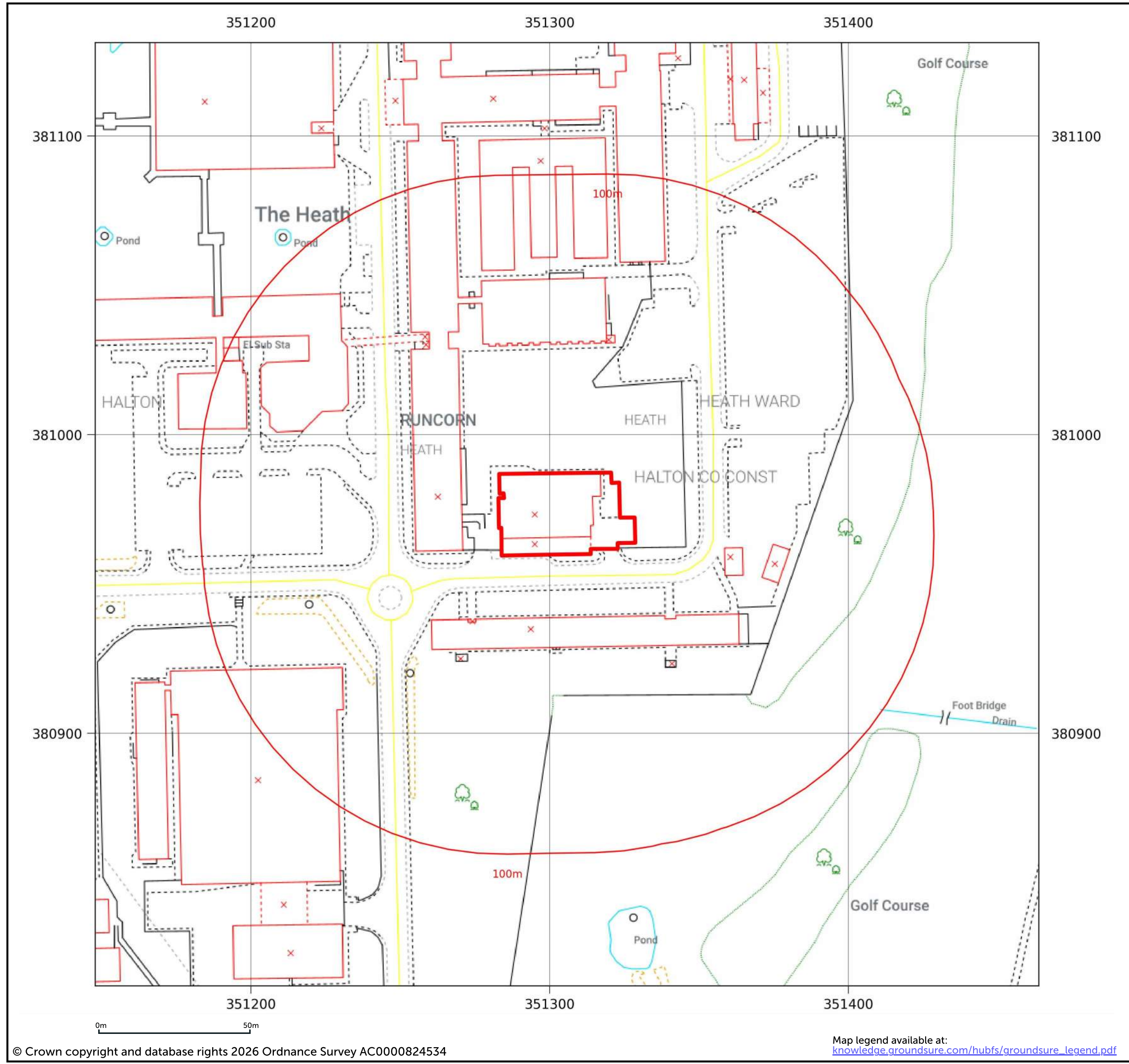
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Report ref: GS-4S6-Q3E-59X-8QT
Grid ref: 351303.88, 380973.38
Production date: 27 March 2026

Map name: LandLine
Map date: 2003
Scale: 1:1,250
Printed at: 1:1,250



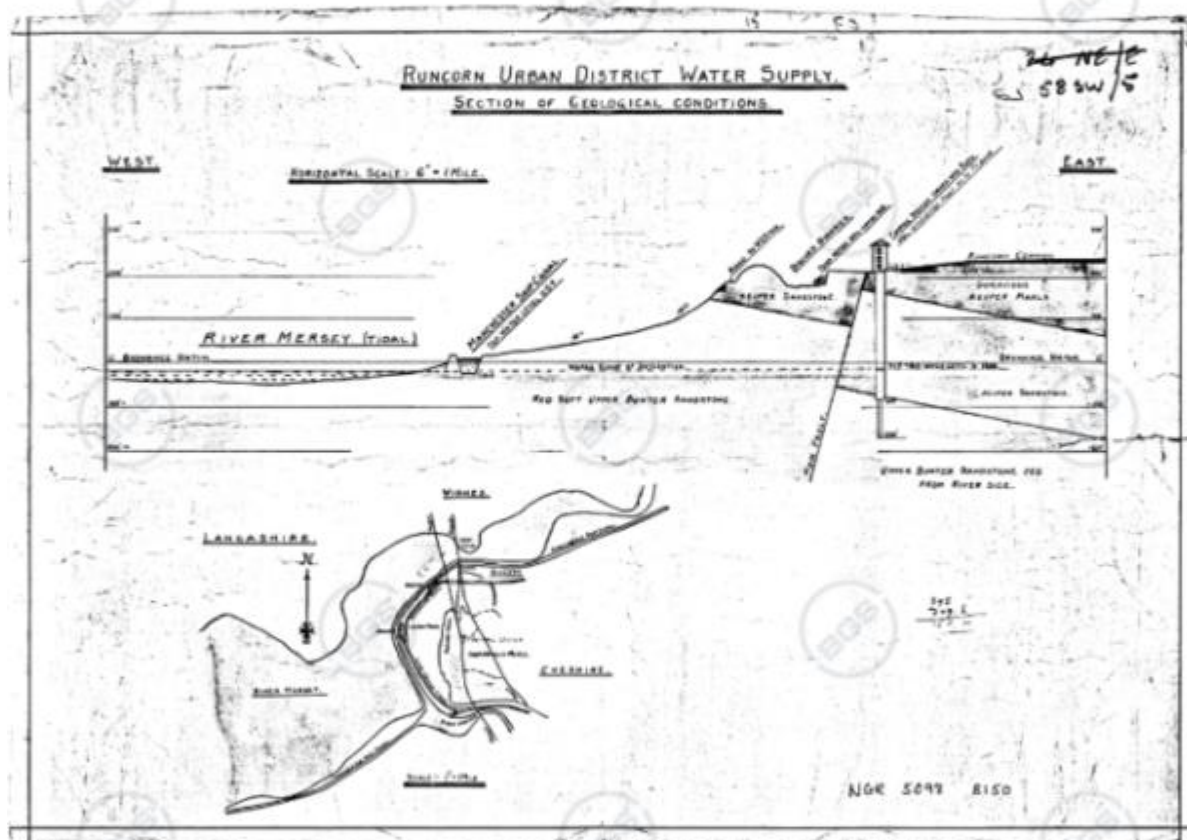
Date: 2003

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Appendix D –BGS Borehole Records

Name and Number of Shaft or Bore given by Geological Survey:		QUANTITY	
(NAME) WASHINGTON ROAD AND A.E.W.L.M. ROAD		SS 57/348 24 SEP.	
GEOLOGICAL CLASSIFICATION		THICKNESS	DEPTH
Upper Bedded Sst.) 20-4-78	Deep red sandstone with very abundant marl pellets	16	30.6
	Chocolate and grey marl	2	30.8
	Very soft incoherent red sandstone	5	31.3
	Hard band of grey sandstone	2	31.5
	Very soft incoherent red sandstone	3	31.8
	Grey marl	1	31.9
	Fine grained deep red soft sandstone	4	32.3
	Hard deep red fine grained sandstone	1	32.4
	Fine grained deep red soft sandstone	0	33.4
	Chocolate and grey marl	2	33.6
	Red and grey sandstone with numerous pellets of chocolate marl; sandstone firm and coarse grained	19	35.5
	Fine grained rather coarse grained red and grey sandstone. Marl pellets occur, but very scarce	10	36.5
	Very soft deep red coloured sandstone, very fine in grain. Very occasional thin grey bands	4	40.5
	Borehole filled up concrete to cut out saline water to 32 ft.		
	Lining tubes: 20 inch bore tubes, surface to 109' 8"		
	14 inch bore tubes, surface to 171 ft. 4 in.		
	Annu-lars filled with cement grout.		
	Open boring 11 inch diameter bory tool to 405 ft.		
	Water:- Maximum yield is 3000 galls per hour		
	Chemical analysis of the water (attached)		
	See next sheet.		



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