STAGE 1 DESK STUDY

ENVIRONMENTAL RISK ASSESSMENT

At

Eastmere Stables, Fontwell

On behalf of

NJS Partnerships

PROJECT REFERENCE: GI24.1168

October 2024

constructiveevaluation
site investigation • building pathology

Stage 1 Environmental Risk Assessment Desk Study

By:

Constructive Evaluation Ltd

Units 15-16 Ford Lane Business Park, Ford, Arundel BN18 0UZ

Tel: [redacted]

Email: [redacted]

Report Author(s)		
Lee Saxton BSc FGS **(Engineering Geologist)**	Signature: [redacted]	Date: 22/10/2024

Report Checked		
Jocelyn Middleton MGeol FGS **(Principal Geo-Environmental Consultant)**	Signature: [redacted]	Date: 22/10/2024
Report Approved by		
Michael Rose M.Sc., B.Sc., FGS, AIEMA **(Principal Geo-Environmental Consultant)**	Signature: [redacted]	Date: 22/10/2024

	Version 1	Version 2	Version 3
History			
Issued to			
Date			

Foreword

Contents

Figures

Appendices

Executive Summary

Site Address	Eastmere Stables, Eastergate Lane, Eastergate, Chichester, PO20 3SJ
Site Description	Horse stables with accommodation area and pasture fields to the north, alongside a workshop garage and storage buildings.
Proposed Development	Redevelopment of the existing site for the development of nine new detached two-storey and bungalow residential properties with private gardens and associated access roads.
Geology	Superficial: Head – gravel, sand, silt and clay Bedrock: London Clay Formation – clay, silt and sand
Hydrology	A small river named Lidsey Rife is located on the site and is part of the Arun and Western Streams management catchment.
Hydrogeology	Secondary A superficial aquifer on the site and secondary undifferentiated off site within the Head Deposits. The site lies over an unproductive aquifer within the London Clay Formation.
Topography	Based on Ordnance Survey 1:25000 maps of the area, the subject site is at an approximate elevation of between 15 to 16m AOD. Local topography on site is relatively level.
Site History	Earliest records of the site show it being a section of an agricultural field in 1876. Construction of buildings started between 1937 and 1939, with the extension of a gravel pit within the southwestern side of the site. Additional buildings were added from 1994 to 2003.
Potential Areas of Concern	• Potential chemical spillages from vehicles (on and off site) • Asbestos Containing Materials (ACM) • Construction and builders' materials (skip and stockpiled areas) • Imported Made Ground hardstanding • Historic backfilled gravel pit
Conceptual Site Model	• Human Health – Moderate • Controlled Waters – Low/Moderate • Ground Gas – Moderate • Geological Hazard – Very Low
Ground Engineering	Potentially good foundation conditions, dependent on the nature and variability of the Head Deposits.
Conclusions and Recommendations	Investigation for refinement of the potential risks identified within the Preliminary Conceptual Site Model and determine the geotechnical properties of the soil on the site.

1 Introduction

On 27th September 2024 Constructive Evaluation (CE) was commissioned by NJS Partnerships Ltd (the Client) to undertake a Stage 1 Desk Study Environmental Risk Assessment at Eastmere Stables, Eastergate Lane, Eastergate, Chichester, PO20 3SJ, hereafter referred to as the "site".

It is understood that the proposed development consists of the redevelopment of the existing site through building nine new detached two-storey and bungalow residential properties with private gardens and associated access roads with car parking areas. A Proposed Development Plan is presented as **Figure 1**.

In accordance with BS5930:2015 the intent of this desk study is to:

- To provide information on the anticipated geology, hydrology, and hydrogeology of the subject site.
- Investigate the development history and most recent uses of the subject site.
- To identify whether there is any contamination on site which is likely to cause significant harm to human health, the environment, or other sensitive receptors.

To achieve these aims CE undertook:

- A site walkover to assess existing site conditions.
- A comprehensive assessment of Geo Insight data as acquired from Groundsure.
- A review of publicly available data including those published by British Geological Survey and Ordnance Survey.
- Develop a Conceptual Site Model (CSM) based on environmental database information.

The works described in this report are subject to the Service Constraints presented in **Appendix C**. This report was finalised in October 2024 and should be read considering any subsequent changes in legislation, statutory requirements, statutory guidance, non-statutory guidance, relevant research, and industry practices. This report is currently assigned to the Client for their sole reliance.

2 Site History

2.1 Site Location

The site is located at Eastmere Stables, Eastergate Lane, Eastergate, Chichester, PO20 3SJ and National Grid Reference SU 95199 06082. The Site Location Plan is provided in **Figure 2**. The site can be found in an area of residential, commercial and recreational land-use. A summary of the site surroundings is as follows;

- Northern Boundary – Pasture fields used for horse riding and grazing are located north of the boundary.
- Eastern Boundary – Fenceline along the southeast of the site. Stables with associated fields and an arena for horse riding.
- Southern Boundary – Main gate entrance from Eastergate Lane. Vegetation and ash trees. A residential two-storey building with boundary defined with fence line.
- Western Boundary – Hedge and treeline along the boundary.

Immediately to the west of the site is a nursery composed of a large greenhouse complex approximately 1.0 hectares in size. Small buildings, tank containers, and vehicles occupy the large open area accompanying the nursery site.

The site is roughly L- shaped with maximum dimensions of approximately ~100m east to west by ~105m north to south, covering an area of 0.77ha. Based on Ordnance Survey 1:25000 maps of the area, the subject site is at an approximate elevation of between 15 to 16m AOD. Local topography across the site is relatively level.

Access to the site is via the southern boundary from Eastergate Lane. The site was surfaced by granular materials (shingle, aggregate and bituminous gravel) and an area of concrete hardstanding near to the eastern boundary. 2-3m high laurel and leylandii hedges were located across the site, with a few small trees including ash and hawthorn. Abundant vegetation including brambles (*Rubus fruticosus)* and nettles (*Urtica dioica)* was present alongside the western boundary, with grassy areas towards the northern boundary of the site within the pasture fields. Several stockpiles were located across the site including construction material, building debris, wooden pallets, wooden posts, metal fencing and plastic buckets. Three small boats, a scaffolding vehicle and an uncovered full skip were present during the site walkover. Multiple building structures were on the site including stable units, accommodation and garage/workshop buildings. The building structures are constructed of wood, concrete and metal with corrugated metal sheet and corrugated cement tile roofing. Small water tanks and an overhead power cable were observed within the stables area of the site. The Site Walkover Plan is provided in **Figure 3**.

2.2 Site Walkover Observations

A site walkover was undertaken on 3rd October 2024 with the aim of identifying any potential areas of concern that may be present on site prior to the commencement of any intrusive works.

The following areas of concern were observed:

- Imported Made Ground hardstanding concrete.
- Potential Asbestos Containing Material (ACM), within corrugated roofing.
- Potential chemical spillages from vehicles (oil, diesel, petrol).
- Construction and builders' materials (skip and stockpiled)

Site Photographs are presented within **Appendix A**.

2.3 Aerial Photographs

Available aerial photographs of the site date back to 1999. Within the aerial photography it shows the removal of a mature tree and the construction of a new building in the centre of the site between 2013 and 2018. The nursery located west of the site shows an increase in storage crates and materials from 1999 to 2018. The grassed area observed within 1999 at the nursery, has been landscaped to incorporate a larger area for storage for vehicles and materials.

2.4 Historical Maps

A site history of the site was undertaken through the review of available historical map extracts within 500m of the site and are summarised in **Table 1**.

Table 1: Summary of Historical Maps

Date	Map Scale	On Site	Off Site
1876	1:10,560	A section of land within a larger field.	Unnamed road (later Eastergate Lane) running east-west south of the site. Wanleys Copse and Barn ~ 500m to the northeast. Northfields Farm ~ 500-600m west of the site. Unnamed copse with building structure ~ 400m northeast.
1896	1:10,560	No Change.	Pumping Station (Bognor Water Works) ~ 350m to the northwest.
1910	1:10,560	No Change.	New small buildings ~ 250m to the west. Unnamed copse now called Little Wandleys Copse ~ 400m northeast.
1912	1:2,500	No Change.	Unnamed pit ~50m to the southwest.
1937-1939	1:2,500	Buildings constructed on site. Four building structures in eastern half of the site. Excavation/potential extension of gravel pits in south-western area of the site.	Old Gravel Pits ~ 50m to the south. New buildings constructed ~ 120m to the east. Unnamed road below the site called Walberton Lane. Orchards shown surrounding the site from the north, west and south boundaries.
1940	1:10,560	No Change.	Unspecified tank located south of the Pumping Station ~ 500m to the northwest.
1950	1:10,560	No Change.	No Change.
1961	1:10,560	No Change.	Nursery ~ 500m to the east.
1974	1:2,500	The site is divided into three sections. Southeast section contains three buildings.	Grinstead Nursery ~ 80m to the west. Walberton Lane now called Eastergate Lane.
1979-1980	1:10,000	No Change.	Previous Gravel Pits now disused. Nursery ~ 450m to the southeast.
1994	1:2,500	Additional building and modified existing buildings.	No Change.
2003	1:1,250	New building along the west perimeter of the site. Fenced courtyard area. A track within the field at the northern boundary.	Additional buildings west of the site.
2024	1:10,000	The site and surrounding agricultural area are now present in their current condition	

The historical maps date back to 1876 showing a section of land within a larger field associated with other potentially agricultural fields within the area. The construction of new buildings are observed on the site between 1937 to 1939, which are sectioned into three separate areas by 1974. Additional buildings are constructed within 1994 with the previous buildings being modified. A new building is constructed within 2003 to the west of the site with a fenced courtyard area.

The complete site history is provided in **Appendix B**.

2.5 Historical Land Use

Records indicate ten (10no.) historical industrial land uses within 250m of the site. These include:

- On Site:
  - Unspecified Pit, present between 1940 to 1961.
- Off Site:
  - Nursery, present in 1979, immediately to the west
  - Unspecified Disused Pits, present in 1979, 10m to south
  - Old Gravel Pits, present in 1940, 41m to south
  - Sand Pit, present in 1910, 66m to southwest

2.6 Historic Landfill

Records indicate two historical landfill sites within 250m of the site. These include:

- On Site:
  - Brit pits recorded on site (~10m southwest). Northfields Gravel Pit with sand and gravel commodity. Status is ceased.
- Off Site:
  - Brit pits, 96m to the southwest. Northfields Farm Gravel Pit with sand and gravel commodity. Status is ceased.
  - Eastergate Lane, 13m to the south. Waste type: inert, commercial and household. Recorded to be operational between 1949 to 1963.
  - Worked Ground (Undivided), 15m to the south.

2.7 Current Industrial Land Use

Records indicate two recent industrial land uses within 250m of the site:

- Off Site:
  - JBS (wood products including charcoal, paper, card and board), 90m west on Eastergate Lane.
  - Auto aircon (vehicle repair, testing and servicing), 224m northeast on Eastergate Lane.

2.8 UXO

The risk of UXO has been assessed by reference to the unexploded WWII aerial delivered bomb (UXB) regional risk maps produced by Zetica.

The Zetica risk maps indicate a low risk, and there is no known history of military activity in the area. Hence the overall risk of UXO is rated as low. Zetica risk maps have indicated a Luftwaffe target west of Fontwell Avenue approximately 1.2km west of the subject site.

3 Physical Site Setting

Published geological information as available from the British Geological Survey and included within the Geo Insight data provided by Groundsure, and presented in **Appendix B** was reviewed to assess probable geological conditions.

3.1 Geology

Reference to the publications of the British Geological Survey (BGS), indicate that the site has a superficial cover of Head Deposits. Sedimentary bedrock of the London Clay Formation is indicated to underlie the site. The following sections summarise the anticipated geological strata as described in "The BGS Lexicon of Named Rock Units".

3.1.1 Head

The superficial materials within the surrounding area are comprised of Head Deposits formed between 2.588 million years ago (Ma) to the present, during the Quaternary Period. The deposits consist of clay, silt, sand, and gravel; and are poorly sorted and poorly stratified, angular rock debris and/or clayey hill wash and soil creep, mantling a hillslope and deposited by solifluction and gelifluction processes.

3.1.2 London Clay Formation

The underlying bedrock is indicated to be of the London Clay Formation, deposited within the Ypresian Age (56Ma to 47.8Ma). The London Clay mainly comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.

3.2 Historical Boreholes

No historical borehole is indicated to lie within the site.

However, one historical borehole was indicated to lie within 250m of the site. The BGS ref. SU90NE49 was located 248m south of the site at West Barnham Farm. The stratigraphic log described topsoil overlying ballast to a depth of ~6.0mbgl. Groundwater was struck at ~3.0mbgl.

3.3 Geological Hazards

3.3.1 Natural Hazards

Natural hazards identified on the site are summarised in **Table 2**.

Table 2: Summary of Potential Natural Hazards

Natural Hazard	Risk Rating
Shrink Swell	Very Low
Running Sands	Very Low
Compressible Deposits	Negligible

Natural Hazard	Risk Rating
Collapsible Deposits	Very Low
Landslides	Very Low
Ground Dissolution of Soluble Rocks	Negligible

3.3.2 Ground Cavities and Sinkholes

There are no records of ground cavities and sinkholes within 500m of the site. These include natural cavities, mining cavities, and the national karst database.

3.3.3 Radon

The site is in a negligible probability radon area, as <1% of homes are at or above the action level. As a result, no radon protective measures are required during construction of new dwellings or extensions.

3.3.4 Soil Chemistry

Reference to BGS estimated and measured soil chemistry indicates the likely background concentration of potentially harmful elements in and around the site. A summary of expected on-site soil chemistry concentration values is presented in **Table 3**.

Table 3: Summary of Expected Soil Chemistry Average Concentration Values

Element	Concentration (mg/kg)	
	On Site	4km South of Site
Arsenic	15	15
Bio-accessible Arsenic	No Data	No Data
Lead	100	100
Bio-accessible Lead	60	60
Cadmium	1.8	1.8
Chromium	60 – 90	60 – 90
Nickel	15 - 30	15 - 30

3.4 Land Use Designations

The site lies within:

- A nitrate vulnerable zone, the Aldingbourne Rife NVZ Surface Water.
- A Site of Special Scientific Interest (SSSI) Impact Risk Zone.
- Grade 1 Agricultural Land Classification.

Within 250m of the site lies:

- Two nitrate vulnerable zones, the Aldingbourne Rife NVZ Surface Water and Sussex Chalk Groundwater.

- Grade 3 Agricultural Land Classification (5m E).
- Grade 2 Agricultural Land Classification (51m NE).
- Priority Habitats – Deciduous woodland and Traditional orchards (8-250m from site).

3.5 Hydrology

A small river named Lidsey Rife is located on the site and is part of the Arun and Western Streams management catchment.

The site is indicated to have limited chance of surface water flooding, within a 1 in 100 year risk of 0.1-0.3m. The highest risk within 50m of the site is indicated to be a 1 in 30 year risk of 0.1-0.3m.

There is a Moderate-High risk of groundwater flooding on site, and a Moderate-High risk within 50m of the site.

3.6 Risk of Flooding from Rivers and the Sea

The site has no risk of flooding from Rivers and the Sea (RoFRaS) within 50m of the site.

There are no recorded historical flood events within 250m of the site.

There are no recorded flood defences within 250m of the site.

There are no recorded flood storage areas within 250m of the site.

The site has not been identified as being within any Flood Zone of the Environment Agency floodplains, which include fluvial and tidal models.

3.7 Hydrogeology

The Head Deposits covering the site have been classified as a Secondary A aquifer. These consist of permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. Approximately 134m west of the site a Secondary undifferentiated aquifer has been assigned to a narrow stretch of the superficial deposits. Secondary undifferentiated aquifers are assigned where it is not possible to assign category A or B to a rock type.

The London Clay Formation is classed as Unproductive. These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow. Secondary A aquifer is located 208m northwest of the site within the Lambeth Group.

3.8 Controlled Waters

There are no licensed discharges to controlled water within 500m of the site.

3.8.1 Groundwater Abstractions

There are three groundwater abstraction licences within 500m of the site. Two are labelled as active, and one is labelled as historical, all located off the subject site. They are for:

- Spray Irrigation – Direct (387m SE) – Fuente
- Potable Water Supply – Direct (466m NW) – Portsmouth Water Ltd
- Potable Water Supply – Direct (477m NW) – Portsmouth Water Ltd

3.8.2 Surface Water Abstractions

There are no surface water abstraction licences within 500m of the site.

3.8.3 Potable Water Abstractions

There are no potable water abstractions within 250m of the site.

There is an active potable water abstraction for Eastergate Pumping Station located 466m northwest of the site and commenced on 31/03/1974.

There is a historic potable water abstraction for Eastergate Pumping Station located 477m northwest of the site and commenced on 31/03/1974.

3.8.4 Source Protection Zones

There are two Source Protection Zones (confined aquifer) within the site. They are:

- 1c – Inner catchment within confined aquifer
- 2c – Outer catchment within confined aquifer

3.8.5 Groundwater Vulnerability and Soil Leaching Potential

The on-site Secondary A superficial aquifer is identified as being of medium vulnerability, with an intermediate infiltration value of >70% and a dilution value of 300-550mm/year.

3.9 Potential Areas of Concern

Potential areas of concern were identified during the undertaking of the desk study, these are summarised in **Table 4** and shown in **Figure 4**.

Table 4: Summary of Potential Areas of Concern

Reference	On Site
A	*Imported Made Ground hardstanding*
B	*Construction and builders' materials (skip and stockpiled)*
C	*Potential Asbestos Containing Material (ACM) in roofing*
D	*Potential chemical spillages from fuels and maintenance of vehicles (Garage/ workshop and parked vehicles on the site)*

Reference	On Site
E	*Historic Gravel Pit in southwestern part of site, and now potentially a Made Ground backfilled area and/or area of infill*
F	*Potential for animal waste (stables)*
Reference	**Off Site**
D	*Potential chemical spillages from fuels and maintenance of vehicles*
G	*Landfill inert/commercial/household waste (~13m south)*
H	*Nursery Complex (~80m west) – pesticide/fertiliser chemicals*

4 Preliminary Risk Assessment

To assess the potential for risk, the Source-Pathway-Receptor relationships have been evaluated to determine whether there are potentially active pollutant linkages between sources and receptors. It is only when there is an active pollutant linkage, can there be a potential risk to a receptor from a source via a particular pathway. Each active pathway has been assigned a qualitative assessment as to the level of risk explained in **Table 5** as per R&D 66[3].

Table 5- Qualitative Risk Classification Scheme

		Consequence			
		Severe	Medium	Mild	Minor
Probability (Likelihood)	High	*Very High risk*	*High risk*	*Moderate risk*	*Low risk*
	Likely	*High risk*	*Moderate risk*	*Moderate/Low risk*	*Low risk*
	Low	*Moderate risk*	*Moderate/Low risk*	*Low risk*	*Very low risk*
	Unlikely	*Moderate/Low risk*	*Low risk*	*Very low risk*	*Very low risk*

4.1 Identification of Contaminant Sources

The potential sources of contamination on site and in the surrounding areas are summarised in **Table 6**.

Table 6 - Identification of Potential Sources of Contamination

Potential Source	Location	Potential Contaminants
Asbestos Containing Material (ACM) on stable roofing	*On site*	*Asbestos*
Chemical spillages from vehicles (oils and fuels)	*On site/Off site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Phenols, Inorganics*
Construction and builders' materials (skip and stockpiled)	*On site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Phenols, Inorganics, Asbestos, Acids, Alkaline*
Historic Gravel Pit and backfilled ground	*On site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Phenols, Inorganics, Asbestos, Acids, Alkaline*
Animal Waste	*On site*	*Organics, micro-organisms*
Made Ground Soils	*On site/Off site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Organics, In-organics, Acids, Asbestos*
Imported Made Ground Hardstanding	*On site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Organics, In-organics, Acids, Asbestos*
Historic Landfill	*Off site*	*Hydrocarbons (TPH, BTEX, PAH), Heavy Metals, Phenols, Inorganics, Asbestos, Acids, Alkaline.*
Nursery Complex	*Off site (*	*Organic solvents, Organic acids, Mineral acids, Heavy Metals, Herbicides, Pesticides*

The initial CSM has identified a number of potential contaminant sources associated with the site's recent and former use as a stables/barn complex.

4.2 Pathways

4.2.1 Human Health Pathways

The potential human health exposure pathways, based on the relevant guidance[1], for a residential receptor are indicated in **Table 7**.

Table 7- Potentially Active Human Health Exposure Pathways

Potential Pathway	Active/ Inactive	Comments
Ingestion of soil and dusts	*Active*	*Qualitative Risk Assessment required*
Dermal contact with soils and dusts	*Active*	*Qualitative Risk Assessment required*
Inhalation of dusts	*Active*	*Qualitative Risk Assessment required*
Inhalation of asbestos	*Active*	*Qualitative Risk Assessment required*
Inhalation of organic vapours (generated by shallow soils) in external areas or inside buildings	*Active*	*Qualitative Risk Assessment required*
Inhalation of organic vapours generated by dissolved phase surface water migrating onto site	*Active*	*Qualitative Risk Assessment required*
Inhalation of organic vapours generated by dissolved phase surface water migrating onto site from offsite sources	*Active*	*Qualitative Risk Assessment required*

4.2.2 Controlled Water Pathways

The potentially active controlled waters migration pathways are indicated in **Table 8**.

Table 8 - Potentially Active Controlled Water Pathways

Potential Pathway	Active/Inactive	Comments
Impacted soils leaching to groundwater	*Inactive*	*Qualitative Risk Assessment required*
Impacted soils leaching to groundwater and migration to adjacent surface water	*Active*	*Qualitative Risk Assessment required*

4.2.3 Ground Gas Pathways

[1] Environment Agency. August 2008. Updated technical background to the CLEA model. Science Report – SC050021/SR3

The potentially active migration pathways for ground gas are indicated in **Table 9**.

Table 9 - Potentially Active Ground Gas Pathways

Potential Pathway	Active/Inactive	Comments
Ground gas generated from current/historical landfills within 500m radius	*Active*	*Historic landfill ~13m south of the site.*
Ground gas generated from historical infilled land within 500m radius	*Active*	*Potential backfilled historic gravel pit (Brit pit) on site. In addition, the historic landfill ~13m south.*
Ground gas generated from disturbed made ground soils capped within hardstanding concrete	*Inactive**	*Qualitative Risk Assessment required*

*Gas risk if Made Ground deeper than 1m and to be proven by site investigation.

4.3 Receptors

Based on future commercial land use, the potentially sensitive receptors are considered as the following.

4.3.1 Human Health

- Site users
- Construction workers*

*The risks to on-site workers (during development) can be minimised by following appropriate health and safety guidance on site (i.e. wearing protective clothing, respiratory equipment and washing).

4.3.2 Controlled Waters

- Superficial Head Deposits (Secondary A and Secondary Undifferentiated).
- Two Source Protection Zones are located within the site. Inner catchment 1c and Outer catchment 2c within a confined aquifer.
- Two Groundwater Abstractions within 500m of the site. Both direct sources from the Southern Region Groundwater.

4.3.3 Others

- Material construction of building and infrastructure.

4.4 Qualitative Risk Assessment

A summary of the relevant pollutant linkages based on a Source-Pathway-Receptor analysis is provided in **Table 10**.

Table 10 - Summary of Potentially Active Source-Pathway-Receptor Assessment

Source	Location (On/Off Site)	Contaminant	Potential Pathway	Potential Receptor	Probability	Consequence	Risk Classification	Notes
Potential chemical spillages from fuels and maintenance of vehicles	*On-site Sources*	*Hydrocarbons (PAH, BTEX, TPH)*	*Inhalation of organic vapours generated by dissolved phase groundwater migrating from site to neighbouring properties*	*Human Health (On-site Residential)*	*Low*	*Mild*	*Low*	*Spillages from vehicles (boats and vans) would be at small volumes and low occurrence rate.*
Potential chemical spillages from fuels and maintenance of vehicles	*Off-site Sources*	*Hydrocarbons (PAH, BTEX, TPH)*	*Inhalation of organic vapours generated by dissolved phase groundwater migrating from neighbouring properties to site*	*Human Health (Off-site Residential)*	*Low*	*Mild*	*Low*	
Potential chemical spillages from fuels and maintenance of vehicles	*On-site Sources*	*Hydrocarbons (PAH, BTEX, TPH)*	*Impacted soils leaching to groundwater and migrating towards surface water*	*Controlled Waters (On-site Residential)*	*Unlikely*	*Mild*	*Very Low*	*Spillages from vehicles (boats and vans) would be at small volumes and low occurrence rate. Impermeable nature of the bedrock geology would make migration to groundwater unlikely.*
Asbestos Containing Material (ACM)	*On-site Sources*	*Asbestos fibres*	*Inhalation of asbestos*	*Human Health (Onsite Residential)*	*Low*	*Severe*	*Moderate*	*Potential ACMs in the form of cement bound roofing tiles on the stables. Testing of the roofing tiles for ACM would be advised prior to demolition.*

Source	Location (On/Off Site)	Contaminant	Potential Pathway	Potential Receptor	Probability	Consequence	Risk Classification	Notes
Construction and builders' materials (skip and stockpiled)	*On-site Sources*	*Hydrocarbons (PAH), Heavy Metals, Phenols, Inorganics, Asbestos, Acids, Alkaline*	*Inhalation of dusts and dermal contact*	*Human Health (Onsite Residential)*	*Low*	*Medium*	*Low/Moderate*	*The onsite hardstanding is likely to contain elevated PAH and contaminants. However, given the current proposals for site, it is considered that the risk to the identified receptors is low as the material will be removed from site during the development.*
Construction and builders' materials (skip and stockpiled)	*On-site Sources*	*Hydrocarbons (PAH), Heavy Metals, Phenols, Inorganics, Asbestos, Acids, Alkaline*	*Impacted soils leaching to groundwater and migrating to surface water*	*Controlled Waters (Onsite Residential)*	*Low*	*Medium*	*Low/Moderate*	
Made Ground soils	*On-site Sources*	*Ground gases and vapours*	*Dermal Contact*	*Human Health (Onsite Residential)*	*Low*	*Medium*	*Low/Moderate*	*Without knowing the gas/vapour regime, proposed new concrete flooring alone may not block the pathway.*
Made Ground soils	*On-site Sources*	*Ground gases and vapours*	*Inhalation of organic vapours and ground gas*	*Human Health (Onsite Residential)*	*Low*	*Medium*	*Low/Moderate*	*Historic gravel pit (Brit pit) on the site. Gas monitoring required. Inclusion of gas/vapour protection (upgrading of DPC to vapour, sub floor ventilation and/or re-enforced concrete) would block this potential pathway.*
Historic Landfill	*Off-site Sources*	*Ground gases and vapours*	*Inhalation of organic vapours and ground gas*	*Human Health (Offsite Residential)*	*Low*	*Severe*	*Moderate*	*Off-site landfill to the south of the site could produce harmful gases based off the materials present within the ground.*
Nursery Complex	*Off-site Sources*	*Organic solvents, Organic acids, Mineral acids, Heavy Metals*	*Impacted soils leaching to groundwater and migrating to surface water*	*Controlled Waters (Surface Water)*	*Low*	*Mild*	*Low*	*Impacted soils leaching is more likely from the soft-standing surface cover northwest of the site.*

Source	Location (On/Off Site)	Contaminant	Potential Pathway	Potential Receptor	Probability	Consequence	Risk Classification	Notes
Nursery Complex	*Off-site Sources*	*Organic solvents, Organic acids, Mineral acids, Heavy Metals*	*Vapour inhalation from dissolved phase migration from offsite sources*	*Human Health (Offsite Residential)*	*Unlikely*	*Medium*	*Low*	*Inclusion of gas/vapour protection (upgrading of DPC to vapour, sub floor ventilation and/or re-enforced concrete) would block this potential pathway.* *Without knowing the gas/vapour regime, proposed new concrete flooring alone may not block the pathway.*
Potential Animal Waste	*On-site Sources*	*Organics, Micro-organisms,*	*Impacted soils leaching to groundwater and migrating to surface water*	*Controlled Waters (Surface Water)*	*Unlikely*	*Mild*	*Very Low*	*Hardstanding ground within stables would block this potential pathway.*

5 Ground Engineering Assessment

The following is summarised from the BGS 1:1M Superficial Engineering Geology map, and the 1:1M Bedrock Engineering Geology map.

There are Head superficial deposits identified on the site. They consist of very soft to very stiff sometimes sandy CLAY or SILT. Desiccation of top few metres may result in firm to stiff material overlying soft to very soft deposits at depth. They have a low to moderate permeability flow dominantly through fissures.

Typically, easy digging. Excavations usually require immediate support but stiff clays may be stable in short-term where groundwater ingress is controlled or absent.

Important to determine lithological variability and the presence, depth and extent of any soft compressible zones (and depth to sound strata). Assessment of shrink-swell potential and sulphate/sulphide contents in clay deposits and the potential for rapid collapse settlement in loessic deposits is advisable.

The bedrock geology of the London Clay Formation is classified as being Unproductive. It consists of firm to very stiff sometimes sandy CLAY or SILT. It is effectively impermeable, however low permeability flow is dominantly through fissures.

Potentially good foundation conditions, dependent on the nature and thickness of the weathered zone, and the presence of marl bands and beds of flint nodules. Soakaways near structures are not advised.

Typically, easy digging to hard digging. Excavations usually require rapid support but stiff clays may be stable in short-term.

During the site investigation it is important to determine in situ variability in lithology and properties, including depth and nature of the weathered zone. In situ loading tests advisable to assess bearing strength at selected sites. Assessment of shrink-swell potential and sulphate/sulphide contents highly advisable.

An assessment of the ground engineering parameters is provided in **Table 11**.

Table 11: Qualitative Ground Engineering Assessment

Category	Parameter	Potential Issue	Likelihood/Consequence
Foundations	*Fine Soil*	*Generally, not considered good for foundation conditions, dependent on shear strength and consolidation characteristics. Susceptibility to frost.*	*Moderate*
	Coarse Soil	*Generally good foundation conditions. Possible susceptibility to frost.*	*Low*
Drainage	*Fine Soil*	*Effectively impermeable to low permeability flow through fissures.*	*Low*
	Coarse Soil	*High to very high permeability flowthrough matrix.*	*Moderate*
Excavations	*Fine Soil*	*Easy digging to hard digging.Excavations require rapid support,though stiff clay may be stable in short-term.*	*Moderate*
	Coarse Soil	*Easy digging to hard digging. Immediate trench support required.May be water-bearing with running sands. Susceptible to collapses in the short-term.*	*Moderate*
Groundwater	*Shallow Groundwater*	*Control measures will be necessary where deposits are below the watertable.*	*Low*

6 Conclusions and Recommendations

Based on the information provided within this Stage 1 Desk Study Environmental Risk Assessment Report, the conceptual site model and qualitative risk assessment has identified the following risk shown in **Table 12**.

Table 12: Summary of Qualitative Risk Assessment

Category	Risk Classification
Human Health	*Moderate*
Controlled Waters	*Low/Moderate*
Ground Gas	*Moderate*
Geological Hazard	*Very Low*

An intrusive investigation is recommended to confirm the conceptual site model and to determine the geotechnical properties on the site. CE recommends:

1) Shallow boreholes and/or trial pits to assess the composition and depth of any Made Ground and any field evidence of contamination into underlying soils.
2) Installation of three shallow standpipes to assess the potential for ground gas and vapour generation on site, along with return monitoring.
3) Selected soil samples (including materials bearing field evidence of contamination) should be sent for laboratory analysis (identified below).
4) Soil samples should be screened for vapours using a Photoionisation Detector (PID).
5) If perched water is encountered, it should be sampled and tested. The existing surface water features on site should be sampled and tested. However, it is not considered necessary to investigate aquifer water quality at this stage.
6) Positions should be located in areas of concern: targeted to specific points of potential contamination such as historic gravel pit in southwestern area of site, below the footprint of proposed dwellings and in the location of buried services.
7) Monitoring for ground gases; three preliminary return visits at different weather/pressure conditions to record levels of common ground gases (carbon dioxide, methane, oxygen, VOC's) gas flow rates, and water levels.

The analytical suite, based on the known site history and walkover survey, should include:

- General parameters: Acidity (pH), fraction of organic carbon. Herbicides and Pesticides.
- Metals; Arsenic, Cadmium, Chromium (total), Lead, Mercury, Selenium, Boron, Copper, Nickel and Zinc.
- Non-metals: water soluble Sulphate, Sulphide, total Cyanide.
- Targeted organic parameters; TPH, BTEX, Speciated PAHs, VOCs and SVOCs, scheduled based on PID screening and field evidence etc.
- Visual asbestos screening of all Made Ground samples. Where possible asbestos fibres or ACMs are identified, these should be examined under a microscope to determine type.

Once the above have been undertaken the preliminary Conceptual Site Model can be refined. Further investigation or remediation may be recommended.

Further positions may be required, additional samples analysed, or additional determinants added to the analysis, as appropriate, based on any field evidence of possible contamination encountered.

Onsite and laboratory testing could also be undertaken to determine the geotechnical properties of the soil and/or rock conditions encountered on site.

In addition, the requirement for Waste Acceptance Criteria (WAC) testing should be considered to categorise soils in terms of disposal.

It would be prudent to confirm the scope of ground investigation works with the Local Authority and other stakeholders before carrying out these works.

7 Relevant Guidance

Constructive Evaluation has duly taken account of the recommendations contained within the following current and historical guidance documents during the preparation of this report.

1. Land Contamination Risk Management (LCRM) produced by DEFRA and the Environment Agency[2]
2. Environment Agency Soil Science Report SR3.
3. Safe Development of Housing on Land Affected by Contamination[3].
4. British Standards guidance for the Investigation of Potentially Contaminated Sites[4] and for undertaking of Site Investigations[5]
5. Environment Agency Updated Technical Background to the CLEA Model[6]
6. Sampling Strategies for Contaminated Land[7]

The above documents produced by DEFRA, the Environment Agency, the National House-Building Council (NHBC) and the Chartered Institute of Environmental Health (CIEH) outline structured mechanisms to identify potential risk issues and, where necessary, provide a way forward to develop a robust risk management strategy to address potentially unacceptable risks in an appropriate manner.

The National Planning Policy Framework[8] has also been considered. This document states that, prior to development, a site must meet the following criteria;

- The site is made suitable for its intended use, taking account of all ground conditions arising from natural and former activities, pollution arising from previous uses and proposals for mitigation including land remediation.
- After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.
- Adequate site investigation information, prepared by a competent person, is presented.

[2] Environment Agency. October 2020. Land Contamination Risk Management.

[3] Environment Agency. 2008. Guidance for the Safe Development of Housing on Land Affected by Contamination. R&D 66.

[4] British Standards. 2011. Investigation of Potentially Contaminated Sites – Codes of Practice. BS5930: 2011.

[5] British Standards. 2015. Code of Practice for Site Investigations. BS5930: 2015.

[6] Environment Agency. August 2008. Updated Technical Background to the CLEA Model. Science Report – SC050021/SR3.

[7] DOE. 1994. Sampling Strategies for Contaminated Land. CLR Report No 4.

[8] Department of Communities and Local Government. March 2012.

Trading Terms

Unless specifically stated within the tender/quotation or unless identified within the introduction to this report it is confirmed that this report has been compiled wholly in accord with Constructive Evaluation Limited's terms of engagement. This report is provided for sole use by the Client and is confidential to them. No responsibility whatsoever for the contents of the report will be accepted to anyone other than the Client.

Copyright

Copyright of this report subsists with the originator. Prior written permission must be obtained for any third party to reproduce, store in a retrieval system or transmit in any form of by any means whatsoever, all or part of this report. The copyright of written materials supplied shall remain the property of Constructive Evaluation Limited but with a royalty-free perpetual licence, granted to the Client on payment in full of any outstanding monies.

Context

This report is written in the context of an agreed scope of work between Constructive Evaluation Limited and the Client and should not be used in a different context. In light of additional information becoming available, improved practices and changes in legislation amendment or re-interpretation of the report in whole or part may be necessary after its original submission.

Professional Interpretation

The recommendations made and opinions expressed in the report are based on the conditions revealed by the site works together with an assessment of the data from the insitu and laboratory testing or in respect of the desktop reports. No responsibility can be accepted for conditions that have not been revealed by the research, site works and testing.

The Client is advised that the conditions observed on site by Constructive Evaluation Limited at the time of any site survey may be subject to change. Certain indicators of the presence of hazardous substances may have been latent at the time of the most recent site reconnaissance and they may subsequently have become evident. It is not possible to assess areas which are inaccessible or where access is not granted and CE accept no liability for risks subsequently identified therein.

The conceptual model, Risk assessment and sampling regime has been formulated in accordance with current UK guidance at time of production based upon the relevant information gained from Phase 1 and Phase 2 investigations. While the model and assessment offer opinions and interpretations of these guidelines, the comments made are for guidance only and no liability can be accepted for their accuracy. It is possible that aspects of desktop study may need to be altered to conform to the requirements of the statutory regulatory bodies.

Intrusive Field Operations

The data collected through direct operations in the production of this report has been so obtained, unless directly otherwise stated, in accordance with current UK guidance, law or accepted industry practice, including but not limited to: BS.5930: 1990 Code of Practice for Site Investigations (Amendment 2: 2010), BS 10175:2011+A1:2013 Investigations into Potentially Contaminated Sites, and BS.8576:2013 Guidance on Investigations for Ground Gas -- Permanent Gases and Volatile Organic Compounds. Exact exploratory locations will depend upon access conditions, site use and plant capability, CE do not accept liability for issues arising from material identified between or outside of the area of exploratory locations.

Laboratory Testing

Unless stated otherwise within the text, all geotechnical and material laboratory tests have been performed in accordance with the relevant British Standard Documents. Laboratory testing for contaminated land assessment is completed under the UKAS / MCERTS accreditation schemes, unless identified as otherwise in the report.

Human Health Risk Assessment Criteria

The Environment Agency has recently undertaken revision of the Soil Guideline Values (SGVs) which are partially complete. Where standards are available using the "new" approach, these have been utilised for correlative purposes. Where standards have not yet been revised, guidance following the "old" approach has been utilised. Please note that upon release of the remaining guidelines, the standards contained within this report may be subject to change. In addition, the second edition of the LQM CIEH guidance has now been released and will be utilised in favour of previously published guideline values.

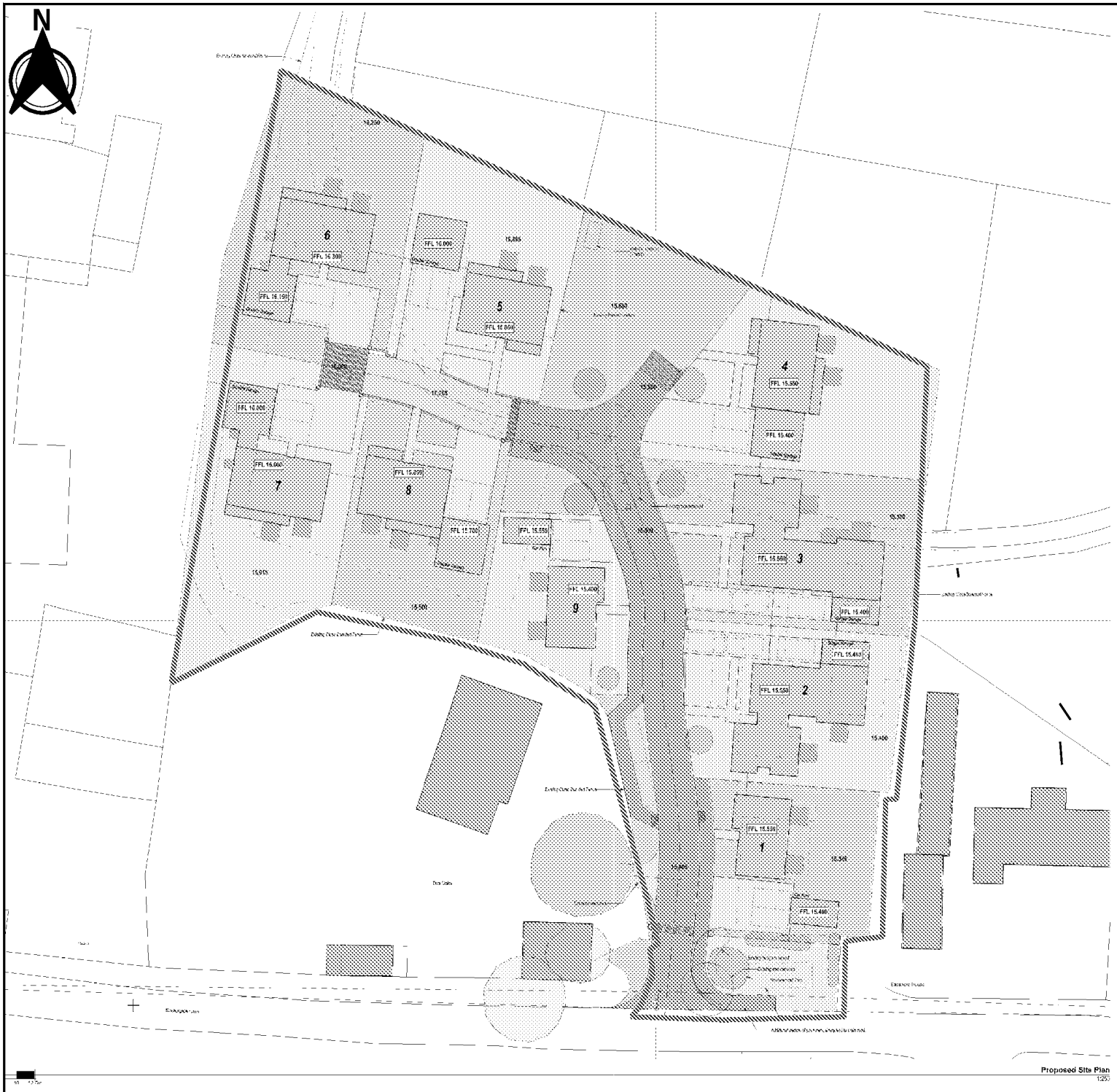
Third Parties

The findings and opinions conveyed in this report are based on information obtained from a variety of sources, including that from previous Site investigations and chemical testing laboratories. Constructive Evaluation Limited has assumed that such information is correct. Constructive Evaluation Limited cannot and does not guarantee the authenticity or reliability of the information it has relied upon and can accept no responsibility for inaccuracies with the data supplied by other parties.

The accuracy of the historical map extracts supplied cannot be guaranteed and it should be noted that different conditions may have existed between mapping sheet editions. Therefore, there can be no certainty that all areas of contamination have been identified during the Phase 1 investigation.

Definitions

Reference to the word "contamination" in this report does not relate to the statutory definition of contaminated land under 1990 Environmental Protection Act unless otherwise stated. The definition used in this report is: "Land that contains substances that, when present in sufficient quantities or concentrations, are likely to cause harm, directly or indirectly, to man, to the environment, or on occasion to other targets" (NATO CCMS, 1985).



ARUN DISTRICT COUNCIL BN/128/24/RES
DO NOT SCALE FROM THIS DRAWING

constructiveevaluation
site investigation + building pathology

Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	NJS Partnerships
Project	GI24.1168 - Eastmere Stables, Fontwell, PO20 3SJ
Title	Proposed Development Plan

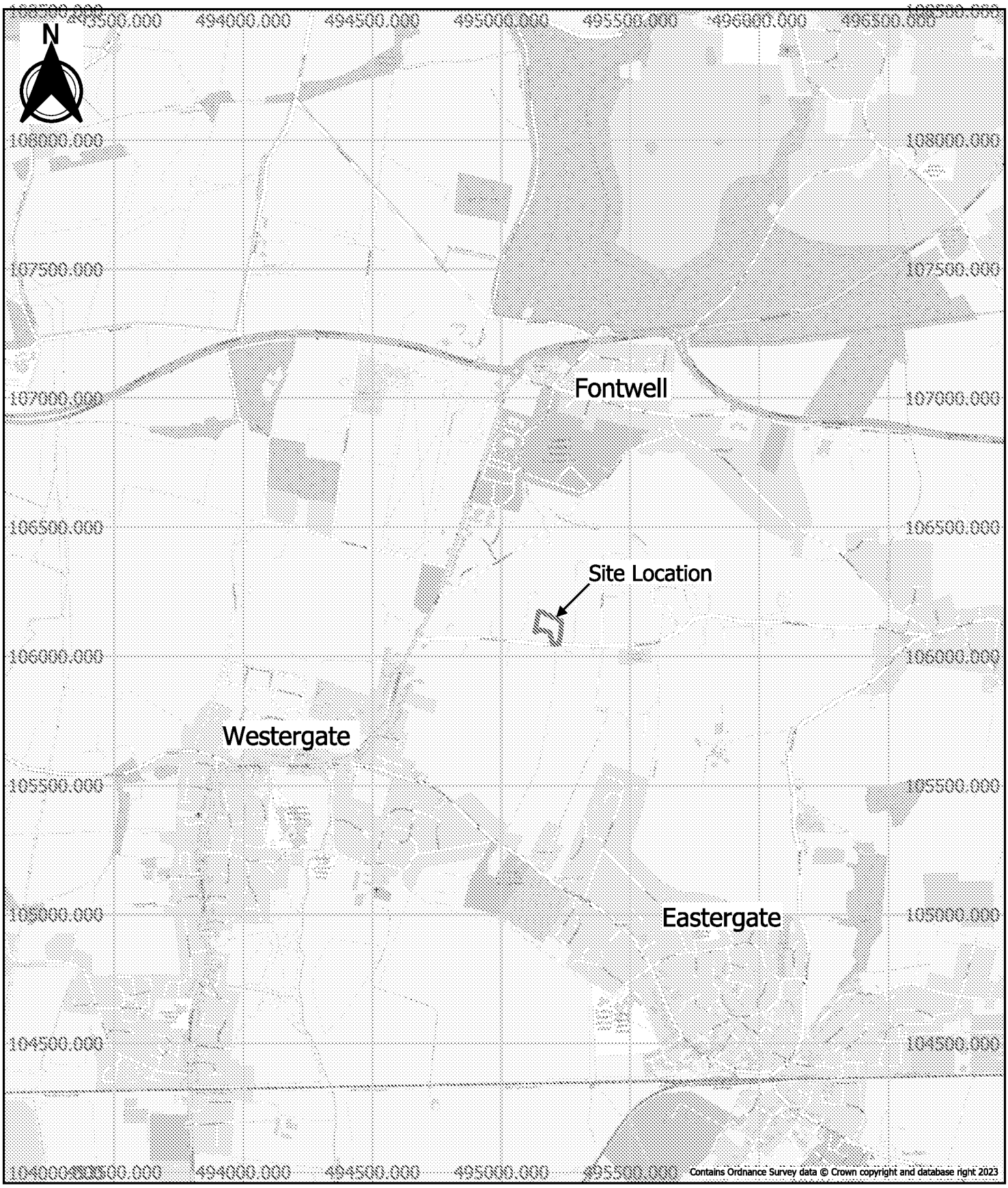
Dimension	Size	Geolocation
m	A4	495198 , 106085

Legend

Boundary Line

0 10 20 30 40 m

Figure 1



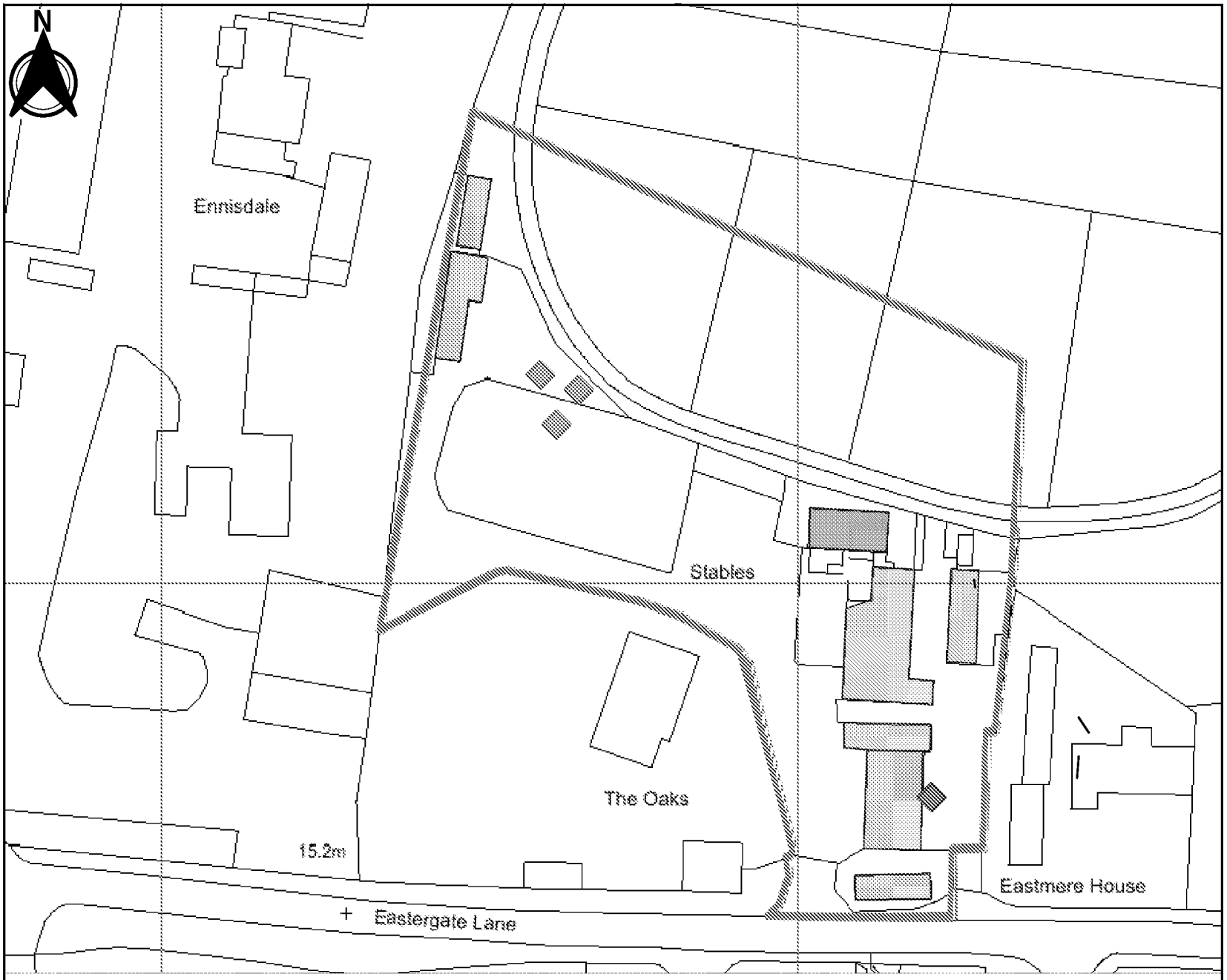
constructiveevaluation
site investigation & building pathology

Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	NJS Partnerships
Project	GI24.1168 - Eastmere Stables, Fontwell, PO20 3SJ
Title	Site Location Plan

Dimension	Size	Geolocation
m	A4	495198 , 106085

Figure 2



constructiveevaluation
site investigation + building pathology

Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	NJS Partnerships
Project	GI24.1168 - Eastmere Stables, Fontwell, PO20 3SJ
Title	Site Walkover Plan

Dimension	Size	Geolocation
m	A4	495198 , 106085

Legend

- Boundary Line

Site Walkover Observations

- Skip
- Vehicles
- Stables
- Workshop and Garage
- Accommodation

0 10 20 30 40 m

Figure 3

ARUN DISTRICT COUNCIL BN/128/24/RES
DO NOT SCALE FROM THIS DRAWING

constructiveevaluation
site investigation + building pathology

Units 15 & 16, Ford Lane Business Park, Ford, Arundel BN18 0UZ

Client	NJS Partnerships
Project	GI24.1168 - Eastmere Stables, Fontwell, PO20 3SJ
Title	Potential Areas of Concern

Dimension	Size	Geolocation
m	A4	495198 , 106085

Legend

Boundary Line

Potential Areas of Concern

- A — Imported Made Ground Hardstanding
- B — Construction and builders' materials (skip and stockpiled)
- C — Potential Asbestos Containing Material (ACM)
- D — Potential chemical spillages from fuels and maintenance of vehicles
- E — Historic Gravel Pit and Backfilled
- F — Potential for Animal Waste
- G — Historic Landfill
- H — Nursery Complex

0 10 20 30 40 m

Figure 4

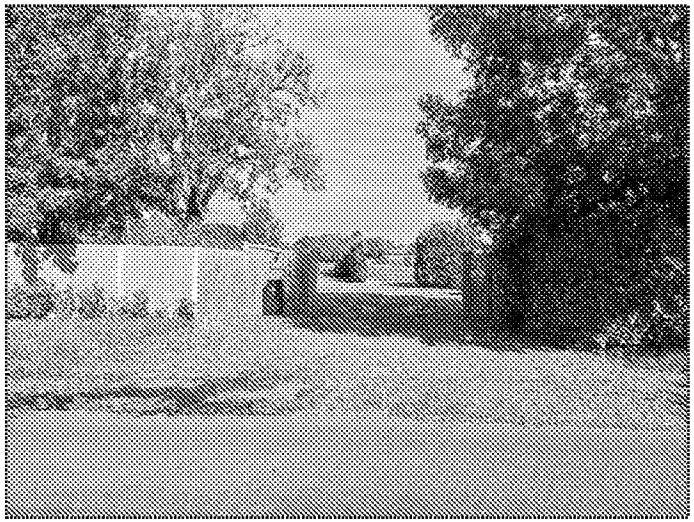
ARUN DISTRICT COUNCIL BN/128/24/RES
DO NOT SCALE FROM THIS DRAWING

Site Photographs

Project Ref: GI24.1168

Site Name: Eastmere Stables, Fontwell

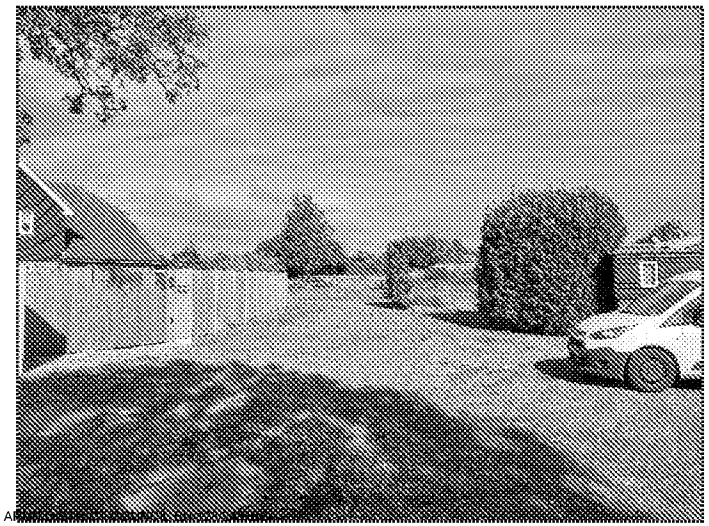
1.



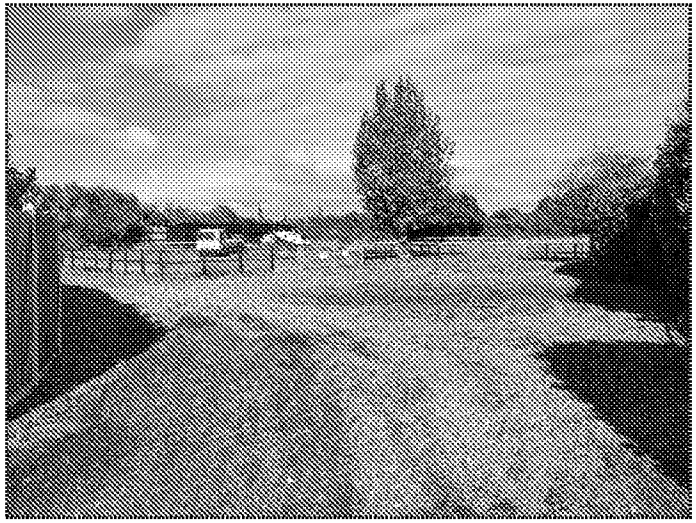
2.

1) Site Entrance
2) Looking south towards entrance
3) Looking north
4) Looking north towards fields

3.



4.

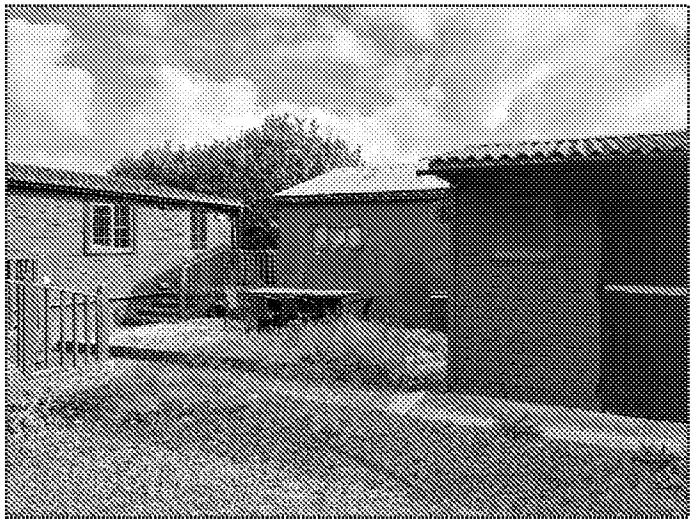


Site Photographs

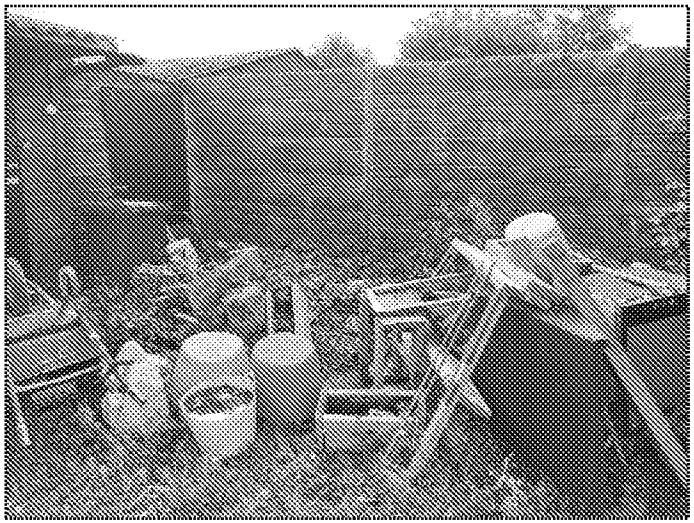
Project Ref: GI24.1168

Site Name: Eastmere Stables, Fontwell

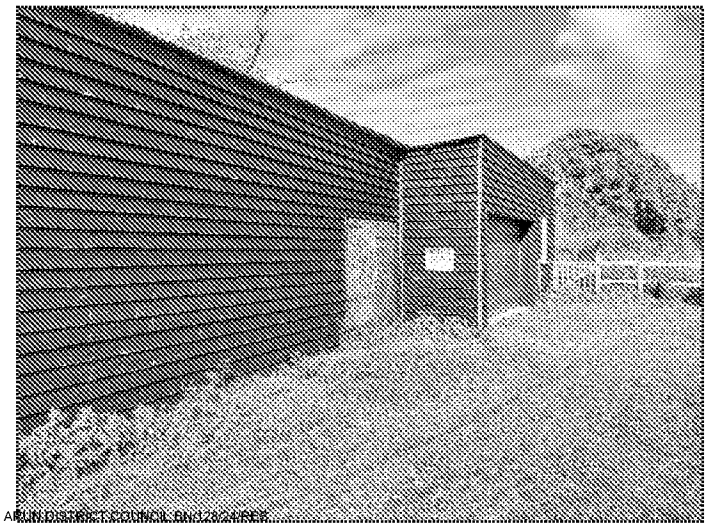
5.



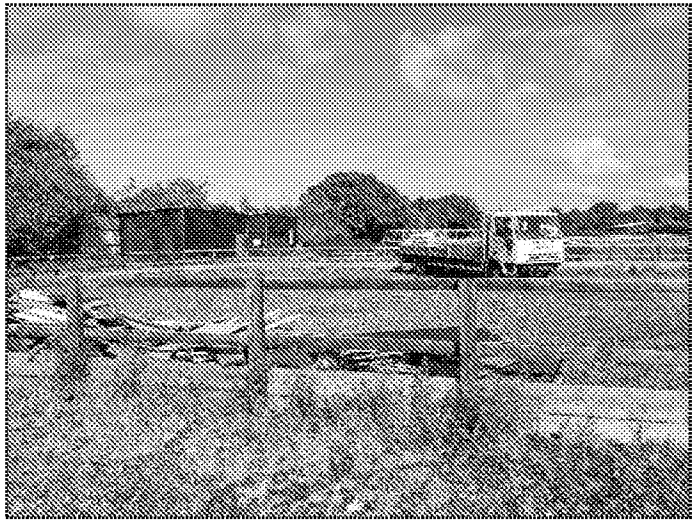
6.



7.



8.



5) Stables and accommodation buildings

6) Abandoned material

7) Building along the western boundary

8) Looking north

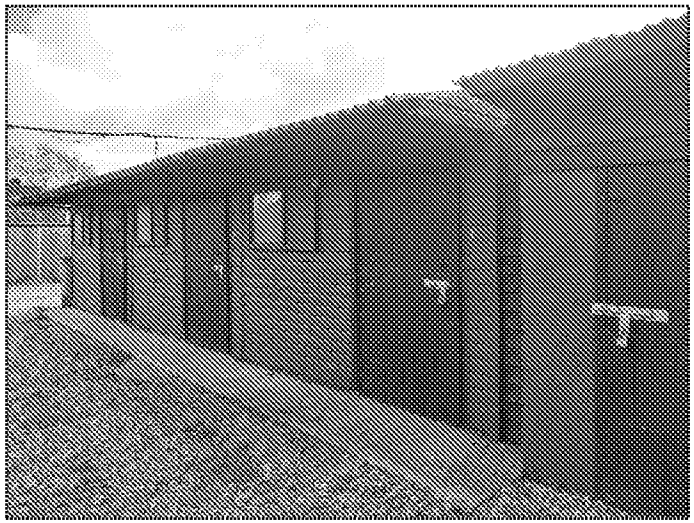
Site Photographs

Project Ref: GI24.1168

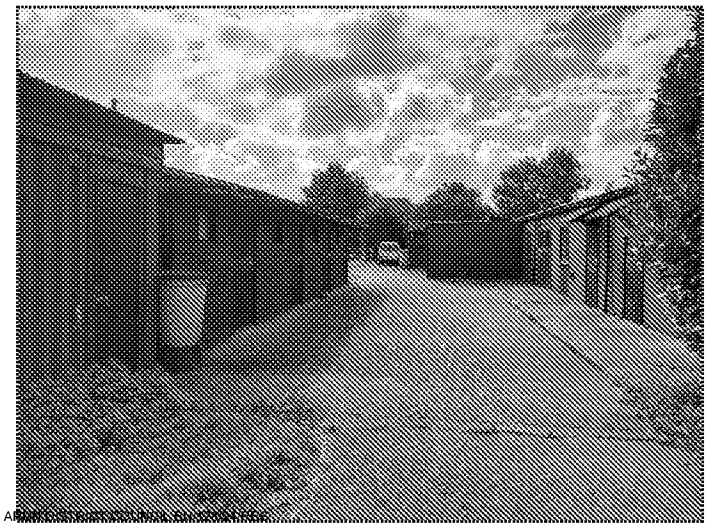
Site Name: Eastmere Stables, Fontwell

9.

10.



11.



12.

9) Northwest of the site

10) Stables east of the site

11) Looking south within stable area

12) Abandoned material

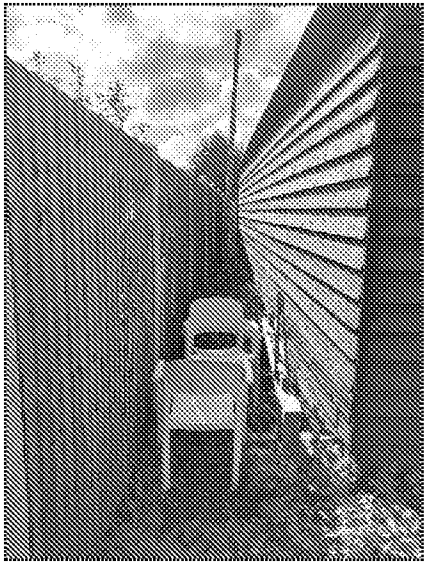
Site Photographs

Project Ref: GI24.1168

Site Name: Eastmere Stables, Fontwell

13.

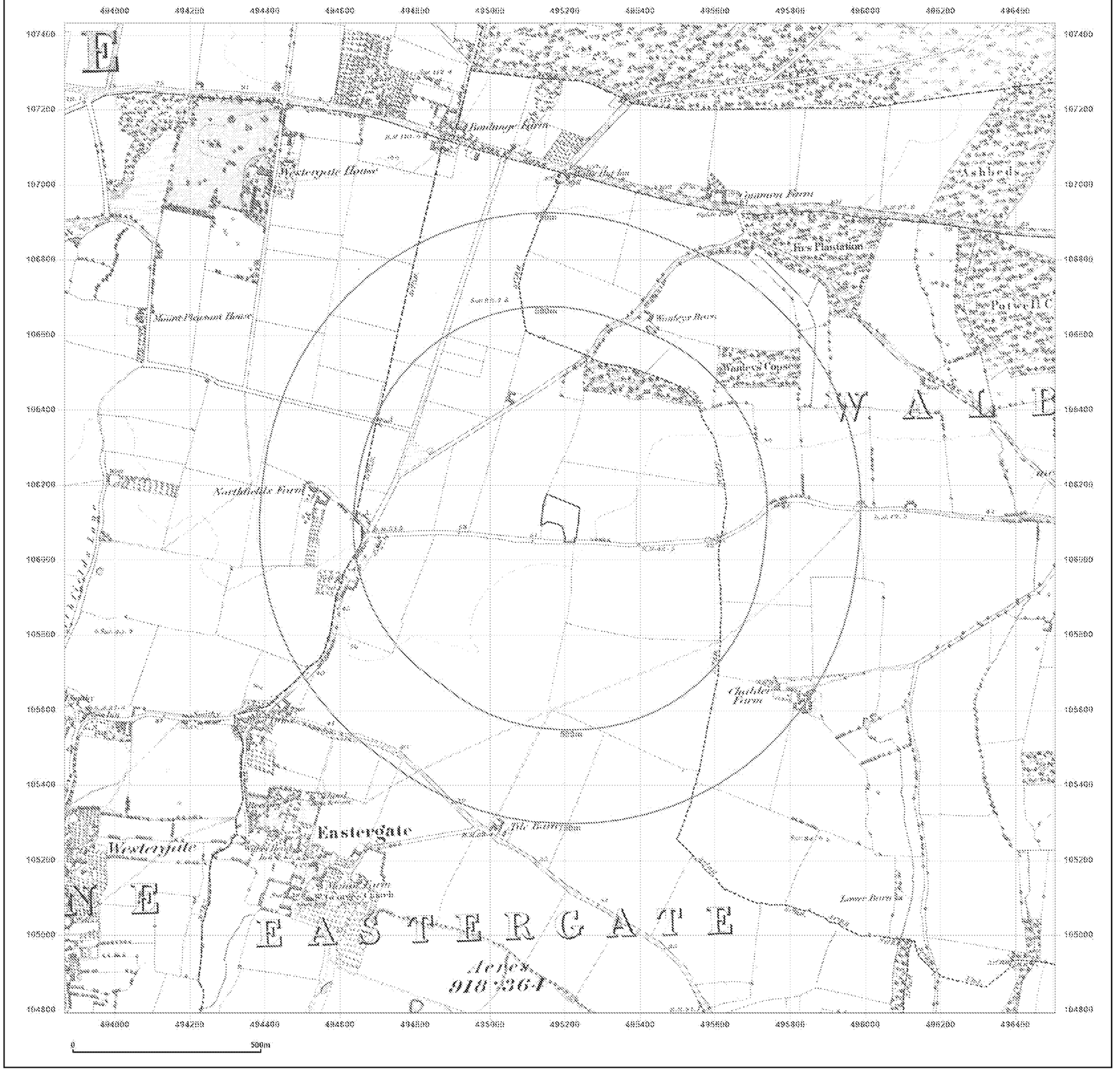
14.



13) Abandoned material southern area of the site

14) Eastern boundary fence line

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1876**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

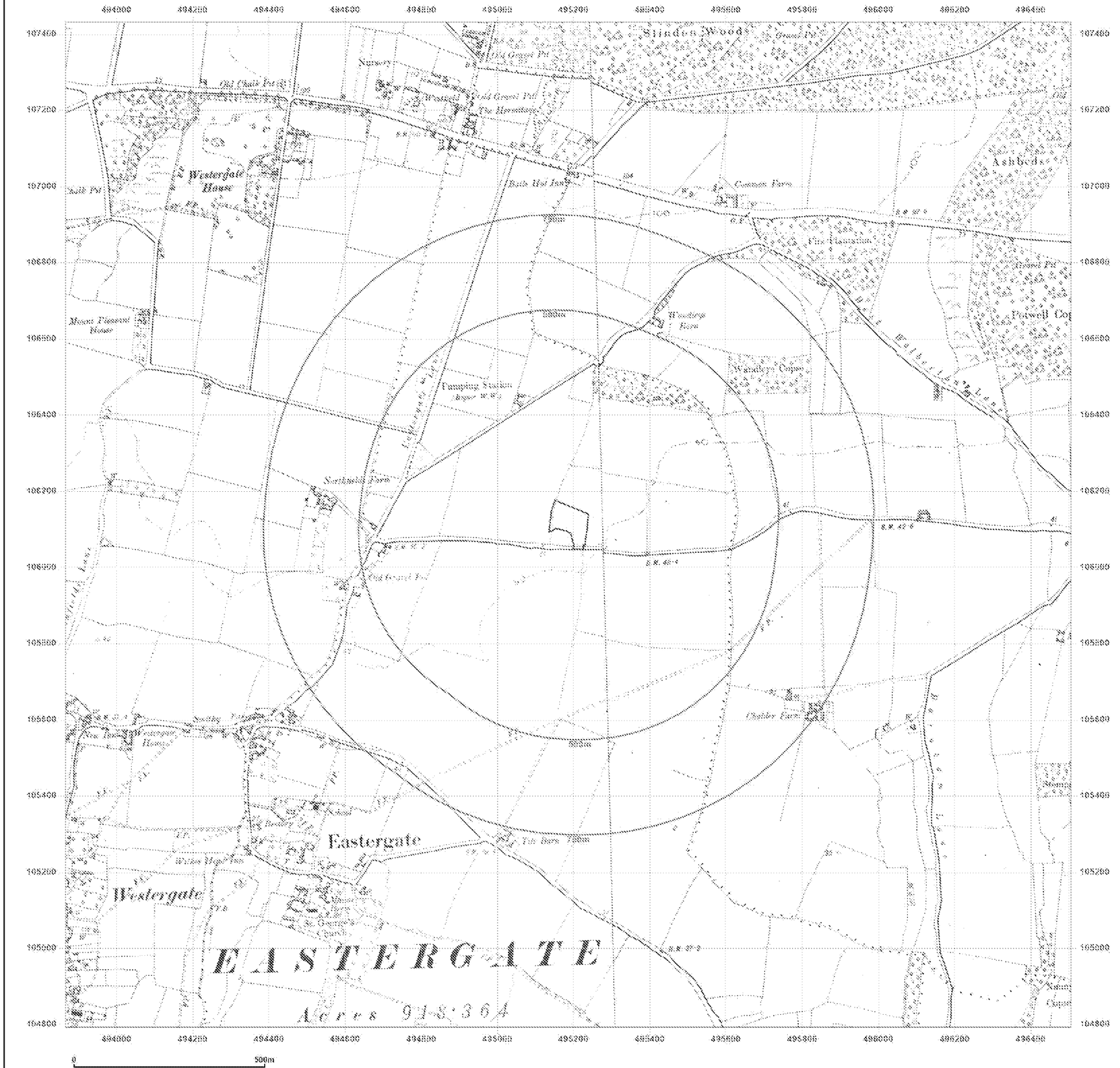
Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
[redacted]
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

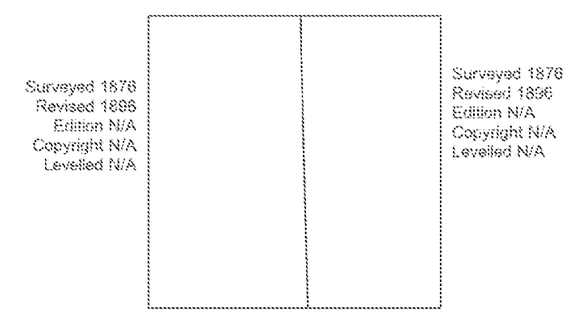
Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1896**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



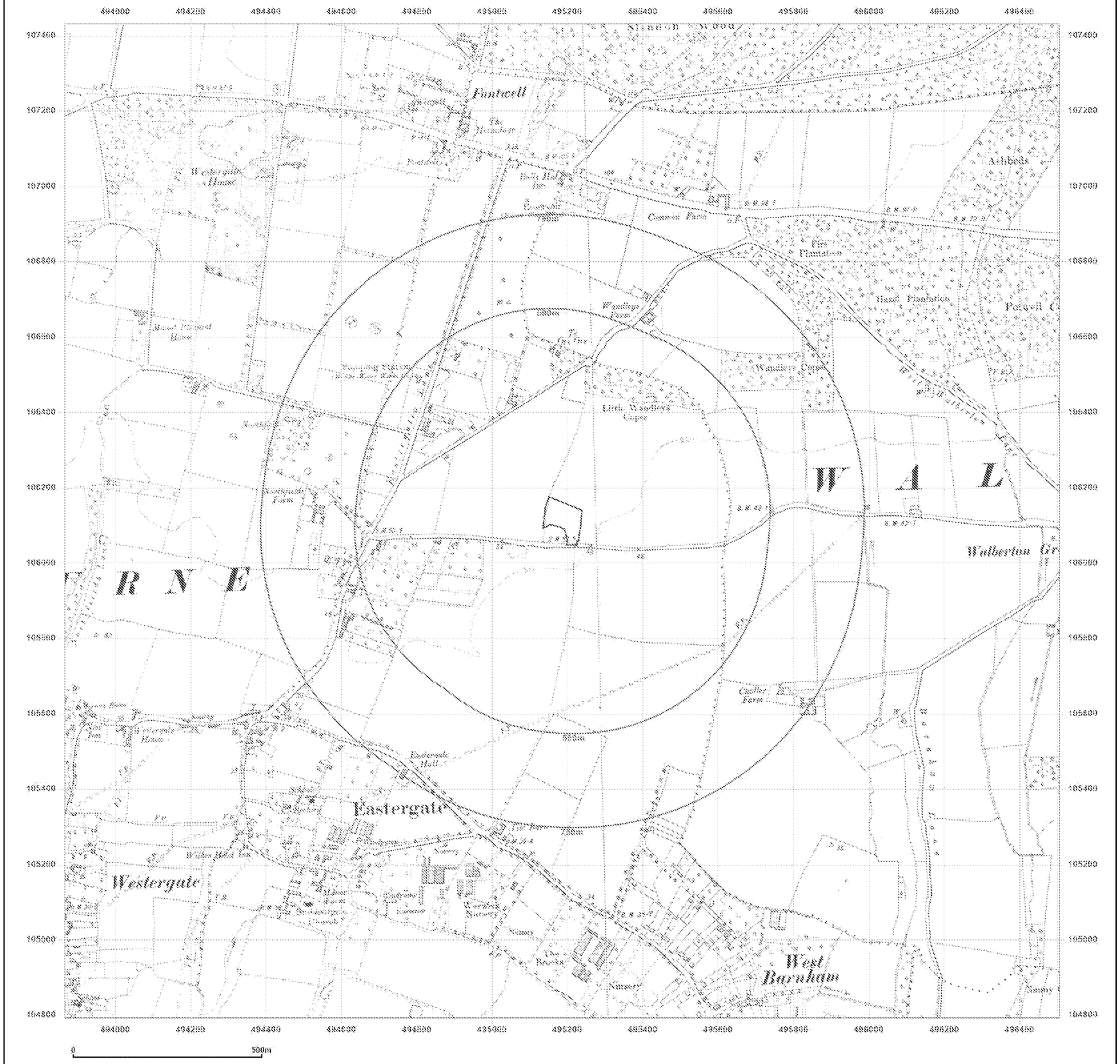
Powered by OS

Produced by
Groundsure Insights
[redacted]
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

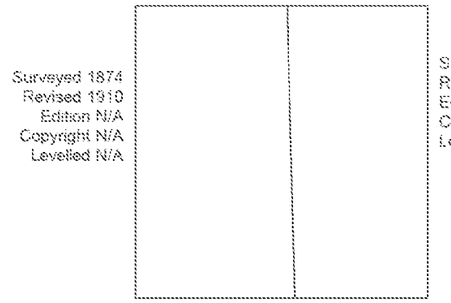
Map Name: County Series

Map date: **1910**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



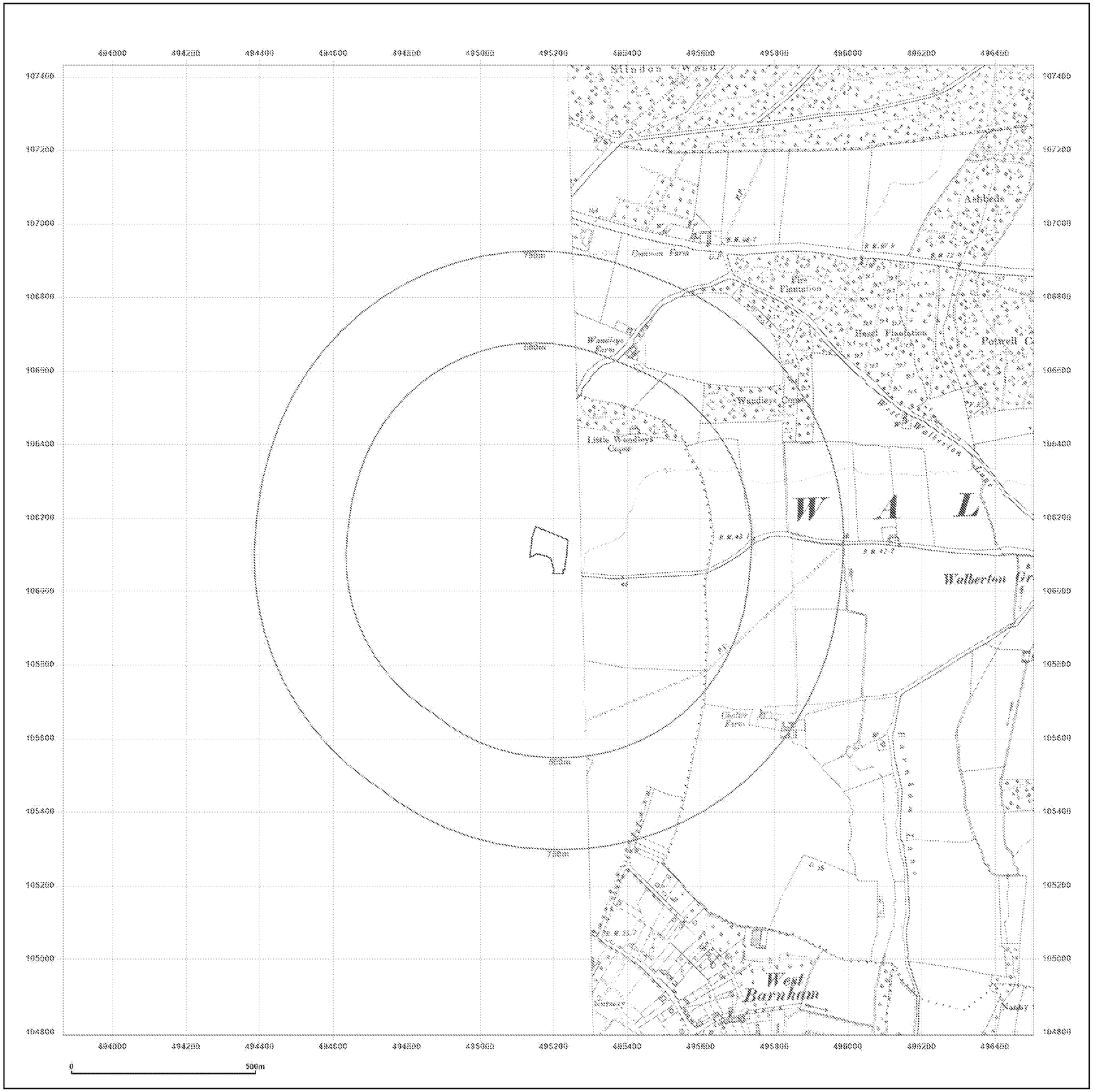
Powered by

Produced by
Groundsure Insights
[redacted]
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

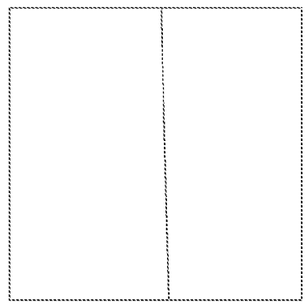
Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1910**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



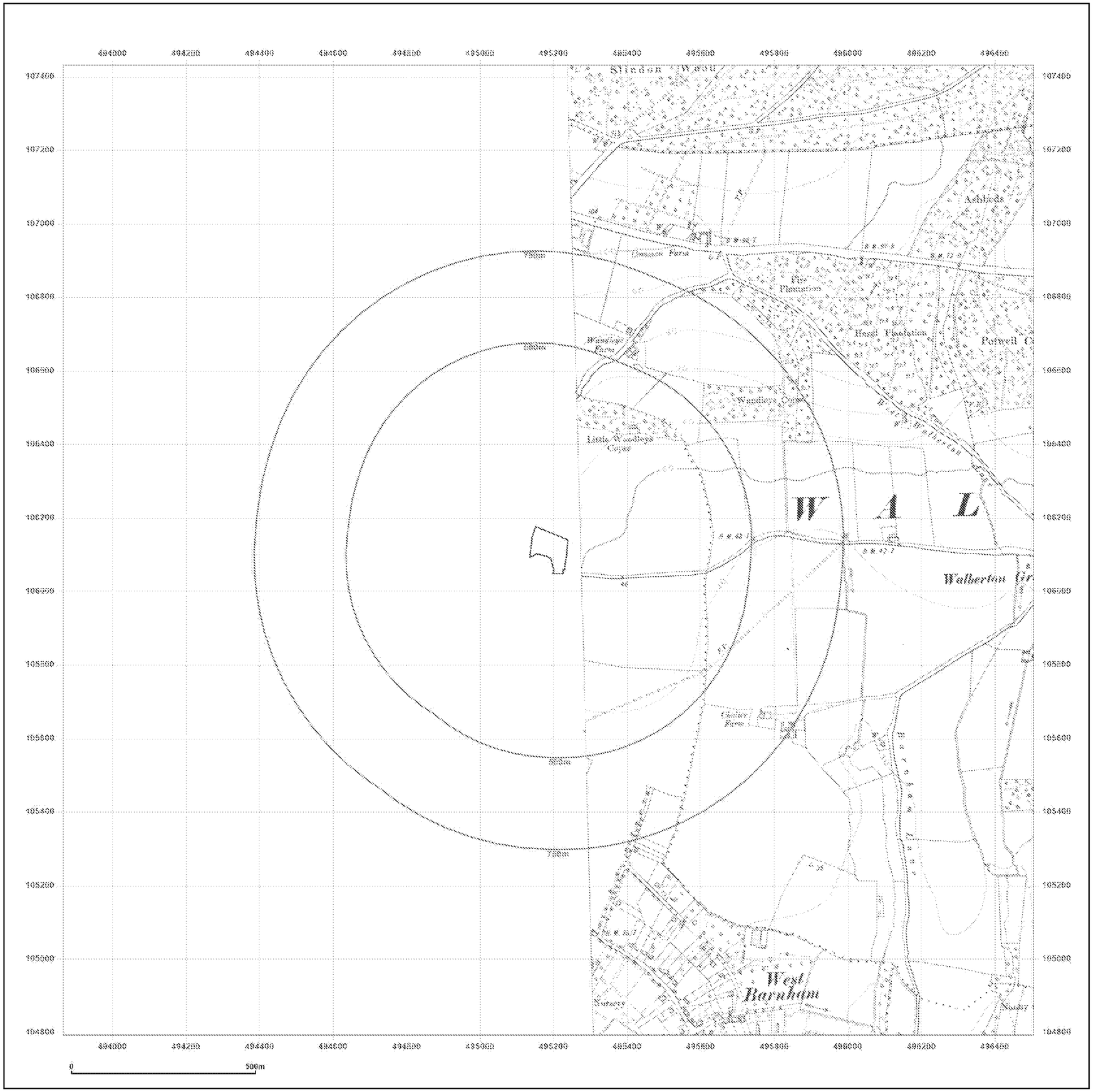
Surveyed 1874
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series

Map date: **1910**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

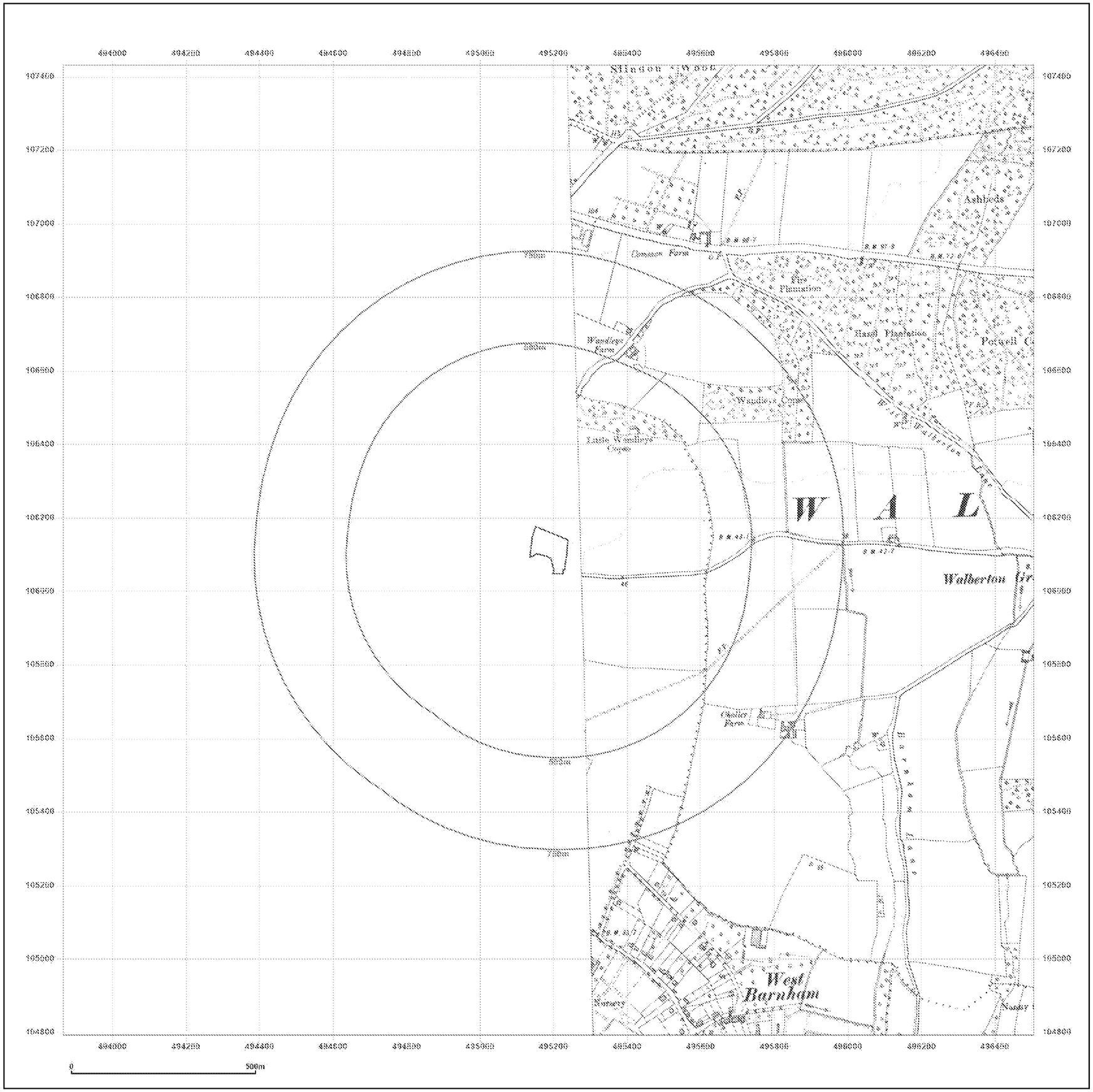
Surveyed 1874
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

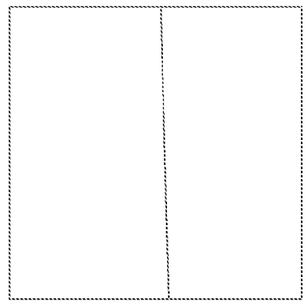
Map Name: County Series

Map date: **1910**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



Surveyed 1874
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

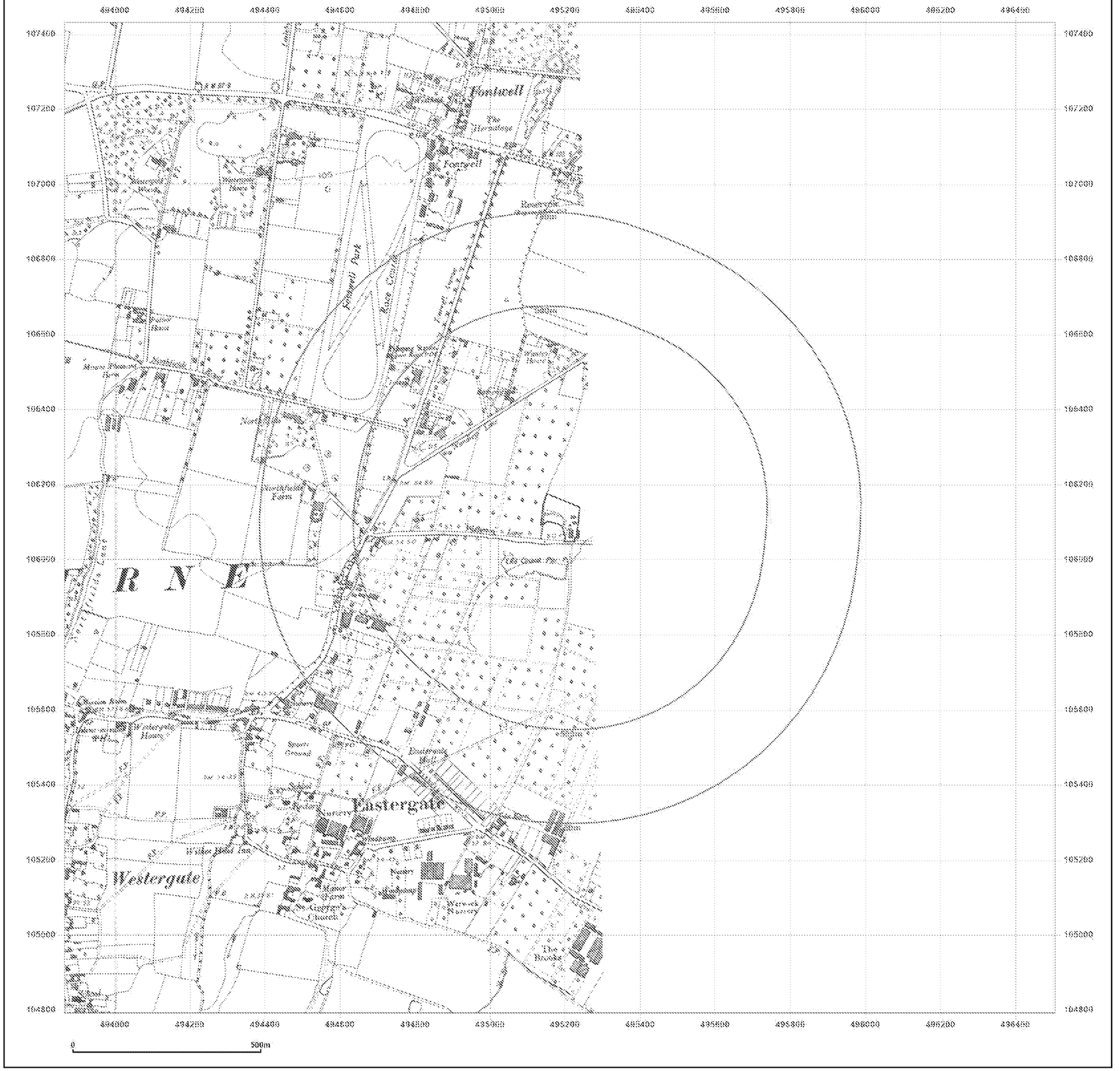
Powered by OS

[redacted]

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series

Map date: **1940**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

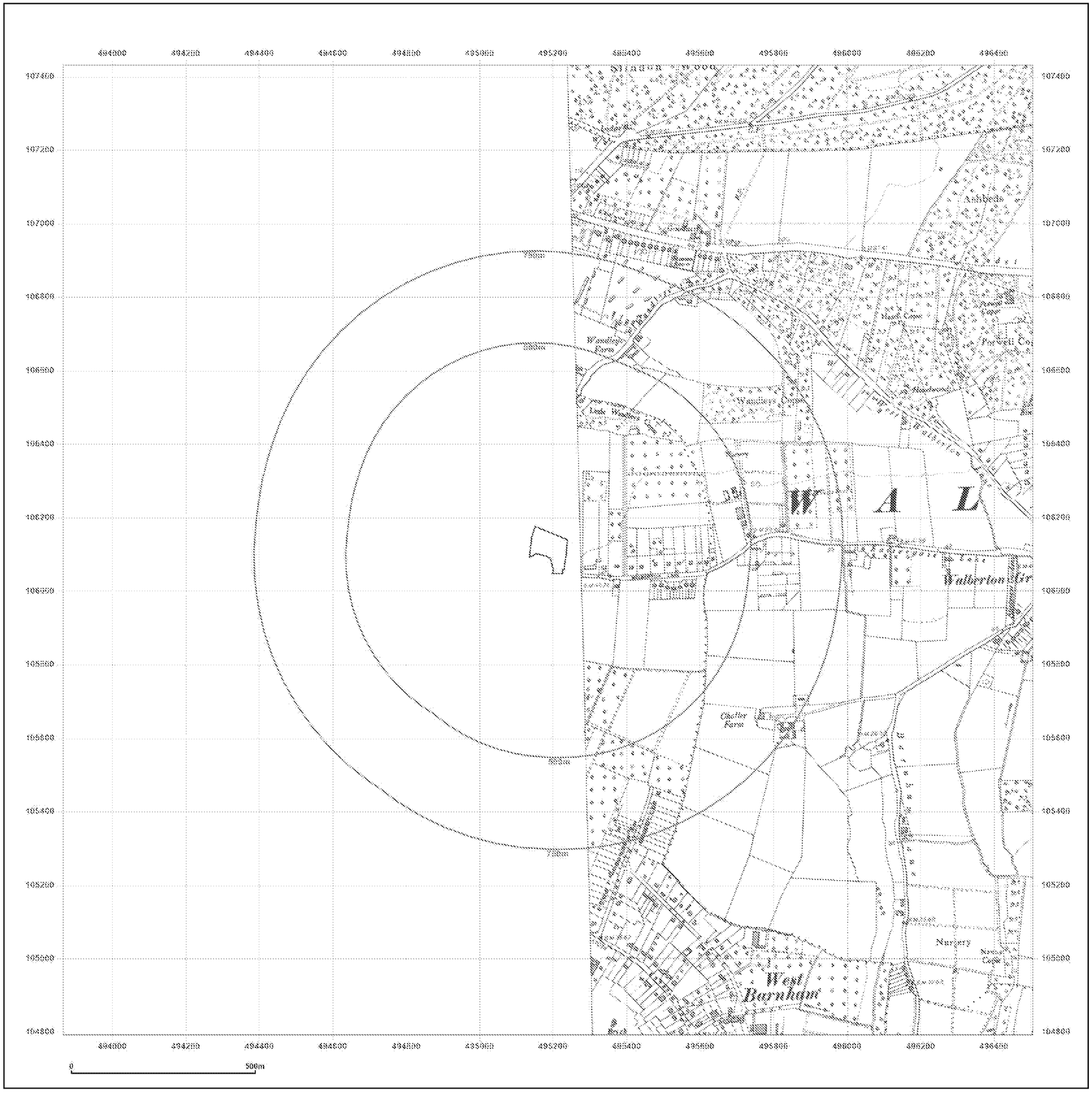
Surveyed 1874
Revised 1940
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

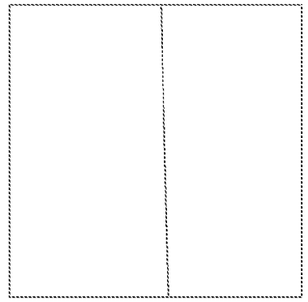
Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1950**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



Surveyed 1874
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

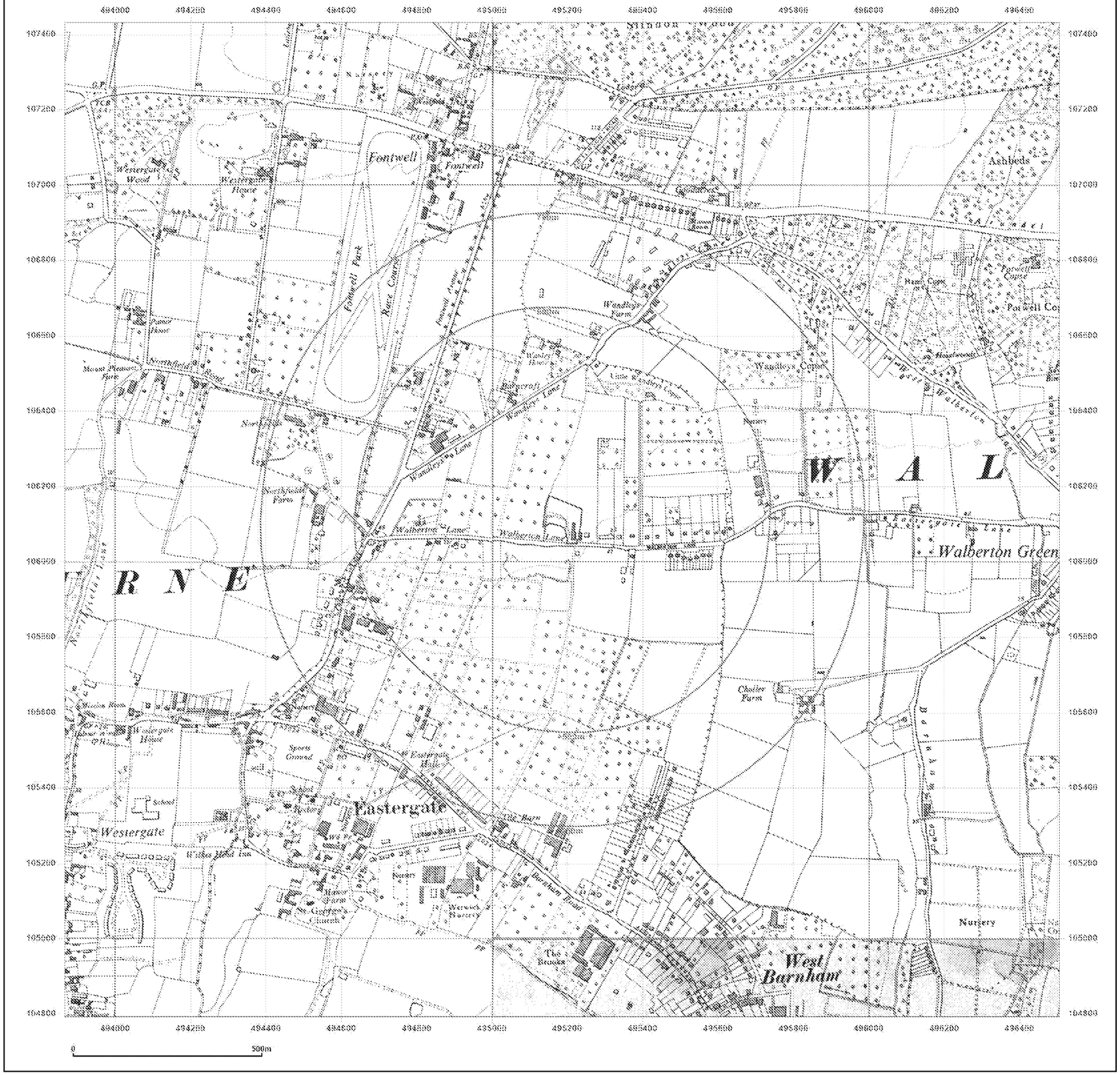
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: Provisional
Map date: **1961**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed N/A
Revised 1961
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1961
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1961
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1961
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES

Groundsure INSIGHTS

Site Details:

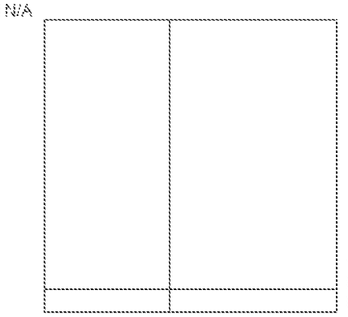
Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: Provisional
Map date: **1966-1969**
Scale: 1:10,560
Printed at: 1:10,560

N W E S

Surveyed N/A
Revised 1969
Edition N/A
Copyright N/A
Levelled N/A



Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES

Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid

Map date: **1979-1980**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1974
Revised 1979
Edition N/A
Copyright 1979
Levelled 1975

Surveyed 1974
Revised 1979
Edition N/A
Copyright 1979
Levelled 1975

Surveyed 1975
Revised 1979
Edition N/A
Copyright 1979
Levelled 1975

Surveyed 1978
Revised 1979
Edition N/A
Copyright 1980
Levelled 1975

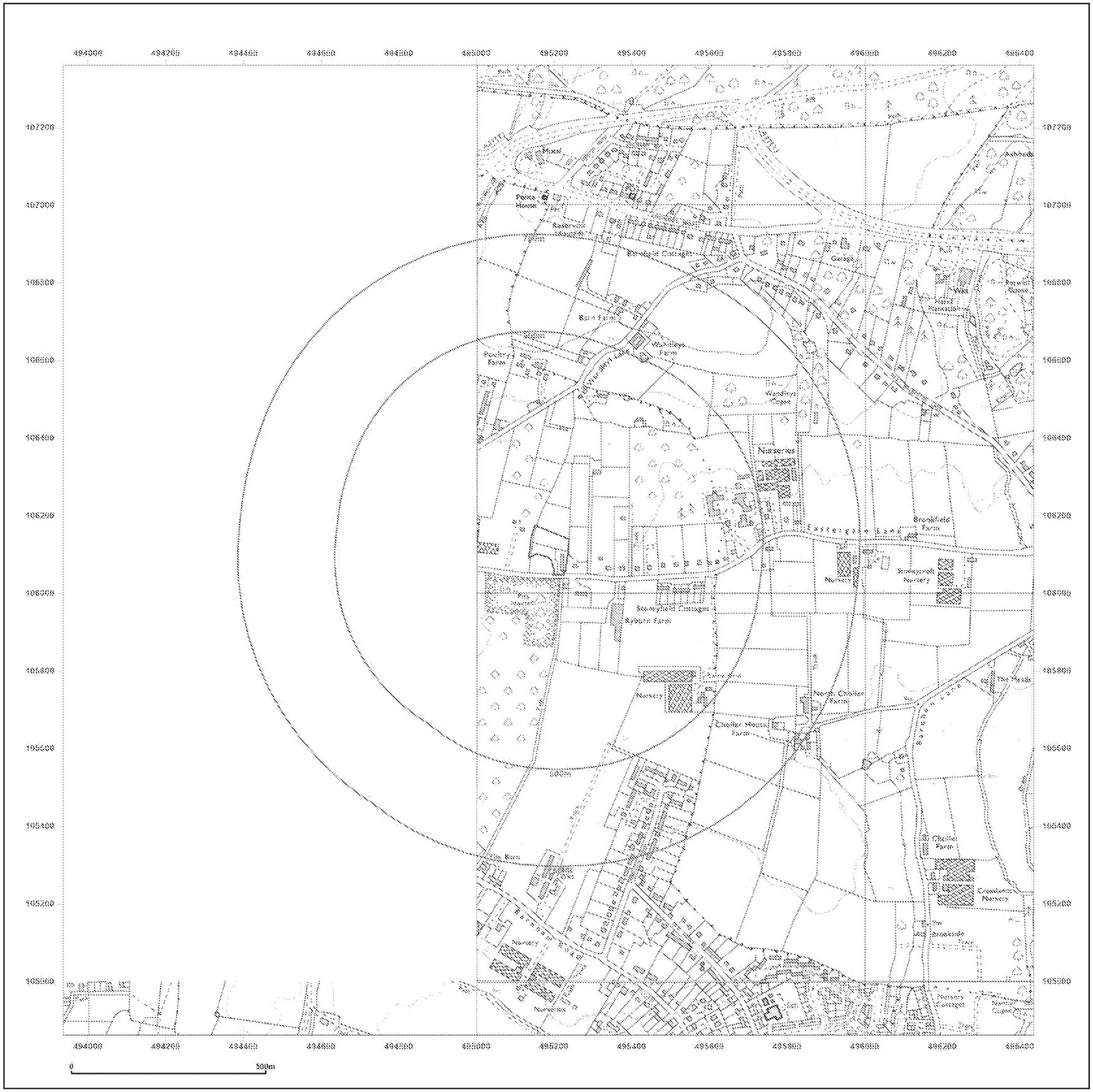
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid

Map date: **1990-1993**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1974
Revised 1990
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1992
Revised 1993
Edition N/A
Copyright N/A
Levelled N/A

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

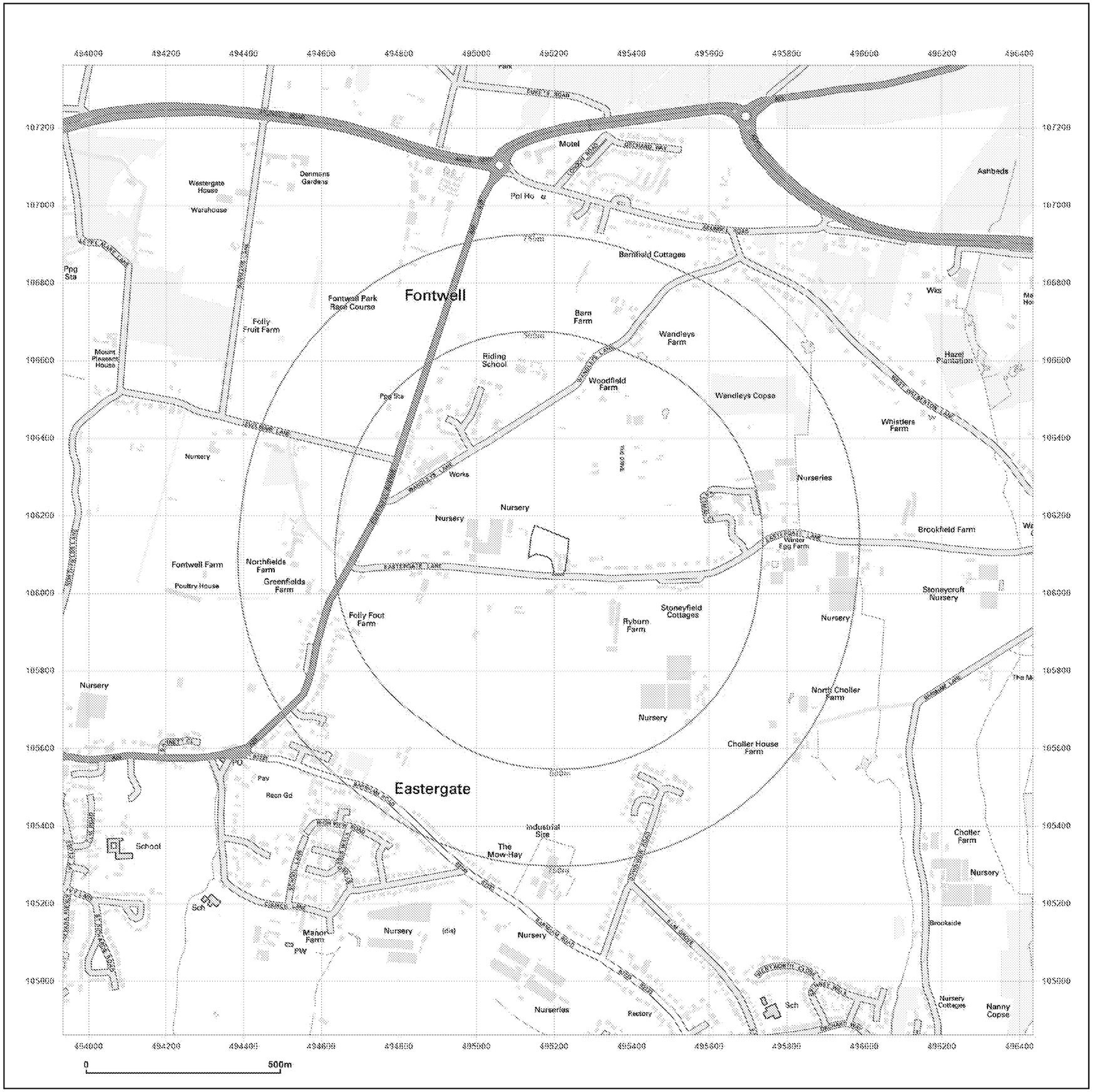
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Site Details:

Eastmere Stables

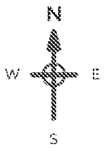
Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

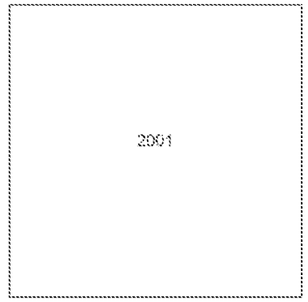
Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



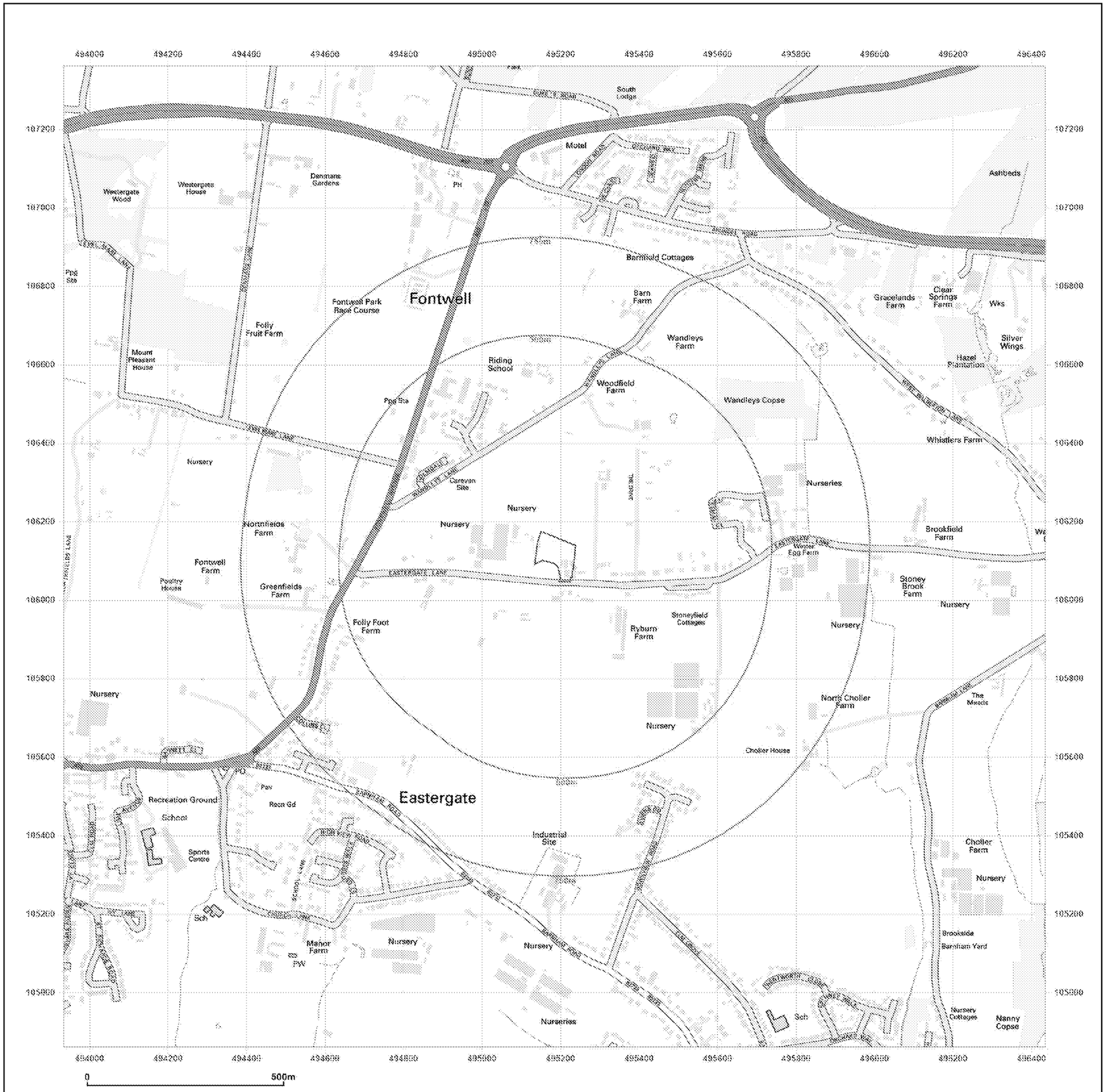


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2010

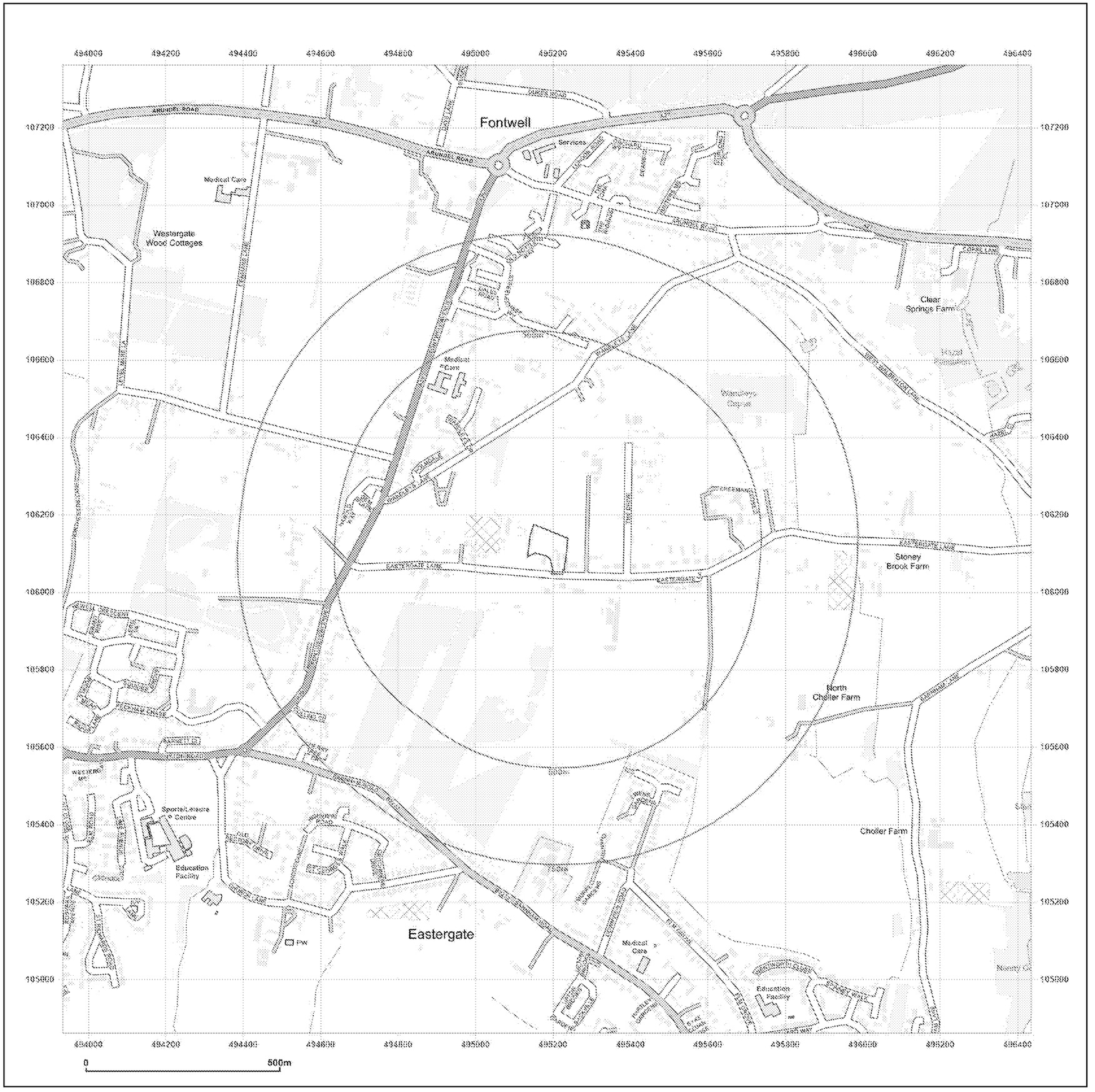
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid
Map date: 2024
Scale: 1:10,000
Printed at: 1:10,000

N W E S

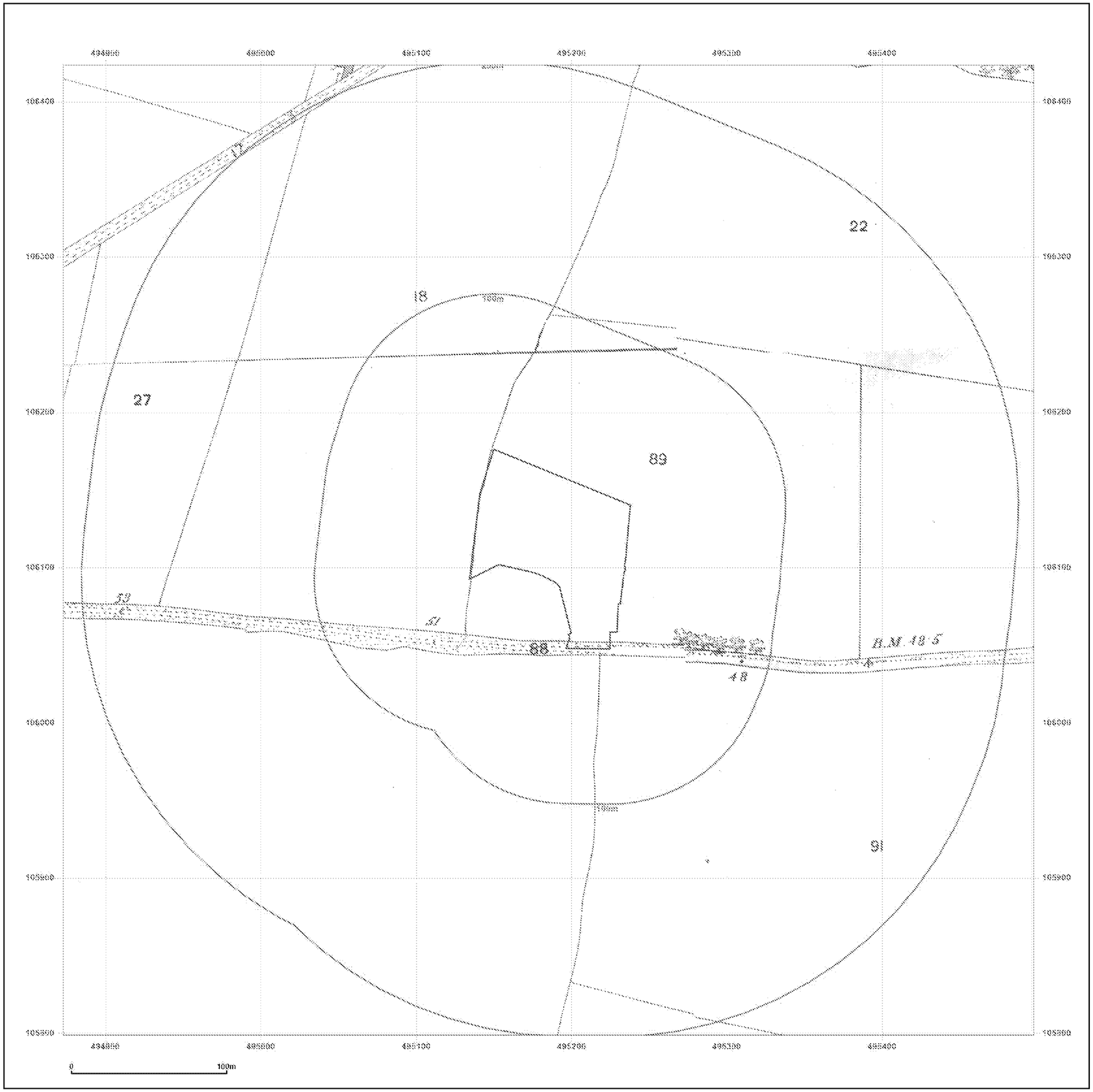
2024

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1876**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

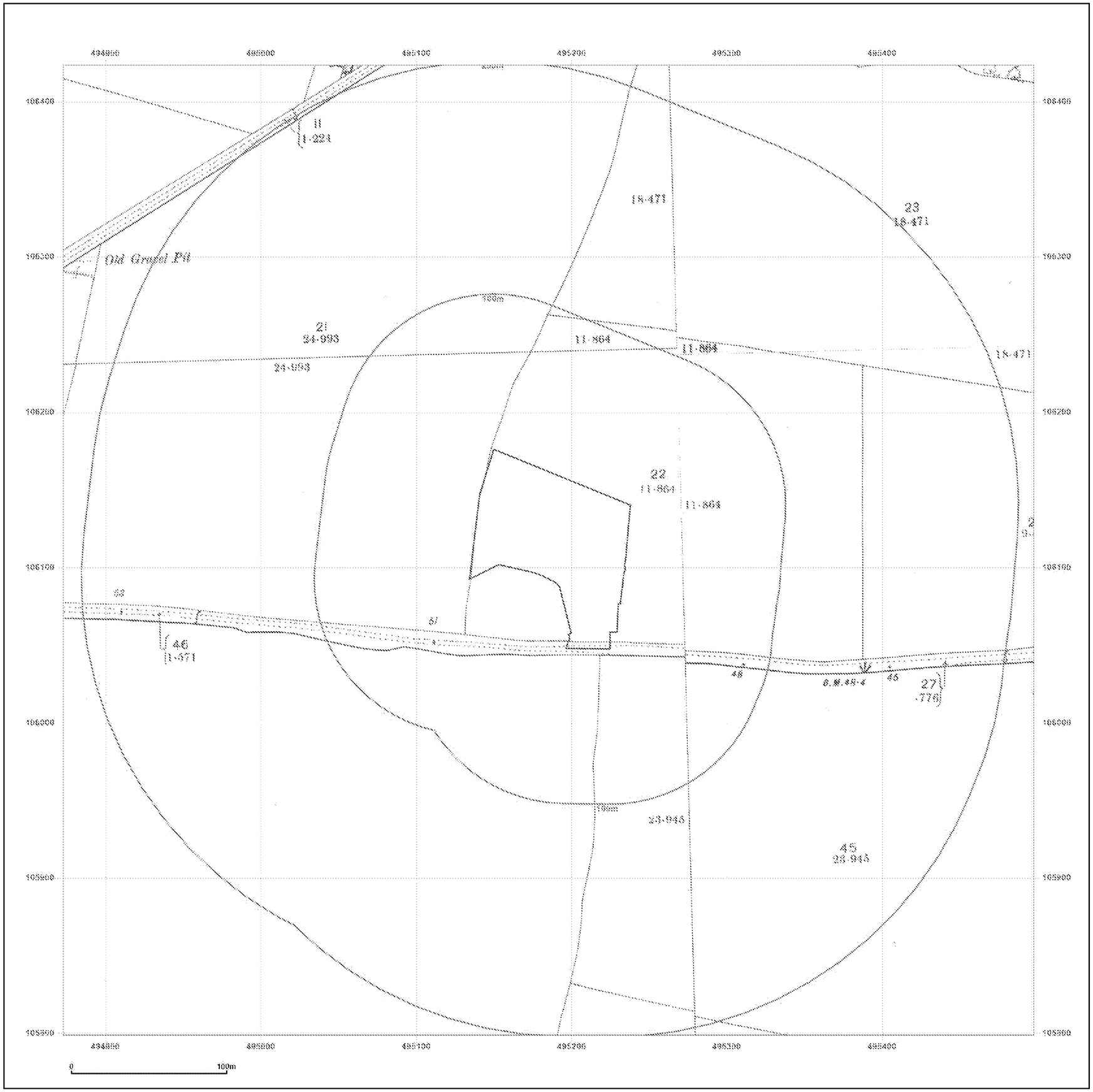
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

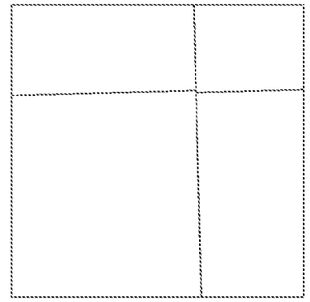
Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1897**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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



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

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

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

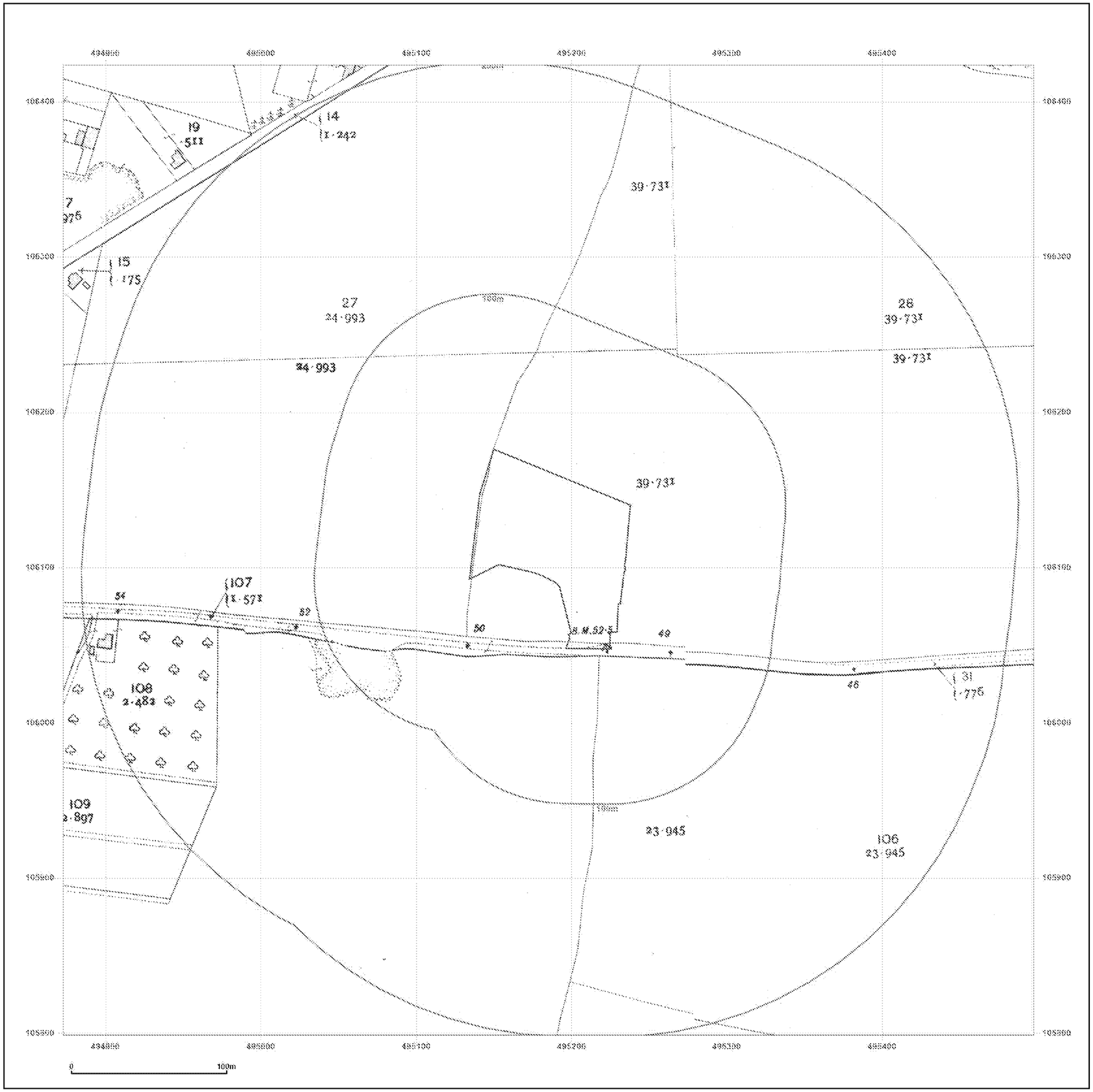
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

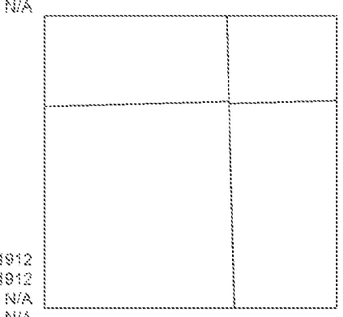
Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: 1912
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A

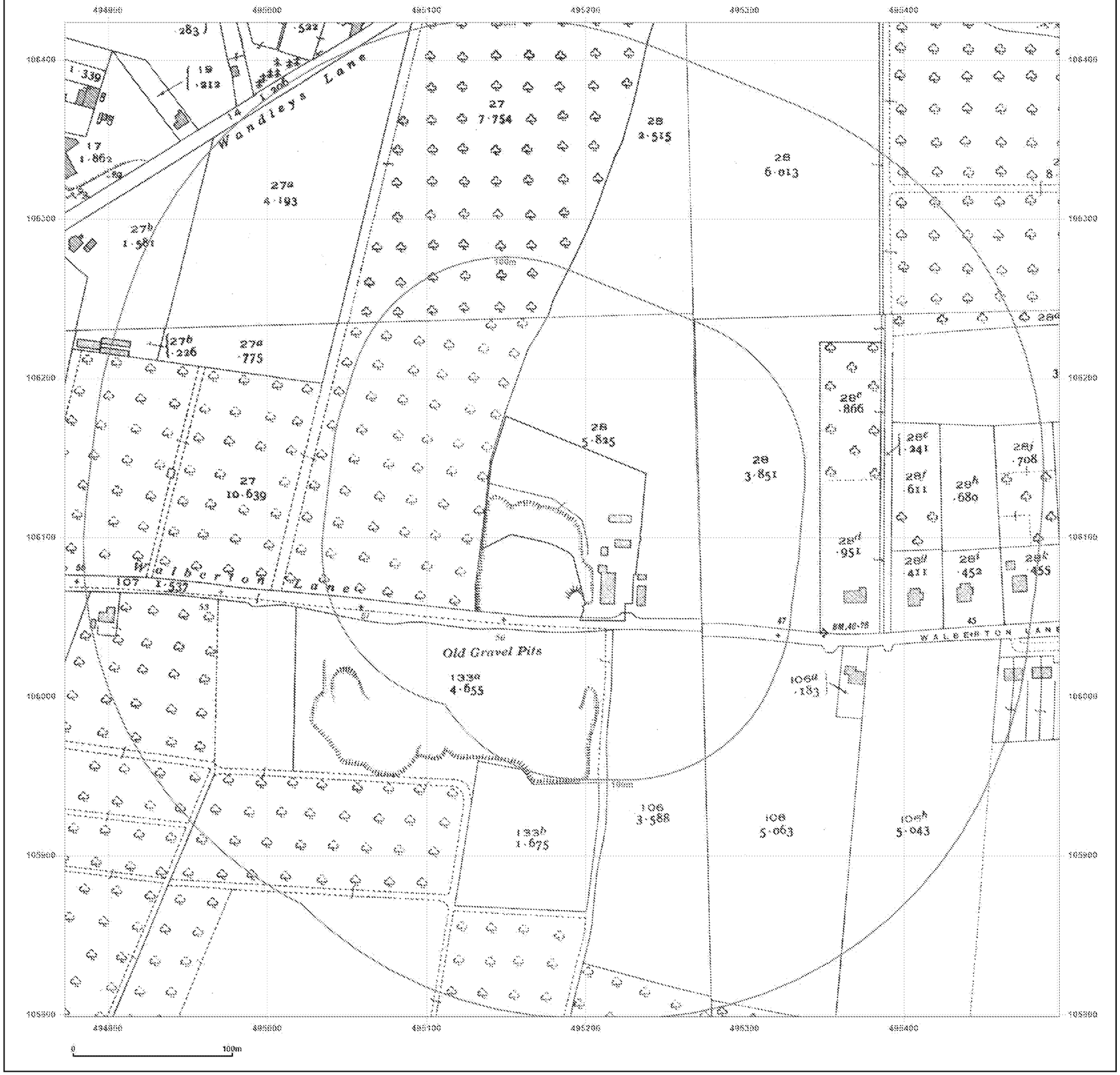
Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: County Series
Map date: **1937-1939**
Scale: 1:2,500
Printed at: 1:2,500

N W E S

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

Surveyed 1936
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1937
Revised 1937
Edition N/A
Copyright N/A
Levelled N/A

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

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES

Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid

Map date: **1974**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1974
Levelled 1950

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1974
Levelled 1950

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES

Groundsure INSIGHTS

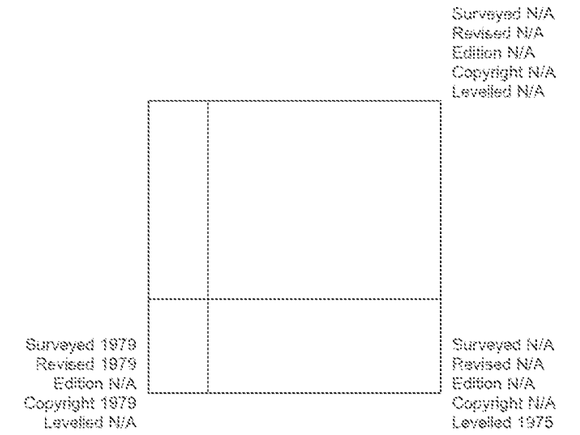
Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid
Map date: **1974-1979**
Scale: 1:2,500
Printed at: 1:2,500

N W E S



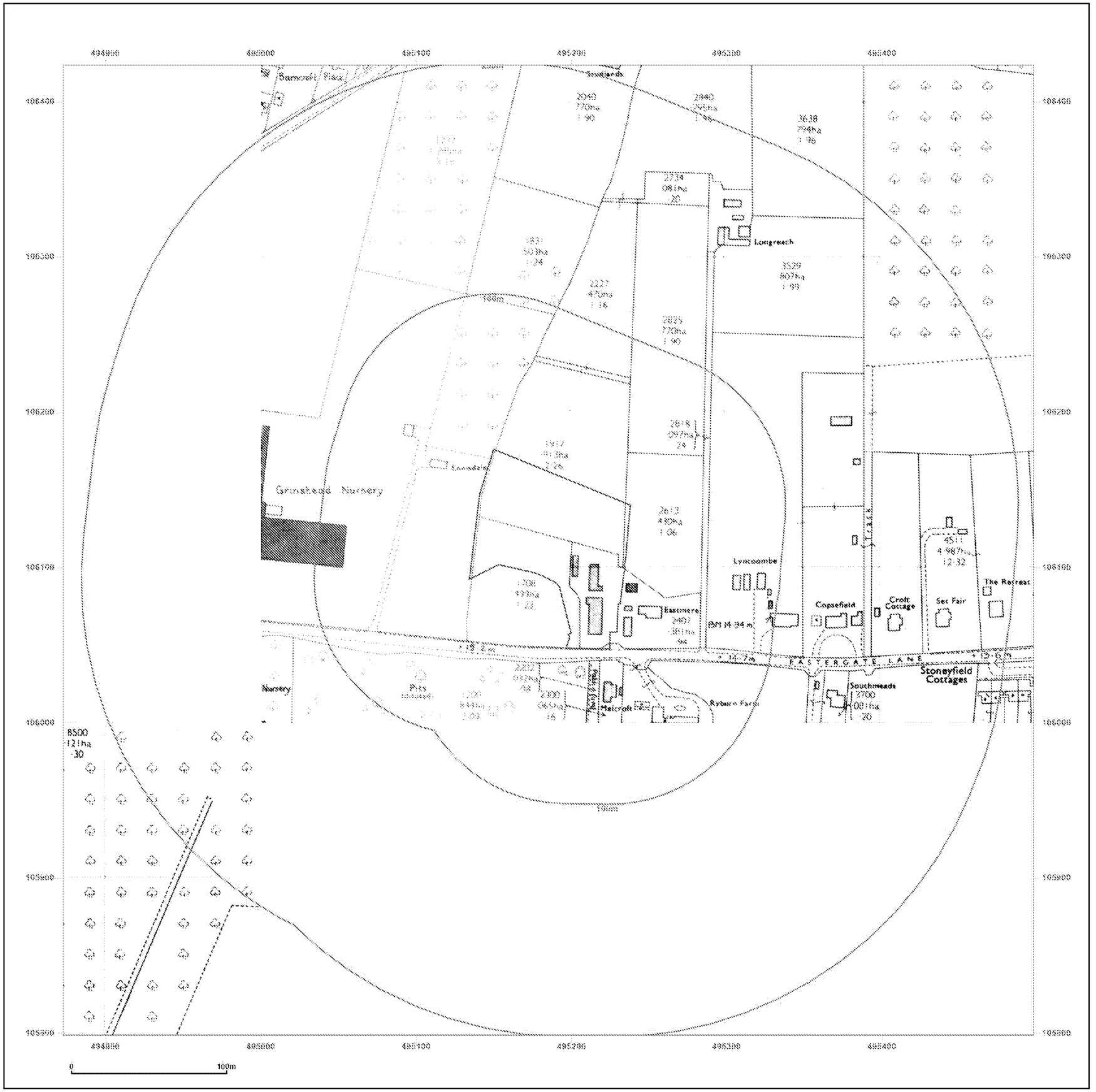
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid
Map date: **1984-1989**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1975
Revised 1989
Edition N/A
Copyright 1989
Levelled 1975

Surveyed 1975
Revised 1984
Edition N/A
Copyright 1964
Levelled 1975

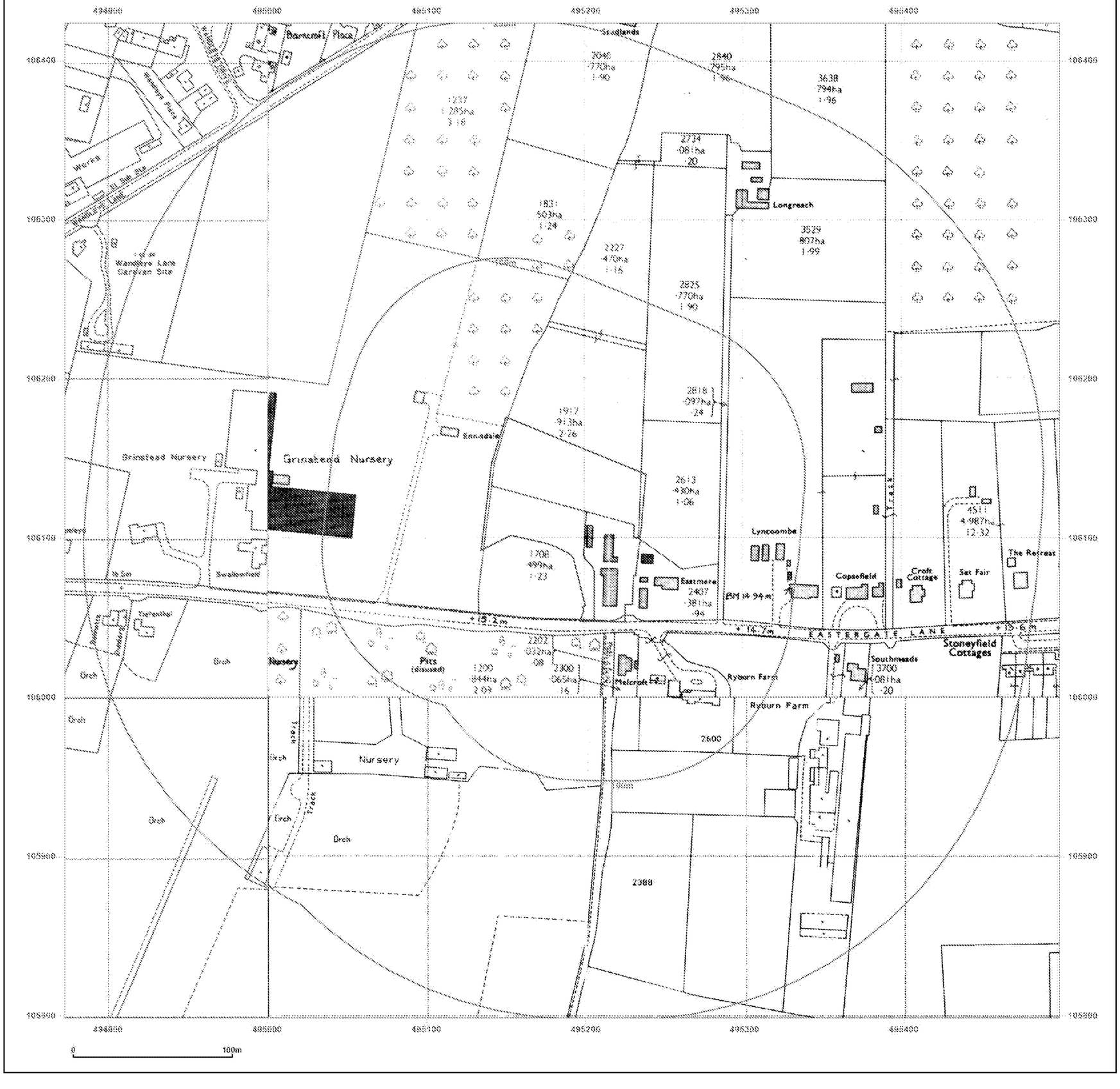
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid
Map date: **1991-1994**
Scale: 1:2,500
Printed at: 1:2,500

N W E S

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

Surveyed 1975
Revised 1991
Edition N/A
Copyright 1991
Levelled 1975

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

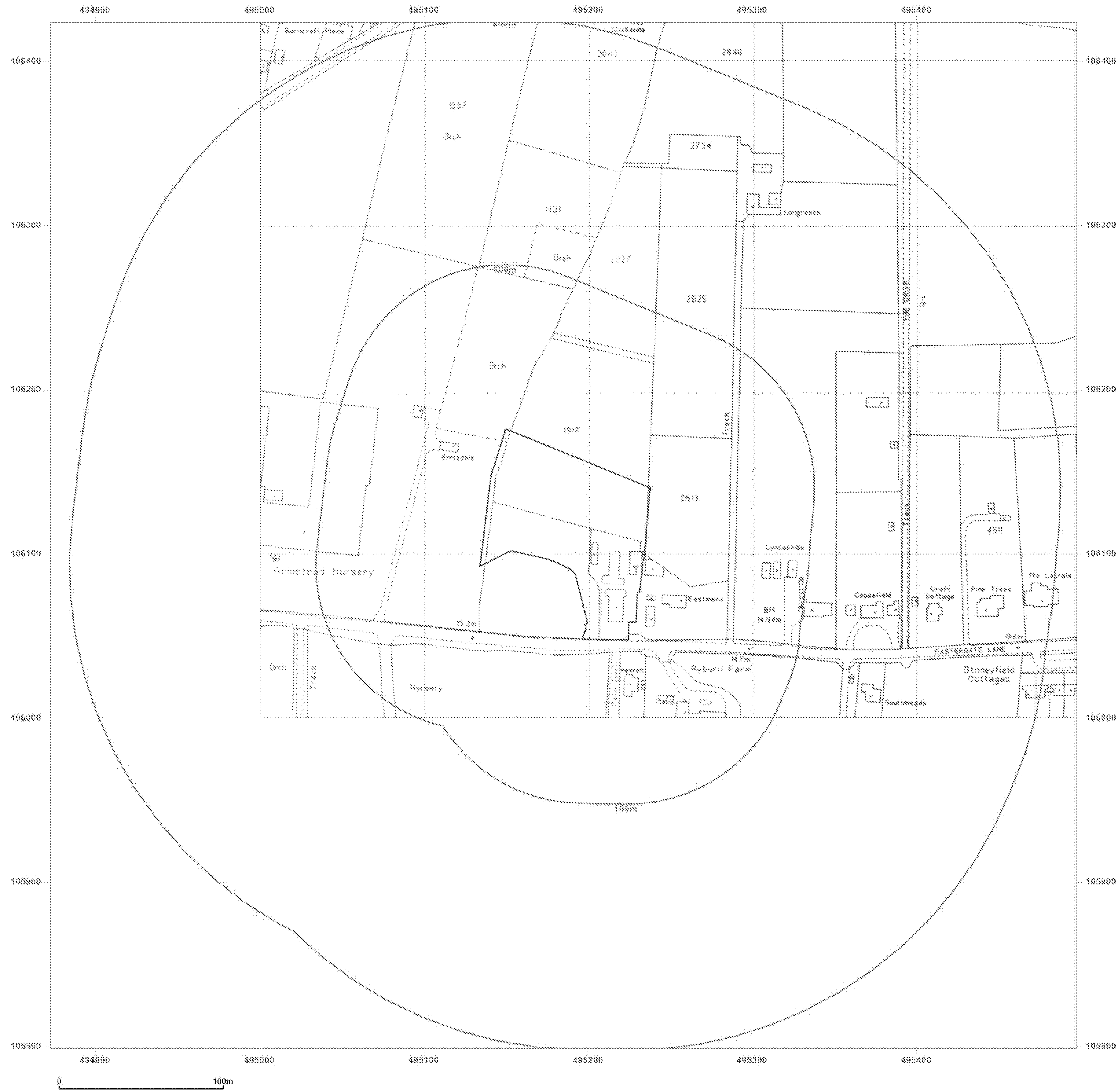
Surveyed 1994
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

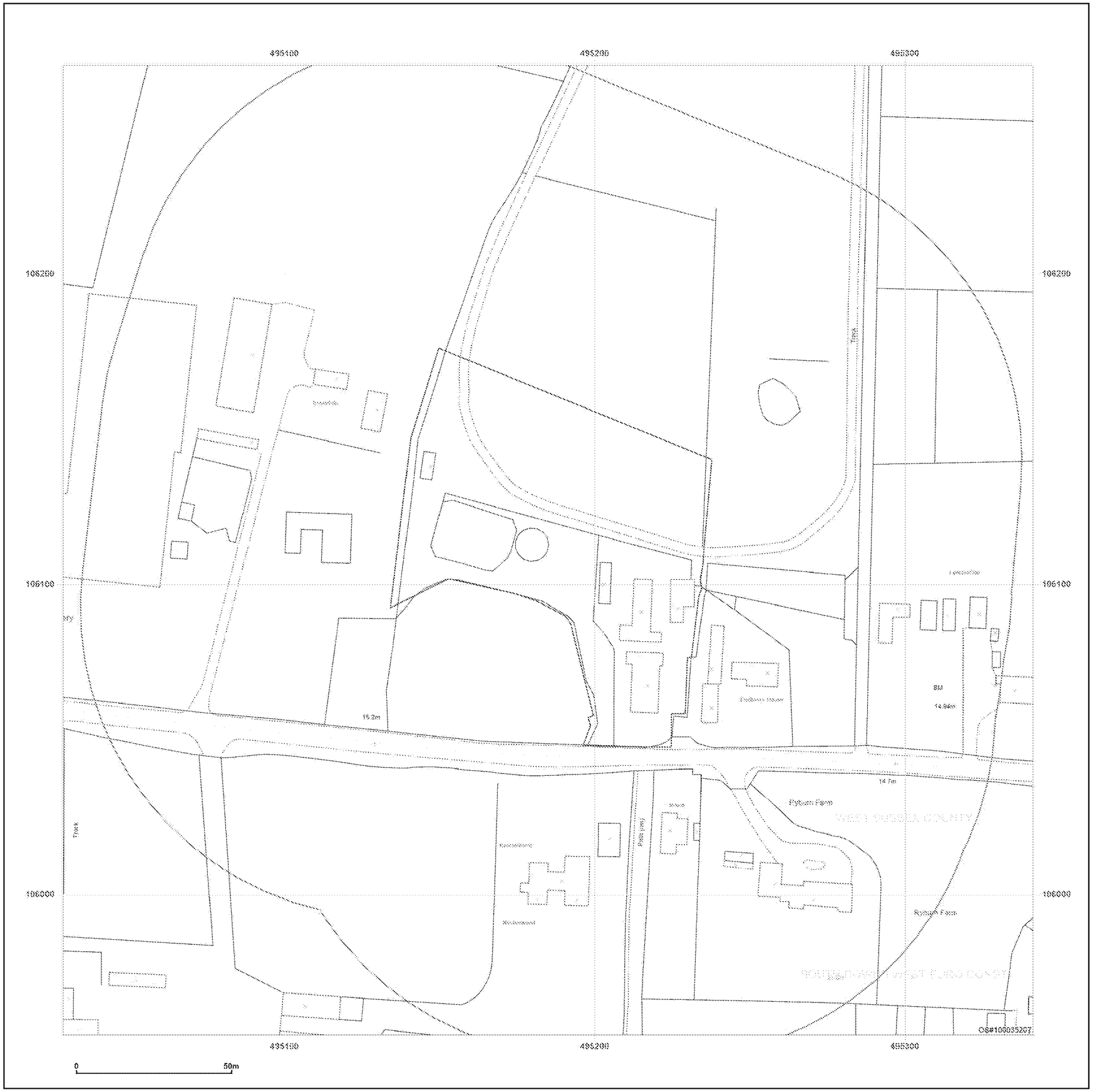
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

ARUN DISTRICT COUNCIL BN/128/24/RES



Groundsure INSIGHTS

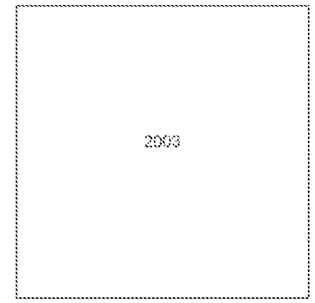
Site Details:

Eastmere Stables

Client Ref: GI24.1168
Report Ref: GS-PAZ-UHU-8KL-Y29
Grid Ref: 495185, 106111

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

N W E S



Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 October 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo
Insight

Eastmere Stables

Order Details

Date: 03/10/2024

Your ref: GI24.1168

Our Ref: GS-VPW-RBX-YSE-4UN

Site Details

Location: 495189 106116

Area: 0.77 ha

Authority: Arun District Council ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	1	4	2	18	-
17 >	1.2 >	Historical tanks >	0	0	0	7	-
17 >	1.3 >	Historical energy features >	0	0	0	2	-
18	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
19 >	2.1 >	Historical industrial land uses >	2	4	2	19	-
21 >	2.2 >	Historical tanks >	0	0	0	9	-
21 >	2.3 >	Historical energy features >	0	0	0	4	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
23	3.1	Active or recent landfill	0	0	0	0	-
23	3.2	Historical landfill (BGS records)	0	0	0	0	-
24	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
24 >	3.4 >	Historical landfill (EA/NRW records) >	0	1	0	1	-
24 >	3.5 >	Historical waste sites >	0	0	0	4	-
25 >	3.6 >	Licensed waste sites >	0	0	0	2	-
26 >	3.7 >	Waste exemptions >	1	0	12	41	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
31 >	4.1 >	Recent industrial land uses >	0	0	2	-	-
32	4.2	Current or recent petrol stations	0	0	0	0	-
32	4.3	Electricity cables	0	0	0	0	-
32	4.4	Gas pipelines	0	0	0	0	-
32	4.5	Sites determined as Contaminated Land	0	0	0	0	-

32	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
33	4.8	Hazardous substance storage/usage	0	0	0	0	-
33	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
33	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
33	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
34	4.12	Radioactive Substance Authorisations	0	0	0	0	-
34	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
34	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.15	Pollutant release to public sewer	0	0	0	0	-
34	4.16	List 1 Dangerous Substances	0	0	0	0	-
35	4.17	List 2 Dangerous Substances	0	0	0	0	-
35	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
35	4.19	Pollution inventory substances	0	0	0	0	-
35	4.20	Pollution inventory waste transfers	0	0	0	0	-
35	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
38 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
40 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
41 >	5.4 >	Groundwater vulnerability- soluble rock risk >	Identified (within 0m)				
41 >	5.5 >	Groundwater vulnerability- local information >	Identified (within 0m)				
43 >	5.6 >	Groundwater abstractions >	0	0	0	3	5
45 >	5.7 >	Surface water abstractions >	0	0	0	0	2
46 >	5.8 >	Potable abstractions >	0	0	0	2	2
47	5.9	Source Protection Zones	0	0	0	0	-
47 >	5.10 >	Source Protection Zones (confined aquifer) >	2	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
49	6.1	Water Network (OS MasterMap)	0	0	0	-	-

49	6.2	Surface water features	0	0	0	-	-
50 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
50 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
51 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
52	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
52	7.2	Historical Flood Events	0	0	0	-	-
52	7.3	Flood Defences	0	0	0	-	-
53	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
53	7.5	Flood Storage Areas	0	0	0	-	-
54	7.6	Flood Zone 2	None (within 50m)				
54	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
55 >	8.1 >	Surface water flooding >	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding >					
57 >	9.1 >	Groundwater flooding >	Moderate-High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
58	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
59	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
59	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
59	10.4	Special Protection Areas (SPA)	0	0	0	0	0
59	10.5	National Nature Reserves (NNR)	0	0	0	0	0
60	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
60 >	10.7 >	Designated Ancient Woodland >	0	0	0	1	16
61	10.8	Biosphere Reserves	0	0	0	0	0
61	10.9	Forest Parks	0	0	0	0	0
61	10.10	Marine Conservation Zones	0	0	0	0	0
61	10.11	Green Belt	0	0	0	0	0
62	10.12	Proposed Ramsar sites	0	0	0	0	0

62	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
62	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
62	10.15	Nitrate Sensitive Areas	0	0	0	0	0
63 >	10.16 >	Nitrate Vulnerable Zones >	1	0	2	0	4
64 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
65	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
66	11.1	World Heritage Sites	0	0	0	-	-
66	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
66	11.3	National Parks	0	0	0	-	-
66	11.4	Listed Buildings	0	0	0	-	-
67	11.5	Conservation Areas	0	0	0	-	-
67	11.6	Scheduled Ancient Monuments	0	0	0	-	-
67	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
68 >	12.1 >	Agricultural Land Classification >	Grade 2 (within 250m)				
69	12.2	Open Access Land	0	0	0	-	-
69	12.3	Tree Felling Licences	0	0	0	-	-
69	12.4	Environmental Stewardship Schemes	0	0	0	-	-
70	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
71 >	13.1 >	Priority Habitat Inventory >	0	1	14	-	-
72 >	13.2 >	Habitat Networks >	0	0	1	-	-
72	13.3	Open Mosaic Habitat	0	0	0	-	-
73	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
74 >	14.1 >	10k Availability >	Identified (within 500m)				
75 >	14.2 >	Artificial and made ground (10k) >	0	1	0	1	-
76 >	14.3 >	Superficial geology (10k) >	1	1	3	5	-

77	14.4	Landslip (10k)	0	0	0	0	-
78 >	14.5 >	Bedrock geology (10k) >	1	0	3	0	-
79	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
80 >	15.1 >	50k Availability >	Identified (within 500m)				
81	15.2	Artificial and made ground (50k)	0	0	0	0	-
81	15.3	Artificial ground permeability (50k)	0	0	-	-	-
82 >	15.4 >	Superficial geology (50k) >	1	0	1	3	-
83 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
83	15.6	Landslip (50k)	0	0	0	0	-
83	15.7	Landslip permeability (50k)	None (within 50m)				
84 >	15.8 >	Bedrock geology (50k) >	1	0	1	0	-
85 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
85	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
86 >	16.1 >	BGS Boreholes >	0	0	1	-	-
Page	Section	Natural ground subsidence >					
87 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
88 >	17.2 >	Running sands >	Very low (within 50m)				
89 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
90 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
91 >	17.5 >	Landslides >	Very low (within 50m)				
92 >	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
94 >	18.1 >	BritPits >	0	1	1	1	-
95 >	18.2 >	Surface ground workings >	2	4	1	-	-
96	18.3	Underground workings	0	0	0	0	0
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	2	0	0
97	18.7	JPB mining areas	None (within 0m)				
97	18.8	The Coal Authority non-coal mining	0	0	0	0	-
97	18.9	Researched mining	0	0	0	0	-
98	18.10	Mining record office plans	0	0	0	0	-
98	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)				
99	18.15	Tin mining	None (within 0m)				
99	18.16	Clay mining	None (within 0m)				

Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
100	19.1	Natural cavities	0	0	0	0	-
100	19.2	Mining cavities	0	0	0	0	0
100	19.3	Reported recent incidents	0	0	0	0	-
100	19.4	Historical incidents	0	0	0	0	-
101	19.5	National karst database	0	0	0	0	-

Page	Section	Radon >	
102 >	20.1 >	Radon >	Less than 1% (within 0m)

Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
104 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	1	-	-	-
104	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
104	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 1	0	0	0	0	-
106	22.9	Crossrail 2	0	0	0	0	-
106	22.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 22/04/2021

Site Area: 0.77ha

Recent site history - 2018 aerial photograph

Capture Date: 28/06/2018

Site Area: 0.77ha

Recent site history - 2013 aerial photograph

Capture Date: 03/05/2013

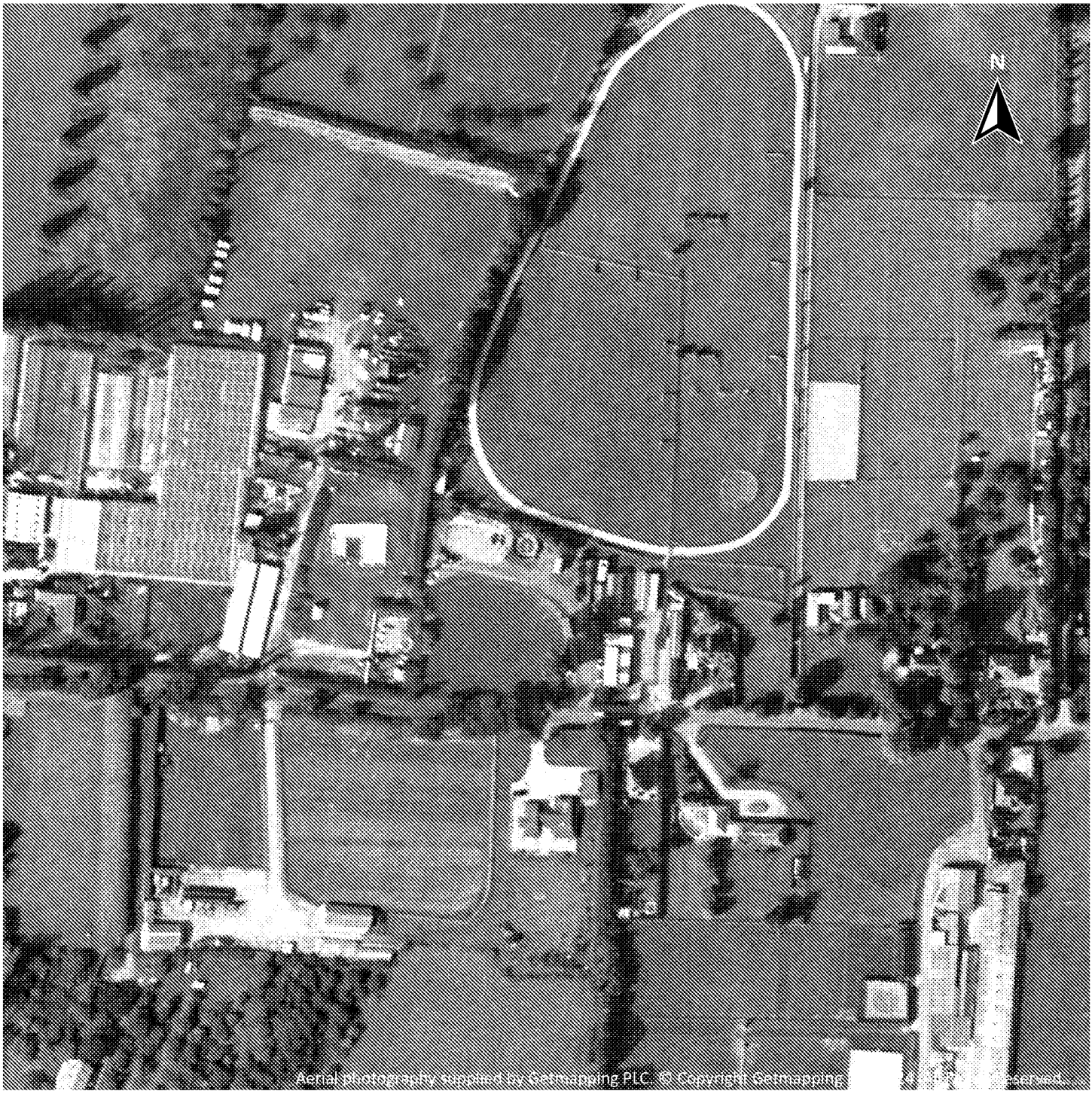
Site Area: 0.77ha

Recent site history - 2012 aerial photograph

Capture Date: 13/09/2012

Site Area: 0.77ha

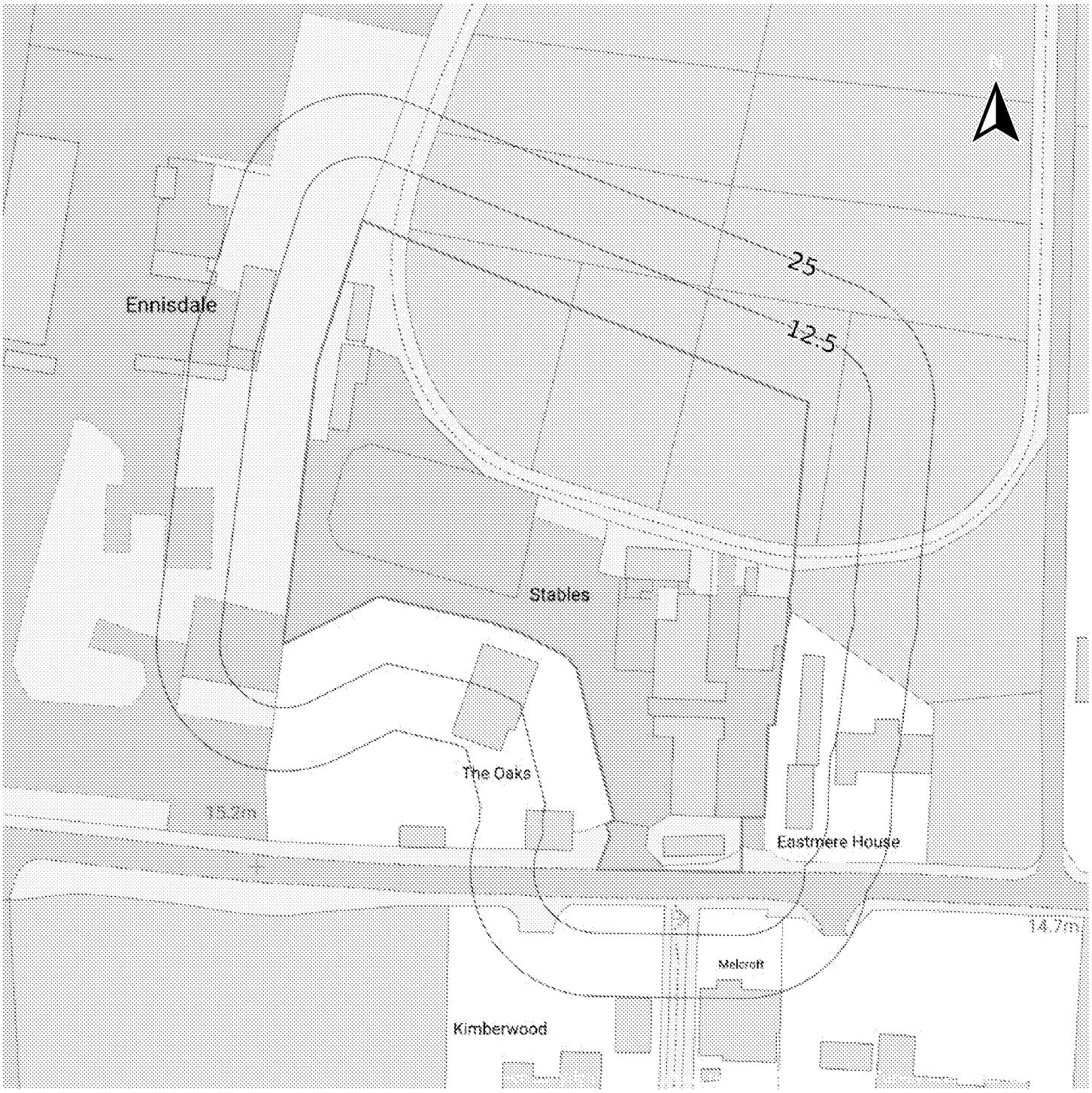
Recent site history - 1999 aerial photograph



Capture Date: 06/09/1999

Site Area: 0.77ha

OS MasterMap site plan



Site Area: 0.77ha

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	25

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
1	On site	Unspecified Pit	1940 - 1961	1931811

ID	Location	Land use	Dates present	Group ID
A	10m S	Unspecified Disused Pits	1979	1931631
A	10m S	Unspecified Disused Pits	1990	1989796
A	41m S	Unspecified Pit	1961	1906421
A	41m S	Old Gravel Pits	1940	1891883
2	66m SW	Sand Pit	1910	1896992
3	123m W	Nursery	1979	1897700
B	269m NW	Unspecified Works	1979	1931480
B	274m NW	Gravel Pit	1910	1912928
C	303m SE	Nursery	1979	1921596
C	303m SE	Nursery	1990	1956984
B	326m NW	Unspecified Pit	1876	1923962
B	340m NW	Unspecified Pit	1969	1944657
B	343m NW	Unspecified Pit	1940	1916756
4	279m NW	Gravel Pits	1910	1911202
5	373m E	Nursery	1950 - 1961	1983944
D	422m NW	Pumping Station	1910 - 1940	1923393
D	425m NW	Pumping Station	1979	1952500
D	428m NW	Pumping Station	1896	1966054
E	470m W	Old Gravel Pit	1896	1822100
E	470m W	Unspecified Pit	1910	1906418
D	471m NW	Unspecified Tank	1969	1934235
D	476m NW	Unspecified Tank	1940	1894223
F	492m E	Nurseries	1979	1962053
F	492m E	Nurseries	1990	1984289

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	7

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

Features are displayed on the Past land use map on page 15 >

ID	Location	Land use	Dates present	Group ID
C	420m SE	Tanks	1975	316949
C	421m SE	Tanks	-	316573
C	421m SE	Tanks	-	316575
C	434m SE	Tanks	1975 - 1994	330781
C	436m SE	Tanks	-	316574
D	478m NW	Unspecified Tank	1939 - 1974	328923
D	492m NW	Tanks	1939	316942

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	2

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

Features are displayed on the Past land use map on page 15 >

ID	Location	Land use	Dates present	Group ID
8	288m NW	Electricity Substation	1974 - 1994	223919
6	449m NW	Electricity Substation	1974 - 1994	214442

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	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.

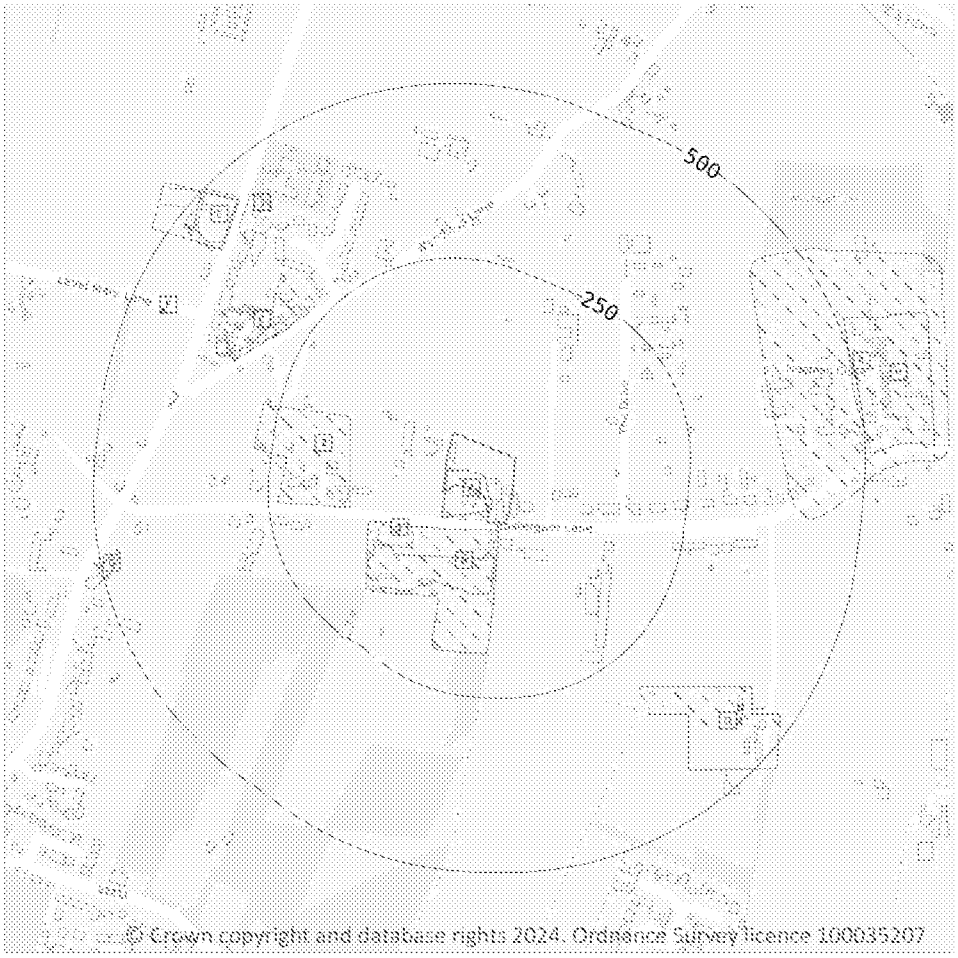
1.6 Historical military land

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	27

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

Features are displayed on the Past land use - un-grouped map on page 19 >

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Pit	1940	1931811
A	On site	Unspecified Pit	1961	1931811
B	10m S	Unspecified Disused Pits	1990	1989796

ID	Location	Land Use	Date	Group ID
B	10m S	Unspecified Disused Pits	1979	1931631
B	41m S	Unspecified Pit	1961	1906421
B	41m S	Old Gravel Pits	1940	1891883
1	66m SW	Sand Pit	1910	1896892
2	130m W	Nursery	1979	1897700
C	269m NW	Unspecified Works	1979	1891480
C	274m NW	Gravel Pit	1910	1912929
D	303m SE	Nursery	1930	1956984
D	303m SE	Nursery	1979	1921596
C	326m NW	Unspecified Pit	1876	1923968
C	340m NW	Unspecified Pit	1969	1944657
C	343m NW	Unspecified Pit	1940	1916756
3	373m NW	Gravel Pits	1910	1911202
4	379m E	Nursery	1950	1939944
E	422m NW	Pumping Station	1910	1923938
E	424m NW	Pumping Station	1940	1923398
E	425m NW	Pumping Station	1979	1952500
E	428m NW	Pumping Station	1896	1966054
G	470m W	Old Gravel Pit	1896	1882100
G	470m W	Unspecified Pit	1910	1906418
E	471m NW	Unspecified Tank	1969	1894225
E	476m NW	Unspecified Tank	1940	1894223
H	492m E	Nurseries	1990	1984389
H	492m E	Nurseries	1979	1962053

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	9

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
D	420m SE	Tanks	1975	316949
D	421m SE	Tanks	-	316573
D	421m SE	Tanks	-	316575
D	434m SE	Tanks	1975	230781
D	436m SE	Tanks	-	316574
D	436m SE	Tanks	1994	230781
E	478m NW	Unspecified Tank	1974	328923
E	481m NW	Unspecified Tank	1939	328923
E	492m NW	Tanks	1939	316942

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	4

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
C	288m NW	Electricity Substation	1974	223919
C	288m NW	Electricity Substation	1994	223919
F	449m NW	Electricity Substation	1994	214442
F	450m NW	Electricity Substation	1974	214442

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

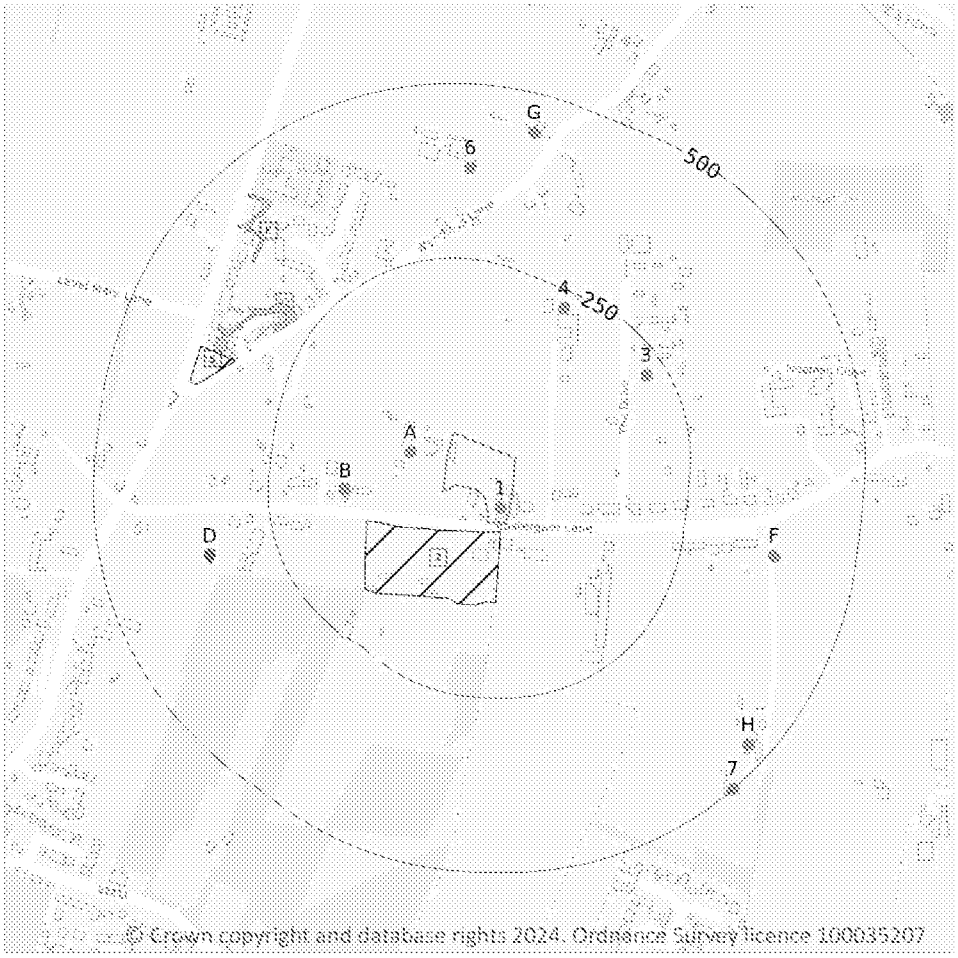
2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	2

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

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Details		
2	13m S	Site Address: Eastergate Lane, Eastergate, Sussex Licence Holder Address: -	Waste Licence: Yes Site Reference: 27-153, WD27/099 Waste Type: Inert, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: - Licence Holder: - First Recorded: 31/12/1949 Last Recorded: 31/12/1963
5	330m NW	Site Address: Wandley's Lane, Eastergate, Sussex Licence Holder Address: -	Waste Licence: Yes Site Reference: WD27/100, WO13/5/28 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 14/03/1979 Licence Surrender: 13/03/1981	Operator: - Licence Holder: Eastergate Parish Council First Recorded: 14/03/1979 Last Recorded: 13/03/1981

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

3.5 Historical waste sites

Records within 500m	4

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

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Address	Further Details	Date
C	278m NW	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1912
C	278m NW	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1912
E	376m NW	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1912
E	376m NW	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1912

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

3.6 Licensed waste sites

Records within 500m	2

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

Features are displayed on the Waste and landfill map on page 23 >

ID	Location	Details		
D	347m W	Site Name: Sussex Recovery Site Address: Sussex Recovery, Fontwell Avenue, Eastergate, West Sussex, PO20 6RU Correspondence Address: Sussex Recovery, Fontwell Avenue, Eastergate, West Sussex, PO20 6RU	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAR001 EPR reference: - Operator: Parker David Michael Waste Management licence No. 19748 Annual Tonnage: 4000	Issue Date: 31/03/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
D	347m W	Site Name: S R C Recycling Ltd Site Address: Sussex Recovery, Fontwell Avenue, Eastergate, West Sussex, PO20 6RU Correspondence Address: Fontwell Avenue, Eastergate, Chichester, West Sussex, PO20 3RU	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SRC001 EPR reference: - Operator: S R C Recycling Ltd Waste Management licence No: 19748 Annual Tonnage: 4000	Issue Date: 31/03/1994 Effective Date: 16/10/2006 Modified: 01/01/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred

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

3.7 Waste exemptions

Records within 500m	54

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 23 >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	**On site**	**Eastmere Stables, Eastergate Lane, Eastergate, Chichester, Po20 3sj**	**WEX036999**	**Using waste exemption**	**Not on a farm**	**Use of waste in construction**
A	53m W	Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX406276	Using waste exemption	Not on a farm	Use of waste in construction
A	53m W	Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX278584	Using waste exemption	Not on a farm	Use of waste in construction
B	140m W	Swallowfield Eastergate Lane Chichester West Sussex Po20 3sj	EPR/AH0872WF/A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
B	140m W	Swallowfield Eastergate Lane Chichester West Sussex Po20 3sj	EPR/AH0872WF/A001	Treating waste exemption	Agricultural waste only	Treatment of waste in a biobed or biofilter
B	140m W	Swallowfield Eastergate Lane Chichester West Sussex Po20 3sj	EPR/AH0872WF/A001	Using waste exemption	Agricultural waste only	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
B	140m W	Swallowfield Eastergate Lane Chichester West Sussex Po20 3sj	EPR/AH0872WF/A001	Treating waste exemption	Agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	142m W	Swallowfield, Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX033840	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	142m W	Swallowfield, Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX033840	Disposing of waste exemption	On a farm	Burning waste in the open
B	142m W	Swallowfield, Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX033840	Treating waste exemption	On a farm	Treatment of waste in a biobed or biofilter
B	142m W	Swallowfield, Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX033840	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
3	220m NE	-	WEX266666	Using waste exemption	Not on a farm	Use of waste in construction
4	224m NE	Longreach, Eastergate Lane, Eastergate, Chichester, Po20 3sj	WEX284816	Using waste exemption	Not on a farm	Use of waste in construction
6	380m N	Wanley House Wandleys Lane Chichester West Sussex Po20 3se	EPR/RE5082WC/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Disposing of waste exemption	Agricultural waste only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Disposing of waste exemption	Agricultural waste only	Disposal by incineration
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Treating waste exemption	Agricultural waste only	Screening and blending of waste
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Spreading waste on agricultural land to confer benefit

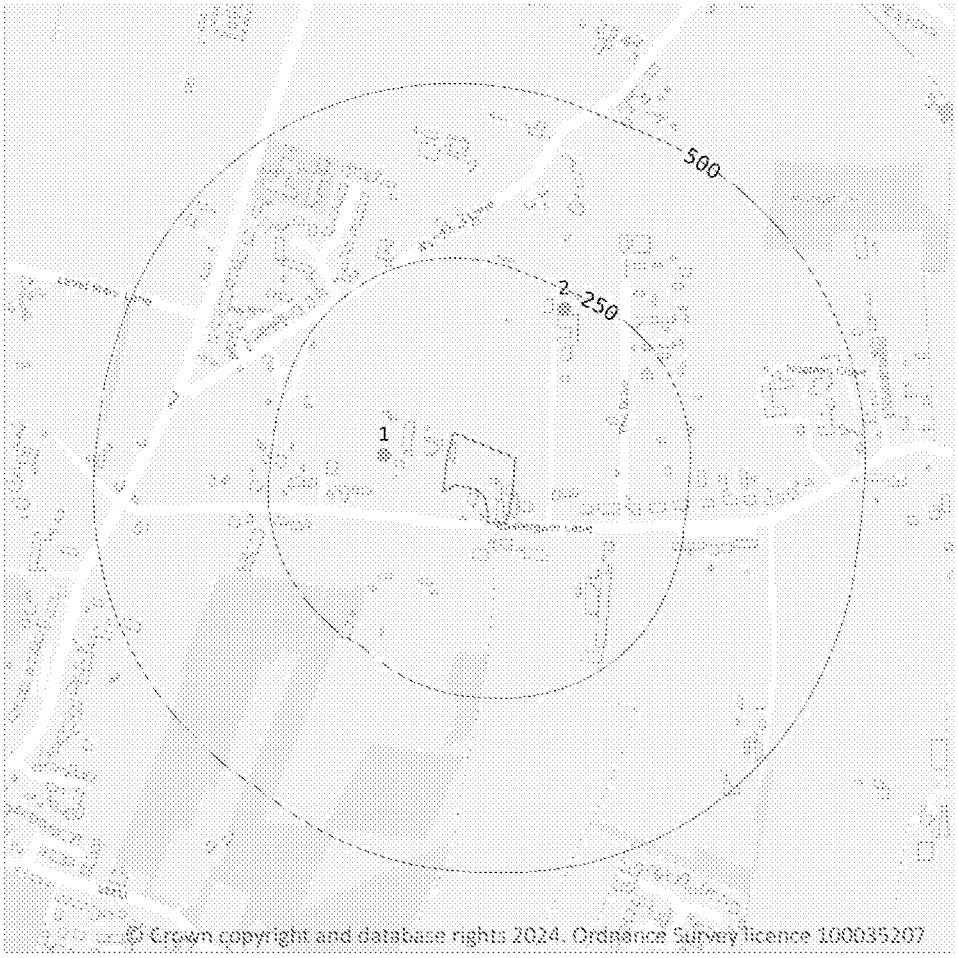
ID	Location	Site	Reference	Category	Sub-Category	Description
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Use of mulch
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Disposing of waste exemption	Agricultural waste only	Deposit of waste from dredging of inland waters
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Disposing of waste exemption	Agricultural waste only	Deposit of waste from a portable sanitary convenience
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Treating waste exemption	Agricultural waste only	Aerobic composting and associated prior treatment
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Use of waste in construction
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Spreading of plant matter to confer benefit
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Incorporation of ash into soil
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Use of baled end-of-life tyres in construction
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Use of waste derived biodiesel as fuel
F	382m E	Stoneyfield Nursery Eastergate Lane Chichester West Sussex Po20 3sl	EPR/PE5089MN/A001	Using waste exemption	Agricultural waste only	Use of waste for a specified purpose
G	444m N	, Wandleys Lane Chichester West Sussex Po20 3se	EPR/IE5857ZX/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
G	444m N	, Wandleys Lane Chichester West Sussex Po20 3se	EPR/XE5750FK/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX322469	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX322469	Disposing of waste exemption	On a farm	Burning waste in the open
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX322469	Using waste exemption	On a farm	Use of mulch
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Use of waste in construction
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Disposing of waste exemption	Not on a farm	Deposit of waste from a portable sanitary convenience
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Treating waste exemption	Not on a farm	Aerobic composting and associated prior treatment
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Incorporation of ash into soil
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Use of baled end-of-life tyres in construction
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Use of waste derived biodiesel as fuel
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Use of waste for a specified purpose

ID	Location	Site	Reference	Category	Sub-Category	Description
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX194117	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX194117	Disposing of waste exemption	On a farm	Burning waste in the open
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX194117	Using waste exemption	On a farm	Use of mulch
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Spreading waste on agricultural land to confer benefit
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Using waste exemption	Not on a farm	Use of mulch
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Disposing of waste exemption	Not on a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Disposing of waste exemption	Not on a farm	Disposal by incineration
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Disposing of waste exemption	Not on a farm	Burning waste in the open
H	469m SE	Eastergate Lane, Eastergate, Chichester, Po20 3sl	WEX034055	Treating waste exemption	Not on a farm	Screening and blending of waste
7	500m SE	-	WEX265299	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

4.1 Recent industrial land uses

Records within 250m	2

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 31 >

ID	Location	Company	Address	Activity	Category
1	90m W	J B S	Eastergate Lane, Eastergate, Chichester, West Sussex, PO20 3SJ	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products
2	224m NE	Autoaircon	Longreach, Eastergate Lane, Eastergate, West Sussex, PO20 3SJ	Vehicle Repair, Testing and Servicing	Repair and Servicing

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	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.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	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.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	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.

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer

Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 36 >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	134m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	333m NW	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	4

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 38 >

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	134m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

ID	Location	Designation	Description
3	208m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	215m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability

Site Outline

Search buffers in metres (m)

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

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

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	2

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

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

Features are displayed on the Groundwater vulnerability map on page 40 >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed**
2	48m S	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer; Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	1

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	**Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.**	**3.0%**

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

5.5 Groundwater vulnerability- local information

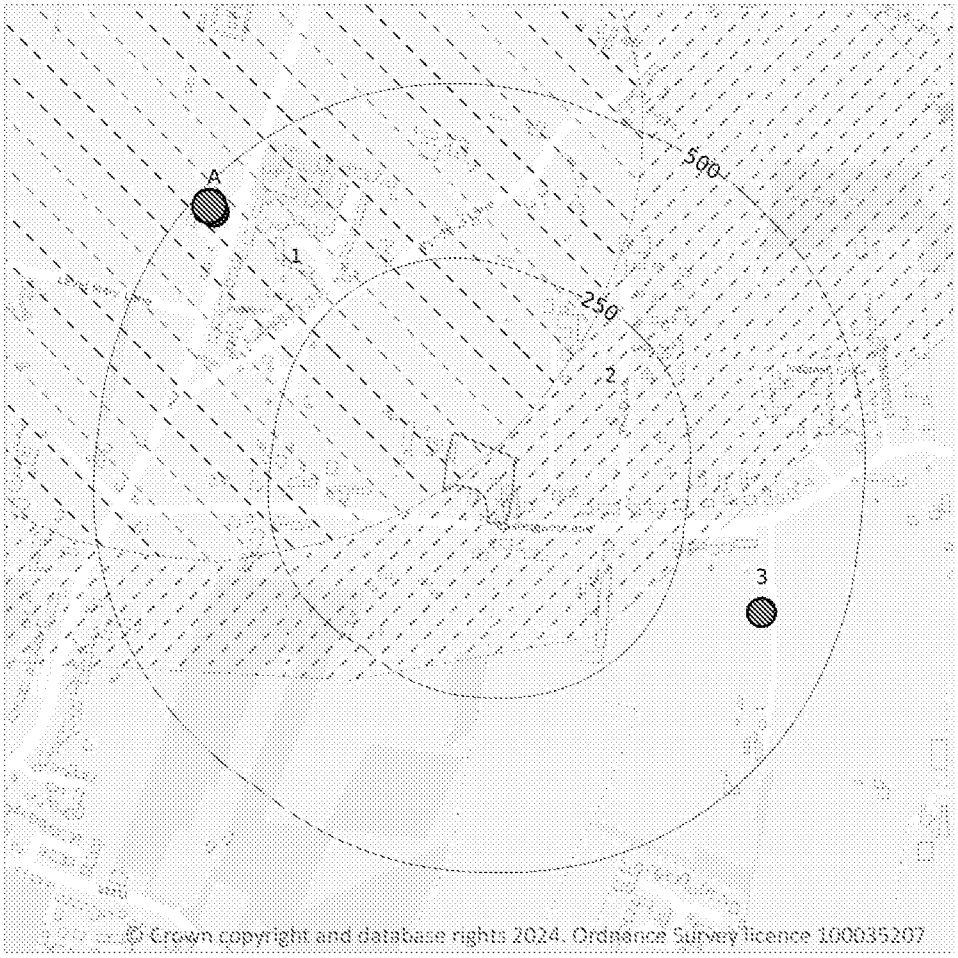
Records on site	1

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

ID	Summary	Additional information
A	**Increased vulnerability of aquifers due to rapid flow pathways**	**Local studies confirm presence of swallow holes in the area**

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	8

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 43 >

ID	Location	Details	
3	387m SE	Status: Active Licence No: 10/41/542211 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: POINT A AT STONEYFIELDS NURSERIES, EASTERGATE LANE,WALBERTON Data Type: Point Name: Fuente Easting: 495590 Northing: 105920	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 102.2 Original Application No: 169/0229 Original Start Date: 03/01/1978 Expiry Date: - Issue No: 101 Version Start Date: 31/03/2016 Version End Date: -
A	466m NW	Status: Active Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT A EASTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 494807 Northing: 106492	Annual Volume (m^3): 10357800 Max Daily Volume (m^3): 41000 Original Application No: NPS/WR/020403 Original Start Date: 31/03/1974 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2016 Version End Date: -
A	477m NW	Status: Historical Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT A EASTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 494800 Northing: 106500	Annual Volume (m^3): 12857800 Max Daily Volume (m^3): 41000 Original Application No: - Original Start Date: 31/03/1974 Expiry Date: - Issue No: 102 Version Start Date: 10/06/2009 Version End Date: -
-	893m W	Status: Historical Licence No: 10/41/542105 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: POINT A AT EASTERGATE Data Type: Point Name: Robinson Easting: 494260 Northing: 105910	Annual Volume (m^3): 10183 Max Daily Volume (m^3): 327.3 Original Application No: - Original Start Date: 19/09/1979 Expiry Date: - Issue No: 100 Version Start Date: 31/03/2016 Version End Date: -
-	1371m NW	Status: Active Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT B WESTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 493956 Northing: 106650	Annual Volume (m^3): 10357800 Max Daily Volume (m^3): 41000 Original Application No: NPS/WR/020403 Original Start Date: 31/03/1974 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2016 Version End Date: -

ID	Location	Details	
-	1444m NW	Status: Historical Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT B WESTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 493900 Northing: 106900	Annual Volume (m^3): 12857800 Max Daily Volume (m^3): 41000 Original Application No: - Original Start Date: 31/03/1974 Expiry Date: - Issue No: 102 Version Start Date: 10/06/2009 Version End Date: -
-	1756m SE	Status: Active Licence No: 10/41/542209 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: AT LAKE LANE,BARNHAM Data Type: Point Name: Toddington Nurseries Limited Easting: 496740 Northing: 105160	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 681.9 Original Application No: NPS/WR/013602 Original Start Date: 11/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2013 Version End Date: -
-	1905m NE	Status: Historical Licence No: 10/41/542212 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: POINT A AT WOODLANDS FARM, SUTTON Data Type: Point Name: Wyatt & Son Easting: 496840 Northing: 107170	Annual Volume (m^3): 22730 Max Daily Volume (m^3): 2909.4 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	2

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 43 >

ID	Location	Details	
-	1911m SW	Status: Historical Licence No: 10/41/542102 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: BETWEEN POINTS A&B AT LIDSEY,BERSTED Data Type: Line Name: Ashmarden Ltd Easting: 494380 Northing: 104320	Annual Volume (m^3): 19639 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: 20/05/1966 Expiry Date: 31/03/2016 Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -
-	1928m SW	Status: Active Licence No: 10/41/542102/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: BETWEEN POINTS A&B AT LIDSEY,BERSTED Data Type: Line Name: Ashmarden Limited Easting: 494358 Northing: 104312	Annual Volume (m^3): 24548 Max Daily Volume (m^3): 909 Original Application No: NPS/WR/030681 Original Start Date: 01/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 13/12/2018 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	4

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

Features are displayed on the Abstractions and Source Protection Zones map on page 43 >

ID	Location	Details	
A	466m NW	Status: Active Licence No: 10/41/542103 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT A EASTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 494807 Northing: 106492	Annual Volume (m^3): 10357800 Max Daily Volume (m^3): 41000 Original Application No: NPS/WR/020403 Original Start Date: 31/03/1974 Expiry Date: - Issue No: 105 Version Start Date: 01/04/2016 Version End Date: -

ID	Location	Details	
A	477m NW	Status: Historical Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT A EASTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 494800 Northing: 106500	Annual Volume (m^3): 12857800 Max Daily Volume (m^3): 41000 Original Application No: - Original Start Date: 31/03/1974 Expiry Date: - Issue No: 102 Version Start Date: 10/06/2009 Version End Date: -
-	1371m NW	Status: Active Licence No: 10/41/542103 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT B WESTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 493956 Northing: 106850	Annual Volume (m^3): 10357800 Max Daily Volume (m^3): 41000 Original Application No: NPS/WR/020403 Original Start Date: 31/03/1974 Expiry Date: - Issue No: 103 Version Start Date: 01/04/2016 Version End Date: -
-	1444m NW	Status: Historical Licence No: 10/41/542108 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: POINT B WESTERGATE PUMPING STATION Data Type: Point Name: Portsmouth Water Ltd Easting: 493900 Northing: 106900	Annual Volume (m^3): 12857800 Max Daily Volume (m^3): 41000 Original Application No: - Original Start Date: 31/03/1974 Expiry Date: - Issue No: 102 Version Start Date: 10/06/2009 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	2

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

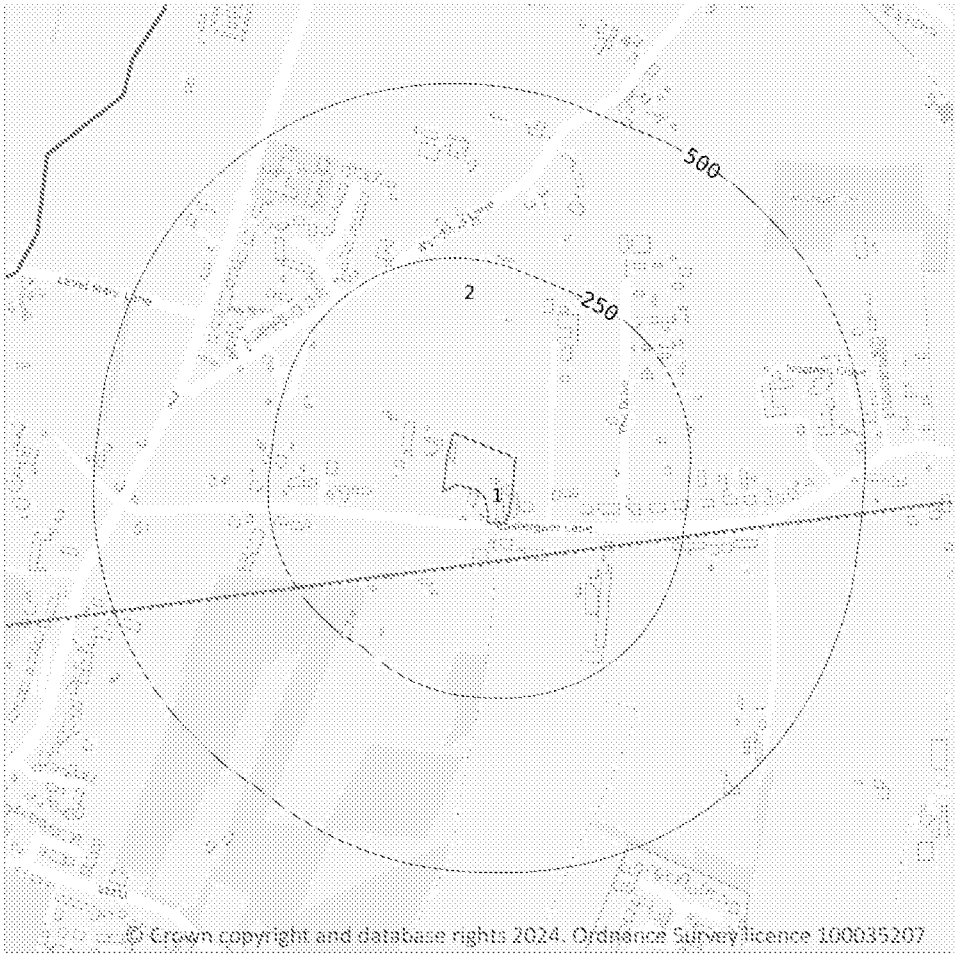
Features are displayed on the Abstractions and Source Protection Zones map on page 43 >

[redacted]

ID	Location	Type	Description
1	On site	1c	Inner catchment within confined aquifer
2	On site	2c	Outer catchment within confined aquifer

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	0

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

This data is sourced from the Ordnance Survey

6.2 Surface water features

Records within 250m	0

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

[redacted]

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 49 >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Lidsey Rife**	**GB107041012010**	**Western Streams**	**Arun and Western Streams**

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

6.4 WFD Surface water bodies

Records identified	1

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

Features are displayed on the Hydrology map on page 49 >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	977m SW	River	Lidsey Rife	GB107041012010 ↗	Moderate	Fail	Moderate	2019

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 49 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	On site	Sussex Lambeth Group	GB40701G505100 ↗	Good	Good	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.

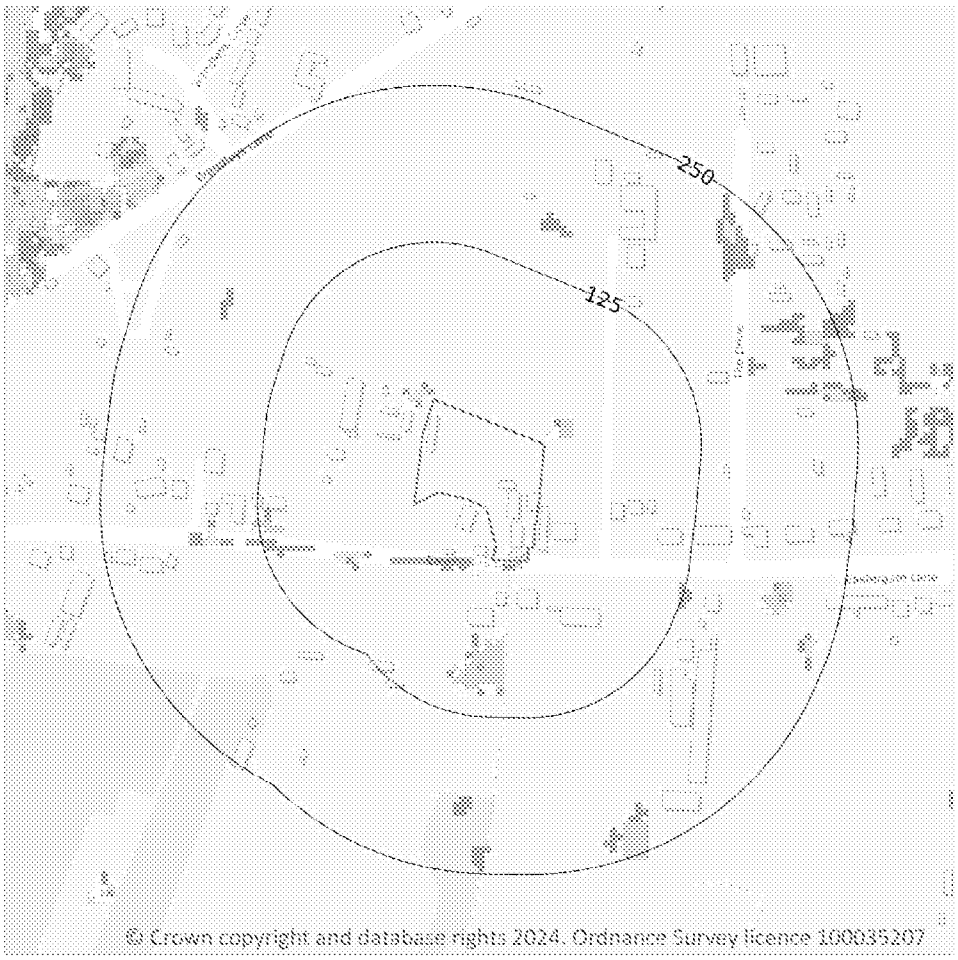
7.7 Flood Zone 3

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



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	1 in 100 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 55 >

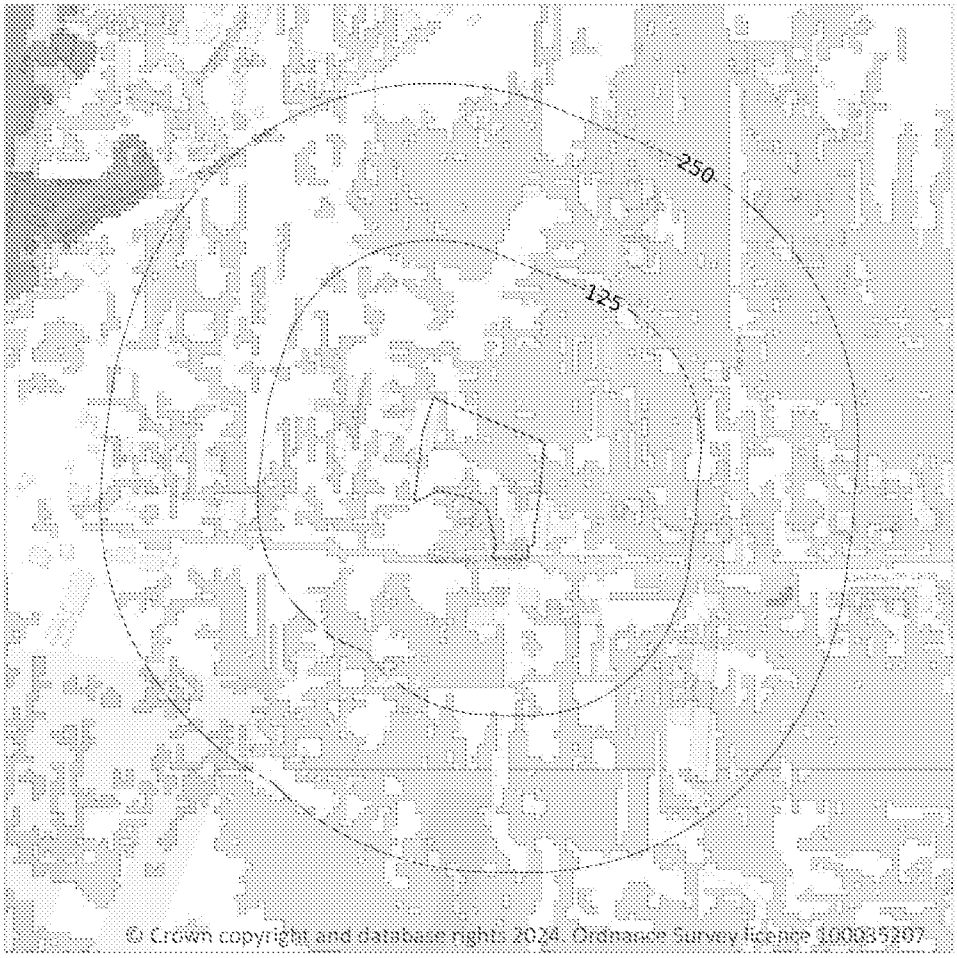
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

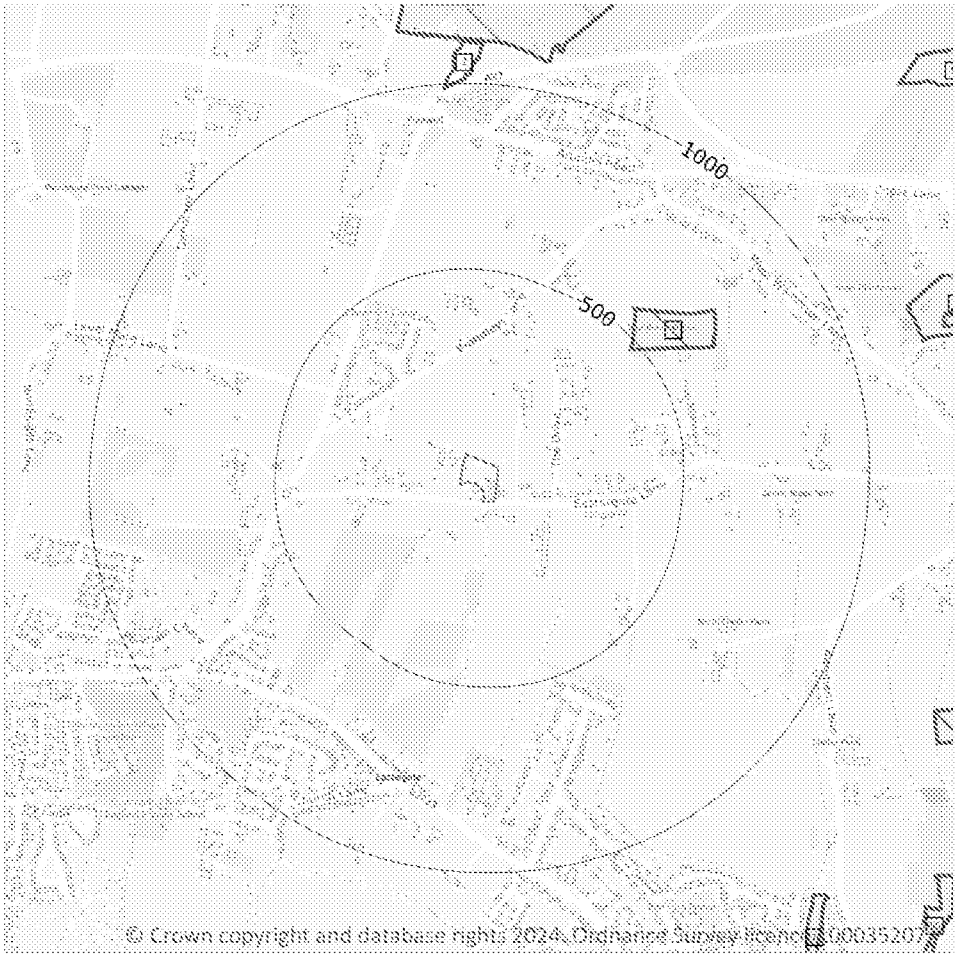
Highest risk on site	**Moderate-High**
Highest risk within 50m	**Moderate-High**

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

Features are displayed on the Groundwater flooding map on page 57 >

This data is sourced from Ambiental Risk Analysis.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	17

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

Features are displayed on the Environmental designations map on page 58 >

ID	Location	Name	Woodland Type
1	479m NE	Wanley's Copse	Ancient & Semi-Natural Woodland
2	989m N	Unknown	Ancient & Semi-Natural Woodland
3	1082m N	Slindon Wood	Ancient & Semi-Natural Woodland
4	1184m E	Potwell Copse	Ancient & Semi-Natural Woodland
-	1215m N	Slindon Wood	Ancient Replanted Woodland
A	1316m SE	Unknown	Ancient & Semi-Natural Woodland
-	1363m N	Slindon Wood & Common	Ancient & Semi-Natural Woodland
7	1367m SE	Unknown	Ancient & Semi-Natural Woodland
-	1394m NE	Potwell Copse	Ancient & Semi-Natural Woodland
-	1447m SE	Unknown	Ancient & Semi-Natural Woodland
9	1497m NE	Unknown	Ancient & Semi-Natural Woodland
-	1546m NE	Butcher's Copse	Ancient & Semi-Natural Woodland
10	1561m SE	Unknown	Ancient & Semi-Natural Woodland
-	1707m NE	Butcher's Copse	Ancient Replanted Woodland
-	1750m N	Slindon Wood	Ancient & Semi-Natural Woodland

ID	Location	Name	Woodland Type
-	1781m NE	Butcher's Copse	Ancient & Semi-Natural Woodland
-	1825m N	Slindon Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	7

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

Location	Name	Type	NVZ ID	Status
On site	**Aldingbourne Rife NVZ**	**Surface Water**	**517**	**Existing**
66m S	Aldingbourne Rife NVZ	Surface Water	517	Existing
208m NW	Sussex Chalk	Groundwater	56	Existing
1042m W	Aldingbourne Rife NVZ	Surface Water	517	Existing
1048m W	Aldingbourne Rife NVZ	Surface Water	517	Existing
1050m W	Sussex Chalk	Groundwater	56	Existing
1207m W	Sussex Chalk	Groundwater	56	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 64 >

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.** **Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

This data is sourced from Natural England and Natural Resources Wales

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

[redacted]

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	3

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 68 >

ID	Location	Classification	Description
1	On site	Grade 1	Excellent quality agricultural land. Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

ID	Location	Classification	Description
2	5m E	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	51m NE	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

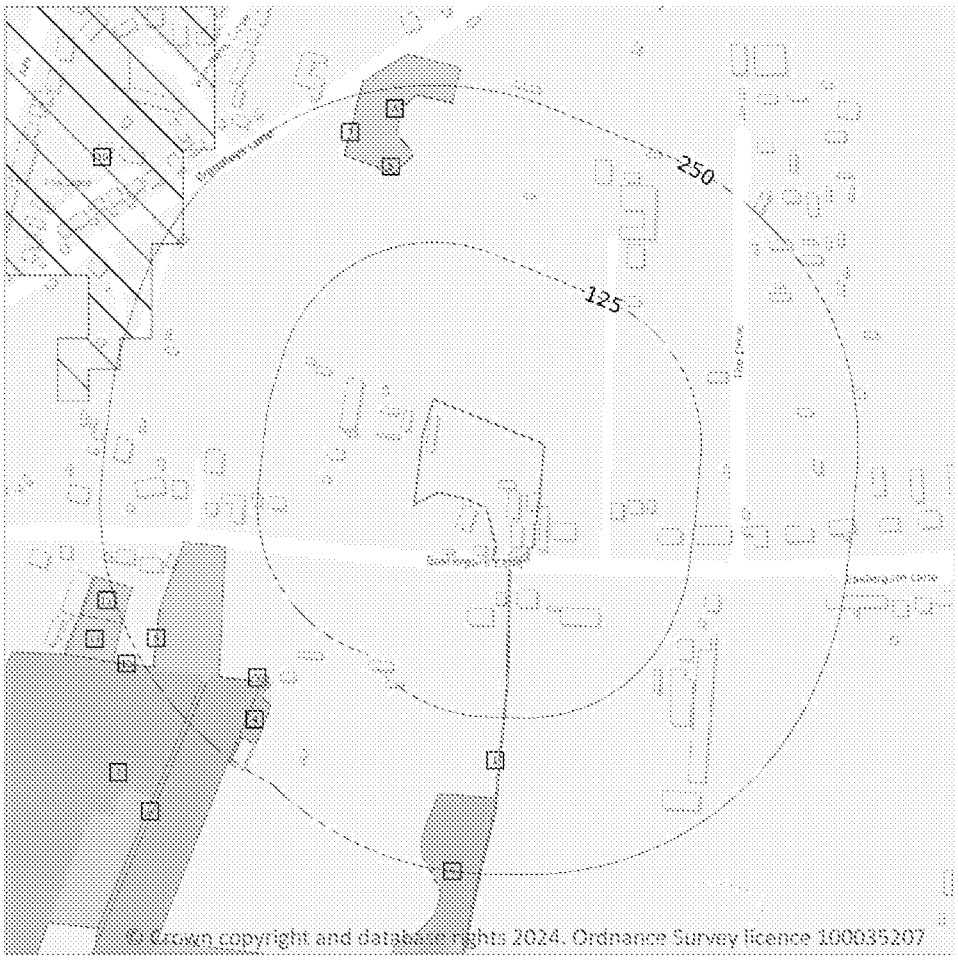
12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

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

13.1 Priority Habitat Inventory

Records within 250m	15

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 71 >

ID	Location	Main Habitat	Other habitats
1	8m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	154m W	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
3	178m SW	Traditional orchard	Main habitat: TORCH (INV > 50%); DWOOD (INV > 50%)
4	181m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

[redacted]

ID	Location	Main Habitat	Other habitats
5	182m N	Traditional orchard	Main habitat. TORCH (INV > 50%)
A	182m N	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
6	189m S	Deciduous woodland	Main habitat. DWOOD (INV > 50%)
7	201m N	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
A	204m N	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
8	219m W	Traditional orchard	Main habitat: TORCH (INV > 50%)
9	219m SW	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
A	223m N	Traditional orchard	Main habitat: TORCH (INV > 50%)
11	234m W	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
12	245m SW	Traditional orchard	Overruled by Traditional Orchards HAP inventory dataset
13	250m W	No main habitat but additional habitats present	Additional. TORCH (INV 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	1

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.

Features are displayed on the Habitat designations map on page 71 >

ID	Location	Type	Habitat
10	229m W	Network Enhancement Zone 2	Not specified

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.

[redacted]

13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability

Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m 2

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

Features are displayed on the Geology 1:10,000 scale - Availability map on page 74 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SU90NE
2	134m W	Full	Full	Full	No coverage	SU90NW

This data is sourced from the British Geological Survey.

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

Site Outline

Search buffers in metres (m)

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

14.2 Artificial and made ground (10k)

Records within 500m	2

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

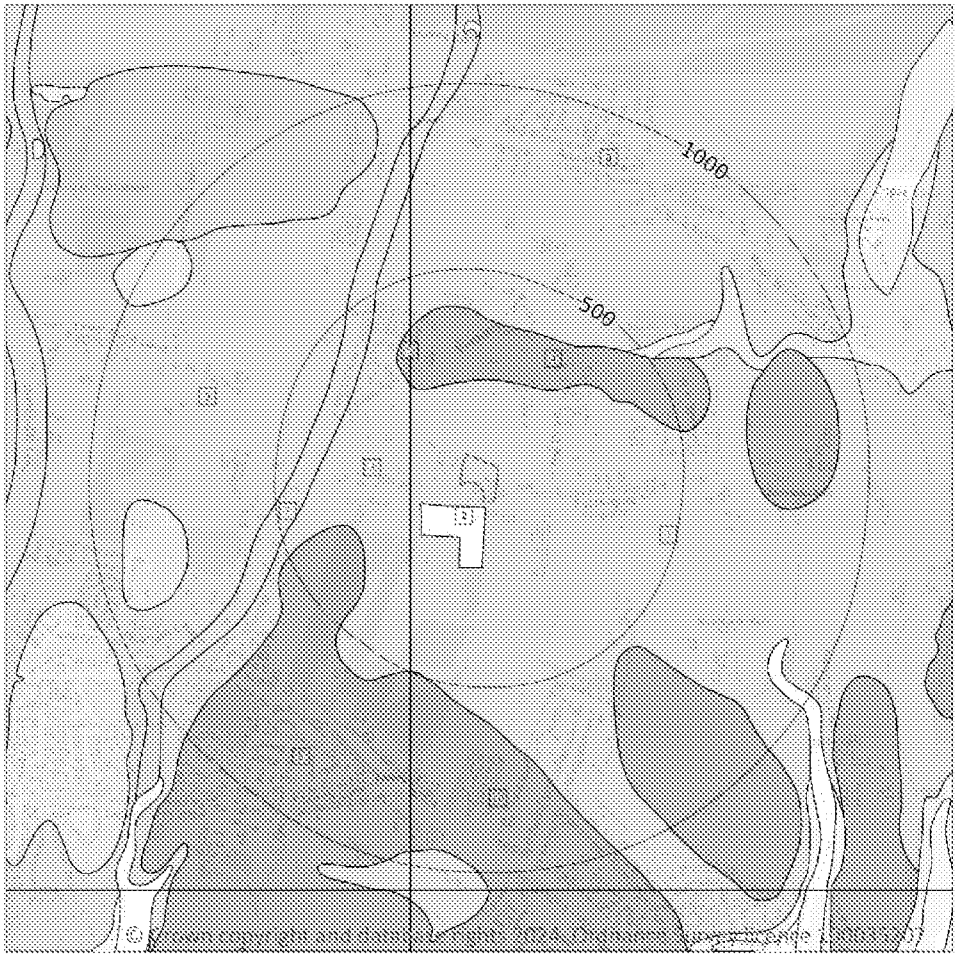
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on page 75 >

ID	Location	LEX Code	Description	Rock description
1	15m S	WGR-VOID	Worked Ground (Undivided)	Void
2	465m W	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.

[redacted]

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	10

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 76 >

ID	Location	LEX Code	Description	Rock description
1	**On site**	**HEAD-XVSZC**	**Head - Gravel, Sand, Silt And Clay**	**Gravel, Sand, Silt And Clay**
2	15m S	SUPNM-UKNOWN	Superficial Theme Not Mapped (for Digital Map Use Only) - Unknown/unclassified Entry	Unknown/unclassified Entry

ID	Location	LEX Code	Description	Rock description
3	134m W	HEAD-XVSZC	Head - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
4	195m N	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt
5	239m NW	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt
6	306m SW	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt
7	345m NW	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	361m N	HEAD-XVSZC	Head - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
9	410m NW	HEAD-XVSZC	Head - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
10	495m S	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m 4

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 78 >

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLSISA**	**London Clay Formation - Clay, Silt And Sand**	**Eocene Epoch**
2	134m W	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch
3	217m NW	LMBE-CLAY	Lambeth Group - Clay	Paleocene Epoch
4	225m NW	LMBE-CLAY	Lambeth Group - Clay	Paleocene Epoch

[redacted]

This data is sourced from the British Geological Survey.

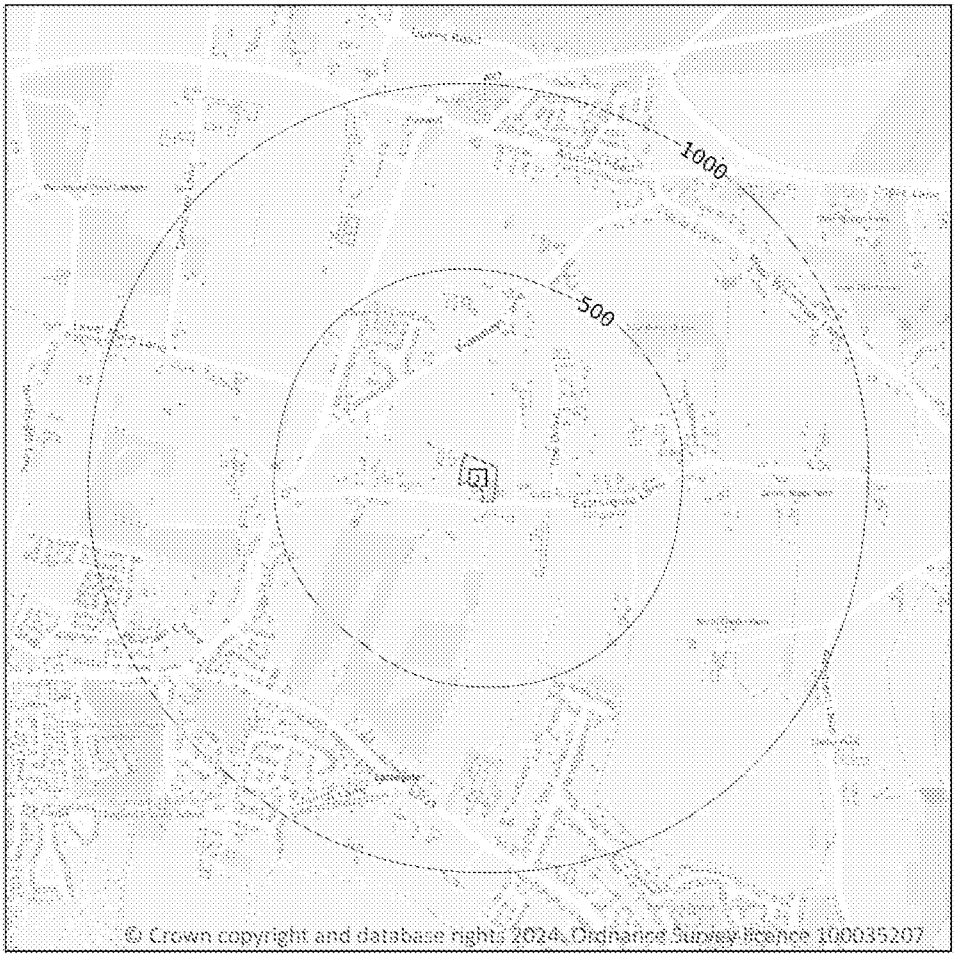
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 80 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW317_332_chichester_and_bognor_v4

This data is sourced from the British Geological Survey.

[redacted]

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	5

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 82 >

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD-XVSZC	HEAD	GRAVEL, SAND, SILT AND CLAY
2	192m N	RTDU-XSZC	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND, SILT AND CLAY
3	293m SW	RTDU-XSZC	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND, SILT AND CLAY

ID	Location	LEX Code	Description	Rock description
4	333m NW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	401m NW	HEAD-XVSZC	HEAD	GRAVEL, SAND, SILT AND CLAY

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

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

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

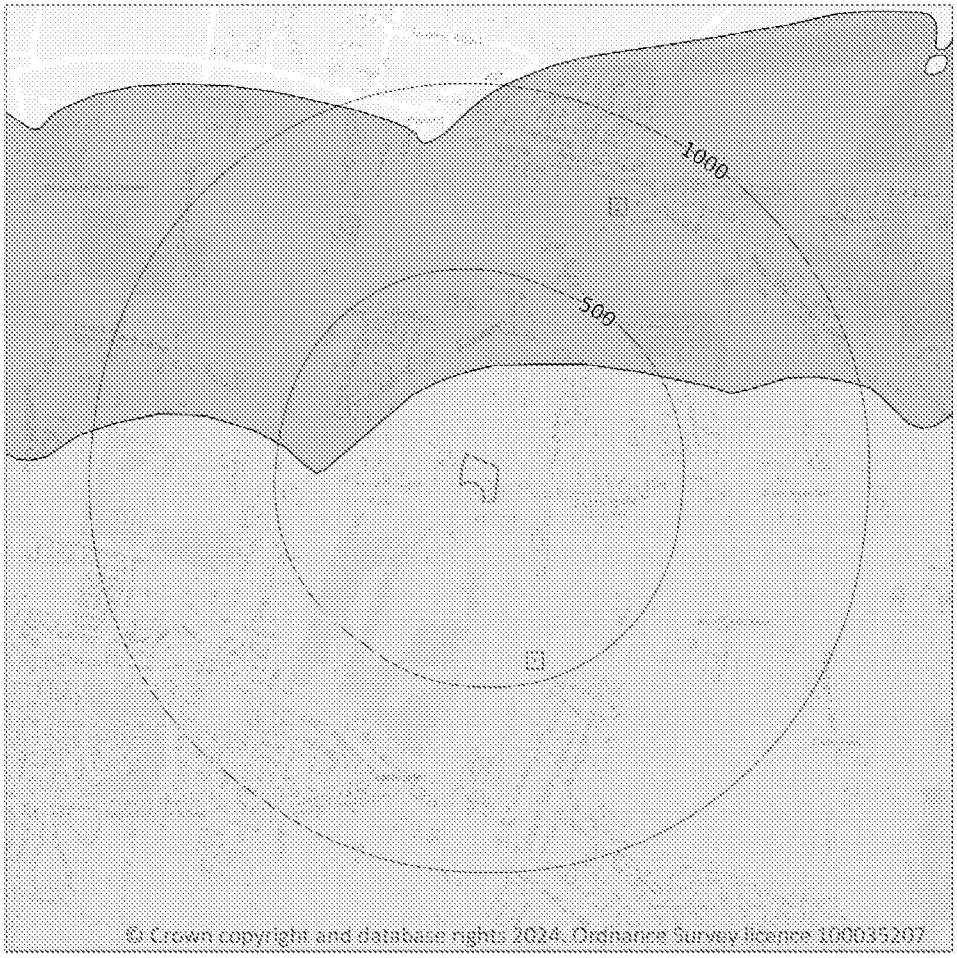
15.7 Landslip permeability (50k)

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	2

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 84 >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN
2	208m NW	LMBE-XCZS	LAMBETH GROUP - CLAY, SILT AND SAND	THANETIAN

This data is sourced from the British Geological Survey.

[redacted]

15.9 Bedrock permeability (50k)

Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

[redacted]

16 Boreholes

Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m 1

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

Features are displayed on the Boreholes map on page 86 >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	248m S	495230 105800	WEST BARNHAM FARM	6.09	N	434119 ↗

This data is sourced from the British Geological Survey.

[redacted]

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).

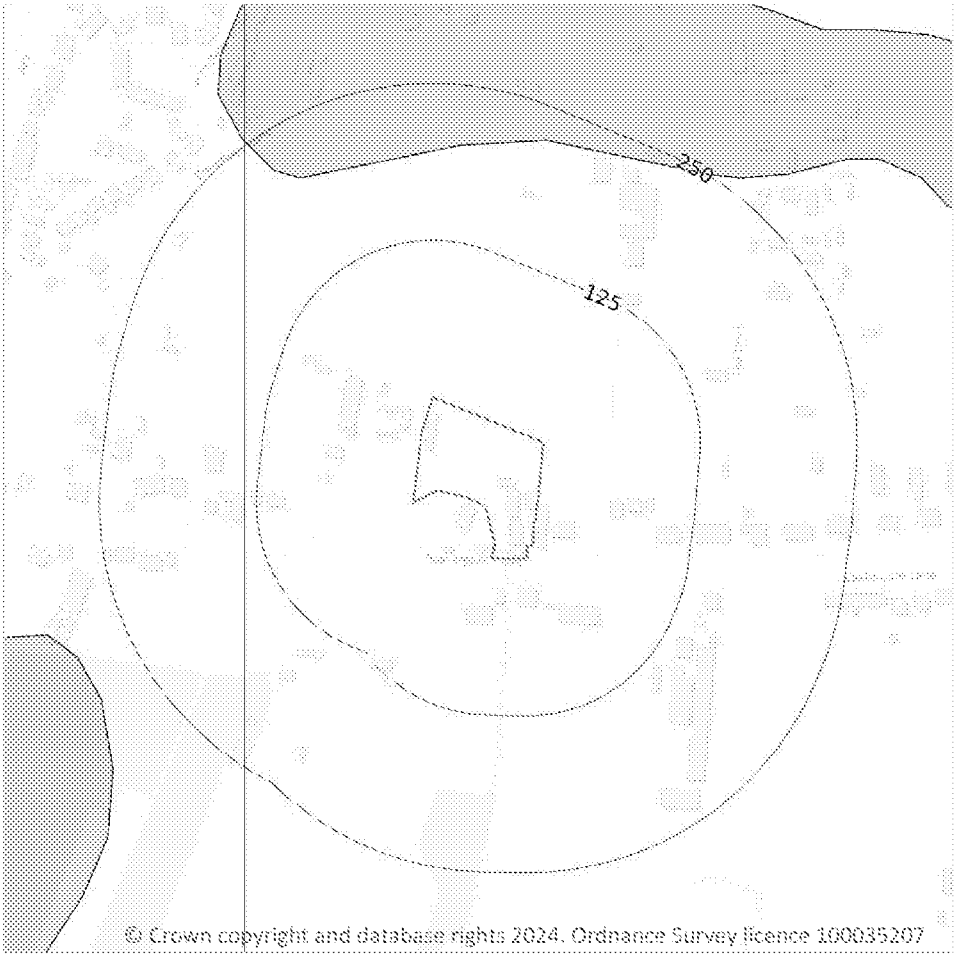
Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 87 >

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

This data is sourced from the British Geological Survey.

[redacted]

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	1

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

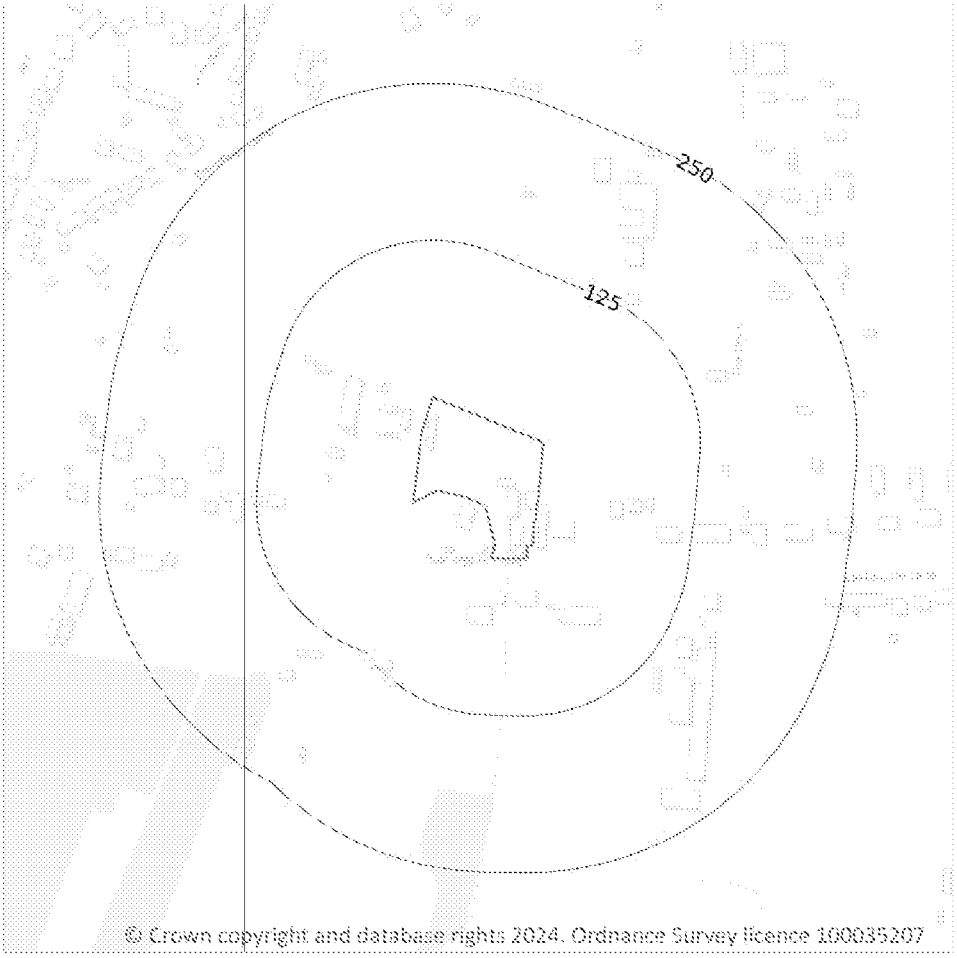
Features are displayed on the Natural ground subsidence - Running sands map on page 88 >

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

This data is sourced from the British Geological Survey.

[redacted]

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

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.

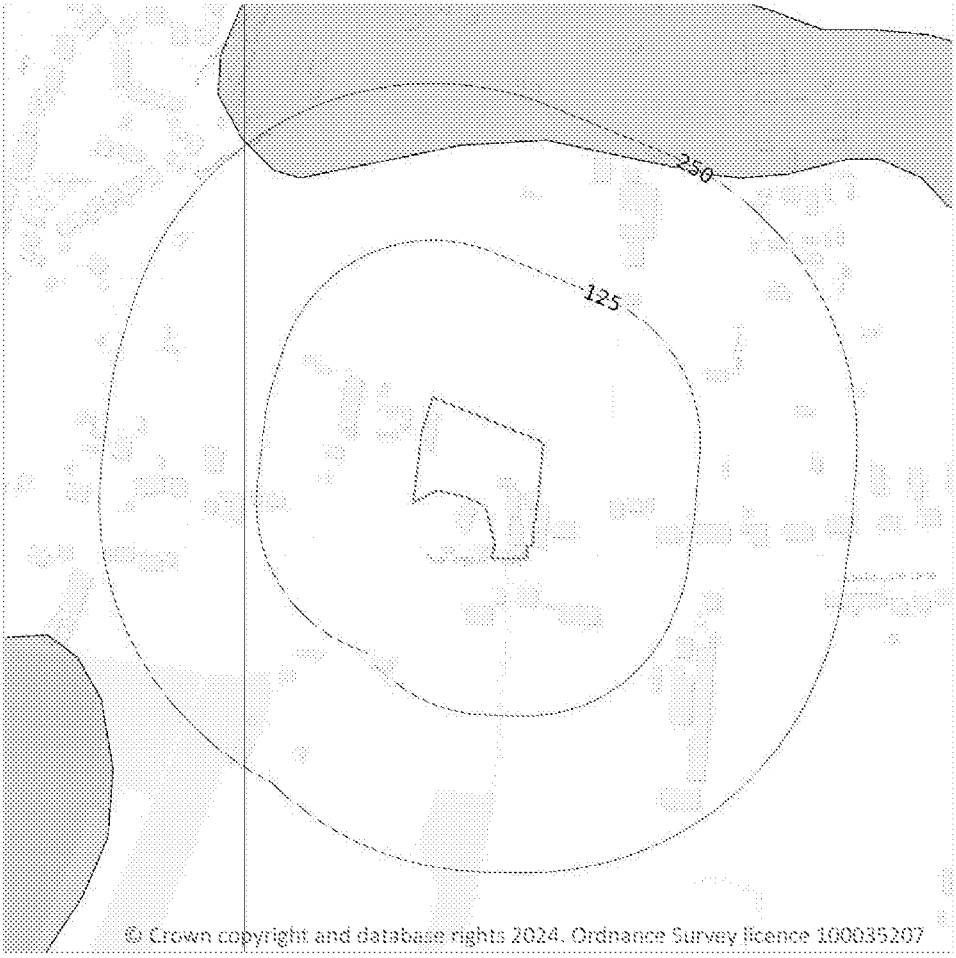
Features are displayed on the Natural ground subsidence - Compressible deposits map on page 89 >

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

This data is sourced from the British Geological Survey.

[redacted]

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.

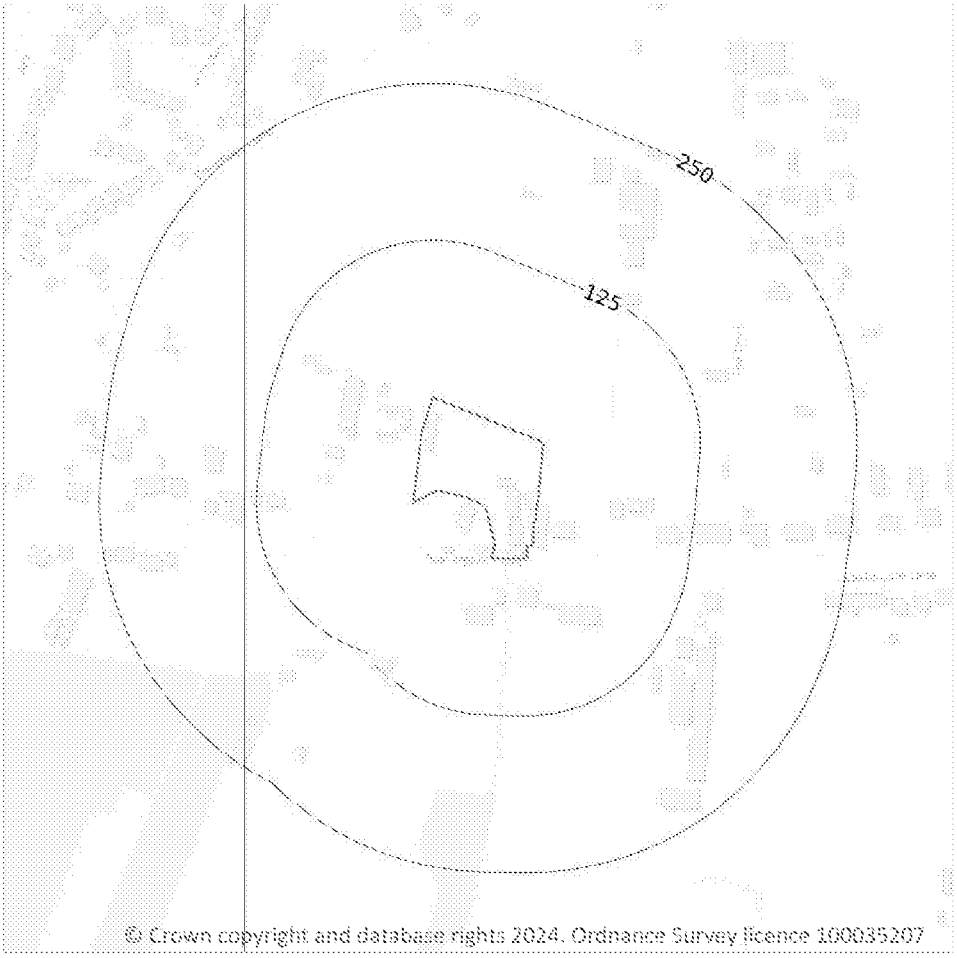
Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 90 >

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.

[redacted]

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

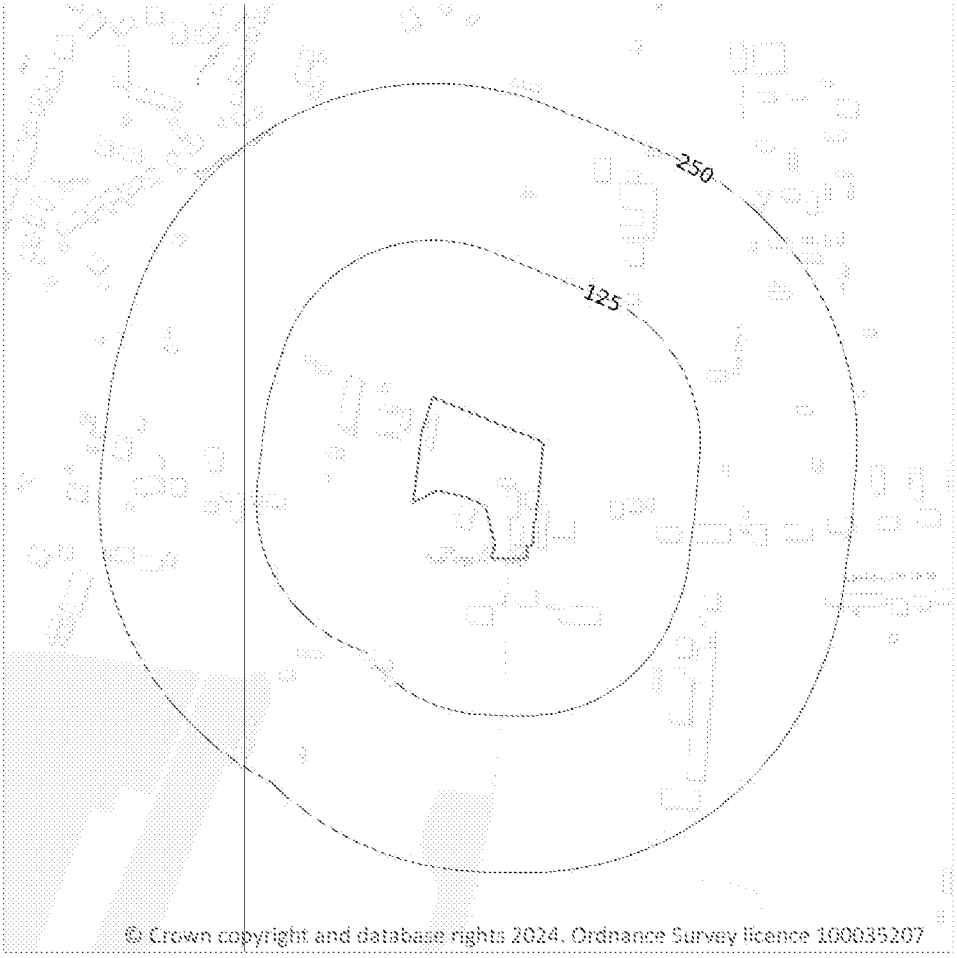
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on page 91 >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adj[redacted]dered.

This data is sourced from the Brit

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

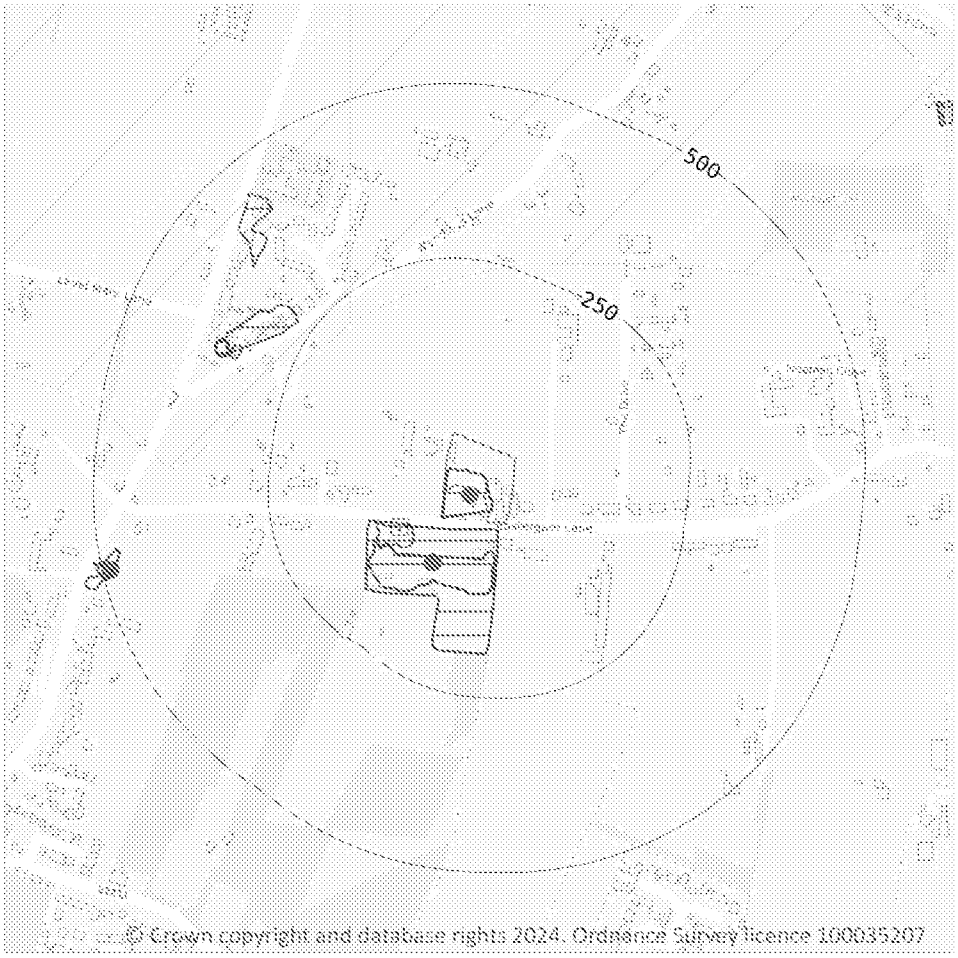
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 92 >

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	3

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 94 >

ID	Location	Details	Description
A	10m SW	Name: Northfields Farm Gravel Pit Address: Nyton, Aldingbourne, CHICHESTER, West Sussex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	96m SW	Name: Northfields Farm Gravel Pit Address: Nyton, Aldingbourne, CHICHESTER, West Sussex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	489m W	Name: Northfields Farm Gravel Pit Address: Nyton, Aldingbourne, CHICHESTER, West Sussex Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m **7**

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 94 >

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Unspecified Pit**	**1961**	**1:10560**
A	**On site**	**Unspecified Pit**	**1940**	**1:10560**
B	10m S	Unspecified Disused Pits	1900	1:10000
B	10m S	Unspecified Disused Pits	1979	1:10000
B	41m S	Unspecified Pit	1961	1:10560
B	41m S	Old Gravel Pits	1940	1:10560
1	66m SW	Sand Pit	1910	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	0

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

This is 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	2

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).

Features are displayed on the Mining and ground workings map on page 94 >

ID	Location	Name	Commodity	Class	Likelihood
2	208m NW	Not available	Chalk	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
3	215m NW	Not available	Chalk	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

[redacted]

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

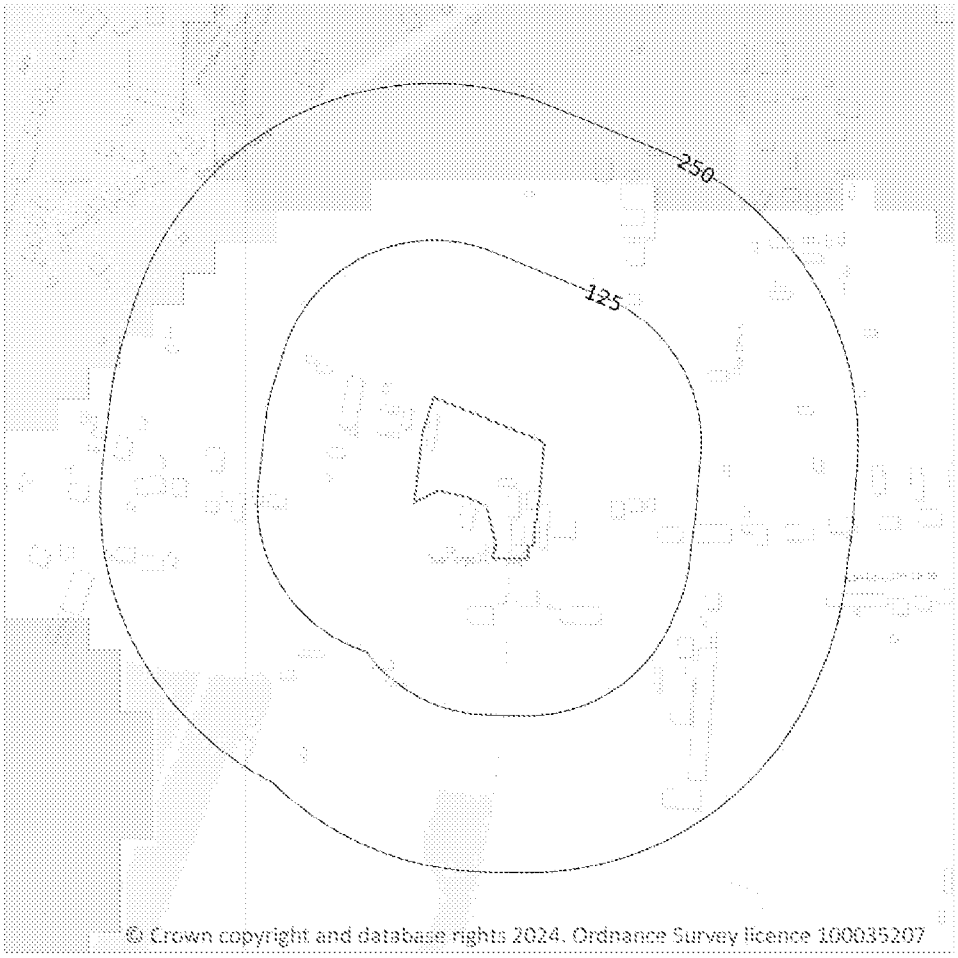
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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

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

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

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

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 102 >

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

[redacted]

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

[redacted]

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	2

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
48m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

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 km^2.

This data is sourced from the British Geological Survey.

[redacted]

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 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 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.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

[redacted]

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/ ↗.

[redacted]