

Land at Dalefield Way (West), Gravesend

Phase 1 Geo-Environmental Desktop Study

O'Halloran & O'Brien Ltd.

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1.0 Synopsis

A Phase 1 Geo-Environmental Assessment has been conducted into the past and present usage of the area of land at Dalefield Way (west), Gravesend. The purpose of the study was to conduct a visual appraisal of the site and its immediate surroundings and to research available data with reference to geotechnical or environmental constraints that may impinge upon the client's proposed development.

The study comprised of a walkover survey followed by examination of historic map records. In addition, searches were made of various databases held by the Environment Agency and others. The information obtained from these sources is summarised herein.

In summary, it is considered that previous activities on and around the site represent a low risk of significant or widespread contamination.

2.0 Site Description and Walk-over Survey.

The existing greenfield land where the site is to be developed is approximately 1.42 hectares in size. The site lies adjacent to the existing Dalefield Way Industrial Estate, which includes the offices, workshops and storage areas used by B&T plant hire, O'Halloran & O'Brien & Keady Construction.

The site is located in the Borough of Dartford.

The site is bordered by Dalefield Way to the south.

A walk-over survey was undertaken on 14th May 2025 to assess current use, surface conditions and visually inspect any available evidence of contamination such as asbestos debris, staining or waste drums, tanks etc.

For site walk over survey photographs, refer to Appendix C.

3.0 Historic map records

Extracts from historic Ordnance Survey maps are presented Appendix A and illustrate usage of the site and its surroundings from 1864 to the present day. These also show the approximate boundary of the site and the 250 m radius of interest for this assessment.

1864

The map shows the area of interest to be filled with flat fields and a few unnamed and narrow roads crossing through the fields, belonging to Westcourt Marshes. Just beyond 100m south of the site, there appears to be a series of buildings entitled West Court. It is not clear as to what the buildings were being used for. Immediately east of the site is another field called Great Clayne Lane Marshes. Within 500m north of the site, there is a railway called the "North Kent Line" running west to site, and a canal called "Thames and Medway Canal" running parallel to the railway. Within 750m north of the site, the River Thames can be identified running west to east.

1897

The map shows little to no change to the plot within 250m with the immediate site being unchanged.

1908-1909

The map shows little to no change to the plot within 250m with the immediate site being unchanged.

1932

The map shows new roads called "Shamrock Road", "Thistle Road", "Ingoldsby Road" and "Rose Avenue" located 250m west from the site. New terraced residential buildings are shown running along Shamrock Road and Thistle Road. There is also a new Sewage Works owned by Gravesend Corporation located northwest of the site 250m from the site. The map shows no change to the immediate plot.

1938

The map past 250m south of the site is not visible. The map shows no change to the immediate plot with its surrounding area being unchanged. At 250m west of the site, it appears that new terraced residential houses have been constructed along Ingoldsby Road. There also appears to be a new school near to those houses along Rose Avenue.

1946-1951

The map shows no change to the immediate plot. Just 100m south of the plot, it appears that the some of the fields close to West Court have been repurposed to Playing Fields and Sports Grounds. Beyond 500m south of the site, more terraced residential buildings have been constructed over the previous fields.

1955

The map shows no change to the immediate plot. Beyond 750m southwest of the plot, the area has heavily developed with a lot of newly constructed terraced residential houses and a new school.

1966-1970

The map shows little to no change to the plot with the immediate site being unchanged.

1981

The map shows no change to the immediate plot. At 500m southeast of the site, it appears that more terraced residential buildings have been constructed. Immediately west of the site, a new caravan site has opened. A new school has opened within 500m south of the site on the Playing Grounds previously mentioned. A new building called "National Sea Training College" has been constructed 500m north of the site, just north of the Thames & Medway Canal.

1989-1993

The map shows no change to the immediate plot. At 100m south of the site, new roads, including Damigos Road and Farley Road, and terraced residential buildings have been constructed in approximately half of the area where the playing fields were shown.

2001

The map shows little to no change to the plot with the immediate site being unchanged.

2010

The map shows little to no change to the immediate site. Immediately south of the site, half of the road that is known today as Dalefield Way has been constructed from the roundabout to the centre of the south of the site.

Present

A recent Aerial photograph of the proposed site which confirms the findings of the site walk-over in Section 2.0.

4.0 Development Proposals

The proposed development involves the change of use of existing greenfield land to open storage.

The site is located in Flood Zone 3, which has the highest risk of flooding, between 0.5 – 1%.

5.0 Database searches

The following information has been gleaned from database searches generally within a 500 m radius of the site (unless noted otherwise). All distances are approximate and measured from the borders of the site.

5.1 Authorisations, Incidents and Registers

5.1.1 Industrial Licenses and Authorisations

No records of the following have been found within 500 m of the centre of the site:

- Historical licensed industrial activities (IPC).
- Licensed industrial activities (Part A(1)).
- Pollutant release to surface waters (Red List).
- Pollutant release to public Sewer.
- List 1 Dangerous Substances.
- Pollution inventory substances.
- Pollution inventory waste transfers.
- Pollution inventory radioactive wastes.

2 No. Licensed industrial activities (Part A (2)/B) have been found at 439 & 454m from the site. This has no future impact on the future use of the land at Dalefield Way (West), Gravesend.

6 No. Licensed Discharges to controlled waters have been found between 374-459m from the site. This has no future impact on the future use of the land at Dalefield Way (West), Gravesend.

1 No. List 2 Dangerous Substance has been found at 351m from the site. This has no future impact on the future use the land at Dalefield Way (West), Gravesend.

5.1.2 Dangerous or Hazardous sites

No records of COMAH or NIHHS or sites or Radioactive substance authorisations have been found.

5.1.3 Environment Agency Recorded Pollution Incidents

No Pollution Incidents have been found within 250m of the site.

5.1.4 Contaminated land under Part 2a of the Environmental Protection Act 1990

The database search has not revealed any land classified as such within 500m.

5.2 Landfill and other waste sites

No records of the following have been found within 500 m of the site:

Active landfill under Environment Agency/Natural Resources Wales regulation.

Historical landfill (BGS records) identified on a survey carried out on behalf of the DoE in 1973.

Historical landfill (LA/mapping records) – sites identified from Local Authority records.

Historical waste site records derived from Local Authority planning records.

Licensed waste site under Environment Agency/Natural Resources Wales Regulations.

2 No. Historical landfill sites (EA/NRW records) have been found between 2-326m from the site. Neither of which adversely affects the land at Dalefield Way (West), Gravesend.

29 No. waste exemptions are recorded within 466m from the site, one of which is directly on the site. None of which adversely affect the land at Dalefield Way (West), Gravesend.

5.3 Current industrial data

A list of current industrial uses is provided at Appendix B – Page 36.

5.3.1 Petrol and fuel sites

No records have been found.

5.3.2 No records of the following have been found within 500m of the site:

Underground high-pressure oil and gas pipelines

High voltage underground transmission cables

6.0 Geology

Geological map information of the area indicates the site to be underlain by made ground over alluvium over the Seaford Chalk and Newhaven Chalk Formations.

Using site investigation data obtained from a series of nearby boreholes, the sequence of strata encountered may be summarised as follows:

Stratum	Approximate Depth to Base of Stratum
Made Ground	0.3 – 2.3 mbgl
Alluvium	2.3 – 15.65 mbgl
Seaford/Newhaven Chalk	15.65 – 20.8 mbgl

Investigation data shows that ground water was discovered to depths of between 0.20 m to 16.80 m bgl.

7.0 Hydrogeology and hydrology

The superficial deposits on site are regarded as Secondary Undifferentiated, which means 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.

The bedrock aquifers on site can be classified as Principal. Principal aquifers refer to geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers.

The closest Historical Groundwater abstraction point is located 453m north of the site, which will not affect plans for the development. The nearest active abstraction point is 357m northwest of the site. It is believed that its distance from the site would negate the requirement for any onerous measures affecting the development site.

There are no Historical Potable abstraction licenses located within 2000m of the site. The nearest active Potable Abstraction License is found 1699m west of the site. It is believed that its distance from the site would negate the requirement for any onerous measures affecting the development site.

19 No Surface water abstraction licenses have been identified within 2000m of the site. The closest active Surface Water abstraction license has been located 909m east of the site. It is believed that its distance from the site would negate the requirement for any onerous measures affecting the development site.

No Source Protection Zone has been identified within 500m east of the site.

A list of Hydrology features within 500m of the site are provided at Appendix B – Page 60.

8.0 Flooding

The site lies within Flood Zone 3 (high risk), with a chance of flooding each year lies between 0.5 – 1.0%.

No historical river or coastal flood events have been recorded within 250m of the site since its records began in 1946.

The site is within an area benefiting from flood defences.

There are no areas within 250m that are used for flood storage.

The risk of Surface Water Flooding on site is considered Highest on site for the 1:30 year return period with potential flood depths between 0.1m – 0.3m. The Highest risk of Surface Water Flooding within a 50m radius of the site for the 1:30 year return period shows potential flood depths between 0.1m – 0.3m.

The risk of Ground Water Flooding is considered High on site. The risk of Ground Water Flooding within a 50m radius of the site is considered High, based on a 1:100-year return period.

9.0 Environmentally sensitive sites

None of the following have been revealed by the database searches within 500 m:

- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- National Nature Reserves (NNR)
- Local Nature Reserves (LNR)
- Designated Ancient Woodland
- Biosphere Reserves
- Forest Parks
- Marine Conservation Zones
- Proposed Ramsar sites
- Possible Special Areas of Conservation (pSAC)
- Potential Special Protection Areas (pSPA)
- Nitrate Sensitive Areas

1 No. Site of Special Scientific Interest (SSSI) has been identified directly on the site. This does not adversely affect the future use of the land at Dalefield Way (West), Gravesend.

1 No. Conserved wetland site (Ramsar site) has been identified directly on the site. This does not adversely affect the future use of the land at Dalefield Way (West), Gravesend.

1 No. Green Belt has been identified 378m northeast of the site. This does not adversely affect the future use of the land at Dalefield Way (West), Gravesend.

2 No. Nitrate Vulnerable Zones has been identified directly on the site. This does not adversely affect the future use of the land at Dalefield Way (West), Gravesend.

As there is no proposal for aviation infrastructure, there are no requirements for consultation in association with SSSI Impact Zones/Units.

10.0 Natural hazards

10.1 Ground instability

A search of the GroundSure database reveals the following hazard ratings:

Shrink swell clays:	Low (within 50m)
Running sand:	Low (within 50m)
Compressible Deposits:	High (within 50m)
Collapsible Deposits:	Very Low (within 50m)
Landslide:	Very Low (within 50m)
Ground Dissolution of Soluble rocks:	Very Low (within 50m)

10.2 Mining

No natural occurring cavities, such as sinkholes or caves, are recorded within 500m of the site.

No British Pits are recorded within 500m of the site.

30 No. Surface ground working has been recorded within 250m of the site.

No Underground workings are recorded within 1000m of the site.

See Appendix B – Page 117 - 121 for further details of the above.

None of the following have been revealed by the database:

Mining Cavities.
JPB Mining areas.
Coal Mining.
Brine affected areas.
Gypsum areas.
Tin Mining.
Clay Mining.

10.3 Radon

The Health Protection Agency estimate that between 1 and 3% of properties exceed the Radon Action Level. The BGS and the Building research Establishment Radon Guidance Document indicate that no radon protection measures are required in this area.

11.0 Discussion

The development history of the site and its immediate surroundings has been summarised in the foregoing, as far as could be ascertained within the present remit.

11.1 Solid and liquid phase contaminants

The development of this site is to be used for storage. The surrounding area has been residential and industrial development.

The following potentially contaminative sources on site or the immediate vicinity have been identified:

On site

Current uses:

- Greenfield land

Historic uses:

- Greenfield land
- Potential agricultural fields

Off site

Current uses:

- Railway for North Kent Line 500m north of the site.
- Dalefield Way Industrial Estate immediately west of the site.
- Terraced residential buildings south of the site.
- Electricity sub stations located 137m to the northwest 146m to the west.
- MOT centre located 220m to the northwest.

Historic uses:

- Contaminants associated with the former construction yards.
- Made ground of unknown composition.

The surrounds are not considered to represent a significantly greater potential for contamination than the application site itself.

11.2 Gas phase

No landfills have been revealed within 500m of the site and thus there is a low risk from ground gas.

Between 1 and 3 % of houses are expected to exceed the Radon Action Level. The site is therefore classified as a Radon Affected Area, however no special precautions are required.

11.3 Risk assessment

This risk classification is designed to consider environmental risk in the context of alternative use strategies where redevelopment or a change of use may be required. This must be set in the context of the following hierarchy of risks as follows:

- High: Significant risk of contamination without remediation. Precludes all but the least sensitive of development such as car parking. Significant potential for environmental pollution. Remediation measures expensive. Site investigation required.
- Medium: Risk of contamination but allowing non-sensitive development such as commercial for reasonable costs of remediation. More sensitive development such as housing may require substantial remedial measures. Potential for environmental pollution. Site investigation required.
- Low: Little risk of contamination where all development options are likely to be possible with little or no remediation measures. Little potential for environmental pollution. Confirmatory site investigation may be required.

The potential risk of isolated areas of contamination from current and previous uses of the site is considered to be low.

The risk of contamination from off-site sources is classified as low.

It is considered there is a low risk of ground gas emissions from either on or off-site sources.

11.4 Preliminary conceptual model

Part IIA of the Environmental Protection Act: 1990 stipulates that a source, pathway, and receptor must all be present to form a potential pollution linkage. Based upon the findings of this Assessment a preliminary conceptual model has been formulated for the source - pathway - receptor interaction and is presented hereafter.

11.4.1 Sources

Limited sources of potential contamination are present on site as discussed in Section 11.0 Potential contamination arising from previous land uses may affect the subsurface soils locally.

11.4.2 Pathways

Excavation is expected to be minimal due to the small increase in road/storage areas. Disturbing potentially affected subsurface soils during excavation may cause contaminants to accumulate in enclosed spaces which in turn allows for the inhalation of vapour or particulates. As little excavation is proposed, this is low risk.

Leaching and ground water transport of dissolved contaminants from the affected areas could affect groundwater.

Pathways between the 'Contaminant' and the 'Receptor' include direct contact, ingestion and inhalation of contaminated soil and exposure to asbestos fibres.

11.4.3 Receptors

Construction workers can be exposed to potential contaminants during excavation and removal of the existing soil however this is negligible given the proposed works do not include excavation.

Other potential receptors include future users of the development. It is understood that there will be no private gardens or landscaping included in the future development and the application site will be completely capped by hardstanding acting to prevent future application site users coming into direct contact with contamination (if present).

12.0 Summary

Information obtained during this assessment has indicated there to be a low risk of significant or widespread contamination from on-site uses based on current and historic records.

Off-site uses also present a low risk of significant or widespread contamination.

It is recommended that a detailed intrusive investigation is carried out which will include an allowance for contamination sampling and testing.

It is recommended that selected samples of soil and purged groundwater be analysed for the following range of contaminants in recognition of the potentially contaminative uses identified by the assessment and in accordance with the recommendations of CLR8[1]:

Metals and semi-metals:

- Total arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Mercury
- Nickel
- Zinc
- Water soluble boron

Organic compounds:

- Phenols
- Polyaromatic hydrocarbons and petroleum hydrocarbons
- Volatile organic compounds and polychlorinated biphenols

Others:

- Sulphate
- pH value & asbestos

Waste Acceptance Criteria (WAC) should also be established in case removal of materials from site are required as part of the development. Such testing is anticipated to be the subject of a planning condition requiring further investigation of contamination.

The intrusive investigations should also cover a geotechnical assessment of the site. Investigations should produce sufficient information for the design of roads & storage areas. This is expected to be undertaken by windowless sampling, boreholes spread across the plot and/or dynamic probing. The survey will recover soil samples for laboratory testing of soil properties and design chemical class.

PROCEDURAL NOTES for GROUND INVESTIGATIONS

General

This report is based upon data obtained from field descriptions of the strata and examination of the samples by an engineer, together with the results of in situ and laboratory tests as appropriate. Responsibility cannot be accepted for variations in ground conditions between and around any of the exploratory points that is not revealed by the data. Whilst the report may offer an opinion on the ground conditions between exploratory points and below the depth of investigation, this is for guidance only and no liability is accepted for its accuracy.

Drilling procedure

Boring by light cable percussion drilling allows the ground conditions to be reasonably well established. However, a certain amount of disturbance is inevitable, and some mixing of soils can occur.

Sampling procedure

"Undisturbed" samples of predominantly cohesive soils are taken with a 100mm diameter open tube sampler, generally in accordance with BS 5930: 1999.

Where appropriate, or where an undisturbed sample is unsuccessful, disturbed samples are recovered and sealed into polythene bags.

Groundwater samples are taken when water is encountered in sufficient quantity.

Standard penetration tests

The test is conducted generally in accordance with BS 1377: Part 9: 1990. The sampler tube is subject to a seating drive of 150mm into the soil at the base of the borehole. Results are given on the Borehole Records as the number of blows required to drive the sampler tube a further 300mm and this is known as the "N" value. Where the driving resistance is such that full penetration is not achieved, the test is generally terminated after 50 blows and the actual distance penetrated is recorded.

Groundwater

Groundwater observations necessarily reflect the conditions encountered at the time of the exploratory work. Long term monitoring of standpipes is usually required to establish an equilibrium water level since the normal rate of boring is too fast to permit steady state conditions to be achieved.

Groundwater levels are subject to variations caused by changes in drainage conditions and seasonal climatic changes.

Water may necessarily be added to advance the bore whilst casing may be required to maintain an open hole. These can both mask subsequent groundwater observations and are therefore noted on the individual Borehole Record.

PROCEDURAL NOTES for ENVIRONMENTAL ASSESSMENTS

This report reviewed and evaluated information from the client, property owner, local authority, Environment Agency and others. The opinions, conclusions and recommendations are based on this information and observations made during the site reconnaissance.

The recommendations made in this report represent our professional opinions. These opinions were arrived at in accordance with current accepted industry practises and hydrological and engineering practises at this time. As such they are not a guarantee that the site is free of hazardous or potentially hazardous material or conditions.

APPENDIX A

HISTORICAL MAPS

Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1953

Scale: 1:1,250

Printed at: 1:2,000



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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1954

Scale: 1:1,250

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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1969-1973

Scale: 1:1,250

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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1975-1978

Scale: 1:1,250

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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1982-1985

Scale: 1:1,250

Printed at: 1:2,000



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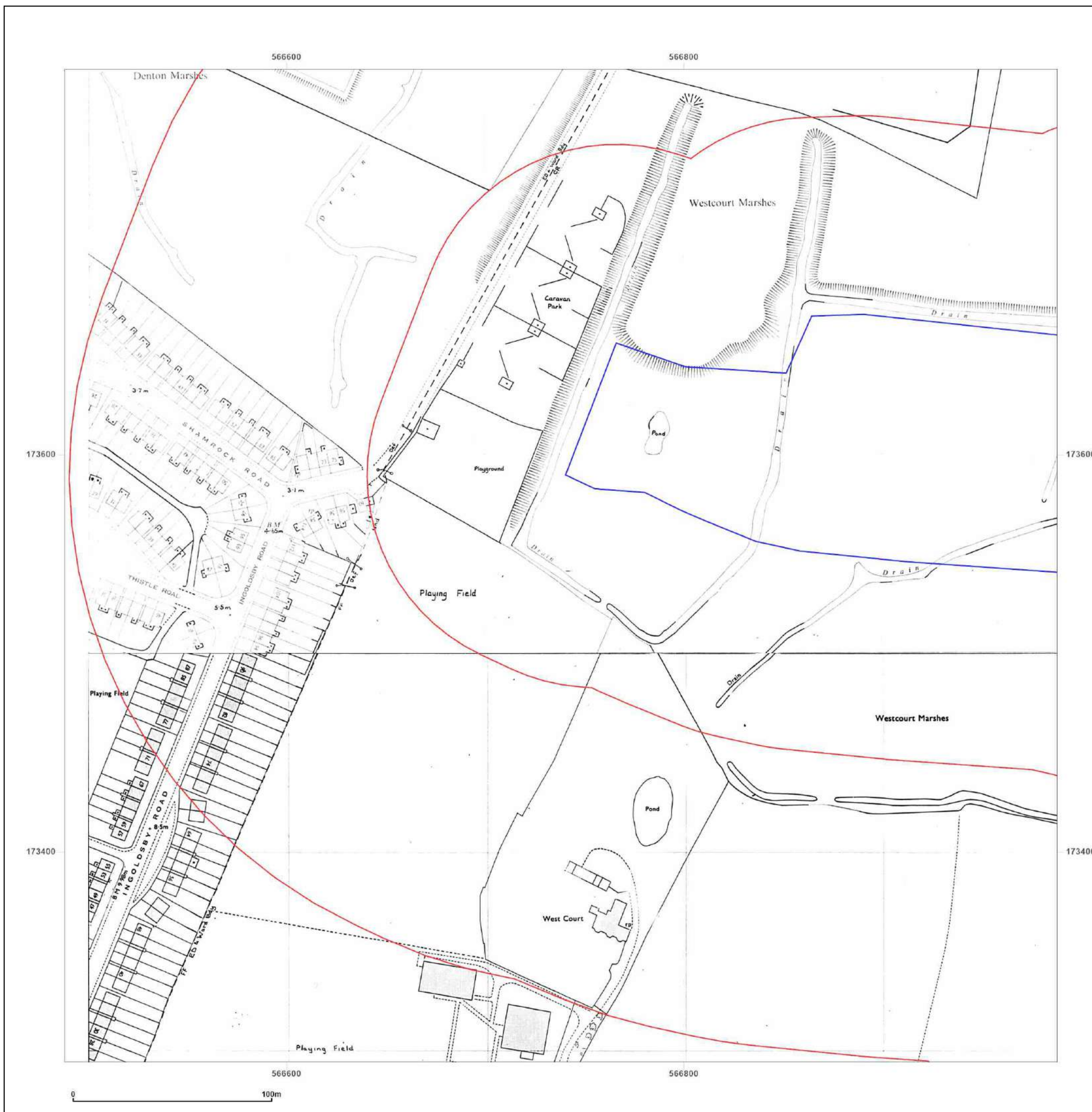


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1988-1993

Scale: 1:1,250

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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_1_1
Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1991-1993

Scale: 1:1,250

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Map Name: National Grid

Map date: 1993

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Grid Ref: 566738, 173544

Map Name: National Grid

Map date: 1993

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Surveyed N/A
Revised N/A
Edition N/A
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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_2_1
Grid Ref: 567238, 173544

Map Name: National Grid

Map date: 1952-1953

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1953
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Levelled 1952

Surveyed 1953
Revised 1953
Edition N/A
Copyright N/A
Levelled 1952

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

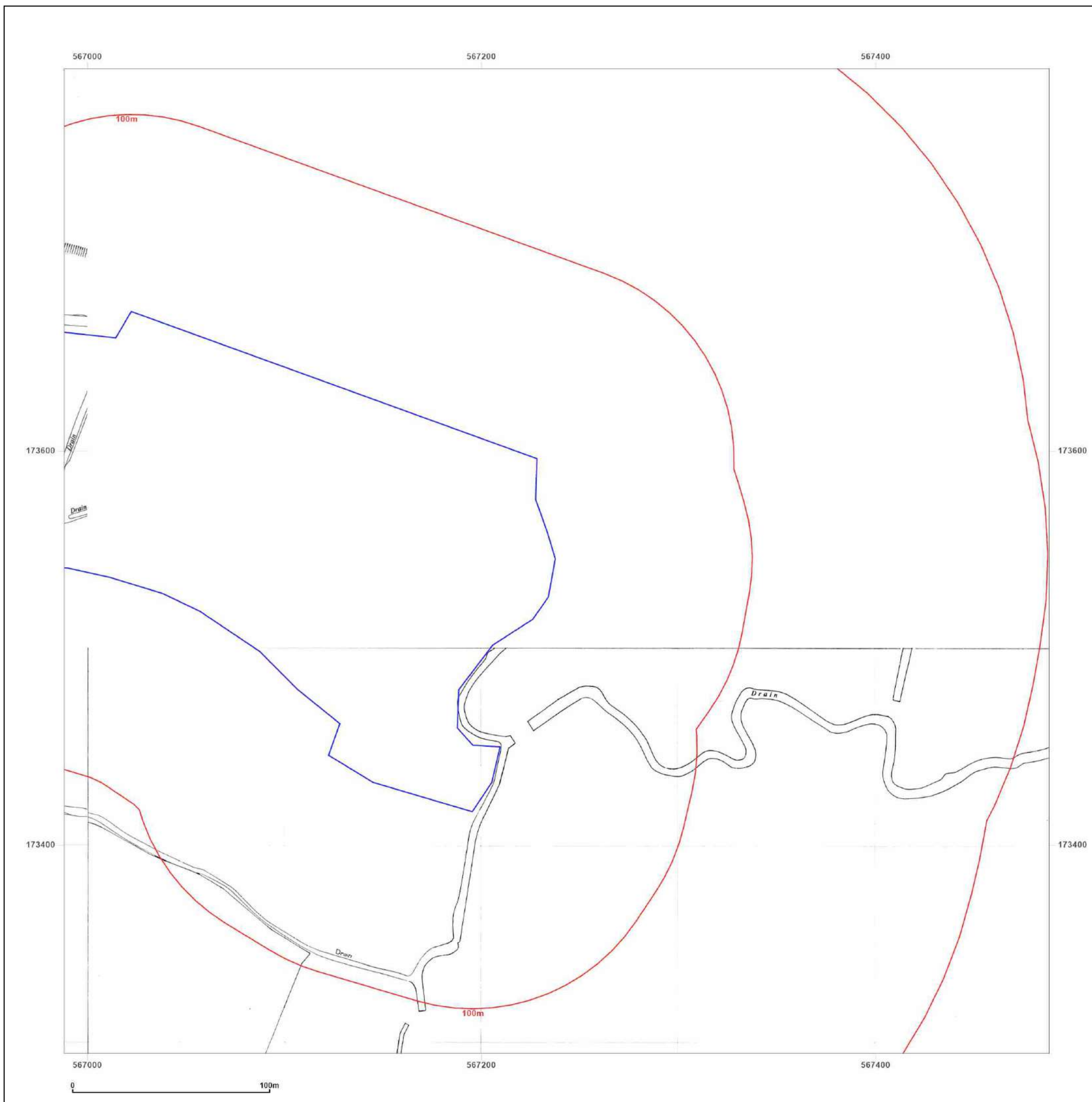


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_2_1
Grid Ref: 567238, 173544

Map Name: National Grid

Map date: 1960

Scale: 1:1,250

Printed at: 1:2,000



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

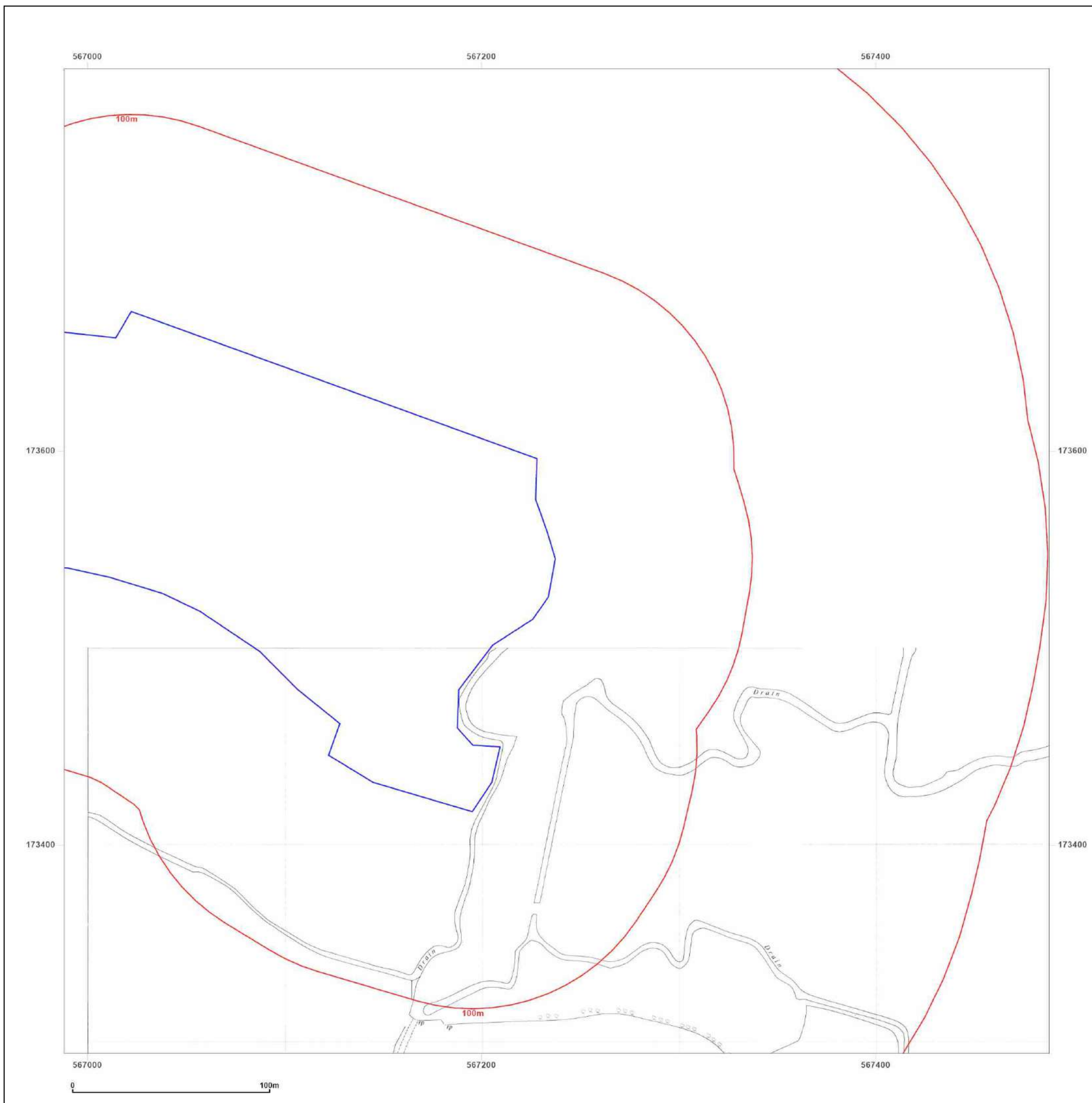


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_2_1
Grid Ref: 567238, 173544

Map Name: National Grid

Map date: 1966-1969

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1953
Revised 1968
Edition N/A
Copyright 1969
Levelled 1952

Surveyed 1953
Revised 1968
Edition N/A
Copyright 1969
Levelled 1952

Surveyed 1960
Revised 1966
Edition N/A
Copyright 1966
Levelled 1952

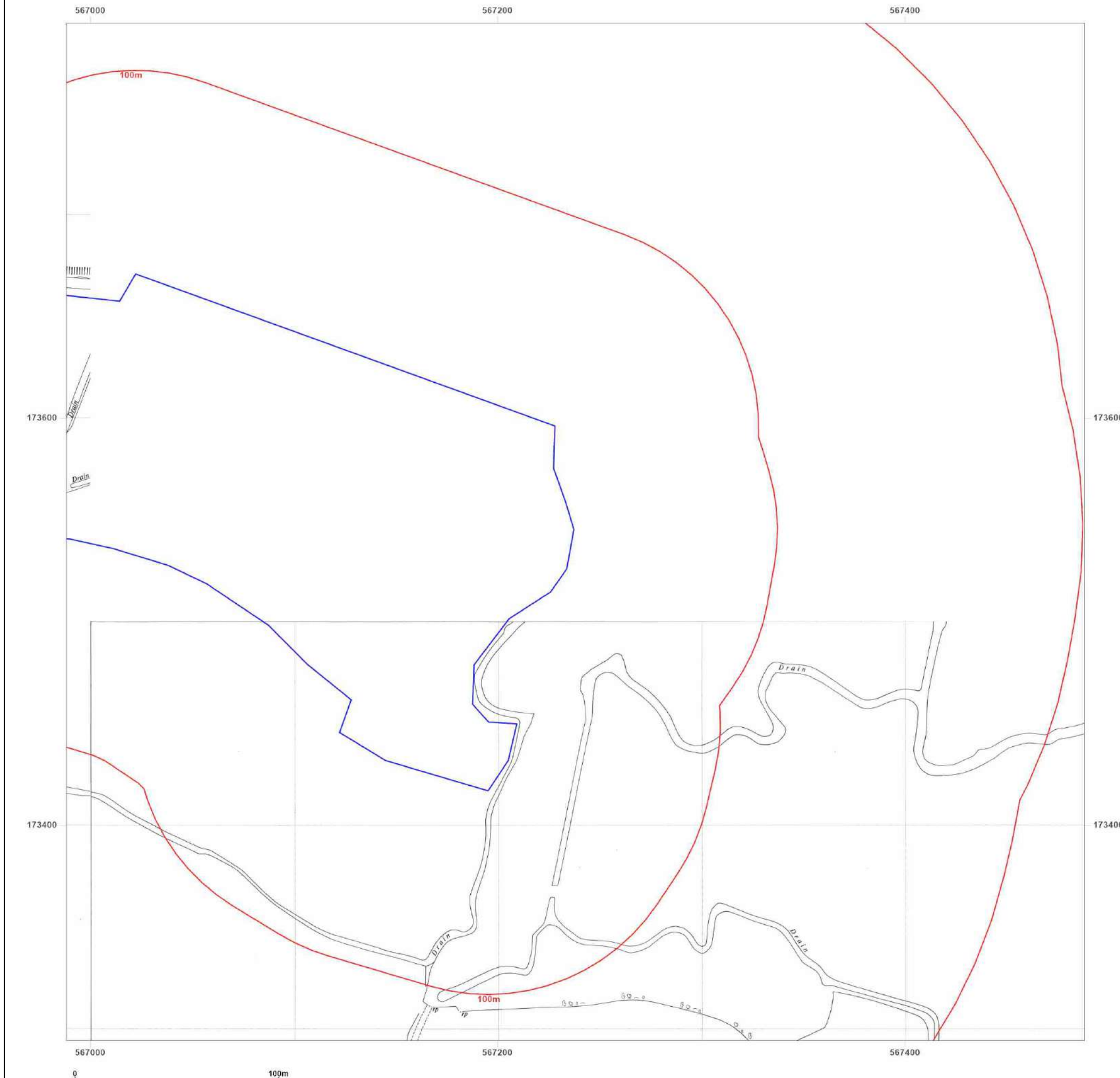


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_2_1
Grid Ref: 567238, 173544

Map Name: National Grid

Map date: 1981-1985

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1982
Levelled 1952

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1985
Levelled 1980

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

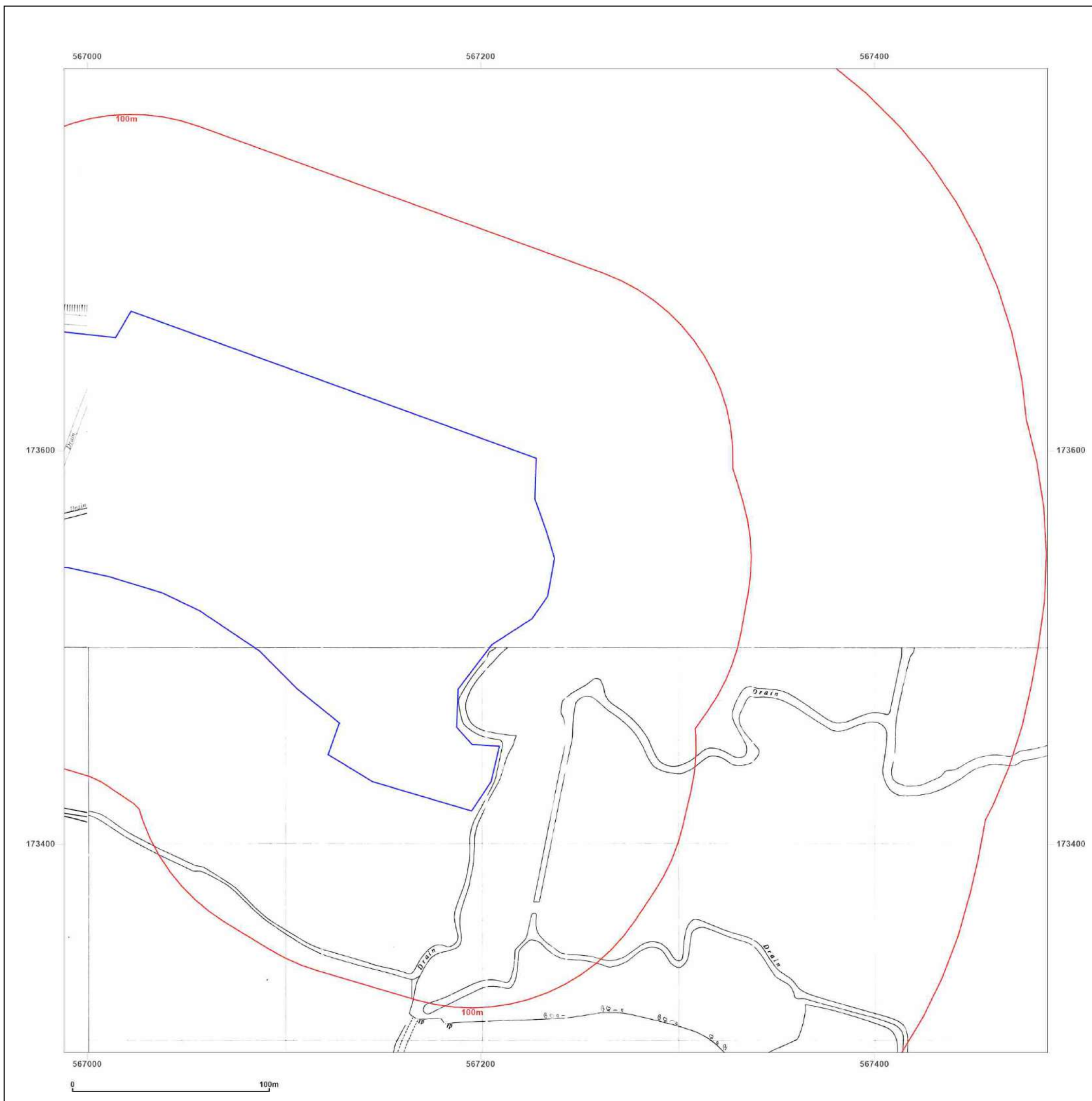


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_1250_2_1
Grid Ref: 567238, 173544

Map Name: National Grid

Map date: 1989-1993

Scale: 1:1,250

Printed at: 1:2,000



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

Surveyed 1980
Revised 1989
Edition N/A
Copyright 1989
Levelled 1980

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

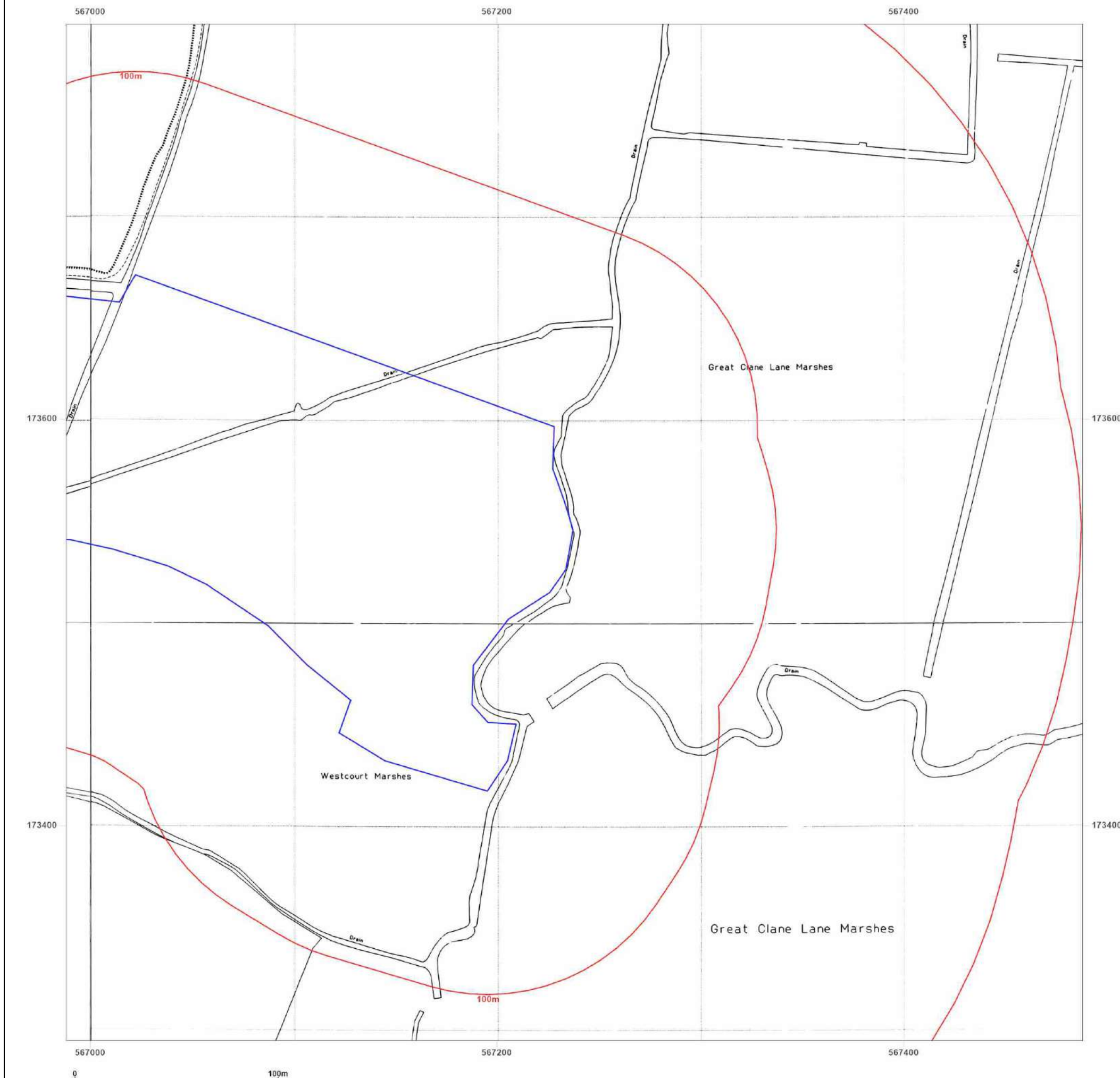


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_Landline_1_1
Grid Ref: 566838, 173543

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003



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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

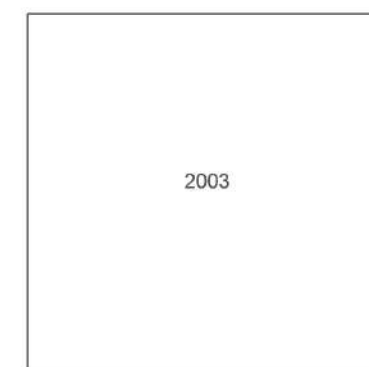
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Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

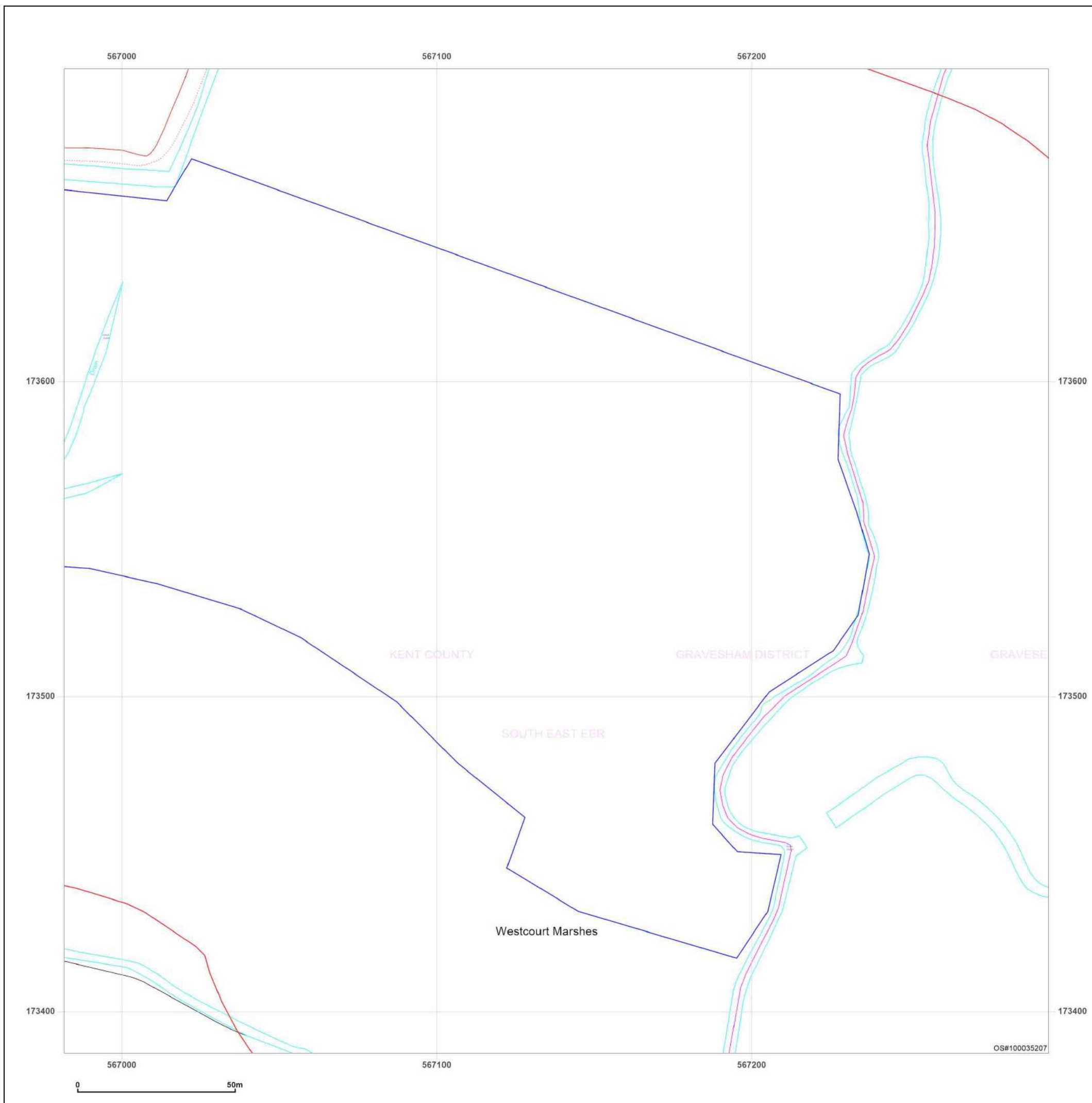


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: County Series

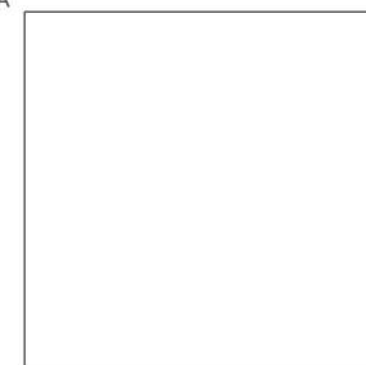
Map date: 1864

Scale: 1:2,500

Printed at: 1:2,500



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

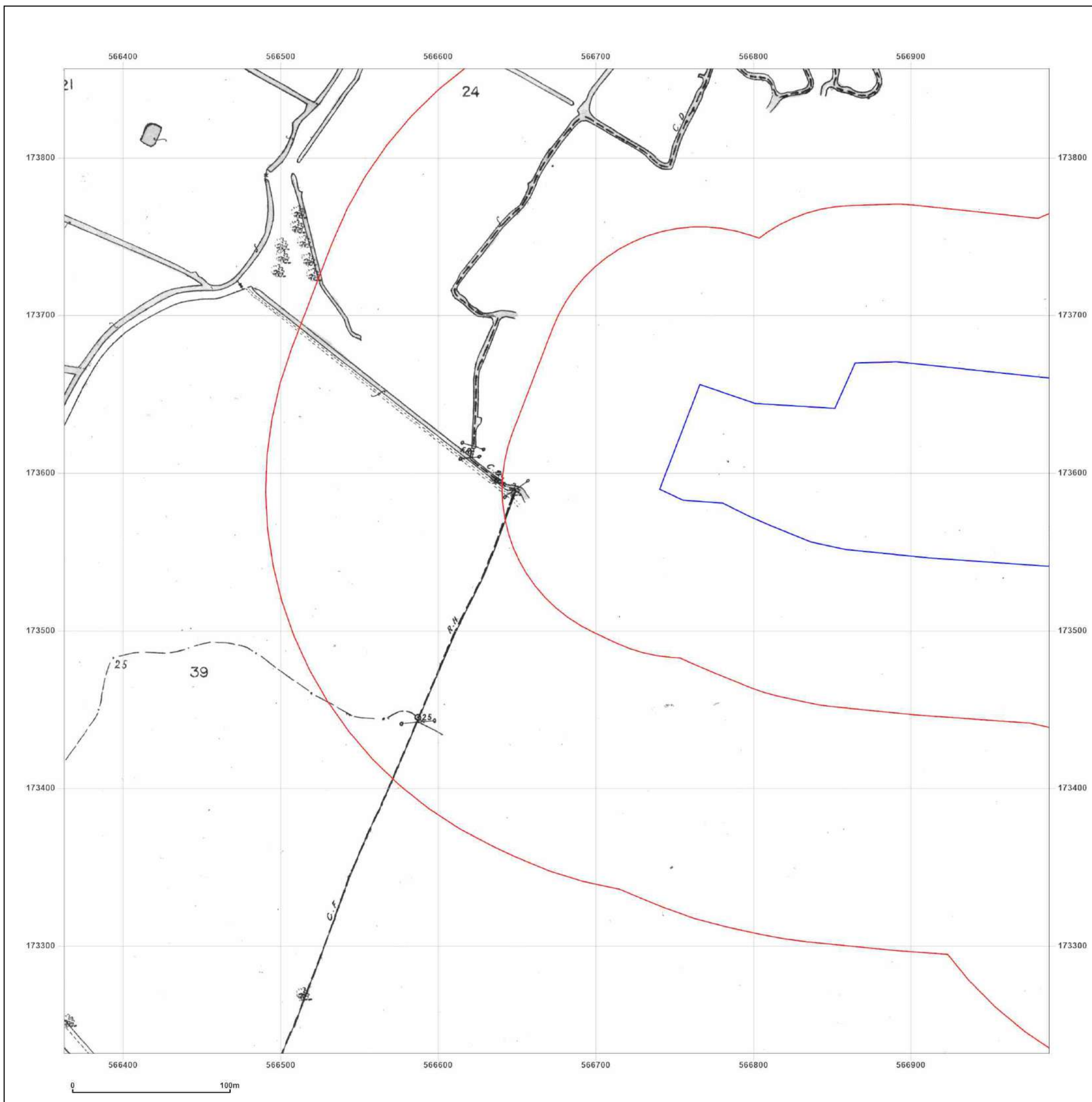


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
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Map Name: County Series

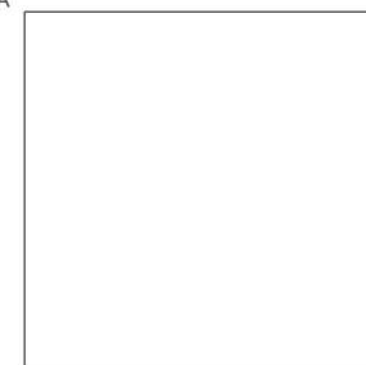
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Printed at: 1:2,500



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

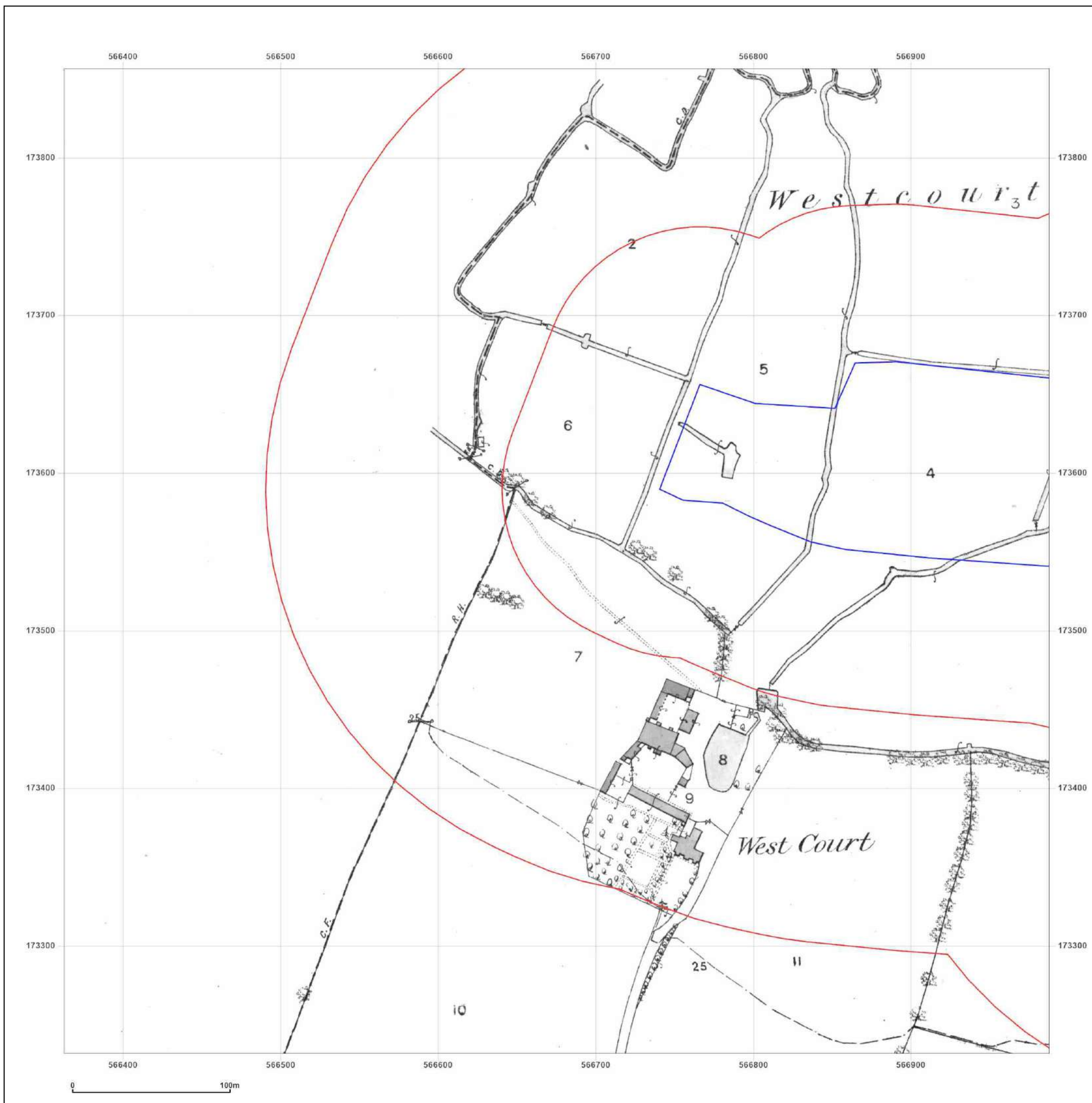


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: County Series

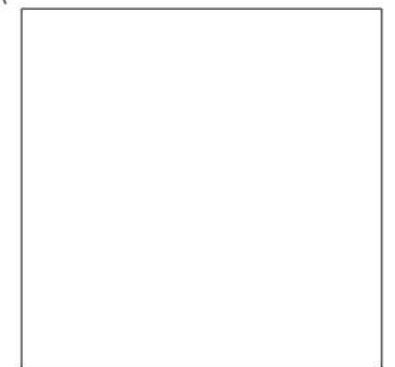
Map date: 1866

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1866
Revised 1866
Edition N/A
Copyright N/A
Levelled N/A

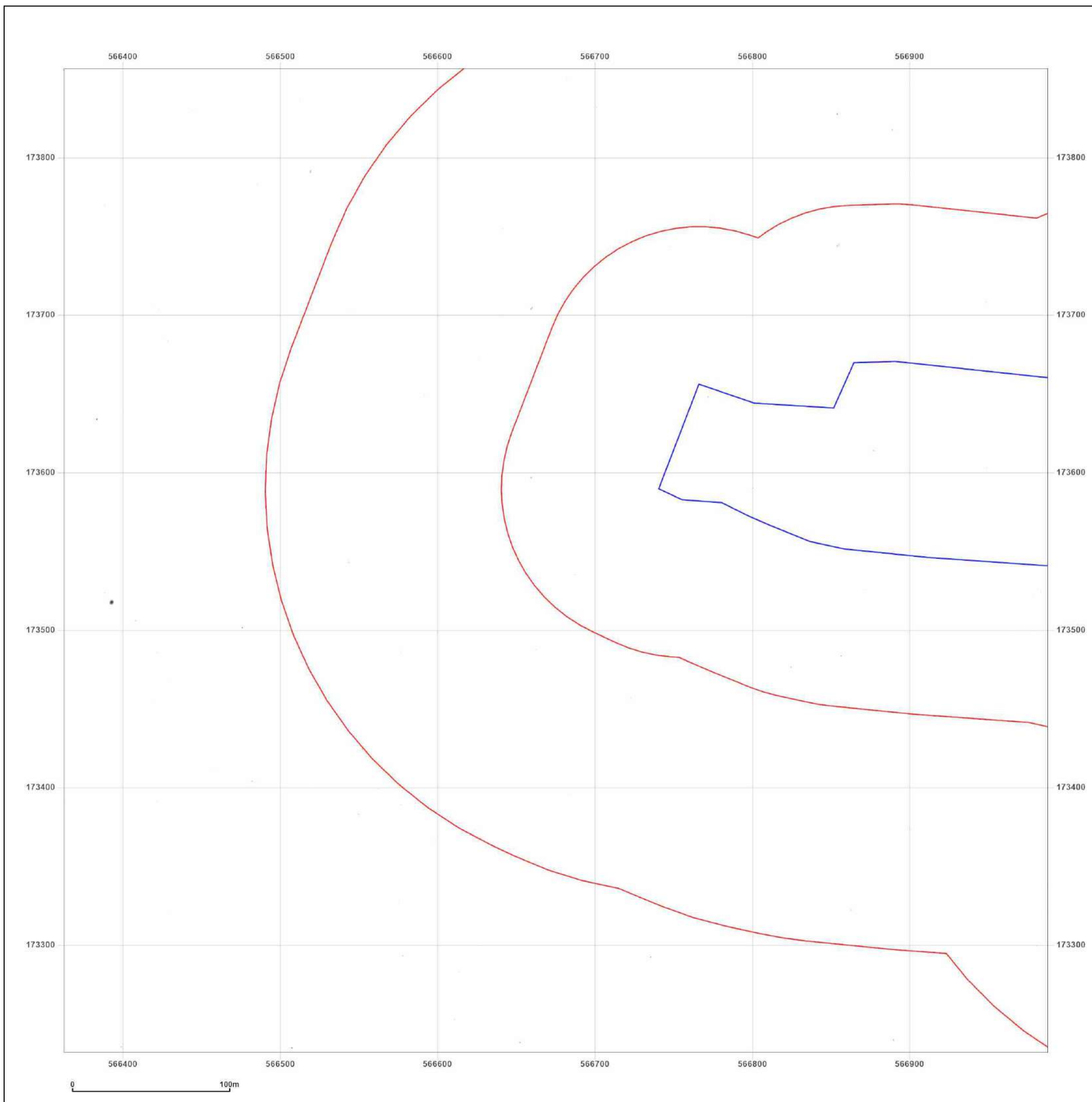


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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: County Series

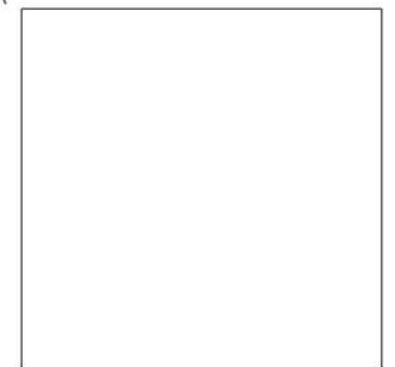
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Revised 1866
Edition N/A
Copyright N/A
Levelled N/A

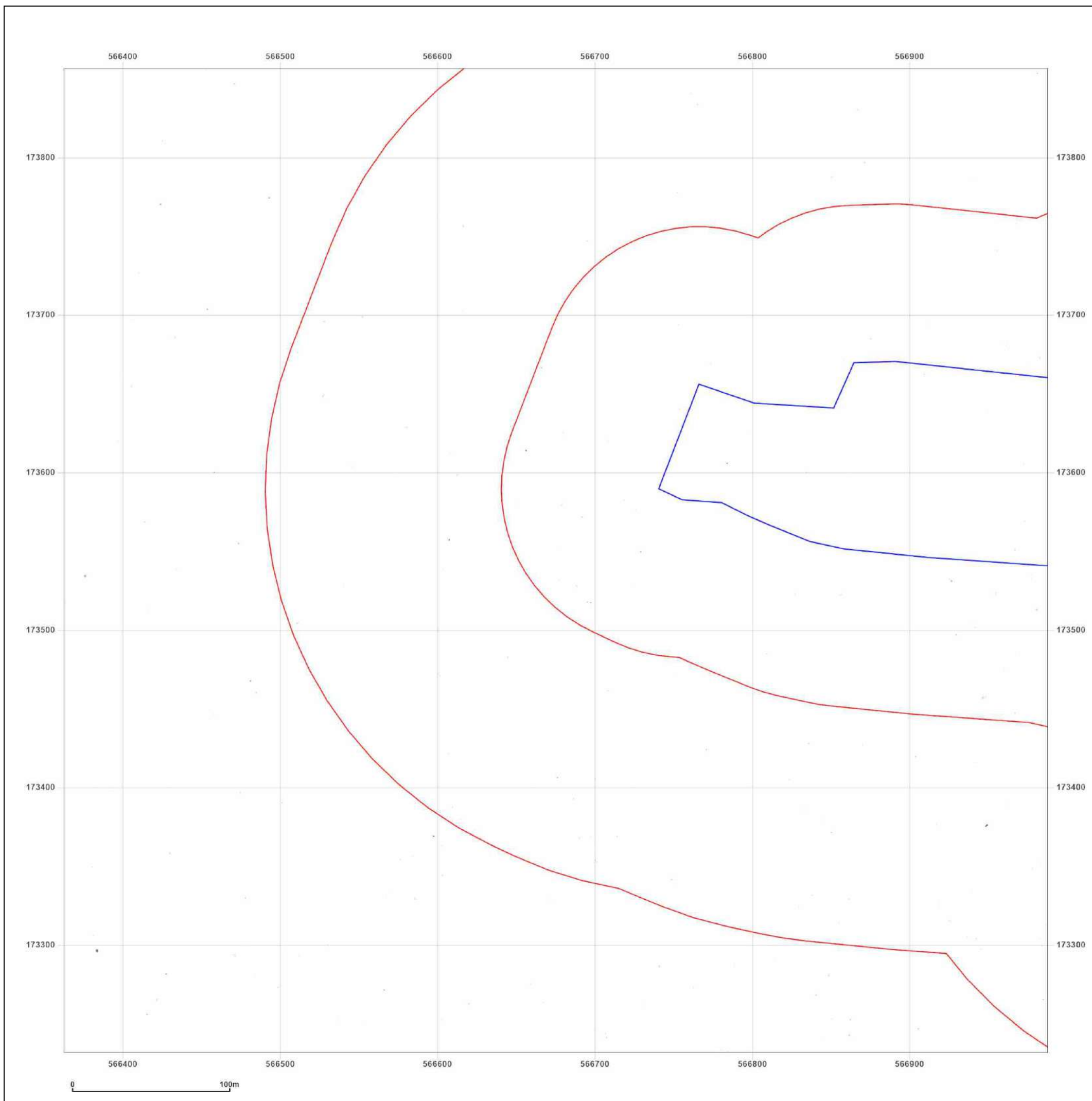


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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: County Series

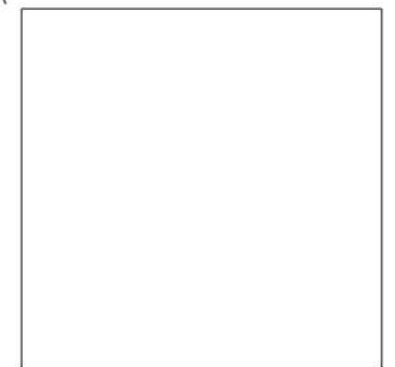
Map date: 1909

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1909
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

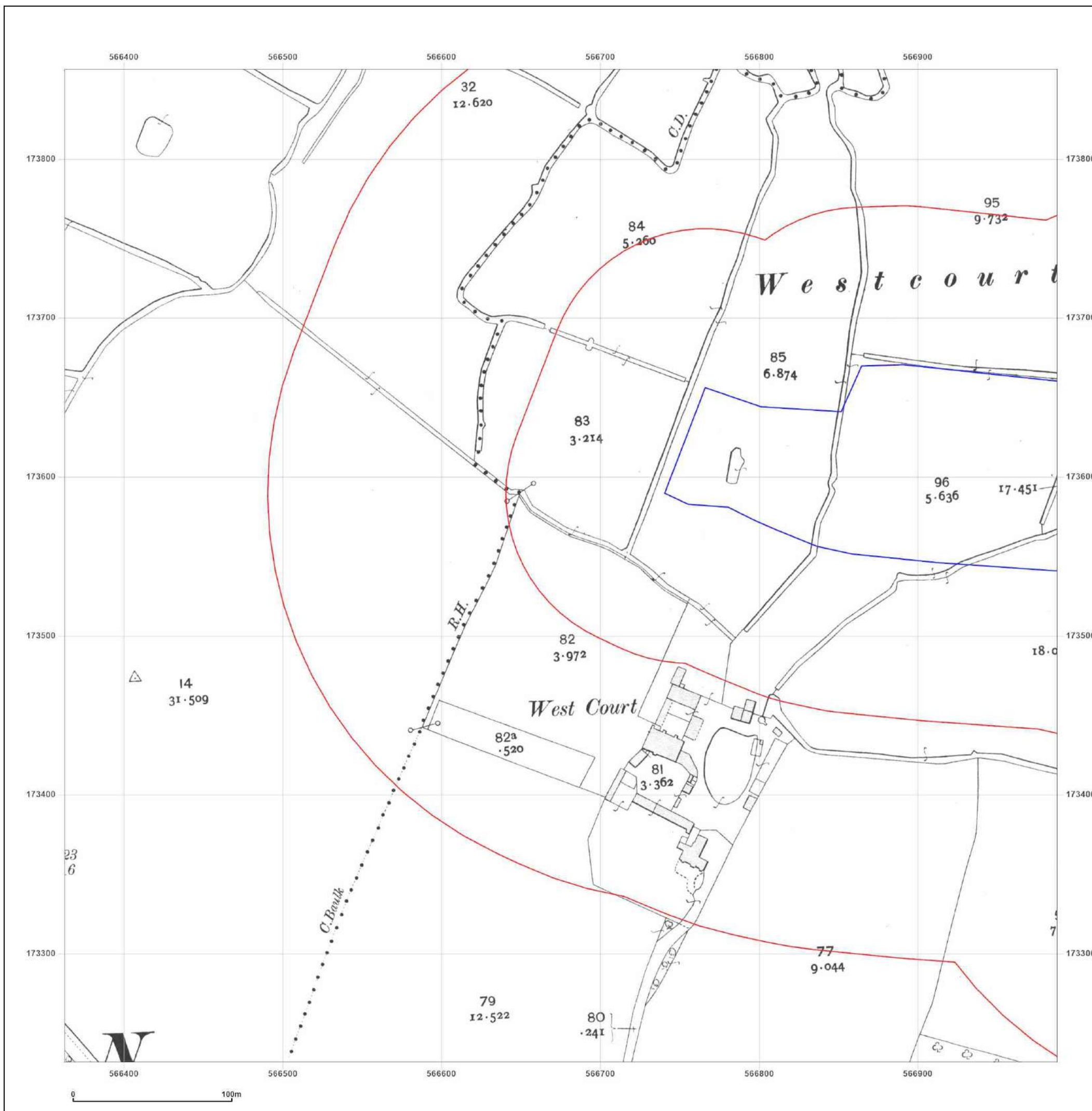


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: County Series

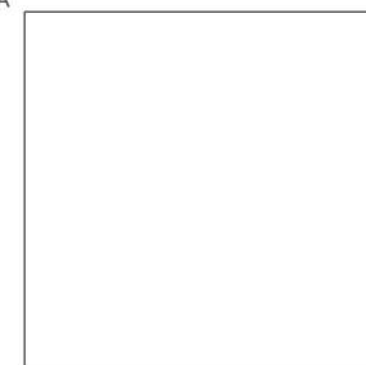
Map date: 1932

Scale: 1:2,500

Printed at: 1:2,500



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

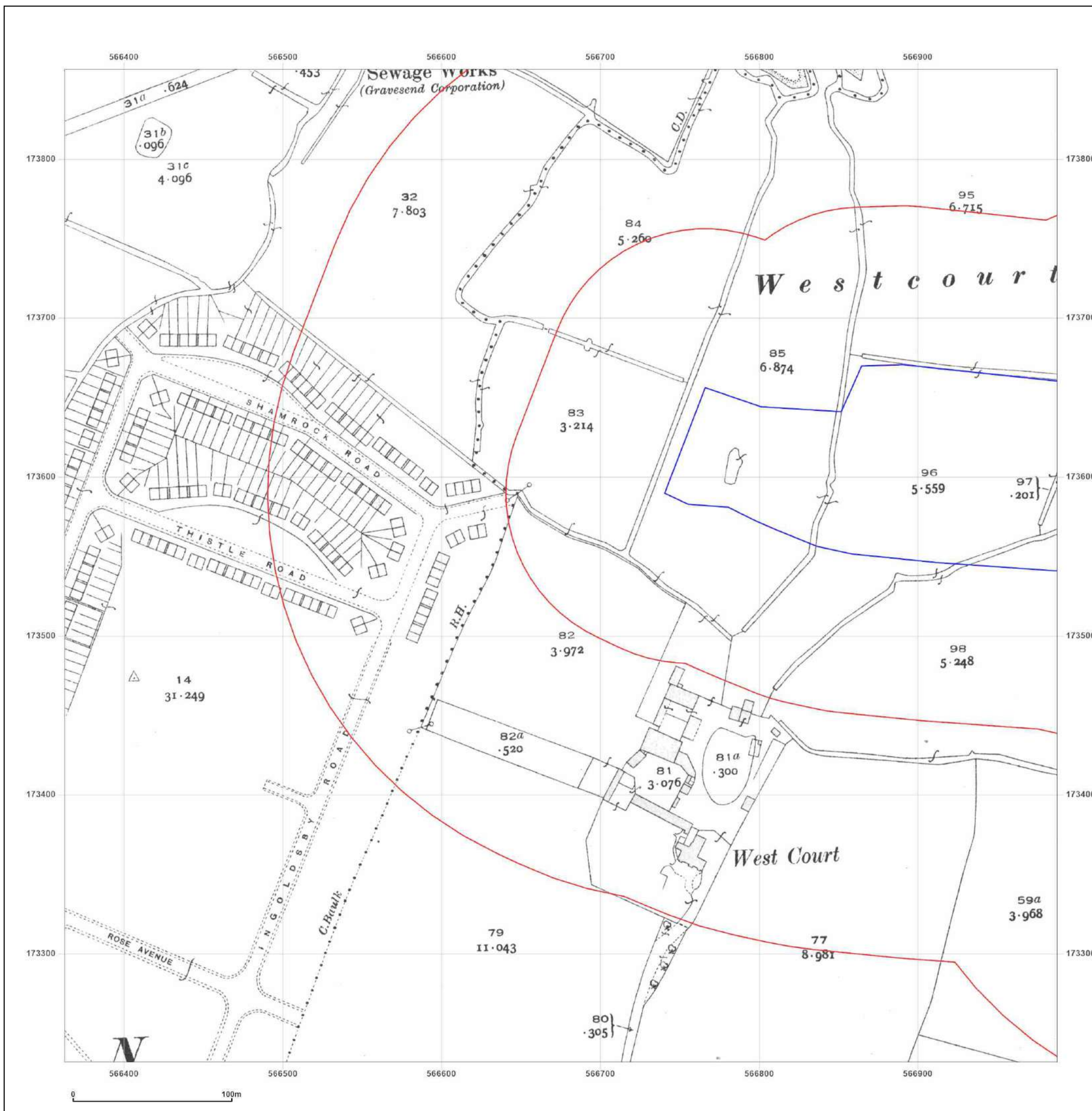


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: National Grid

Map date: 1955

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1953
Revised 1953
Edition 1955
Copyright N/A
Levelled 1952

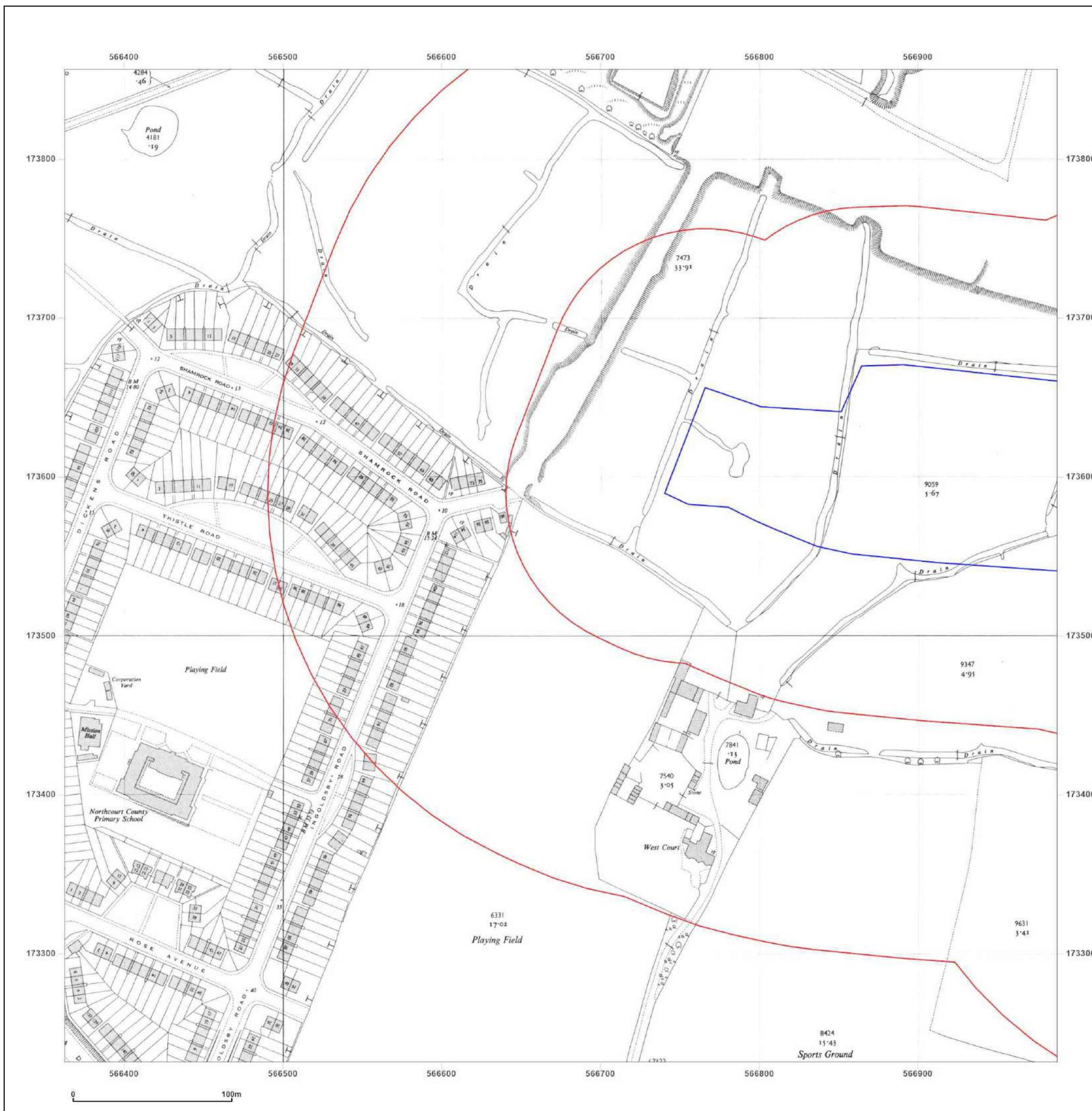


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: National Grid

Map date: 1964

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1961
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Edition 1964
Copyright 1964
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_1_1
Grid Ref: 566675, 173544

Map Name: National Grid

Map date: 1970

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1969
Revised 1969
Edition N/A
Copyright 1970
Levelled 1952

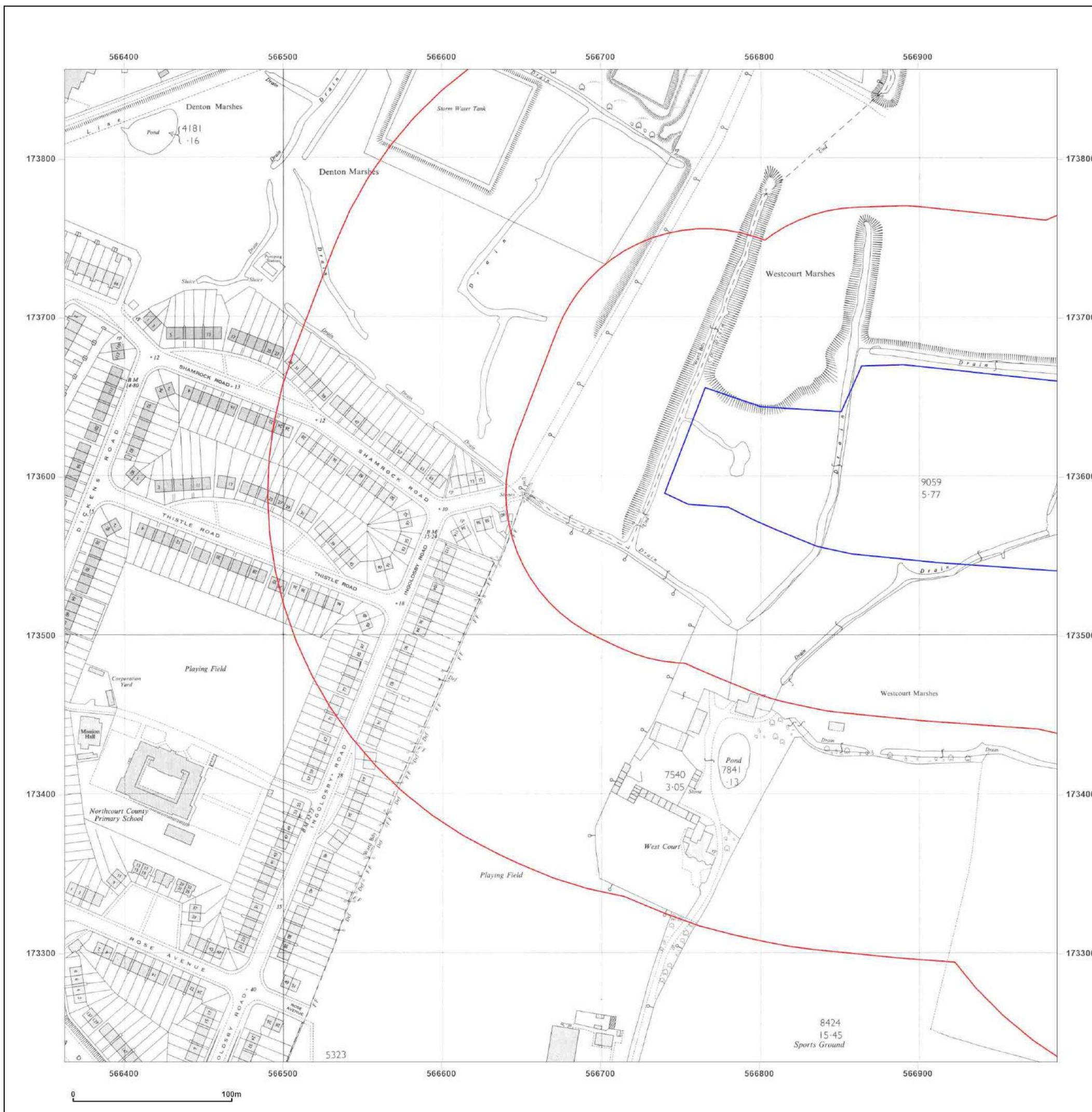


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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: County Series

Map date: 1864

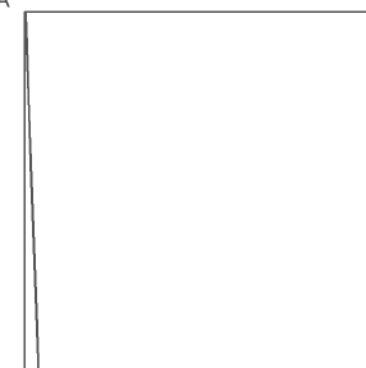
Scale: 1:2,500

Printed at: 1:2,500



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

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

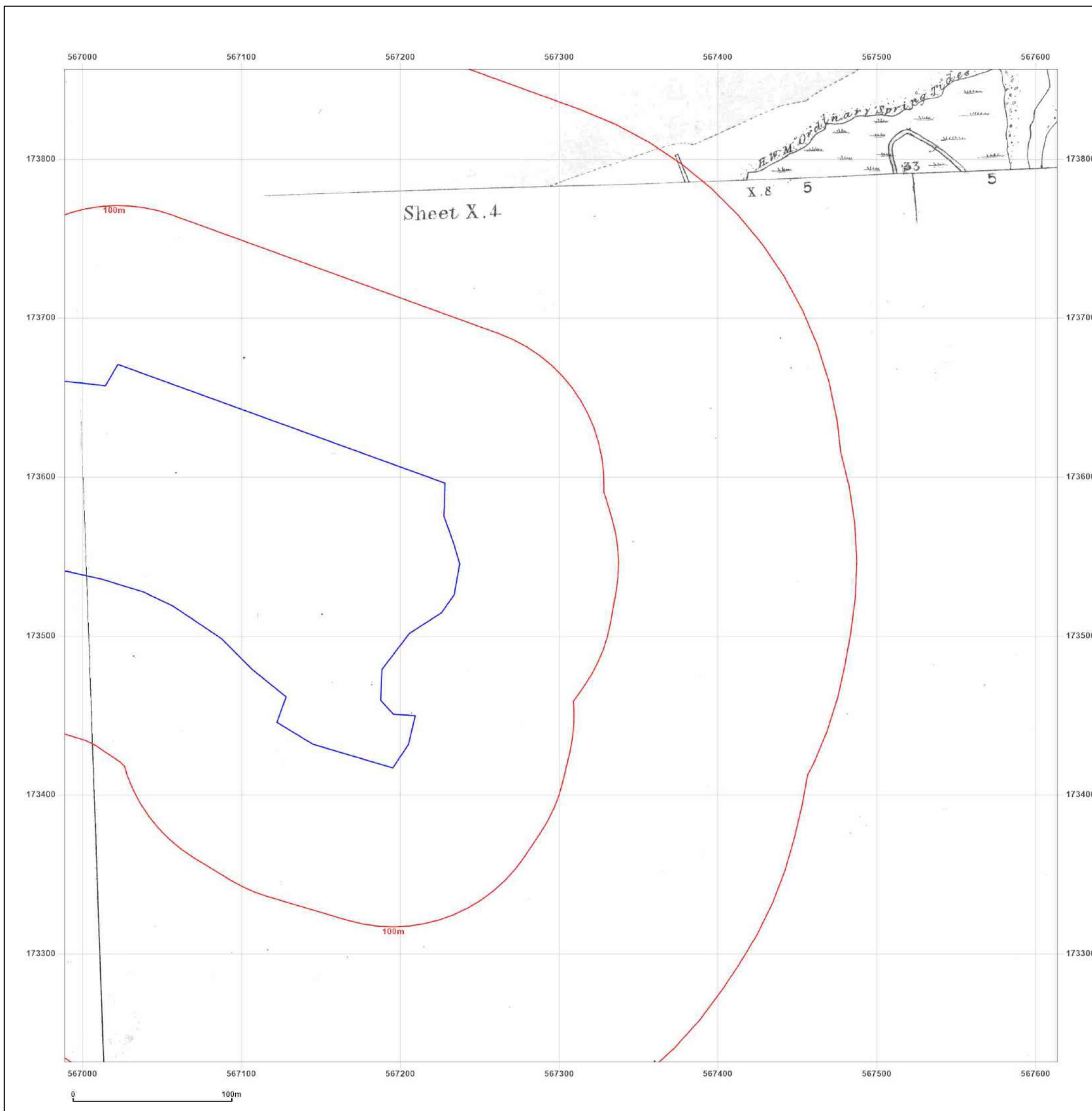


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: County Series

Map date: 1864

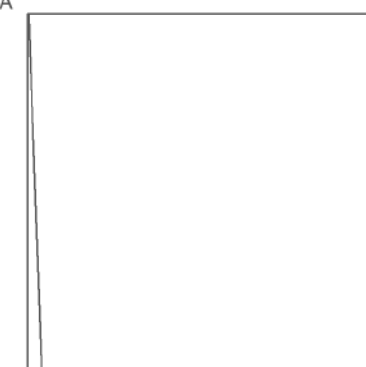
Scale: 1:2,500

Printed at: 1:2,500



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

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

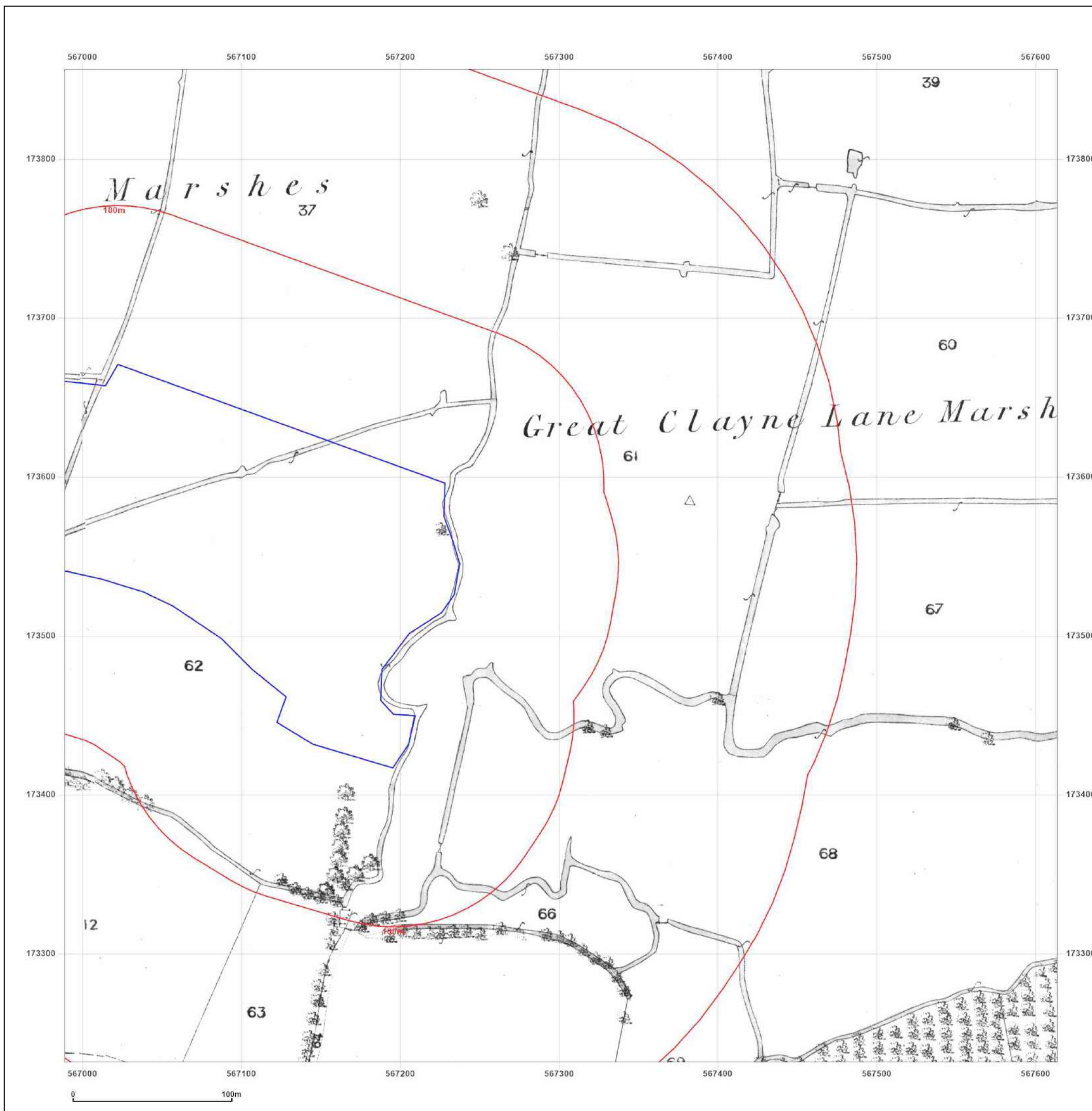


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: County Series

Map date: 1897

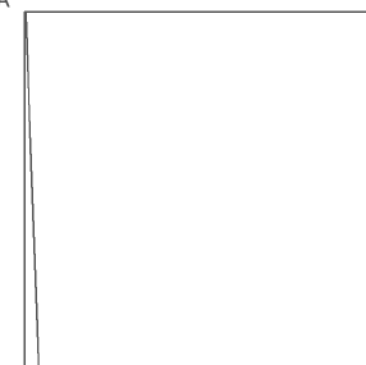
Scale: 1:2,500

Printed at: 1:2,500



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

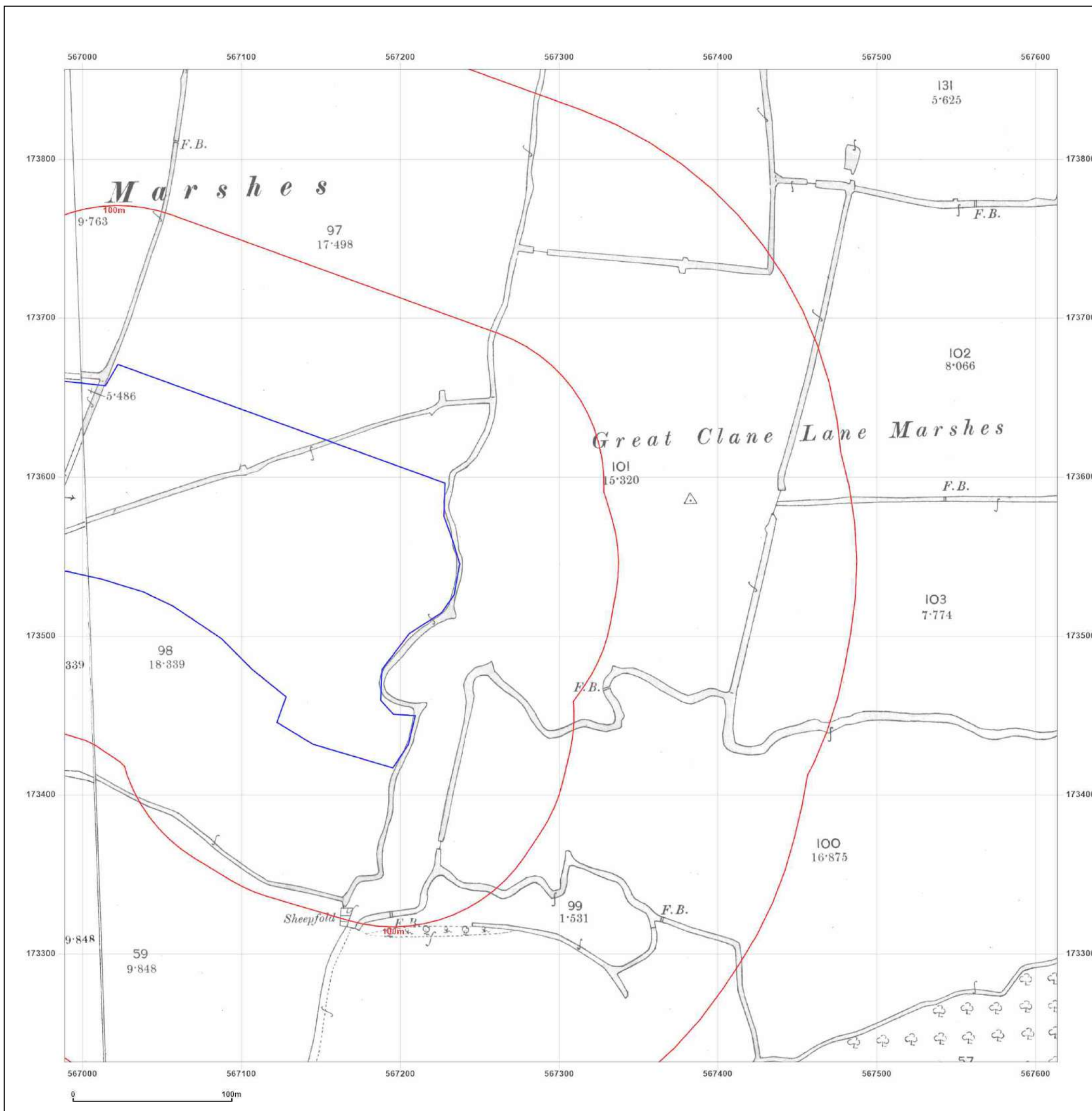


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: County Series

Map date: 1908-1909

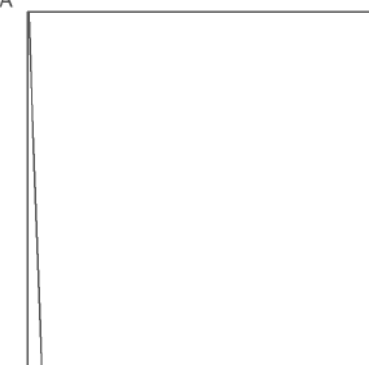
Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1909
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1908
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

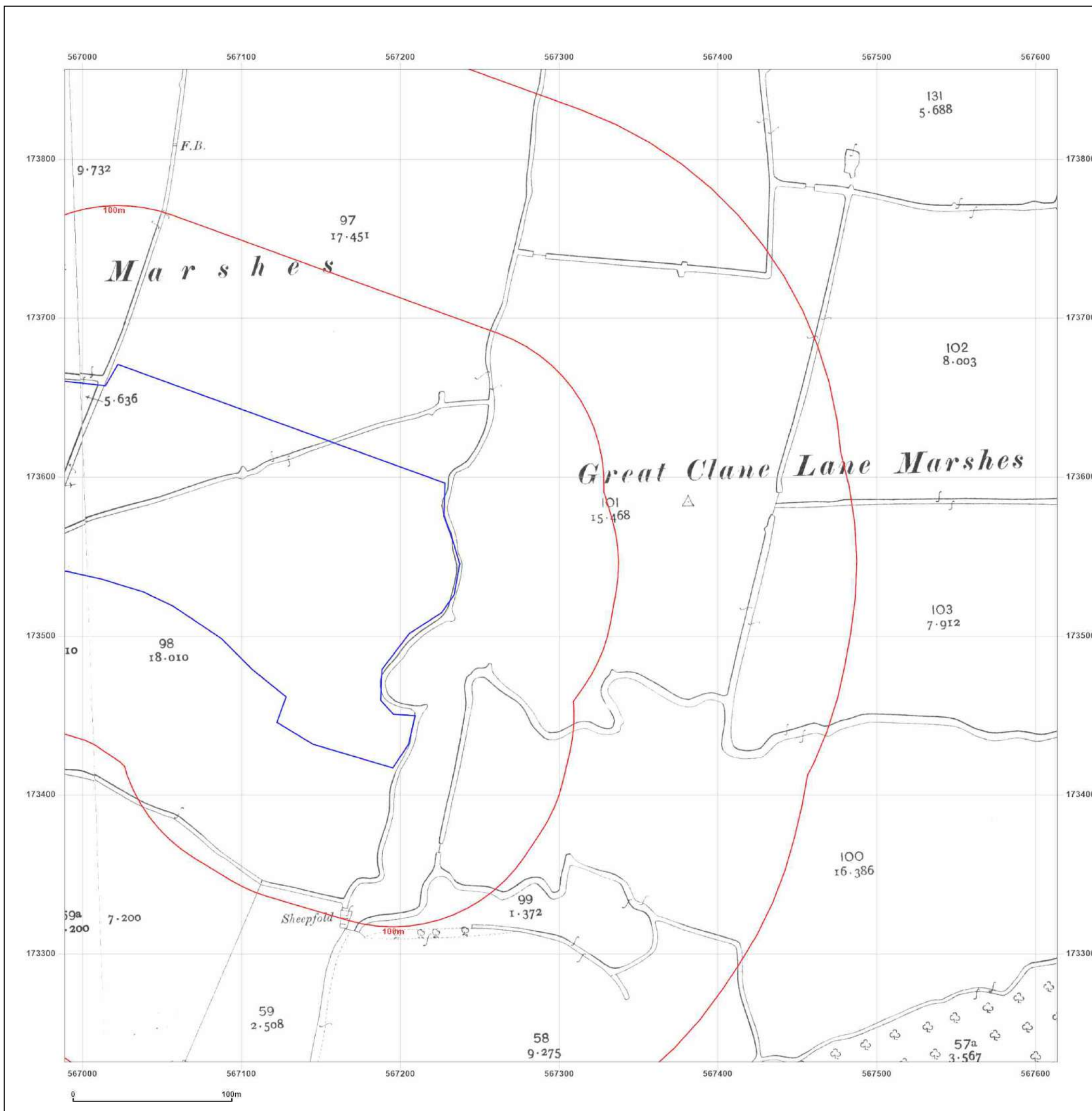


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: County Series

Map date: 1932

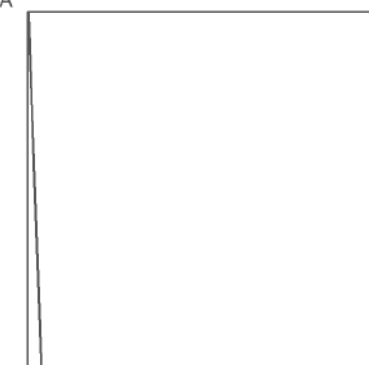
Scale: 1:2,500

Printed at: 1:2,500



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

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

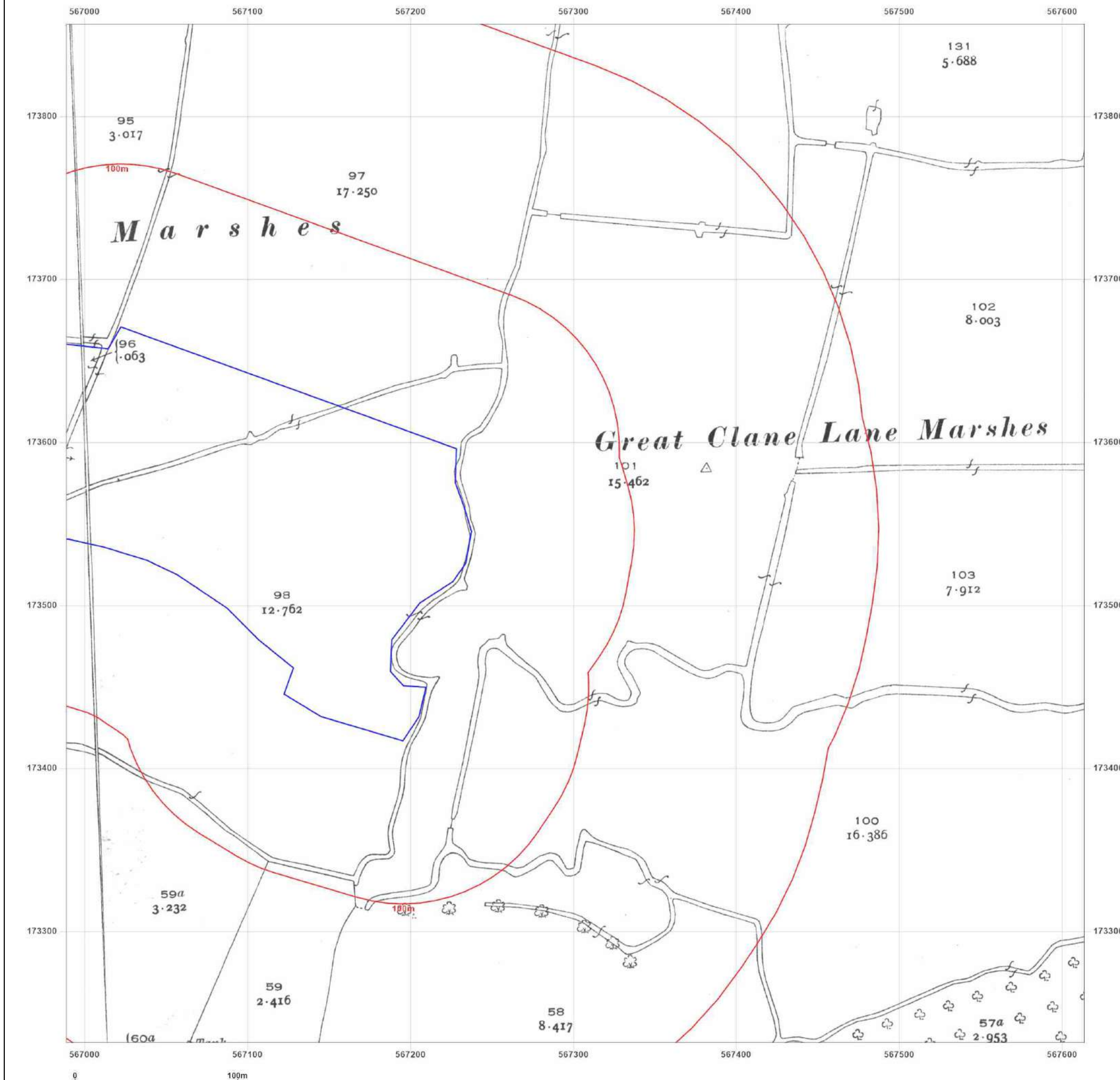


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: National Grid

Map date: 1964

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1961
Revised 1961
Edition 1964
Copyright 1964
Levelled 1952

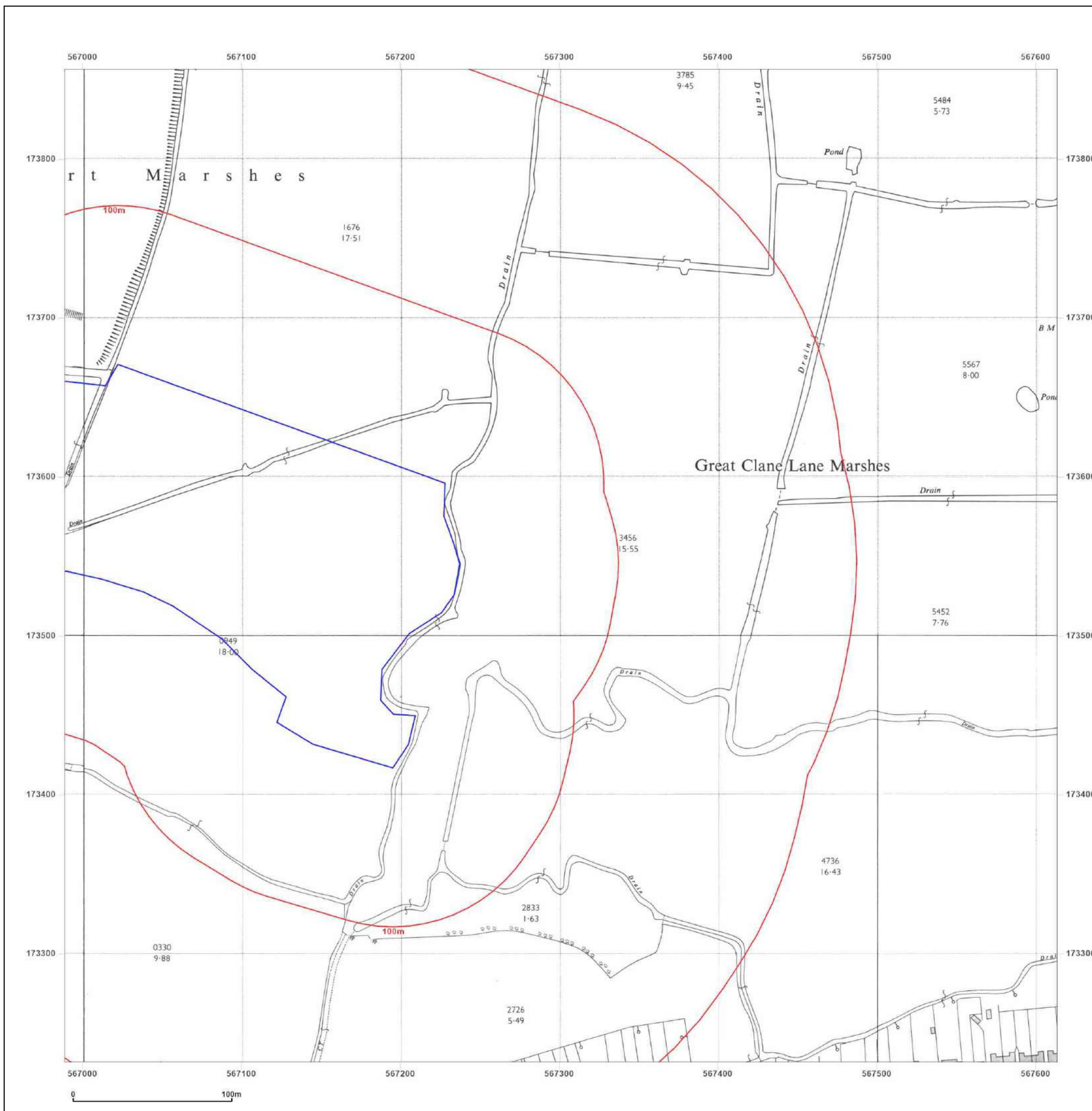


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www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: National Grid

Map date: 1970

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1969
Revised 1969
Edition N/A
Copyright 1970
Levelled 1952

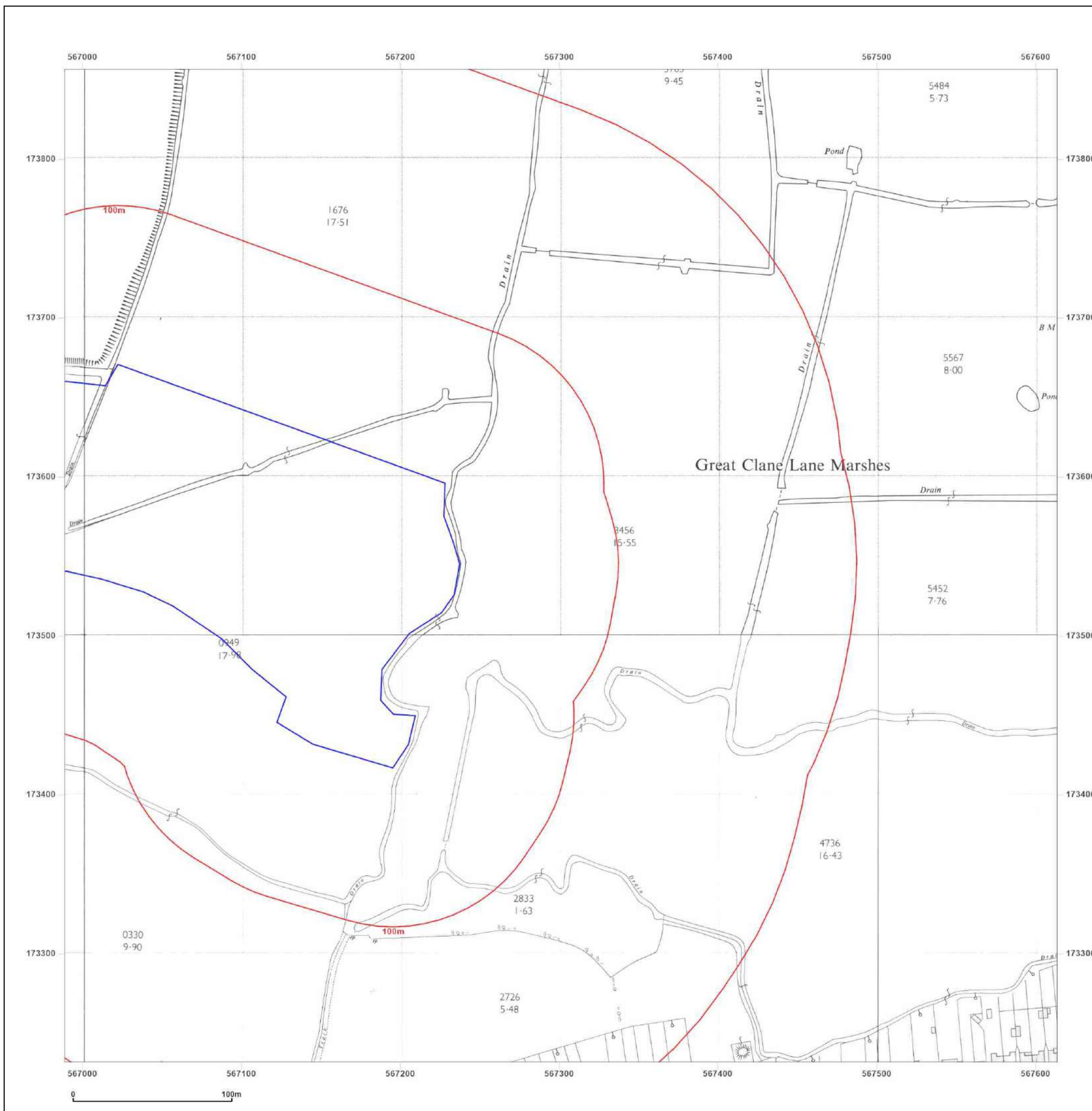


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL_LS_2_1
Grid Ref: 567301, 173544

Map Name: National Grid

Map date: 1970

Scale: 1:2,500

Printed at: 1:2,500



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

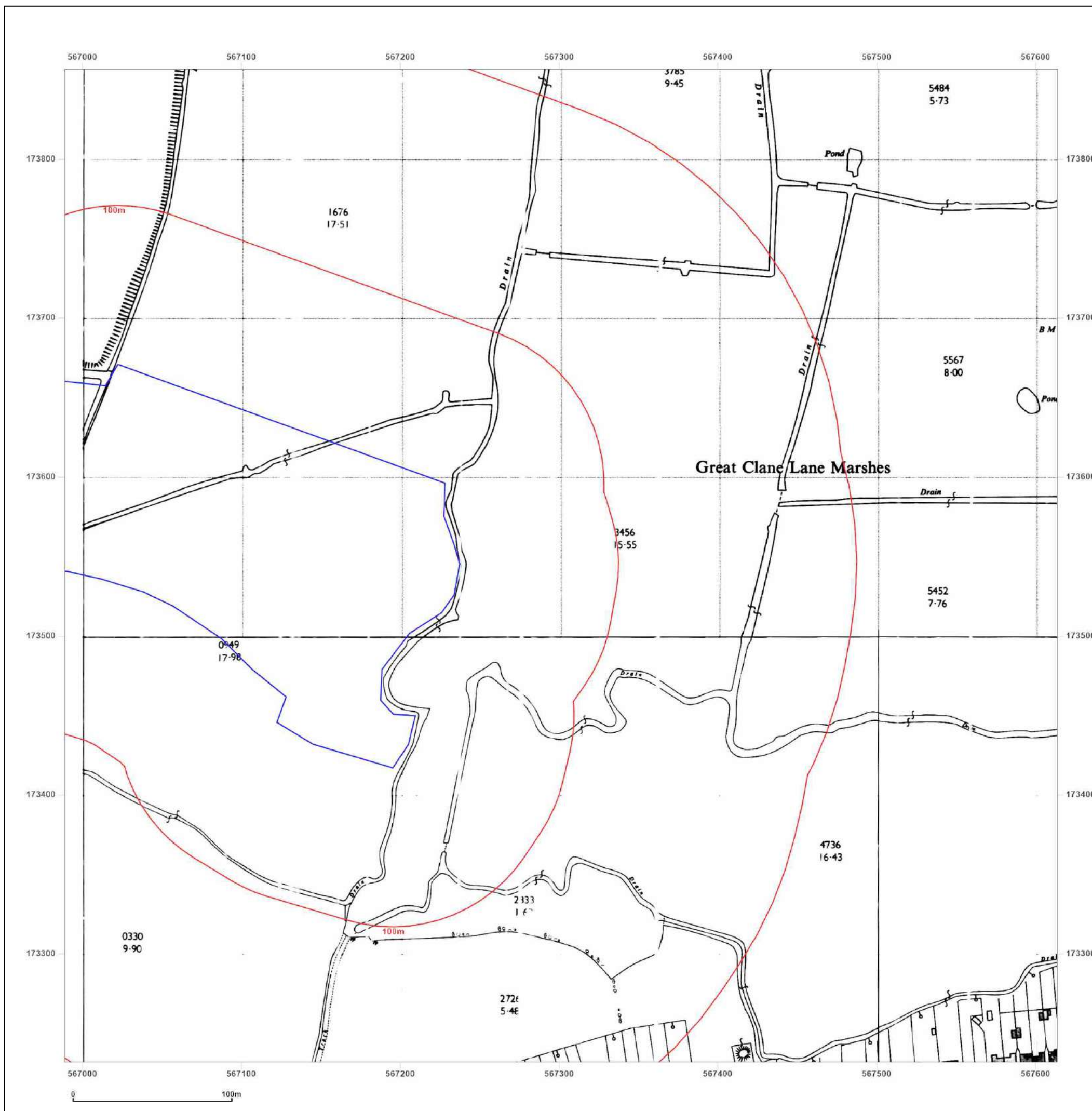


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1863-1865

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1863
Edition N/A
Copyright N/A
Levelled N/A

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

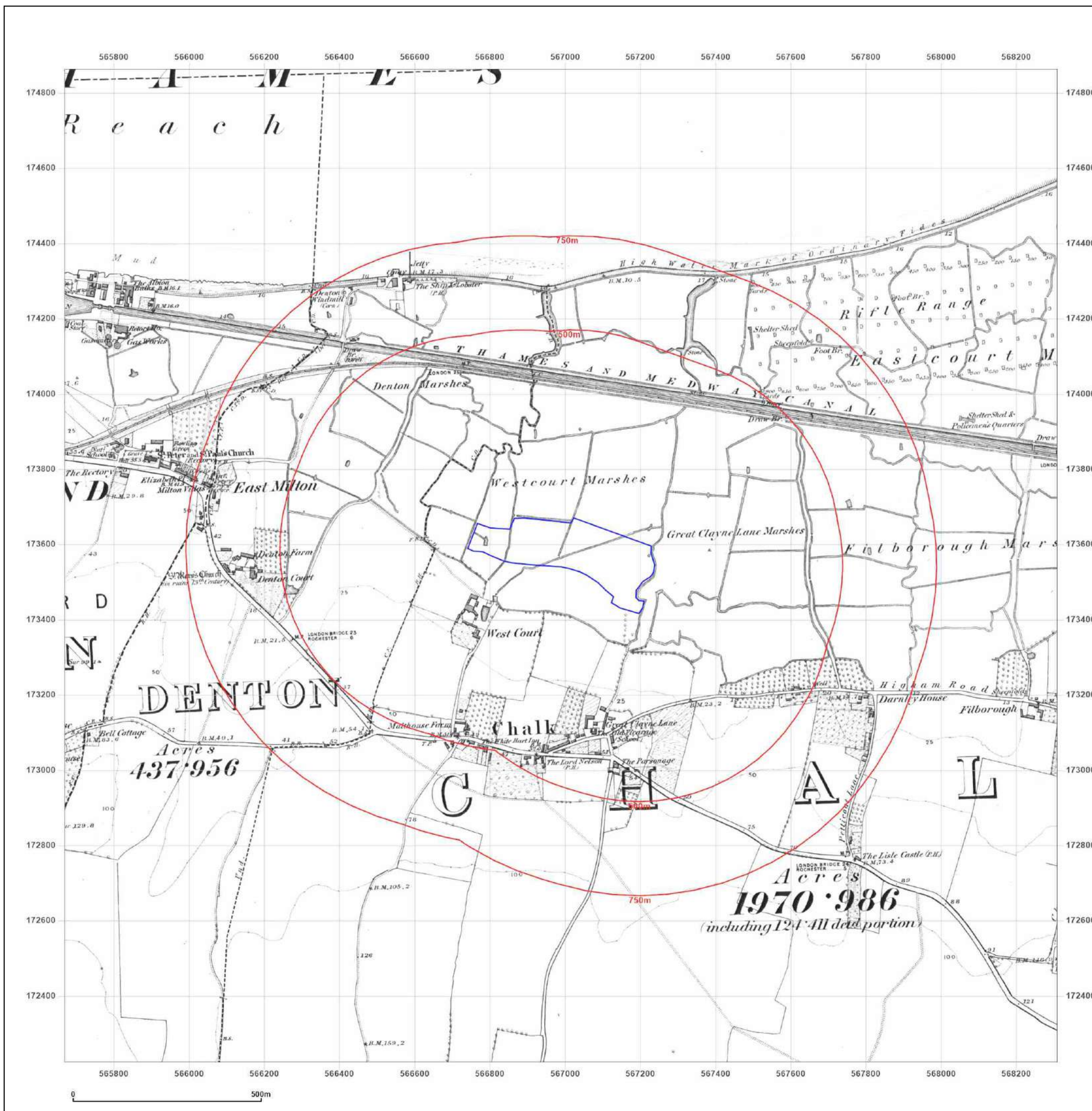


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1888

Scale: 1:10,560

Printed at: 1:10,560



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

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

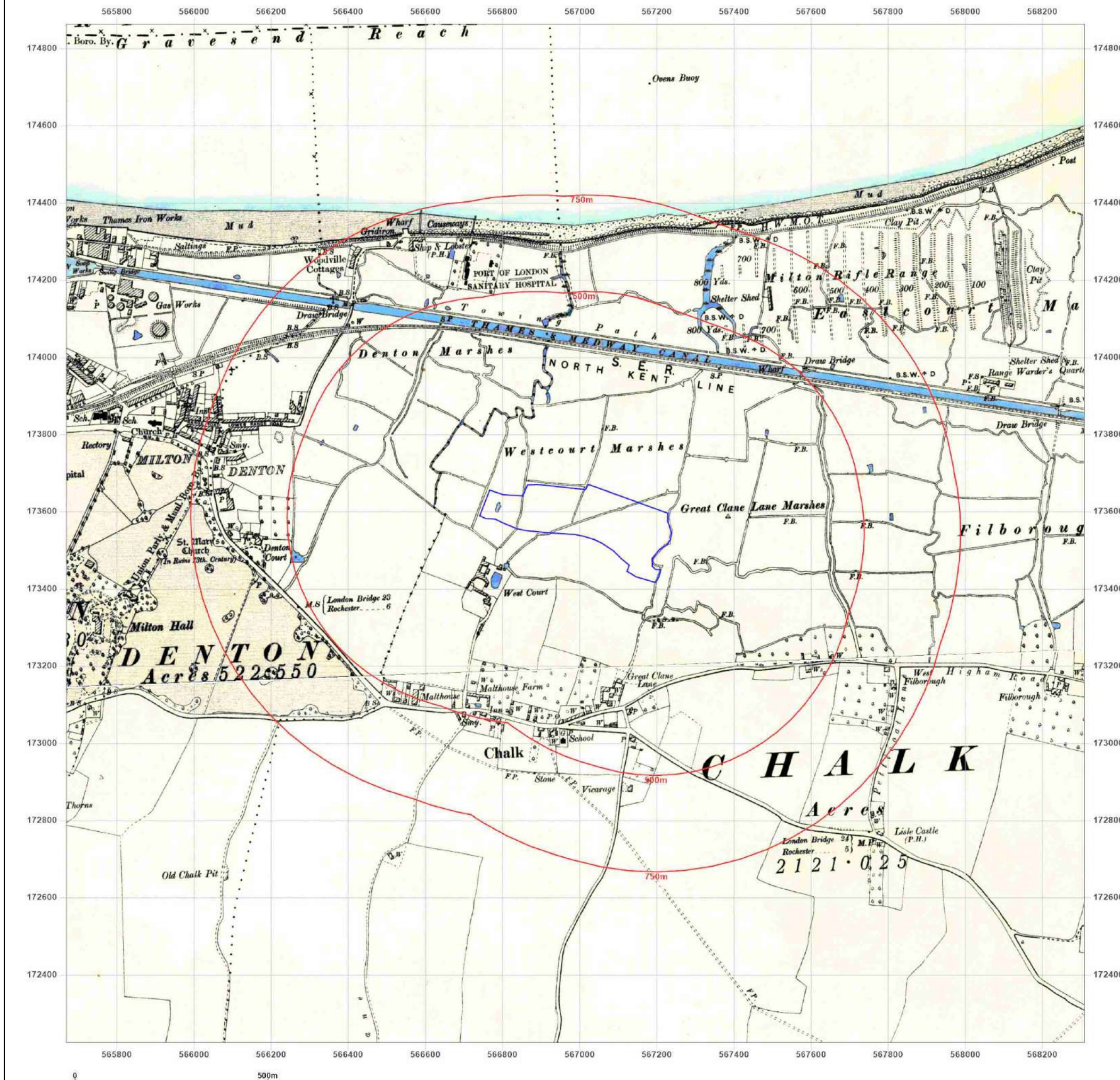


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1895

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1862
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

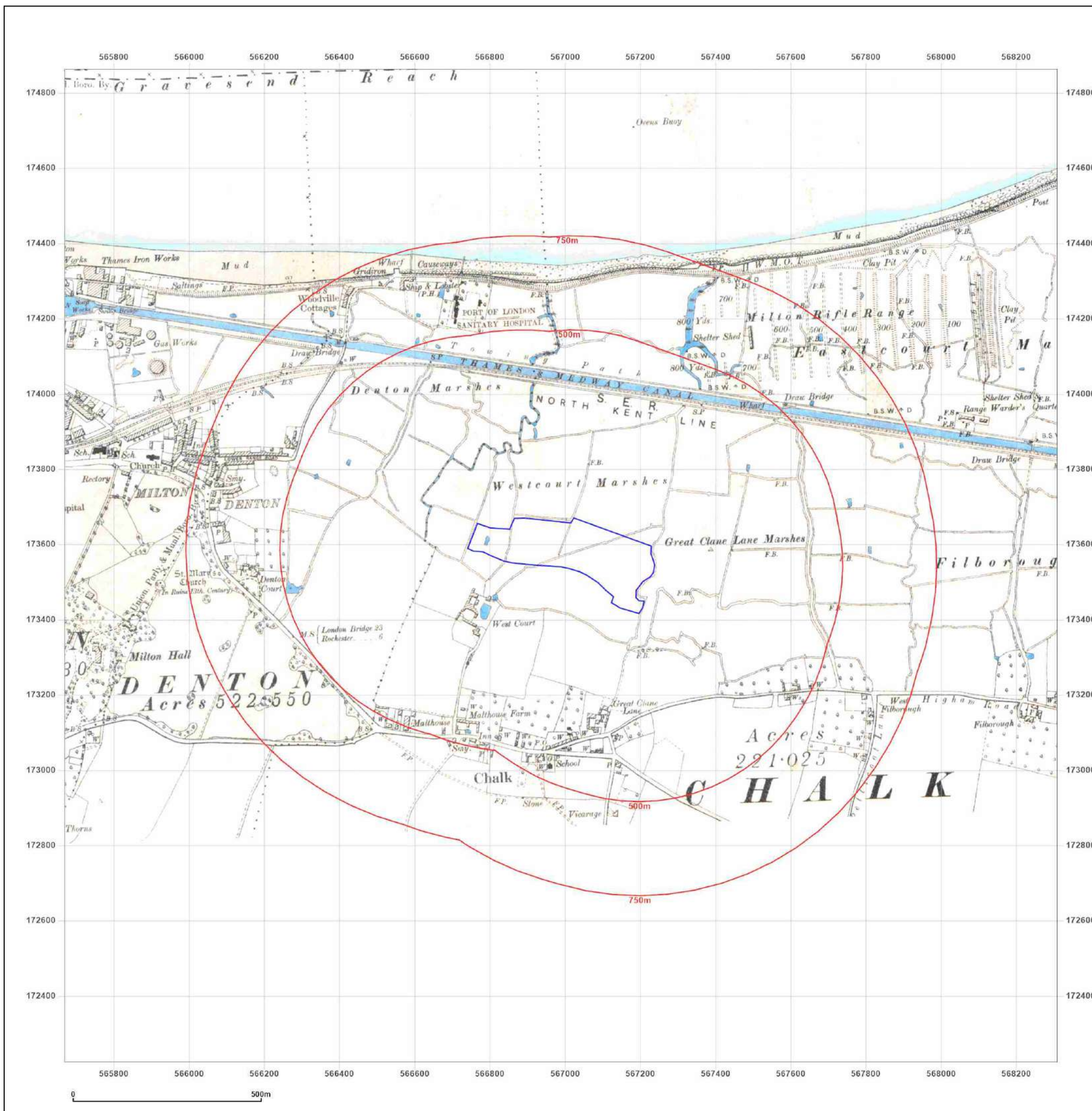


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1895

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1864
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

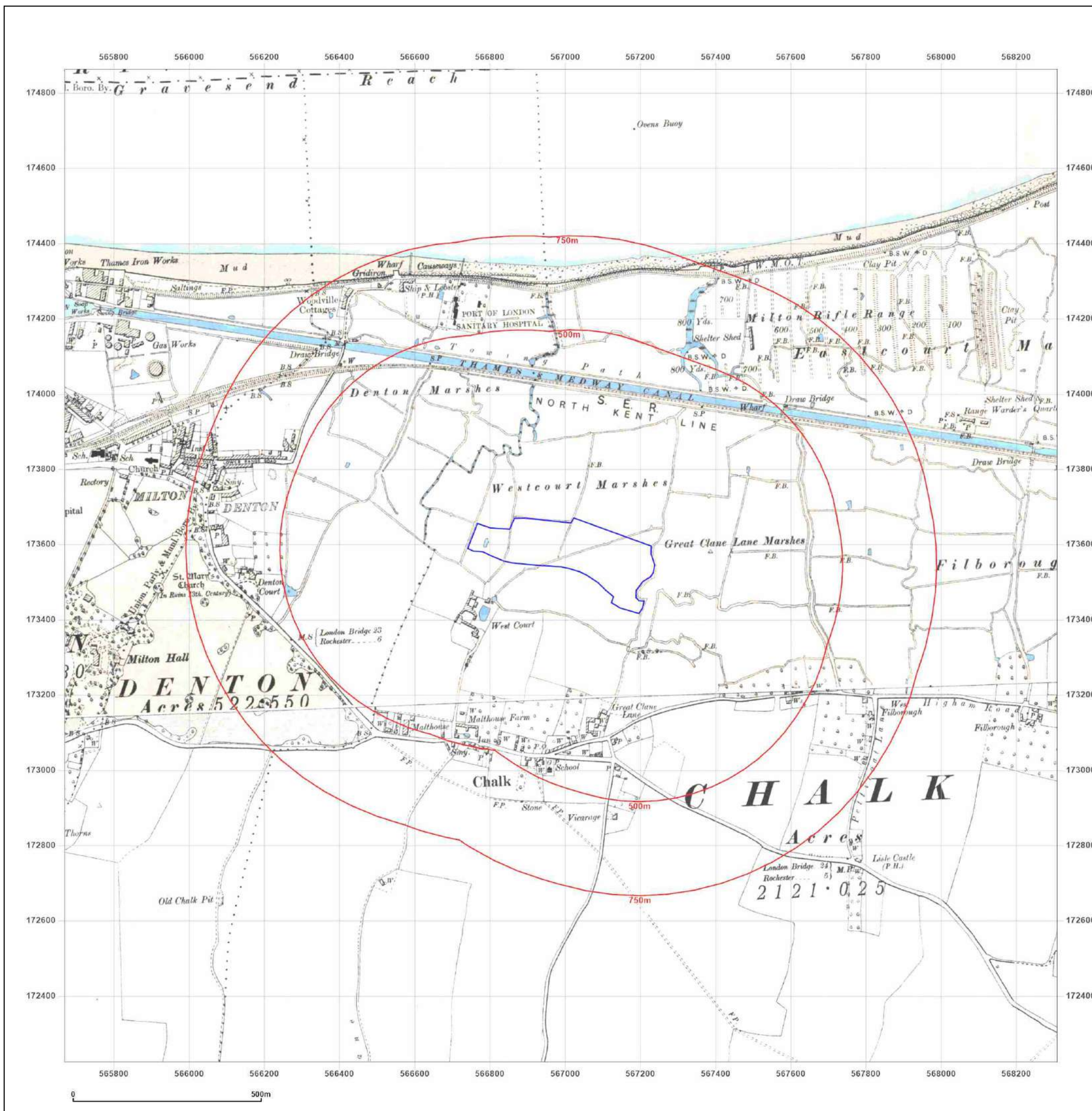


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1895

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1866
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A



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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1907

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1862
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

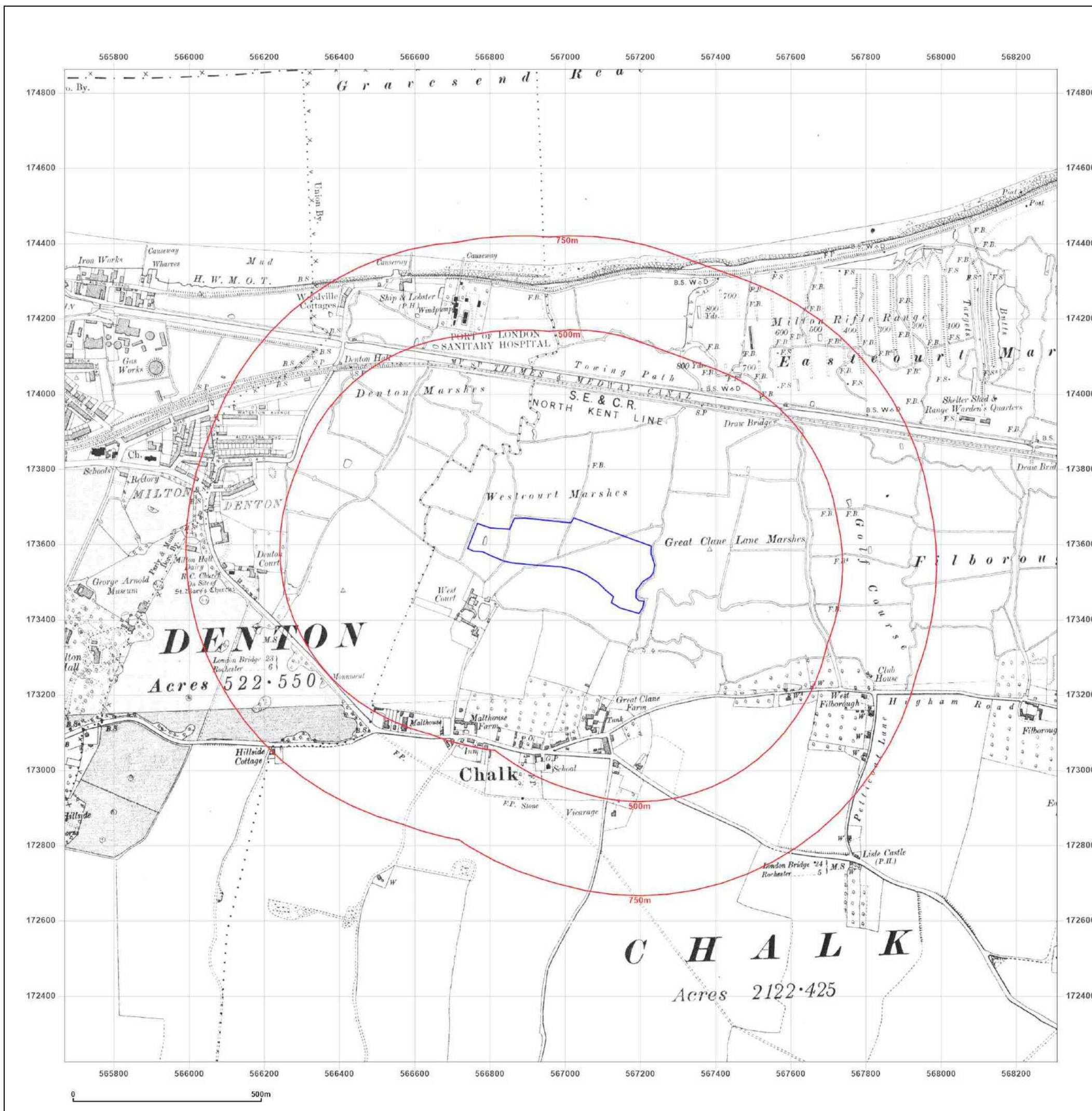


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

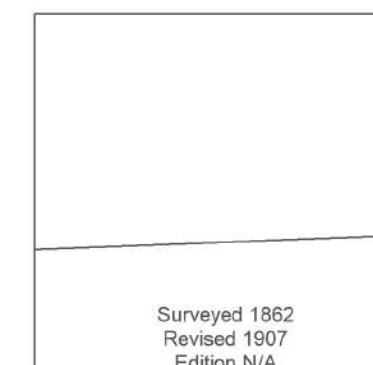
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Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1907

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1862
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

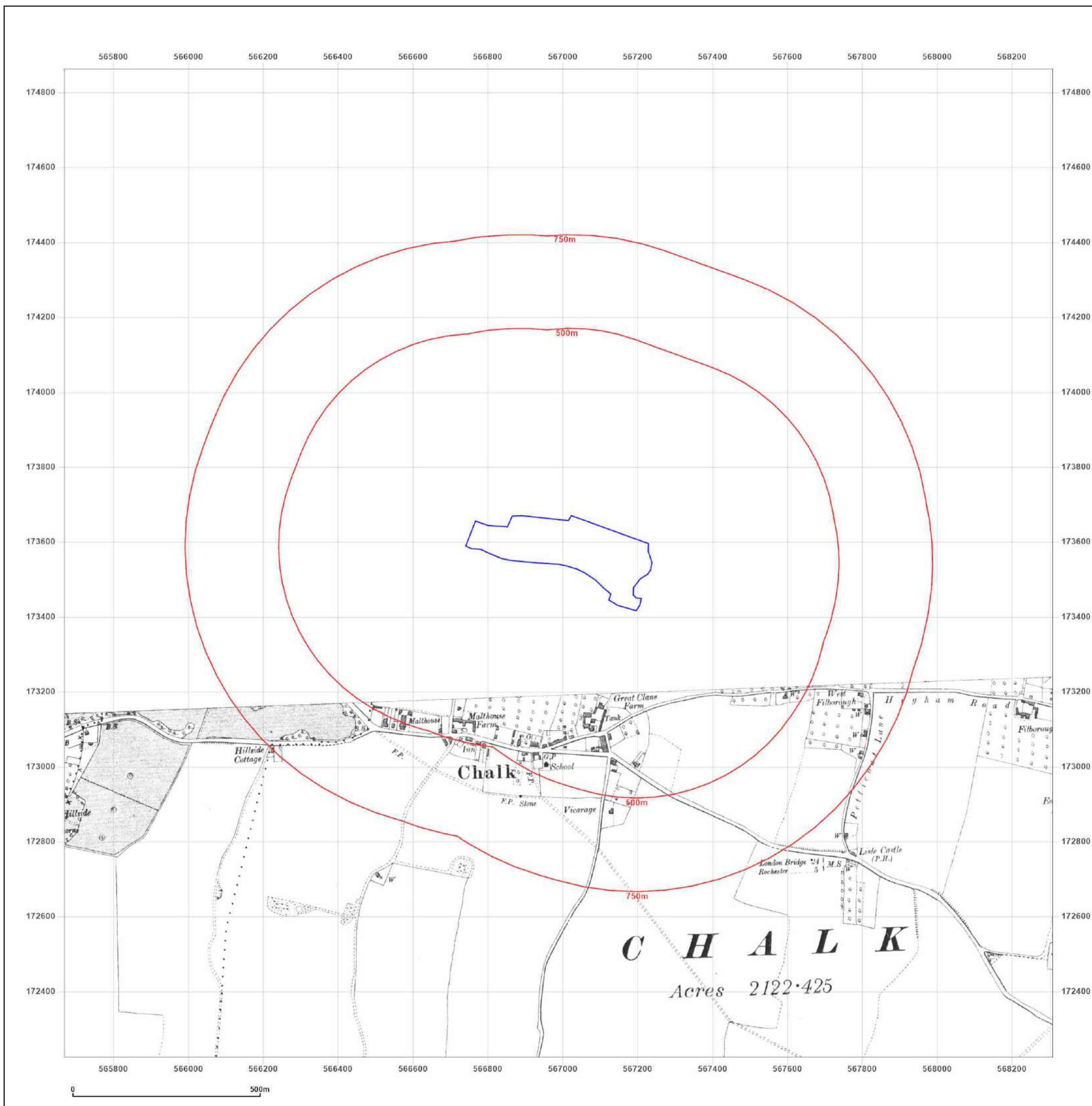


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

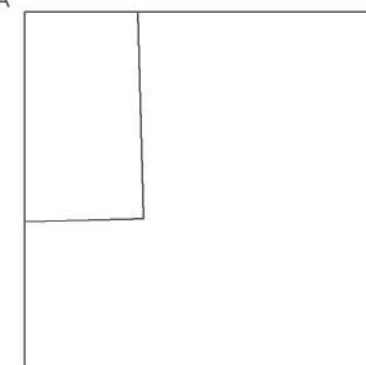
Map date: 1916

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1864
Revised 1916
Edition N/A
Copyright N/A
Levelled N/A

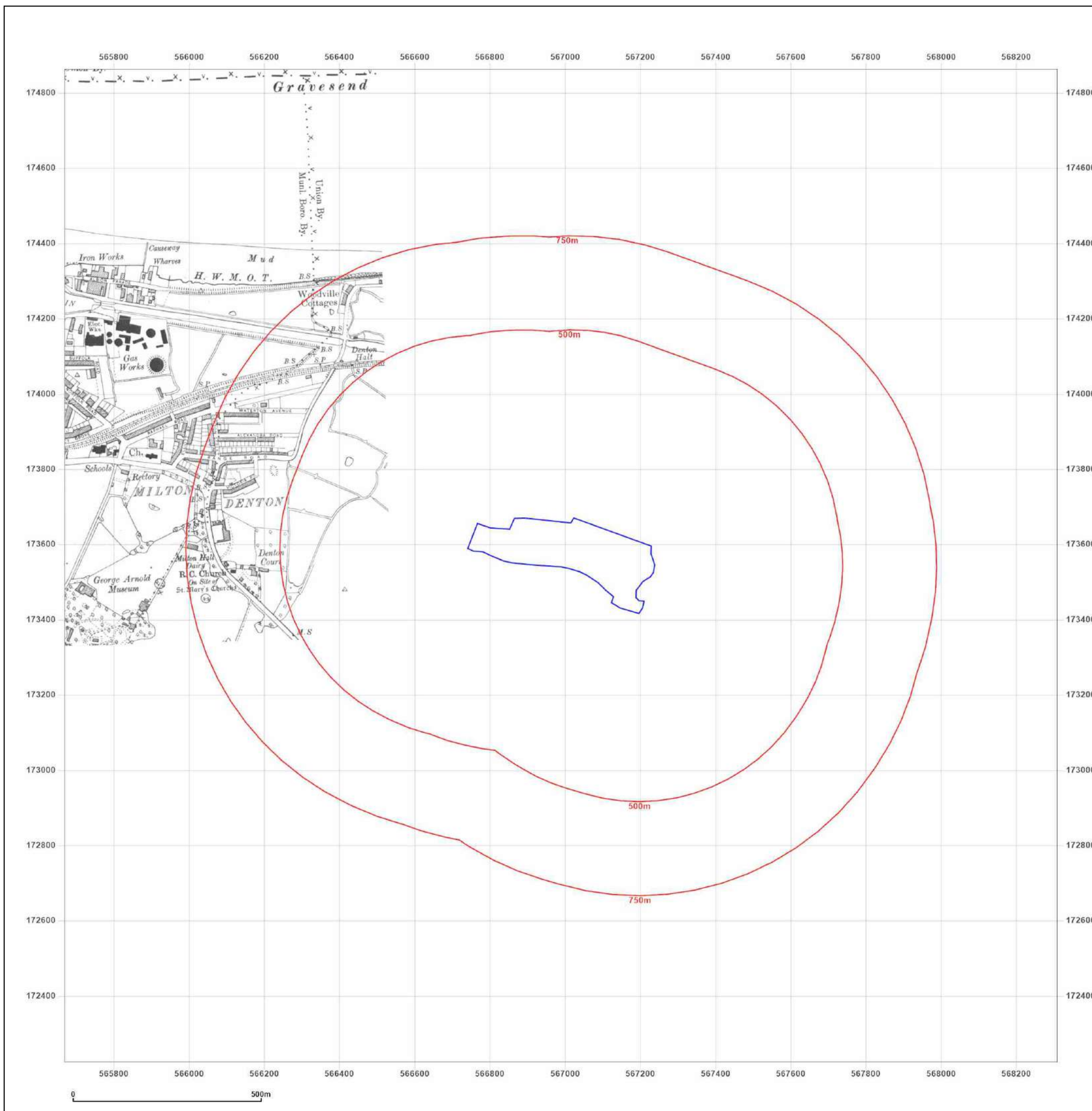


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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1923

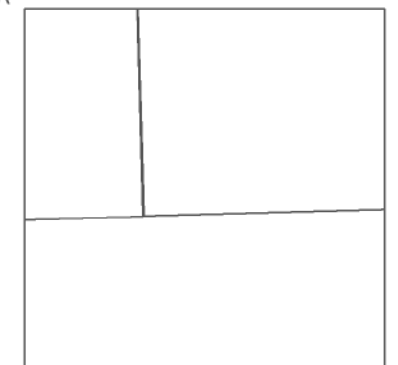
Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1864
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1862
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A



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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

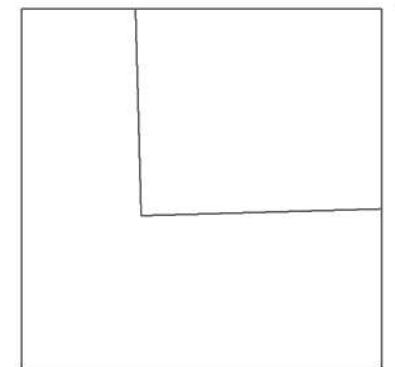
Map date: 1923

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1864
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

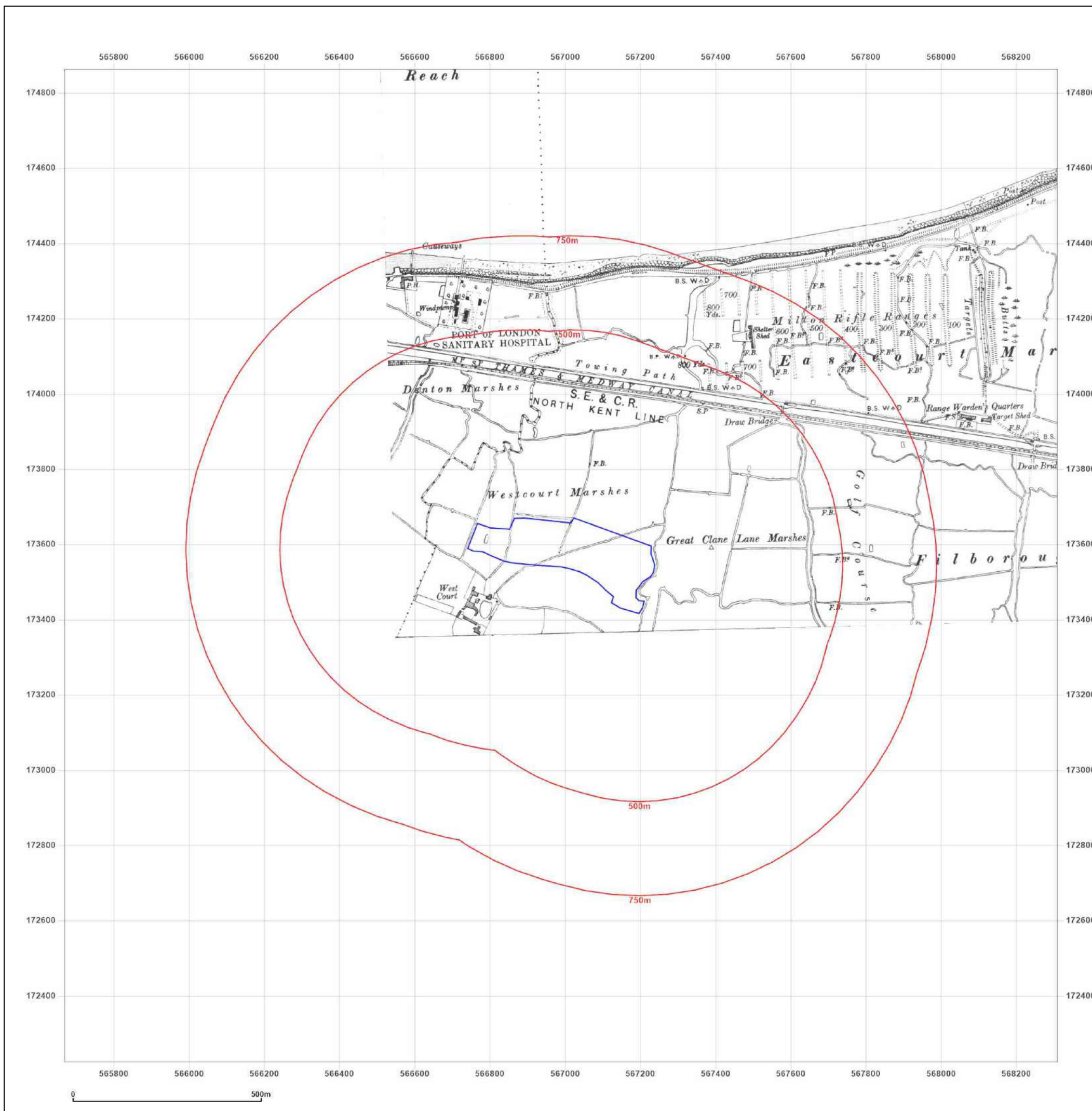


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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1932

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1862
Revised 1932
Edition N/A
Copyright N/A
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

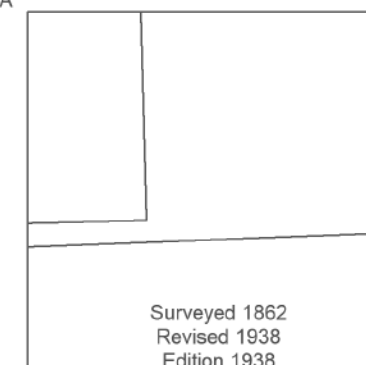
Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1866
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1862
Revised 1938
Edition 1938
Copyright N/A
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1938
Edition N/A
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: County Series

Map date: 1946-1951

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1948
Edition 1951
Copyright N/A
Levelled N/A

Surveyed 1862
Revised 1946
Edition N/A
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: Provisional

Map date: 1955

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1863
Revised 1955
Edition N/A
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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: Provisional

Map date: 1966

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1966
Revised 1966
Edition N/A
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Levelled N/A



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Site Details:

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SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: National Grid

Map date: 1973

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
Revised 1973
Edition N/A
Copyright N/A
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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: National Grid

Map date: 1981

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1980
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A



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Site Details:

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SITES A & B

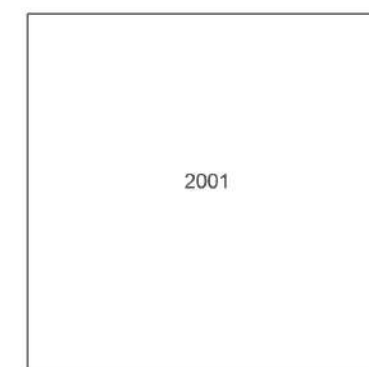
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Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



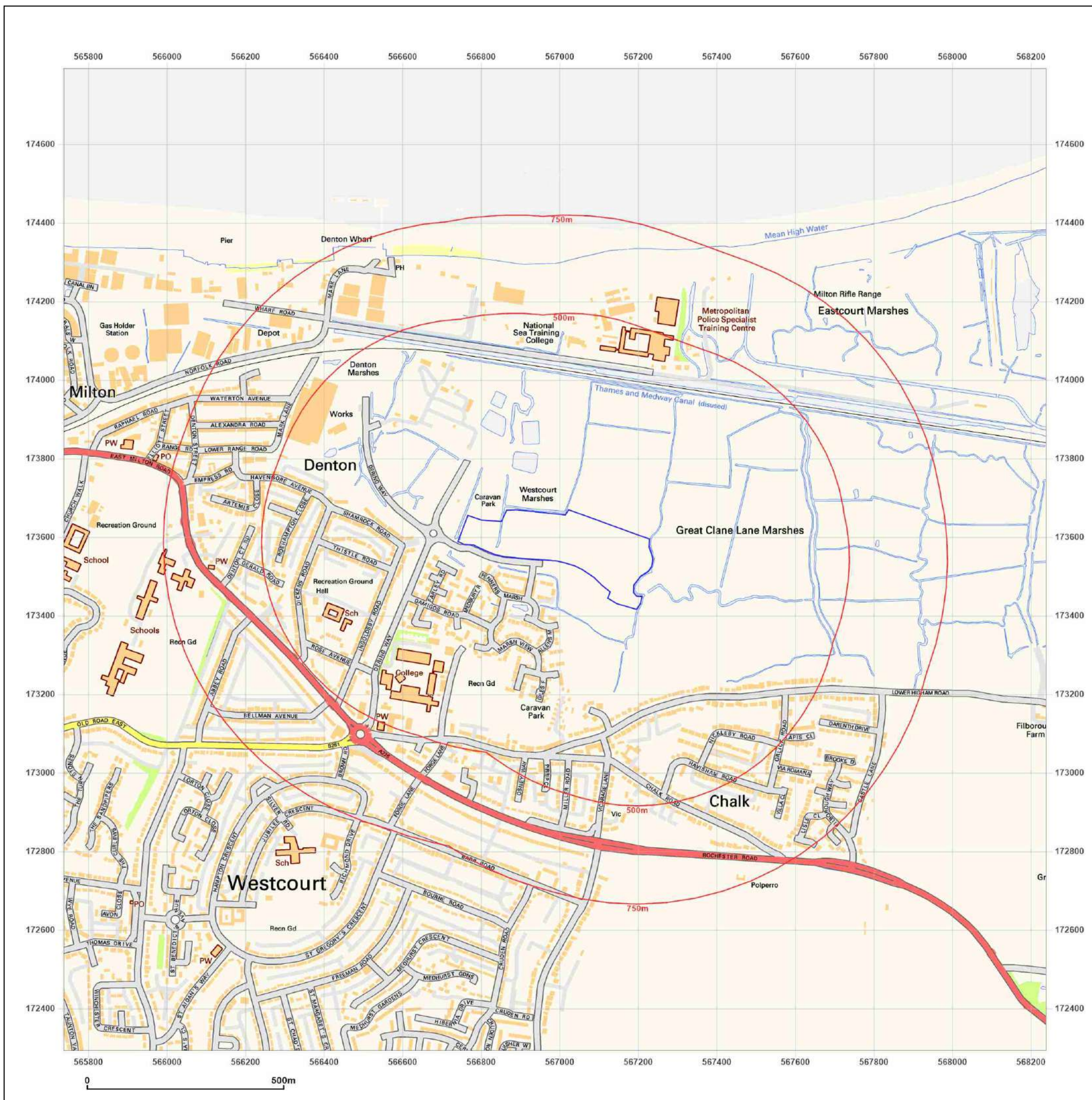
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Site Details:

DALEFIELD WAY, GRAVESEND,
SITES A & B

Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name:	National Grid
------------------	---------------

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



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Site Details:

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SITES A & B

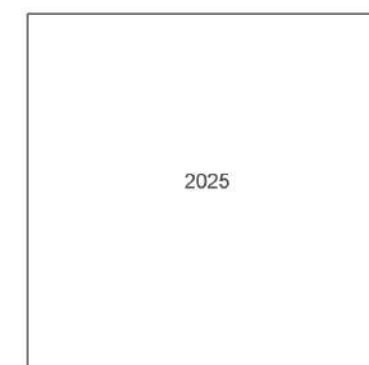
Client Ref: 24054/WP02
Report Ref: GS-WLW-K6A-U63-9BL
Grid Ref: 566988, 173543

Map Name: National Grid

Map date: 2025

Scale: 1:10,000

Printed at: 1:10,000



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APPENDIX B

ENVIRO + GEO DATABASE SEARCH RESULTS

DALEFIELD WAY, GRAVESEND, SITES A & B

Order Details

Date: 14/05/2025
Your ref: 24054/WP02
Our Ref: GS-5U8-Q2L-QJ1-IST

Site Details

Location: 567021 173576
Area: 6.05 ha
Authority: [Gravesham Borough Council](#) ↗



Summary of findings

[p. 2 >](#) **Aerial image**

[p. 9 >](#)

OS MasterMap site plan

[p.14 >](#) [Insight User Guide](#) ↗

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 >	2	1	19	54	-
18 >	1.2 >	Historical tanks >	0	0	4	24	-
20 >	1.3 >	Historical energy features >	0	0	1	7	-
20	1.4	Historical petrol stations	0	0	0	0	-
21 >	1.5 >	Historical garages >	0	0	0	5	-
21	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
22 >	2.1 >	Historical industrial land uses >	3	2	28	77	-
27 >	2.2 >	Historical tanks >	0	0	5	31	-
28 >	2.3 >	Historical energy features >	0	0	3	12	-
29	2.4	Historical petrol stations	0	0	0	0	-
29 >	2.5 >	Historical garages >	0	0	0	10	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
31	3.1	Active or recent landfill	0	0	0	0	-
31	3.2	Historical landfill (BGS records)	0	0	0	0	-
32	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
32 >	3.4 >	Historical landfill (EA/NRW records) >	0	1	0	1	-
32	3.5	Historical waste sites	0	0	0	0	-
33	3.6	Licensed waste sites	0	0	0	0	-
33 >	3.7 >	Waste exemptions >	1	0	5	23	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	4.1 >	Recent industrial land uses >	2	0	7	-	-
37	4.2	Current or recent petrol stations	0	0	0	0	-
37	4.3	Electricity cables	0	0	0	0	-
37	4.4	Gas pipelines	0	0	0	0	-
38	4.5	Sites determined as Contaminated Land	0	0	0	0	-



38	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
38	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
39	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
39 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	0	0	0	2	-
39	4.12	Radioactive Substance Authorisations	0	0	0	0	-
39 >	4.13 >	Licensed Discharges to controlled waters >	0	0	0	6	-
41	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
41	4.15	Pollutant release to public sewer	0	0	0	0	-
41	4.16	List 1 Dangerous Substances	0	0	0	0	-
41 >	4.17 >	List 2 Dangerous Substances >	0	0	0	1	-
41 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	0	7	-
42	4.19	Pollution inventory substances	0	0	0	0	-
43	4.20	Pollution inventory waste transfers	0	0	0	0	-
43	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
44 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
46 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
48 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
49 >	5.4 >	Groundwater vulnerability- soluble rock risk >	Identified (within 0m)				
50	5.5	Groundwater vulnerability- local information	None (within 0m)				
51 >	5.6 >	Groundwater abstractions >	0	0	0	6	1
53 >	5.7 >	Surface water abstractions >	0	0	0	0	19
58 >	5.8 >	Potable abstractions >	0	0	0	0	1
58	5.9	Source Protection Zones	0	0	0	0	-
59	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
60 >	6.1 >	Water Network (OS MasterMap) >	3	12	22	-	-



63 >	6.2 >	Surface water features >	1	2	10	-	-
64 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
64	6.4	WFD Surface water bodies	0	0	0	-	-
64 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
67	7.2	Historical Flood Events	0	0	0	-	-
67	7.3	Flood Defences	0	0	0	-	-
67 >	7.4 >	Areas Benefiting from Flood Defences >	1	0	0	-	-
68	7.5	Flood Storage Areas	0	0	0	-	-
69 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
70 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
71 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
73 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
74 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	1	0	0	0	1
75 >	10.2 >	Conserved wetland sites (Ramsar sites) >	1	0	0	0	1
76	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
76 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	1
76	10.5	National Nature Reserves (NNR)	0	0	0	0	0
77	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
77	10.7	Designated Ancient Woodland	0	0	0	0	0
77	10.8	Biosphere Reserves	0	0	0	0	0
77	10.9	Forest Parks	0	0	0	0	0
78	10.10	Marine Conservation Zones	0	0	0	0	0
78 >	10.11 >	Green Belt >	0	0	0	1	1
78	10.12	Proposed Ramsar sites	0	0	0	0	0



78	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
79	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
79	10.15	Nitrate Sensitive Areas	0	0	0	0	0
79 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	0
80 >	10.17 >	SSSI Impact Risk Zones >	6	-	-	-	-
84 >	10.18 >	SSSI Units >	1	0	0	0	5
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
92	11.1	World Heritage Sites	0	0	0	-	-
92	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
92	11.3	National Parks	0	0	0	-	-
92	11.4	Listed Buildings	0	0	0	-	-
93	11.5	Conservation Areas	0	0	0	-	-
93	11.6	Scheduled Ancient Monuments	0	0	0	-	-
93	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
94 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
95	12.2	Open Access Land	0	0	0	-	-
95	12.3	Tree Felling Licences	0	0	0	-	-
95	12.4	Environmental Stewardship Schemes	0	0	0	-	-
95	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
96 >	13.1 >	Priority Habitat Inventory >	2	3	26	-	-
98 >	13.2 >	Habitat Networks >	0	0	1	-	-
98 >	13.3 >	Open Mosaic Habitat >	0	1	2	-	-
99	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
100 >	14.1 >	10k Availability >	Identified (within 500m)				
101 >	14.2 >	Artificial and made ground (10k) >	1	0	1	4	-
103 >	14.3 >	Superficial geology (10k) >	1	0	1	4	-

104	14.4	Landslip (10k)	0	0	0	0	-
105 >	14.5 >	Bedrock geology (10k) >	1	0	1	1	-
106	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
107 >	15.1 >	50k Availability >	Identified (within 500m)				
108 >	15.2 >	Artificial and made ground (50k) >	0	1	0	3	-
109 >	15.3 >	Artificial ground permeability (50k) >	0	1	-	-	-
110 >	15.4 >	Superficial geology (50k) >	1	0	1	4	-
111 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
111	15.6	Landslip (50k)	0	0	0	0	-
111	15.7	Landslip permeability (50k)	None (within 50m)				
112 >	15.8 >	Bedrock geology (50k) >	1	0	1	1	-
113 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
113	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
114 >	16.1 >	BGS Boreholes >	4	15	66	-	-
Page	Section	Natural ground subsidence >					
119 >	17.1 >	Shrink swell clays >	Low (within 50m)				
120 >	17.2 >	Running sands >	Low (within 50m)				
122 >	17.3 >	Compressible deposits >	High (within 50m)				
124 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
125 >	17.5 >	Landslides >	Very low (within 50m)				
127 >	17.6 >	Ground dissolution of soluble rocks >	Very low (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
129	18.1	BritPits	0	0	0	0	-
130 >	18.2 >	Surface ground workings >	1	2	27	-	-
131	18.3	Underground workings	0	0	0	0	0
131	18.4	Underground mining extents	0	0	0	0	-
131	18.5	Historical Mineral Planning Areas	0	0	0	0	-



132 >	18.6 >	Non-coal mining >	0	1	0	0	1
132	18.7	JPB mining areas	None (within 0m)				
132	18.8	The Coal Authority non-coal mining	0	0	0	0	-
133 >	18.9 >	Researched mining >	0	0	0	2	-
133	18.10	Mining record office plans	0	0	0	0	-
133	18.11	BGS mine plans	0	0	0	0	-
133	18.12	Coal mining	None (within 0m)				
134	18.13	Brine areas	None (within 0m)				
134	18.14	Gypsum areas	None (within 0m)				
134	18.15	Tin mining	None (within 0m)				
134	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
135	19.1	Natural cavities	0	0	0	0	-
135	19.2	Mining cavities	0	0	0	0	0
135	19.3	Reported recent incidents	0	0	0	0	-
135	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
137 >	20.1 >	Radon >	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
139 >	21.1 >	BGS Estimated Background Soil Chemistry >	3	2	-	-	-
139	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
140	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
141	22.1	Underground railways (London)	0	0	0	-	-
141	22.2	Underground railways (Non-London)	0	0	0	-	-
142	22.3	Railway tunnels	0	0	0	-	-
142 >	22.4 >	Historical railway and tunnel features >	0	0	6	-	-
142	22.5	Royal Mail tunnels	0	0	0	-	-
143	22.6	Historical railways	0	0	0	-	-



143	22.7	Railways	0	0	0	-	-
143	22.8	Crossrail 2	0	0	0	0	-
143	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 6.05ha



Recent site history - 2018 aerial photograph



Capture Date: 01/09/2018

Site Area: 6.05ha



Recent site history - 2012 aerial photograph



Capture Date: 25/05/2012

Site Area: 6.05ha



Recent site history - 2009 aerial photograph



Capture Date: 27/09/2009

Site Area: 6.05ha



Recent site history - 1999 aerial photograph

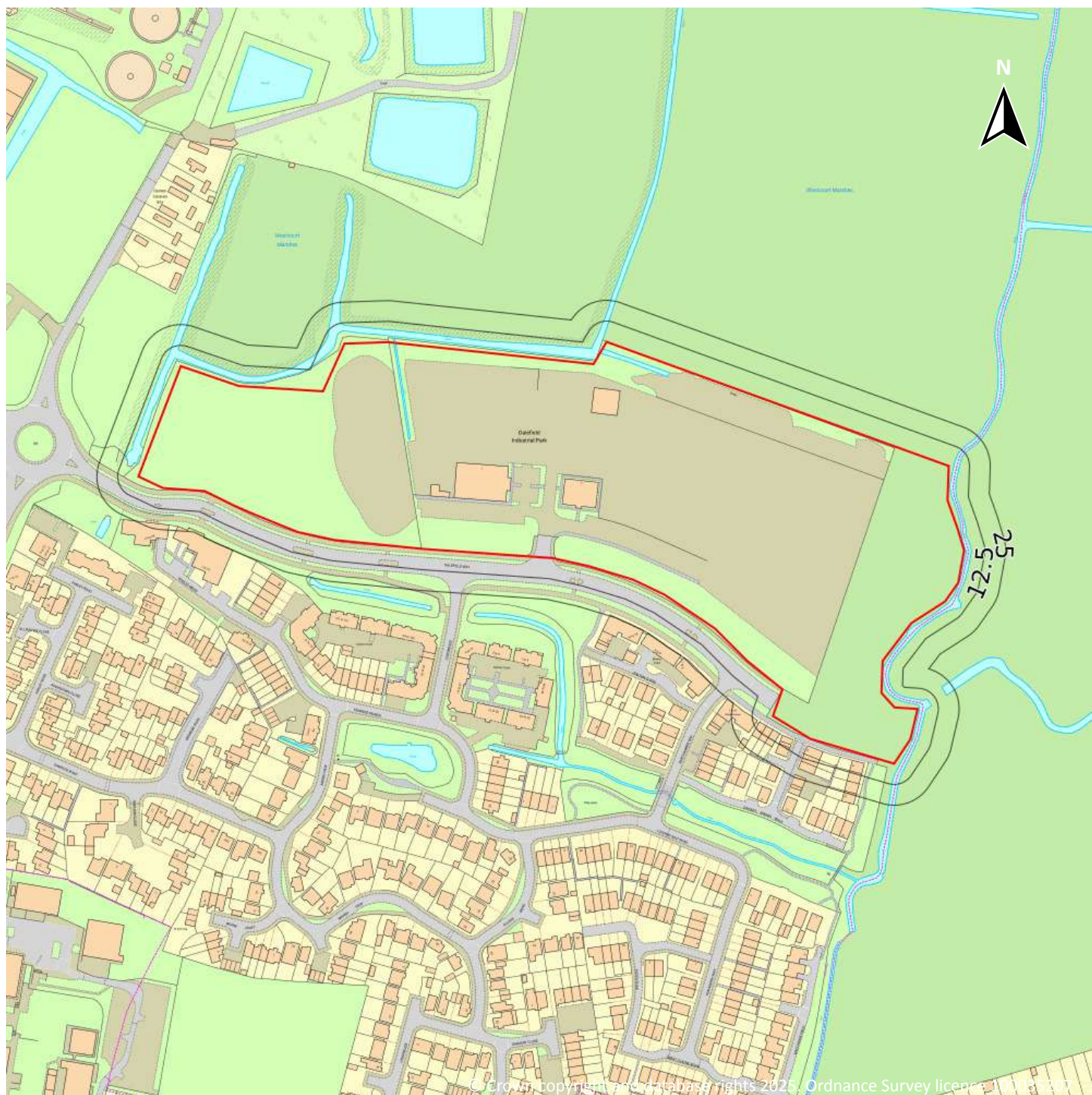


Capture Date: 03/09/1999

Site Area: 6.05ha



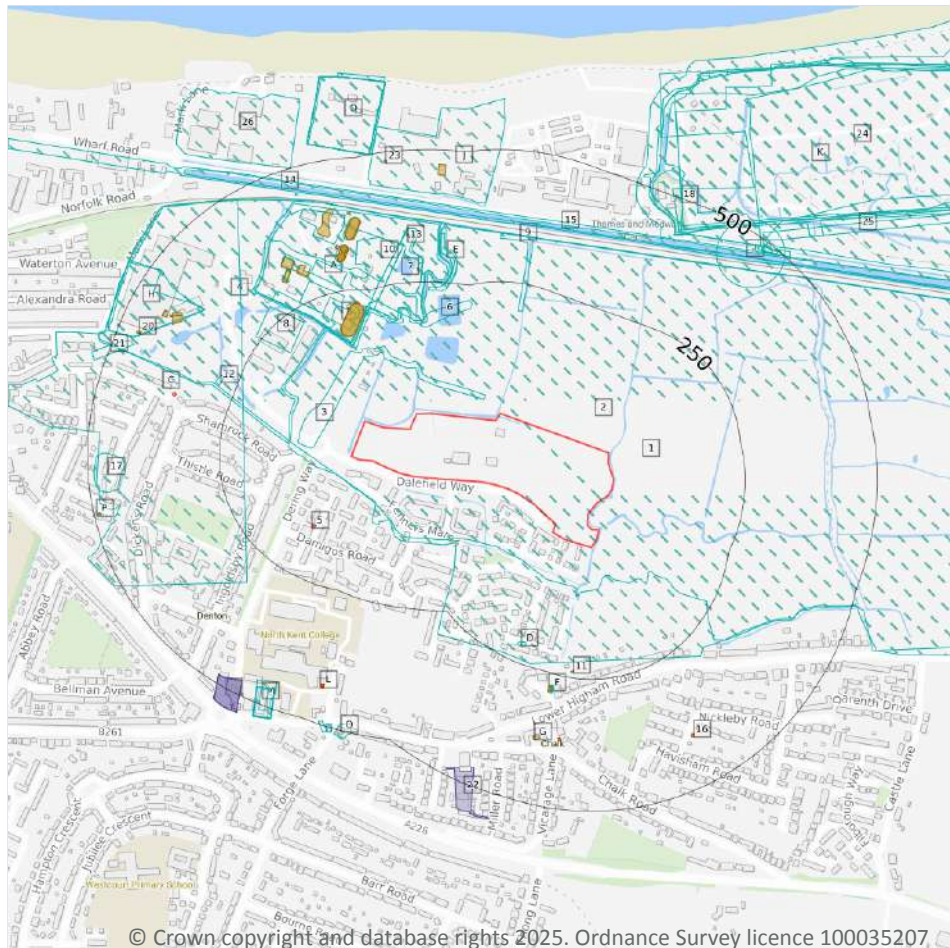
OS MasterMap site plan



Site Area: 6.05ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

76

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	Marshes	1888	2271301



ID	Location	Land use	Dates present	Group ID
2	On site	Marshes	1895	2275604
3	38m N	Unspecified Ground Workings	1955 - 1966	2282061
4	123m W	Marshes	1888	2235831
A	145m NW	Sewage Works	1938 - 1951	2271075
A	151m NW	Unspecified Works	1955 - 1981	2264532
A	152m NW	Sewage Works	1932	2224286
6	164m NW	Unspecified Ground Workings	1966	2163302
B	174m NW	Sludge Bed	1951	2194577
7	182m NW	Refuse Heaps	1932	2273275
A	187m NW	Railway Sidings	1951	2200471
8	191m NW	Unspecified Tank	1973 - 1981	2264218
B	197m NW	Refuse Heap	1951	2159506
9	198m N	Unspecified Ground Workings	1973	2163301
C	203m W	Marshes	1916	2235259
D	209m S	Unspecified Tank	1951	2216403
D	209m S	Unspecified Tank	1932 - 1938	2285362
D	211m S	Unspecified Tank	1955	2245443
A	220m NW	Filter Beds	1951	2184494
10	224m NW	Sludge Beds	1951	2167342
E	233m N	Unspecified Ground Workings	1955 - 1966	2266386
E	241m N	Unspecified Ground Workings	1981	2227735
A	258m NW	Filter Beds	1951	2184493
F	271m S	Unspecified Tanks	1932 - 1946	2261245
F	273m S	Unspecified Tanks	1955	2246555
F	273m S	Unspecified Tank	1907	2190233
F	276m S	Tank	1907	2303186
12	278m W	Pumping Station	1981	2201128
13	285m N	Unspecified Ground Workings	1951	2162946



ID	Location	Land use	Dates present	Group ID
A	296m NW	Unspecified Tanks	1951	2246790
A	304m NW	Unspecified Tank	1938 - 1951	2324931
A	305m NW	Unspecified Tank	1932	2331168
A	306m NW	Unspecified Tanks	1951 - 1973	2206746
A	318m NW	Unspecified Tanks	1932 - 1938	2290170
A	340m NW	Sludge Bed	1951	2194576
A	345m NW	Unspecified Tanks	1981	2168396
14	360m N	Disused Canal	1966	2267240
15	364m N	Disused Canal	1981	2201990
H	369m NW	Unspecified Works	1981	2258663
H	370m NW	Unspecified Works	1966 - 1973	2225608
I	399m NE	Unspecified Wharf	1895	2289910
J	399m N	Unspecified Works	1981	2227547
K	406m NE	Miniature Rifle Range	1938 - 1951	2218090
17	430m W	Unspecified Heap	1955 - 1966	2263614
K	431m NE	Rifle Range	1895	2215220
K	431m NE	Rifle Range	1907	2280097
K	437m NE	Rifle Ranges	1923	2227008
18	438m NE	Unspecified Wharf	1895	2207800
K	439m NE	Rifle Range	1888 - 1895	2315164
K	442m NE	Rifle Range	1932	2269391
19	446m NW	Railway Building	1923	2195565
K	448m NE	Miniature Rifle Range	1955	2263835
M	449m SW	Malthouse	1895	2310635
K	453m NE	Rifle Range	1895	2248584
21	461m W	Unspecified Heap	1951	2186819
M	462m SW	Malthouse	1907	2239700
M	462m SW	Malthouse	1888	2241932



ID	Location	Land use	Dates present	Group ID
M	463m SW	Malthouse	1907	2323041
M	467m SW	Malthouse	1895	2260531
I	478m NE	Unspecified Wharf	1955	2252897
I	479m NE	Unspecified Wharf	1888	2204872
I	479m NE	Unspecified Wharf	1932	2295057
I	479m NE	Unspecified Wharf	1932	2295415
I	482m NE	Unspecified Wharf	1865	2312077
O	485m SW	Smithy	1895	2180938
P	488m W	Unspecified Tank	1938 - 1951	2250066
O	492m SW	Smithy	1895	2210174
O	493m SW	Smithy	1888	2180939
24	497m NE	Rifle Range	1966 - 1973	2266432
25	499m NE	Rifle Range	1865	2317545
Q	499m NW	Hospital	1923	2314027
Q	499m NW	Hospital	1932 - 1938	2235995
Q	499m NW	Hospital	1895	2256681
Q	499m NW	Isolation Hospital	1951	2297229
Q	499m NW	Hospital	1907	2299868
26	499m NW	Unspecified Commercial/Industrial	1973 - 1981	2327938

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

28

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

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



ID	Location	Land use	Dates present	Group ID
B	163m NW	Settling Tanks	1982	397854
B	163m NW	Tanks	1993	378484
D	215m S	Unspecified Tank	1932	389091
11	236m S	Unspecified Tank	1909 - 1933	419068
F	275m S	Tanks	1933	378477
F	275m S	Unspecified Tank	1909	389109
A	295m NW	Sediment Tanks	1932	381165
A	301m NW	Syphon Tank	1932	381523
A	306m NW	Tanks	1953	409432
A	306m NW	Tanks	1969	421658
A	307m NW	Tanks	1970	410919
A	307m NW	Tanks	1955 - 1964	417037
A	319m NW	Sediment Tanks	1932	381164
A	322m NW	Unspecified Tank	1982	389115
A	328m NW	Unspecified Tank	1993	389118
A	345m NW	Tanks	1993	408375
A	346m NW	Tanks	1984	398279
A	356m NW	Tanks	1993	378486
G	371m S	Tanks	1933	378478
A	391m NW	Unspecified Tank	1984	389127
H	395m NW	Tanks	1993	410283
H	399m NW	Tanks	1978 - 1988	418017
H	412m NW	Tanks	1978 - 1988	409105
H	424m NW	Tanks	1993	378485
J	452m N	Tanks	1984 - 1993	429835
20	456m W	Unspecified Tank	1978 - 1988	428727
23	480m N	Unspecified Tank	1984 - 1993	414289
P	487m W	Unspecified Tank	1932	389102

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

8

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

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

ID	Location	Land use	Dates present	Group ID
5	147m W	Electricity Substation	1989 - 1993	298692
A	330m NW	Electricity Substation	1982 - 1993	314789
C	352m W	Electricity Substation	1978 - 1993	321830
G	365m S	Electricity Substation	1952	271761
16	401m SE	Electricity Substation	1952	271762
L	425m SW	Electricity Substation	1985 - 1991	282500
L	426m SW	Electricity Substation	1993	300000
L	426m SW	Electricity Transformer	1975	276834

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



1.5 Historical garages

Records within 500m**5**

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

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

ID	Location	Land use	Dates present	Group ID
22	465m S	Garages	1953 - 1955	90449
N	473m SW	Garage	1969	91800
N	473m SW	Garage	1970	95910
N	473m SW	Garage	1975 - 1978	91036
N	473m SW	Garage	1985 - 1991	95755

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

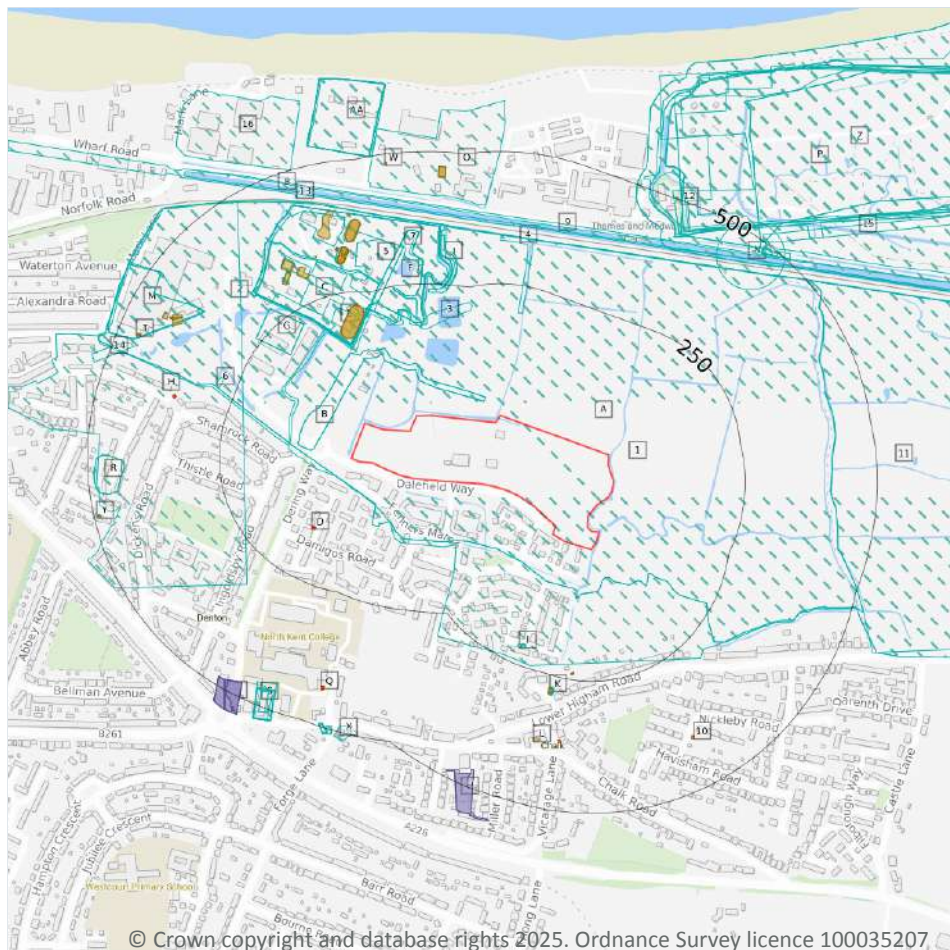
Records within 500m**0**

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

110

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 22](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Marshes	1888	2271301
A	On site	Marshes	1895	2275604
A	On site	Marshes	1895	2275604



ID	Location	Land Use	Date	Group ID
B	38m N	Unspecified Ground Workings	1955	2282061
B	38m N	Unspecified Ground Workings	1966	2282061
2	123m W	Marshes	1888	2235831
C	145m NW	Sewage Works	1938	2271075
C	150m NW	Sewage Works	1951	2271075
C	151m NW	Unspecified Works	1981	2264532
C	151m NW	Unspecified Works	1973	2264532
C	151m NW	Unspecified Works	1955	2264532
C	151m NW	Unspecified Works	1966	2264532
C	152m NW	Sewage Works	1932	2224286
C	152m NW	Sewage Works	1932	2224286
3	164m NW	Unspecified Ground Workings	1966	2163302
E	174m NW	Sludge Bed	1951	2194577
F	182m NW	Refuse Heaps	1932	2273275
F	182m NW	Refuse Heaps	1932	2273275
C	187m NW	Railway Sidings	1951	2200471
G	191m NW	Unspecified Tank	1981	2264218
G	191m NW	Unspecified Tank	1973	2264218
E	197m NW	Refuse Heap	1951	2159506
4	198m N	Unspecified Ground Workings	1973	2163301
H	203m W	Marshes	1916	2235259
I	209m S	Unspecified Tank	1938	2285362
I	209m S	Unspecified Tank	1951	2216403
I	210m S	Unspecified Tank	1932	2285362
I	211m S	Unspecified Tank	1955	2245443
C	220m NW	Filter Beds	1951	2184494
5	224m NW	Sludge Beds	1951	2167342
J	233m N	Unspecified Ground Workings	1955	2266386



ID	Location	Land Use	Date	Group ID
J	233m N	Unspecified Ground Workings	1966	2266386
J	241m N	Unspecified Ground Workings	1981	2227735
C	258m NW	Filter Beds	1951	2184493
K	271m S	Unspecified Tanks	1938	2261245
K	273m S	Unspecified Tanks	1955	2246555
K	273m S	Unspecified Tanks	1946	2261245
K	273m S	Unspecified Tanks	1932	2261245
K	273m S	Unspecified Tank	1907	2190233
K	276m S	Tank	1907	2303186
K	276m S	Tank	1907	2303186
6	278m W	Pumping Station	1981	2201128
7	285m N	Unspecified Ground Workings	1951	2162946
C	296m NW	Unspecified Tanks	1951	2246790
C	304m NW	Unspecified Tank	1938	2324931
C	304m NW	Unspecified Tank	1951	2324931
C	305m NW	Unspecified Tank	1932	2331168
C	306m NW	Unspecified Tanks	1951	2206746
C	307m NW	Unspecified Tanks	1955	2206746
C	307m NW	Unspecified Tanks	1966	2206746
C	308m NW	Unspecified Tanks	1973	2206746
C	318m NW	Unspecified Tanks	1938	2290170
C	323m NW	Unspecified Tanks	1932	2290170
C	340m NW	Sludge Bed	1951	2194576
C	345m NW	Unspecified Tanks	1981	2168396
8	360m N	Disused Canal	1966	2267240
9	364m N	Disused Canal	1981	2201990
M	369m NW	Unspecified Works	1981	2258663
M	370m NW	Unspecified Works	1973	2225608



ID	Location	Land Use	Date	Group ID
M	370m NW	Unspecified Works	1966	2225608
N	399m NE	Unspecified Wharf	1895	2289910
O	399m N	Unspecified Works	1981	2227547
P	406m NE	Miniature Rifle Range	1938	2218090
P	406m NE	Miniature Rifle Range	1951	2218090
11	411m E	Marshes	1888	2271301
R	430m W	Unspecified Heap	1955	2263614
R	430m W	Unspecified Heap	1966	2263614
P	431m NE	Rifle Range	1907	2280097
P	431m NE	Rifle Range	1895	2215220
P	437m NE	Rifle Ranges	1923	2227008
12	438m NE	Unspecified Wharf	1895	2207800
P	439m NE	Rifle Range	1895	2315164
P	439m NE	Rifle Range	1895	2315164
P	442m NE	Rifle Range	1932	2269391
13	446m NW	Railway Building	1923	2195565
P	448m NE	Miniature Rifle Range	1955	2263835
S	449m SW	Malthouse	1895	2310635
P	451m NE	Rifle Ranges	1923	2227008
P	453m NE	Rifle Range	1888	2315164
P	453m NE	Rifle Range	1895	2248584
S	460m SW	Malthouse	1895	2310635
14	461m W	Unspecified Heap	1951	2186819
S	462m SW	Malthouse	1907	2239700
S	462m SW	Malthouse	1907	2239700
S	462m SW	Malthouse	1888	2241932
S	463m SW	Malthouse	1907	2323041
S	467m SW	Malthouse	1895	2260531



ID	Location	Land Use	Date	Group ID
S	467m SW	Malthouse	1895	2260531
N	478m NE	Unspecified Wharf	1955	2252897
N	479m NE	Unspecified Wharf	1888	2204872
N	479m NE	Unspecified Wharf	1932	2295415
N	479m NE	Unspecified Wharf	1932	2295057
N	482m NE	Unspecified Wharf	1865	2312077
X	485m SW	Smithy	1895	2180938
Y	488m W	Unspecified Tank	1938	2250066
Y	488m W	Unspecified Tank	1951	2250066
X	492m SW	Smithy	1895	2210174
X	493m SW	Smithy	1888	2180939
X	494m SW	Smithy	1895	2210174
X	494m SW	Smithy	1895	2210174
Z	497m NE	Rifle Range	1973	2266432
Z	497m NE	Rifle Range	1966	2266432
15	499m NE	Rifle Range	1865	2317545
AA	499m NW	Hospital	1923	2314027
AA	499m NW	Hospital	1938	2235995
AA	499m NW	Isolation Hospital	1951	2297229
AA	499m NW	Hospital	1907	2299868
AA	499m NW	Hospital	1895	2256681
16	499m NW	Unspecified Commercial/Industrial	1981	2327938
AA	499m NW	Hospital	1932	2235995

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

36

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 22 >](#)

ID	Location	Land Use	Date	Group ID
E	163m NW	Settling Tanks	1982	397854
E	163m NW	Tanks	1993	378484
I	215m S	Unspecified Tank	1932	389091
K	236m S	Unspecified Tank	1909	419068
K	236m S	Unspecified Tank	1933	419068
K	275m S	Unspecified Tank	1909	389109
K	275m S	Tanks	1933	378477
C	295m NW	Sediment Tanks	1932	381165
C	301m NW	Syphon Tank	1932	381523
C	306m NW	Tanks	1953	409432
C	306m NW	Tanks	1969	421658
C	307m NW	Tanks	1955	417037
C	307m NW	Tanks	1964	417037
C	307m NW	Tanks	1970	410919
C	319m NW	Sediment Tanks	1932	381164
C	322m NW	Unspecified Tank	1982	389115
C	328m NW	Unspecified Tank	1993	389118
C	345m NW	Tanks	1993	408375
C	346m NW	Tanks	1984	398279
C	356m NW	Tanks	1993	378486
L	371m S	Tanks	1933	378478
C	391m NW	Unspecified Tank	1984	389127
M	395m NW	Tanks	1993	410283



ID	Location	Land Use	Date	Group ID
M	399m NW	Tanks	1978	418017
M	400m NW	Tanks	1988	418017
M	400m NW	Tanks	1993	410283
M	412m NW	Tanks	1978	409105
M	413m NW	Tanks	1988	409105
M	424m NW	Tanks	1993	378485
O	452m N	Tanks	1984	429835
O	452m N	Tanks	1993	429835
T	456m W	Unspecified Tank	1978	428727
T	457m W	Unspecified Tank	1988	428727
W	480m N	Unspecified Tank	1993	414289
W	480m N	Unspecified Tank	1984	414289
Y	487m W	Unspecified Tank	1932	389102

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

15

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 22 >](#)

ID	Location	Land Use	Date	Group ID
D	147m W	Electricity Substation	1989	298692
D	147m W	Electricity Substation	1991	298692
D	148m W	Electricity Substation	1993	298692
C	330m NW	Electricity Substation	1993	314789
C	331m NW	Electricity Substation	1982	314789
H	352m W	Electricity Substation	1978	321830
H	352m W	Electricity Substation	1993	321830



ID	Location	Land Use	Date	Group ID
H	352m W	Electricity Substation	1988	321830
L	365m S	Electricity Substation	1952	271761
10	401m SE	Electricity Substation	1952	271762
Q	425m SW	Electricity Substation	1985	282500
Q	425m SW	Electricity Substation	1989	282500
Q	425m SW	Electricity Substation	1991	282500
Q	426m SW	Electricity Substation	1993	300000
Q	426m SW	Electricity Transformer	1975	276834

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

10

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

Features are displayed on the Past land use - un-grouped map on [page 22 >](#)

ID	Location	Land Use	Date	Group ID
U	465m S	Garages	1955	90449
V	473m SW	Garage	1969	91800
V	473m SW	Garage	1970	95910
V	473m SW	Garage	1975	91036
V	473m SW	Garage	1985	95755

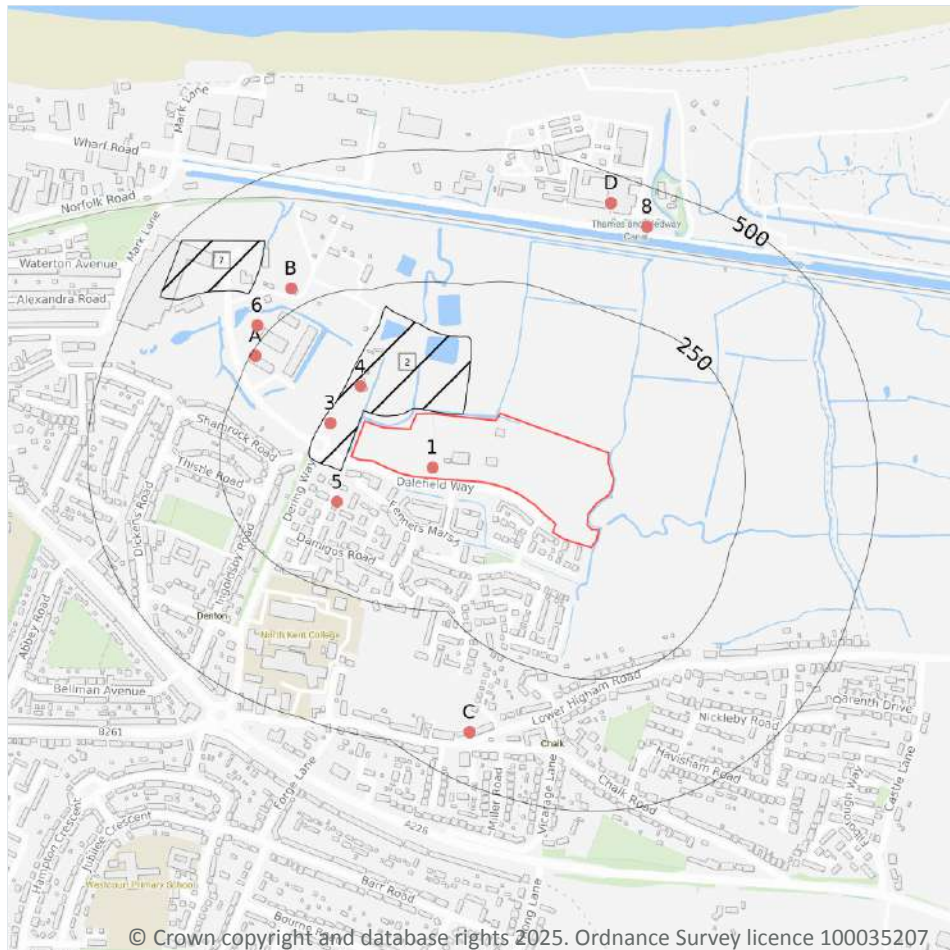


ID	Location	Land Use	Date	Group ID
V	473m SW	Garage	1989	95755
V	473m SW	Garage	1991	95755
U	474m S	Garages	1953	90449
V	483m SW	Garage	1978	91036
V	483m SW	Garage	1969	91800

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

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 31 >](#)

ID	Location	Details		
2	2m NW	Site Address: Shamrock Road, Denton, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: GR1 Waste Type: Inert, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: Gravesham Borough Council Licence Holder: Gravesham Borough Council First Recorded - Last Recorded: -
7	326m NW	Site Address: Denton-Comma Oil, Denton, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: GR11 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: - Licence Holder: J Clubb Limited First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

29

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 31 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
1	On site	-	WEX077951	Using waste exemption	Not on a farm	Use of waste in construction
3	61m W	-	WEX137080	Using waste exemption	Not on a farm	Use of waste in construction
4	65m NW	4 Denton Caravan Site, Dering Way, Gravesend, Da12 2ll	WEX233274	Using waste exemption	Not on a farm	Use of waste in construction
5	91m W	Ohob New Yard, Dalefield Road, Gravesend, Da12 2lt	WEX061815	Using waste exemption	Not on a farm	Use of waste in construction
A	241m NW	Lion Business Park, Unit 3 Block A, Dering Way, Gravesend, Da12 2dn	WEX294890	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	241m NW	Lion Business Park, Unit 3 Block A, Dering Way, Gravesend, Da12 2dn	WEX159449	Storing waste exemption	Not on a farm	Storage of waste in a secure place
6	273m NW	-	WEX397251	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	288m NW	Southern Water Treatment Works, Dering Way, Gravesend, Da12 2qf	WEX326103	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	288m NW	Southern Water Treatment Works, Dering Way, Gravesend, Da12 2qf	WEX200301	Storing waste exemption	Not on a farm	Storage of waste in secure containers
C	409m S	93, Lower Higham Road, Gravesend, Da12 2nq	WEX297274	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal



ID	Location	Site	Reference	Category	Sub-Category	Description
C	409m S	93, Lower Higham Road, Gravesend, Da12 2nq	WEX162003	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
8	427m NE	Mod Range Mark Lane Gravesend Kent Da12 2qb	EPR/DF0207SY /A001	Disposing of waste exemption	Agricultural waste only	Deposit of waste from dredging of inland waters
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Use of waste in construction
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Recovery of waste at a waste water treatment works
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Treatment of waste at a water treatment works
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Use of waste for a specified purpose

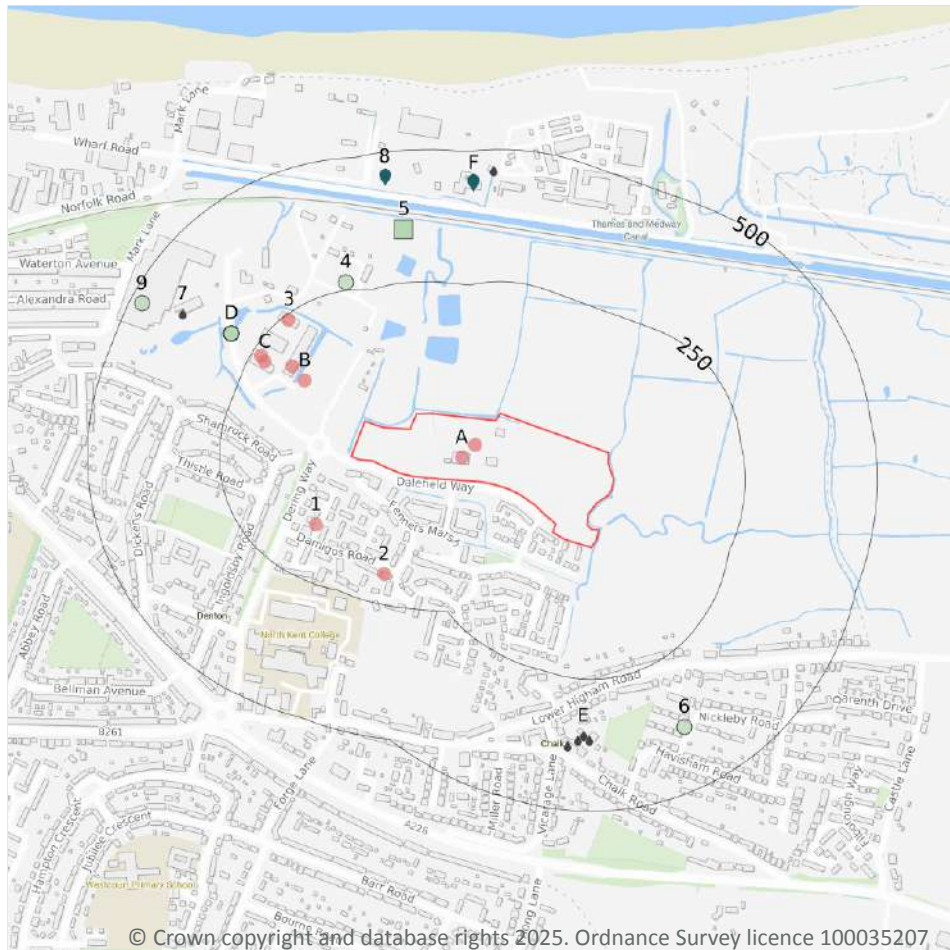


ID	Location	Site	Reference	Category	Sub-Category	Description
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Use of waste derived biodiesel as fuel
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Use of baled end-of-life tyres in construction
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Disposing of waste exemption	Not on a farm	Burning waste in the open
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Treating waste exemption	Not on a farm	Screening and blending of waste
D	446m NE	Thames And Medway Canal Path, Off Mark Lane, Gravesend, Da12 2hn	WEX254510	Using waste exemption	Not on a farm	Use of mulch

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

9

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Company	Address	Activity	Category
A	On site	B & T Plant Hire Ltd	Unit 1 Dalefield Industrial Park, Dalefield Way, Gravesend, Kent, DA12 2FL	Construction and Tool Hire	Hire Services
A	On site	Industrial Park	Kent, DA12	Business Parks and Industrial Estates	Industrial Features
B	137m NW	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
1	146m W	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
B	172m NW	Fire Alarm Fabrication Services	Unit 16 Block D Lion Business Park, Dering Way, Gravesend, Kent, DA12 2DN	Electronic Equipment	Industrial Products
2	193m SW	Mrs P's Pantry	29b, Damigos Road, Gravesend, Kent, DA12 2LR	Baking and Confectionery	Foodstuffs
C	220m NW	Riverside MOT Centre	4, Lion Business Park, Dering Way, Gravesend, Kent, DA12 2DN	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	232m NW	Lion Business Park	Kent, DA12	Business Parks and Industrial Estates	Industrial Features
3	241m NW	Riverview Garage	Unit 13 Block C Lion Business Park, Dering Way, Gravesend, Kent, DA12 2DN	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

2

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

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Address	Details	
F	439m N	Remix Dry Mortar Ltd, Denton Wharf, Mark Lane, Denton, Gravesend, DA12 2QB	Process: Other Mineral Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
8	454m N	Clubb Sand & Gravel, Mark Lane, Denton, Gravesend, Kent, DA12 2QB	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

6

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

Features are displayed on the Current industrial land use map on [page 36 >](#)



ID	Location	Address	Details	
E	357m S	MULLENDERCOURT,MULLENDE RCOURT,CHALKROAD,CHALK,GR AVESENDKENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P00945 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 31/03/1987 Effective Date: 31/03/1987 Revocation Date: 30/01/1995
E	367m S	MULLENDERCOURT,MULLENDE RCOURT,CHALKROAD,CHALK,GR AVESENDKENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P00945 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 31/03/1987 Effective Date: 31/03/1987 Revocation Date: 30/01/1995
E	368m S	MULLENDERCOURT,MULLENDE RCOURT,CHALKROAD,CHALK,GR AVESENDKENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P00945 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 31/03/1987 Effective Date: 31/03/1987 Revocation Date: 30/01/1995
E	380m S	MULLENDERCOURT,MULLENDE RCOURT,CHALKROAD,CHALK,GR AVESENDKENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P00945 Permit Version: 1 Receiving Water: INTO LAND	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 31/03/1987 Effective Date: 31/03/1987 Revocation Date: 30/01/1995
7	401m NW	CABLETUNNELATDENTON,CABL ETUNNELATDENTON,GRAVESEN D,KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: K02109 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/11/1967 Effective Date: 14/11/1967 Revocation Date: 01/07/1991
F	459m N	GRAVESENDTRAININGCOMPLEX ,GRAVESENDTRAININGCOMPLE X,MARKLANE,GRAVESEND,KENT	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: P09285 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 20/03/2001 Effective Date: 20/03/2001 Revocation Date: -

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

1

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.

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
5	351m N	Gravesend Stw	Active	Thames Estuary	Copper, Iron, Zinc

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

7

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

Features are displayed on the Current industrial land use map on [page 36 >](#)



ID	Location	Details	
4	266m NW	Incident Date: 21/01/2003 Incident Identification: 132304 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Ammonia/Amine Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	303m NW	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	303m NW	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	303m NW	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Contaminated Water:Sewage Materials Pollutant Description: Other Contaminated Water:Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	303m NW	Incident Date: 05/07/2004 Incident Identification: 234990 Pollutant: Contaminated Water : Sewage Materials Pollutant Description: Other Contaminated Water :Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6	383m SE	Incident Date: 04/07/2001 Incident Identification: 13596 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
9	478m NW	Incident Date: 23/02/2004 Incident Identification: 218671 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0
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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

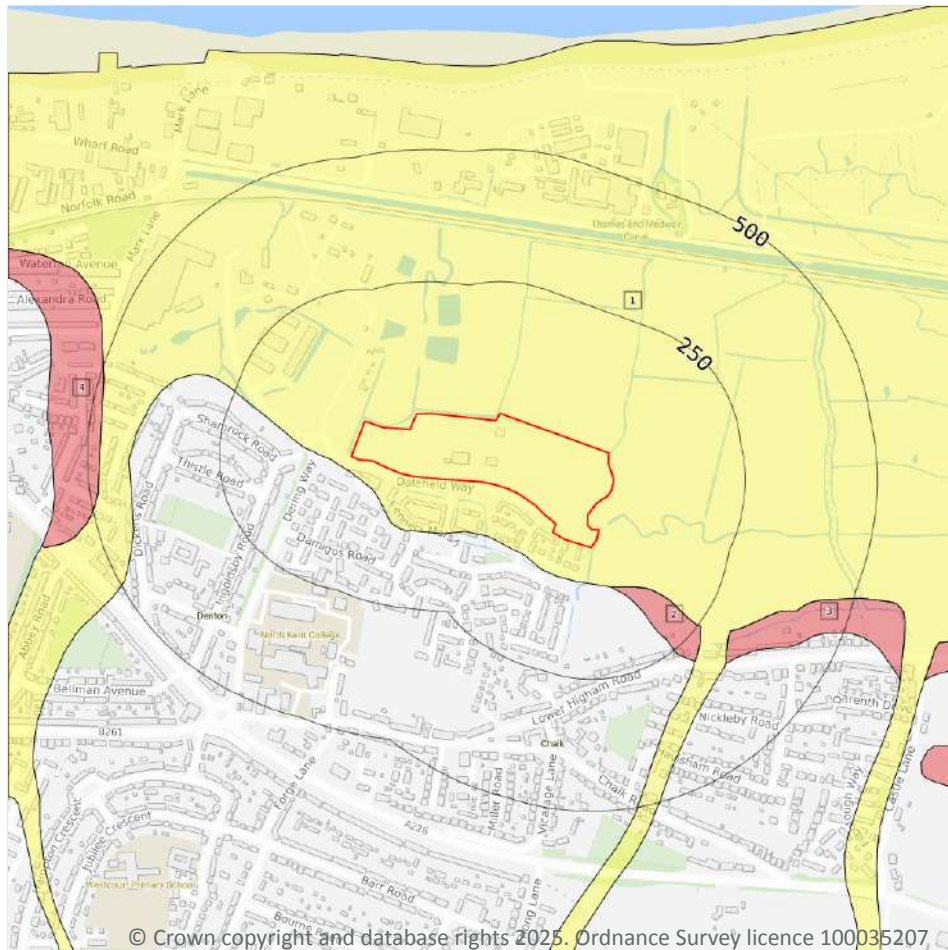
0

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

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 44](#) >

ID	Location	Designation	Description
1	On site	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
2	84m SE	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

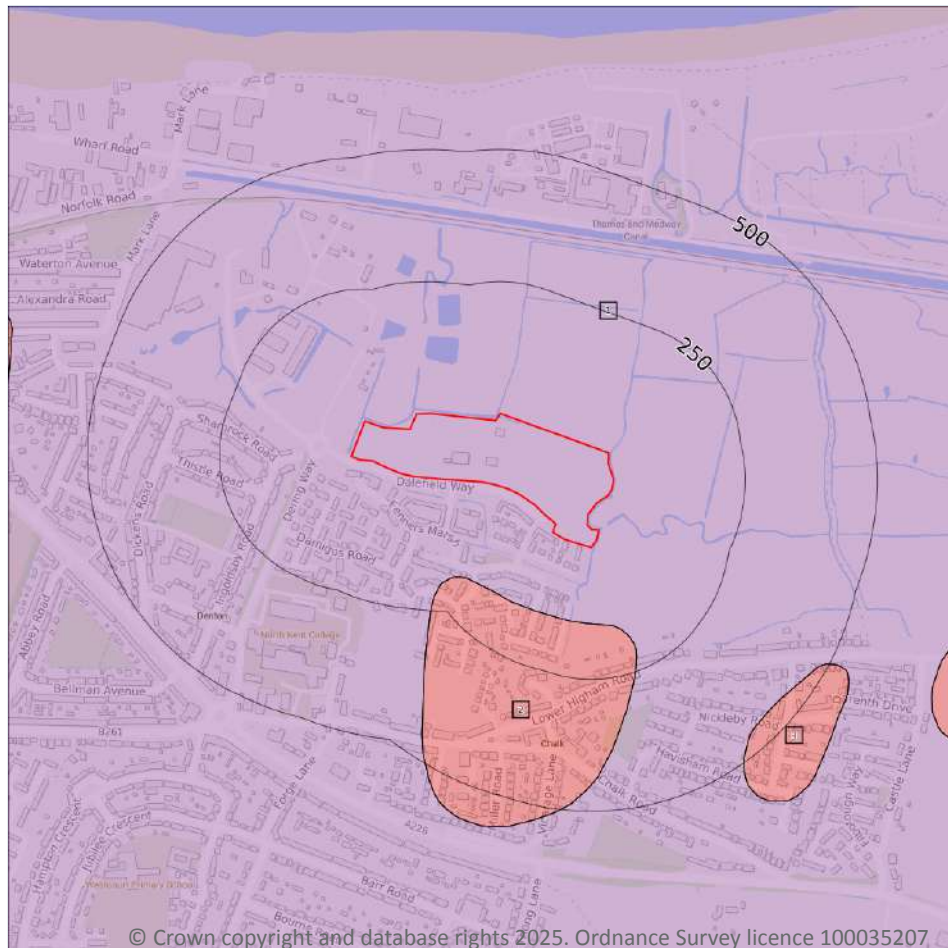


ID	Location	Designation	Description
3	307m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	476m W	Secondary 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

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

3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 46](#) >

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	144m SE	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

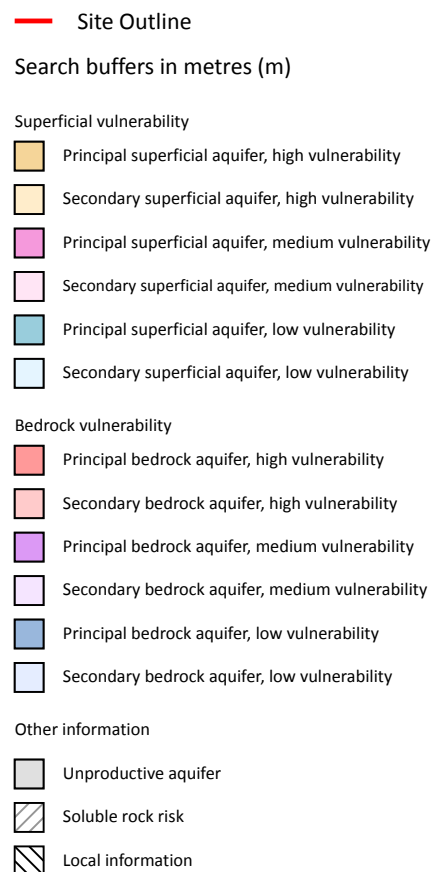
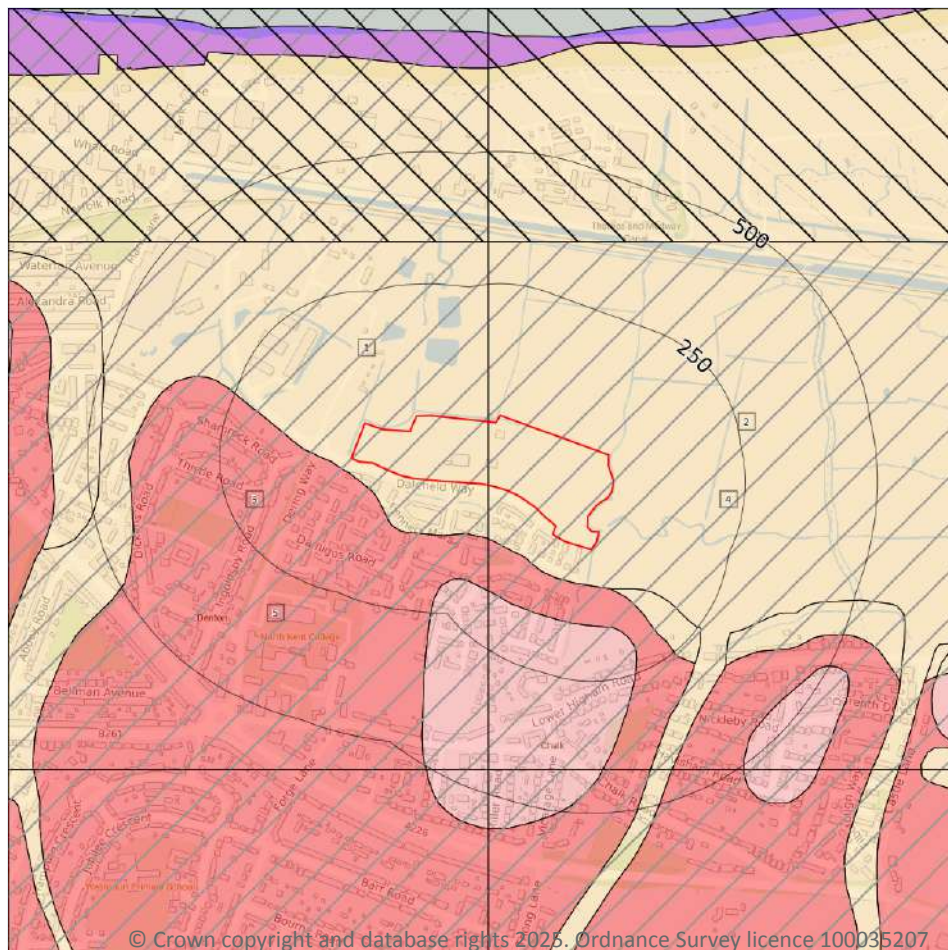


ID	Location	Designation	Description
3	457m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

3

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 48](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
5	26m W	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: Low	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	2
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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
3	Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.	1.0%
4	Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.	1.0%

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



5.5 Groundwater vulnerability- local information

Records on site

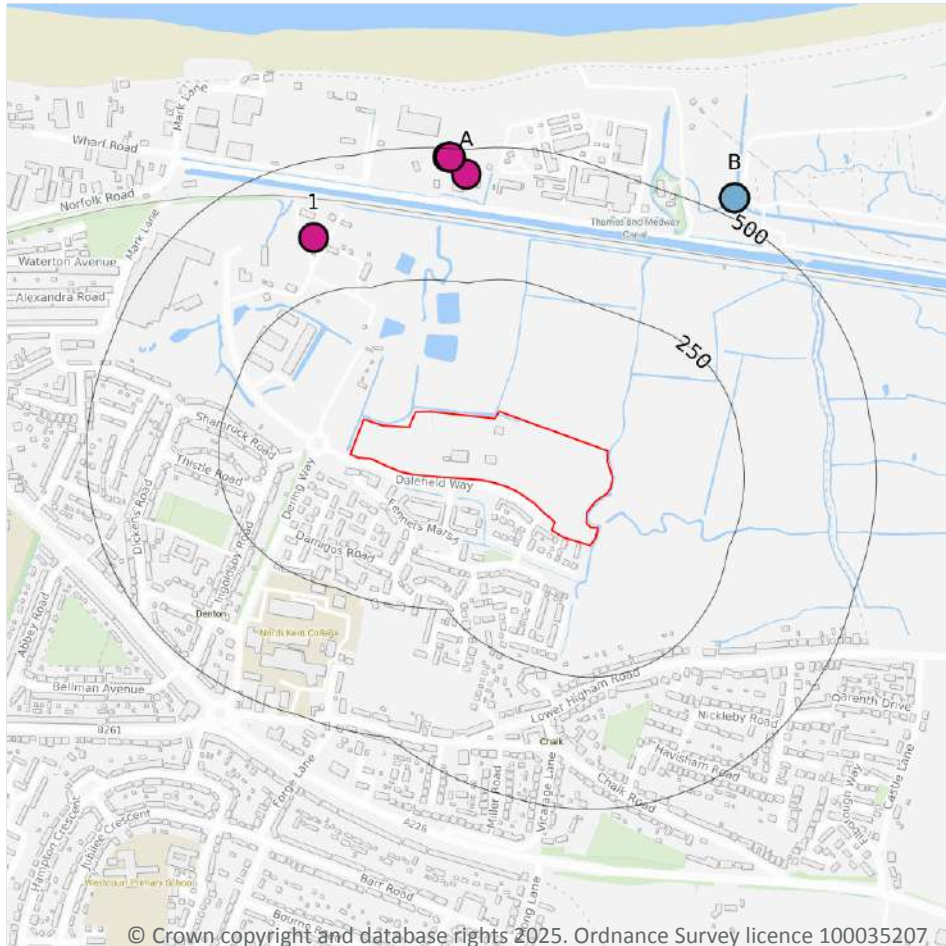
0

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

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



Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

7

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 51](#) >

ID	Location	Details	
1	357m NW	Status: Active Licence No: 9/40/01/0508/G Details: General Washing/Process Washing Direct Source: Southern Region Groundwater Point: POINT 1, BOREHOLE AT GRAVESEND SEWAGE WORKS IN KENT. Data Type: Point Name: Southern Water Services Ltd Easting: 566670 Northing: 174000	Annual Volume (m ³): 55000 Max Daily Volume (m ³): 340 Original Application No: 169/0449 Original Start Date: 23/03/1989 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
A	453m N	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: J Clubb Ltd Easting: 566960 Northing: 174120	Annual Volume (m ³): 33186 Max Daily Volume (m ³): 91 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
A	483m N	Status: Active Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: J Clubb Ltd Easting: 566925 Northing: 174152	Annual Volume (m ³): 83689 Max Daily Volume (m ³): 336 Original Application No: NPS/WR/039725 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2024 Version End Date: -
A	483m N	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: J Clubb Ltd Easting: 566925 Northing: 174152	Annual Volume (m ³): 83969 Max Daily Volume (m ³): 336 Original Application No: NPS/WR/022001 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 101 Version Start Date: 26/05/2016 Version End Date: -



ID	Location	Details	
A	483m N	Status: Active Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: BOREHOLE B, UNDERGROUND STRATA RIVER TERRACE GRAVELS Data Type: Point Name: J Clubb Ltd Easting: 566929 Northing: 174152	Annual Volume (m ³): 83689 Max Daily Volume (m ³): 336 Original Application No: NPS/WR/039725 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2024 Version End Date: -
A	483m N	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: BOREHOLE B, UNDERGROUND STRATA RIVER TERRACE GRAVELS Data Type: Point Name: J Clubb Ltd Easting: 566929 Northing: 174152	Annual Volume (m ³): 83969 Max Daily Volume (m ³): 336 Original Application No: NPS/WR/022001 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 101 Version Start Date: 26/05/2016 Version End Date: -
-	1699m W	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m ³): 17700000 Max Daily Volume (m ³): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

19

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 51](#) >



ID	Location	Details	
B	537m NE	Status: Historical Licence No: SO/040/0001/001/R01 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: Southern Region Surface Waters Point: DENTON NEW CUT-CANAL RESTORATION Data Type: Point Name: GRAVESHAM BOROUGH COUNCIL Easting: 567468 Northing: 174076	Annual Volume (m ³): 50000 Max Daily Volume (m ³): 1728 Original Application No: NPS/WR/017300 Original Start Date: 01/04/2015 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -
B	537m NE	Status: Historical Licence No: SO/040/0001/001 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: Southern Region Surface Waters Point: DENTON NEW CUT-CANAL RESTORATION Data Type: Point Name: GRAVESHAM BOROUGH COUNCIL Easting: 567468 Northing: 174076	Annual Volume (m ³): 175000 Max Daily Volume (m ³): 1728 Original Application No: - Original Start Date: 18/12/2009 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 18/12/2009 Version End Date: -
-	909m E	Status: Active Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	909m E	Status: Active Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	909m E	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -



ID	Location	Details	
-	909m E	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -



ID	Location	Details	
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	959m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	977m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568070 Northing: 174370	Annual Volume (m ³): 70000 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 01/05/2013 Version End Date: -



ID	Location	Details	
-	1013m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT A, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568194 Northing: 173902	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1013m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT A, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568194 Northing: 173902	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -
-	1690m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT B, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568824 Northing: 174152	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1690m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT B, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568824 Northing: 174152	Annual Volume (m ³): 244799 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -

ID	Location	Details	
-	1709m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT A, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568910 Northing: 173900	Annual Volume (m ³): 70000 Max Daily Volume (m ³): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 01/05/2013 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	1
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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 51 >](#)

ID	Location	Details	
-	1699m W	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m ³): 17700000 Max Daily Volume (m ³): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	0
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Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m

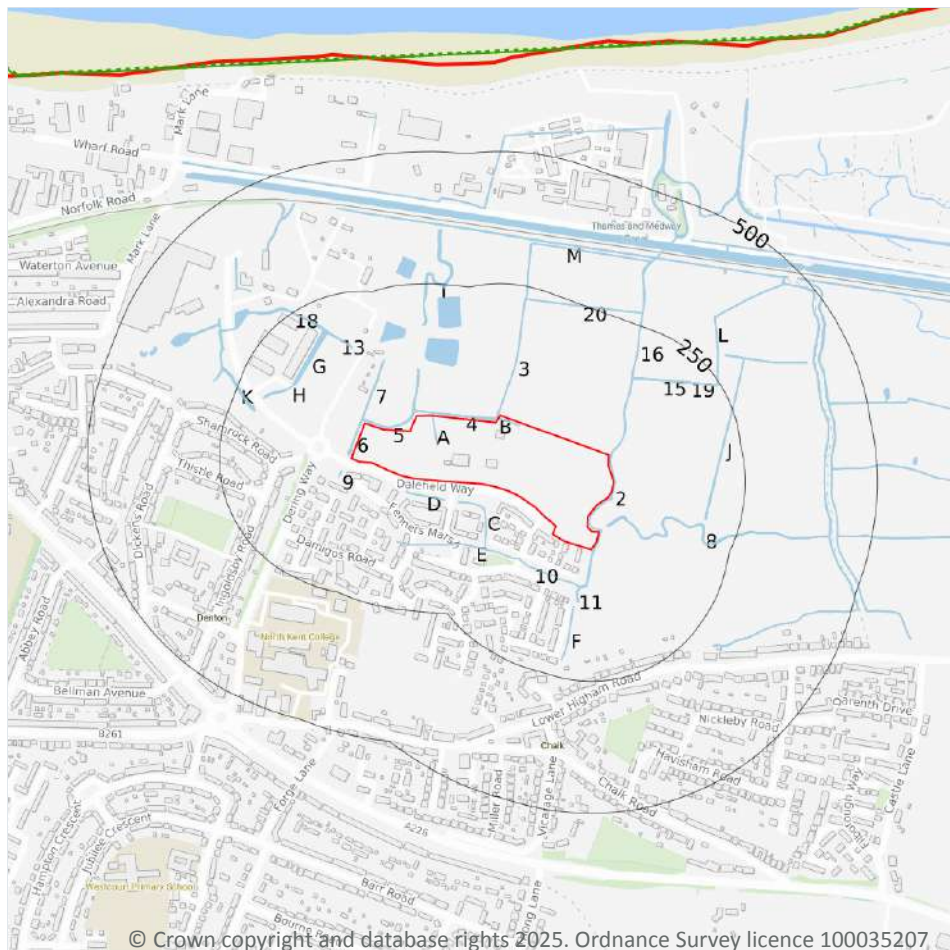
0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

37

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

Features are displayed on the Hydrology map on [page 60](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse may not contain water all year round	-



ID	Location	Type of water feature	Ground level	Permanence	Name
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
2	2m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	3m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	3m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	5m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	6m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	6m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	10m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	11m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	19m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	27m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	30m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	37m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	68m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
11	75m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	113m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	116m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	116m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	120m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	123m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	123m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
13	145m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
15	152m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	152m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	152m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
H	153m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	162m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	170m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	184m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
18	189m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	202m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	204m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	204m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	226m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	226m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

13

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

Features are displayed on the Hydrology map on [page 60](#) >



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 60](#) >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
C	On site	Coastal Catchment	Not part of a river WB catchment	130	Lower Medway	Medway

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

6.4 WFD Surface water bodies

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

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

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

6.5 WFD Groundwater bodies

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

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

Features are displayed on the Hydrology map on [page 60](#) >

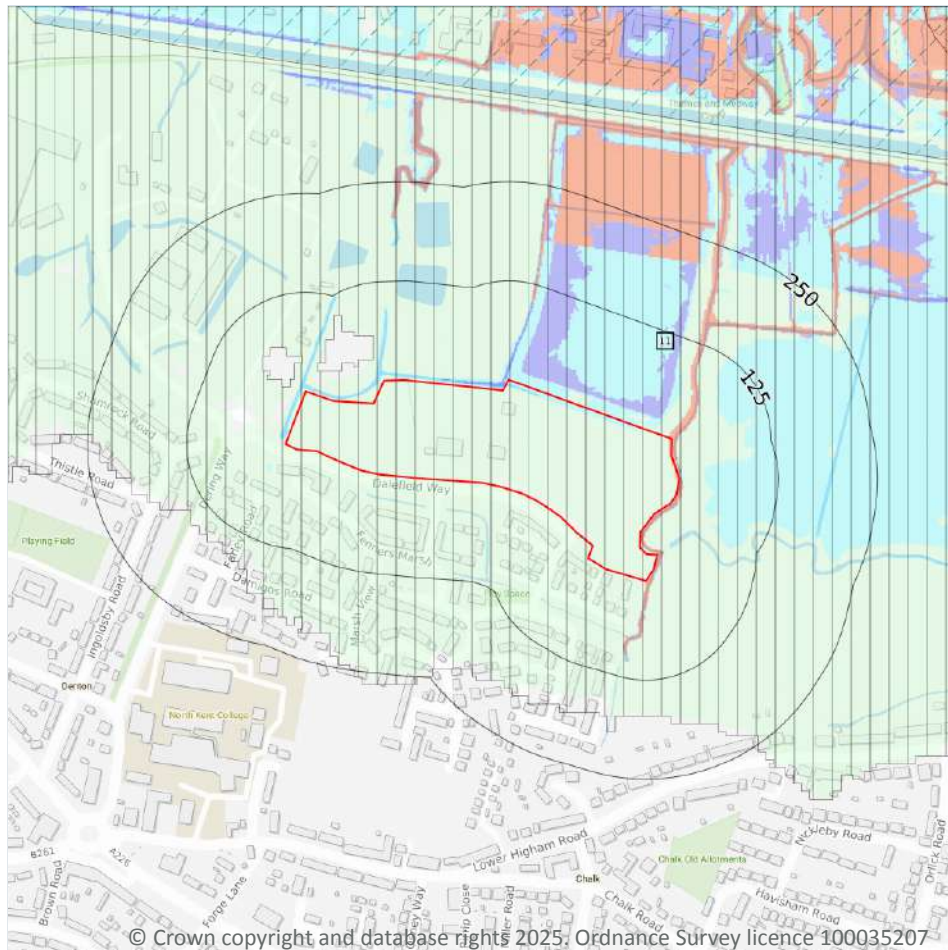
ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
C	On site	North Kent Medway Chalk	GB40601G500300 ↗	Poor	Poor	Poor	2019



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



7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m

13

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).

Features are displayed on the River and coastal flooding map on [page 66](#) >



Distance	Flood risk category
On site	High
0 - 50m	High

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

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.

Features are displayed on the River and coastal flooding map on [page 66 >](#)

ID	Location	
11	On site	Area benefiting from flood defences

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.



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 Flood zone 2

 Flood zone 3

69

7.7 Flood Zone 3

Records within 50m

1

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.

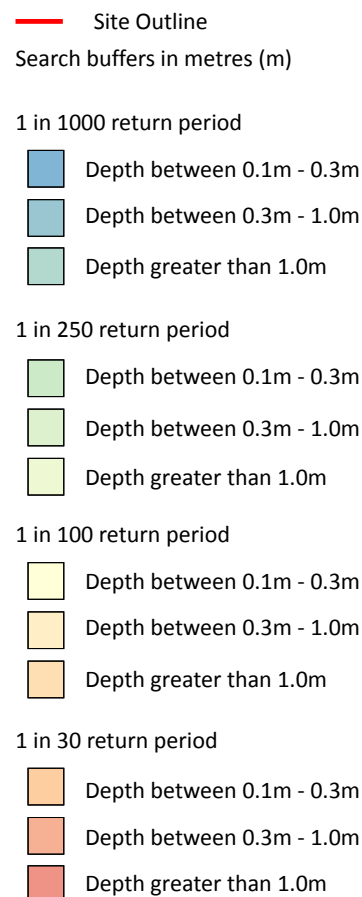
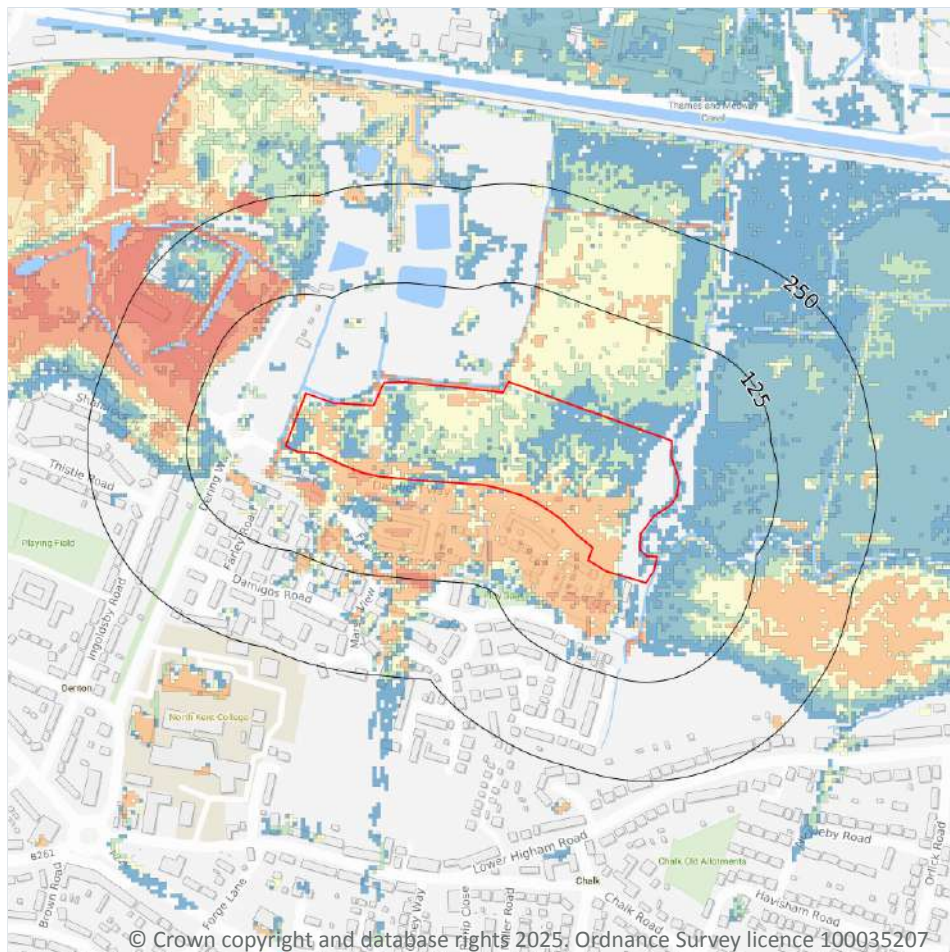
Features are displayed on the River and coastal flooding map on [page 66](#) >

Location	Type
On site	Zone 3 - (Fluvial /Tidal Models)

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on [page 71](#) >

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

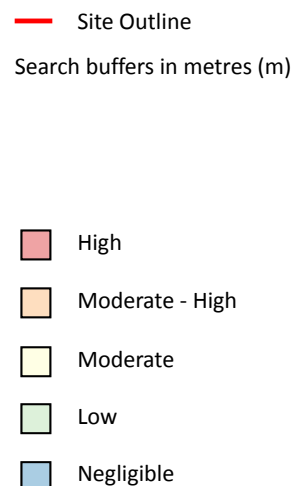
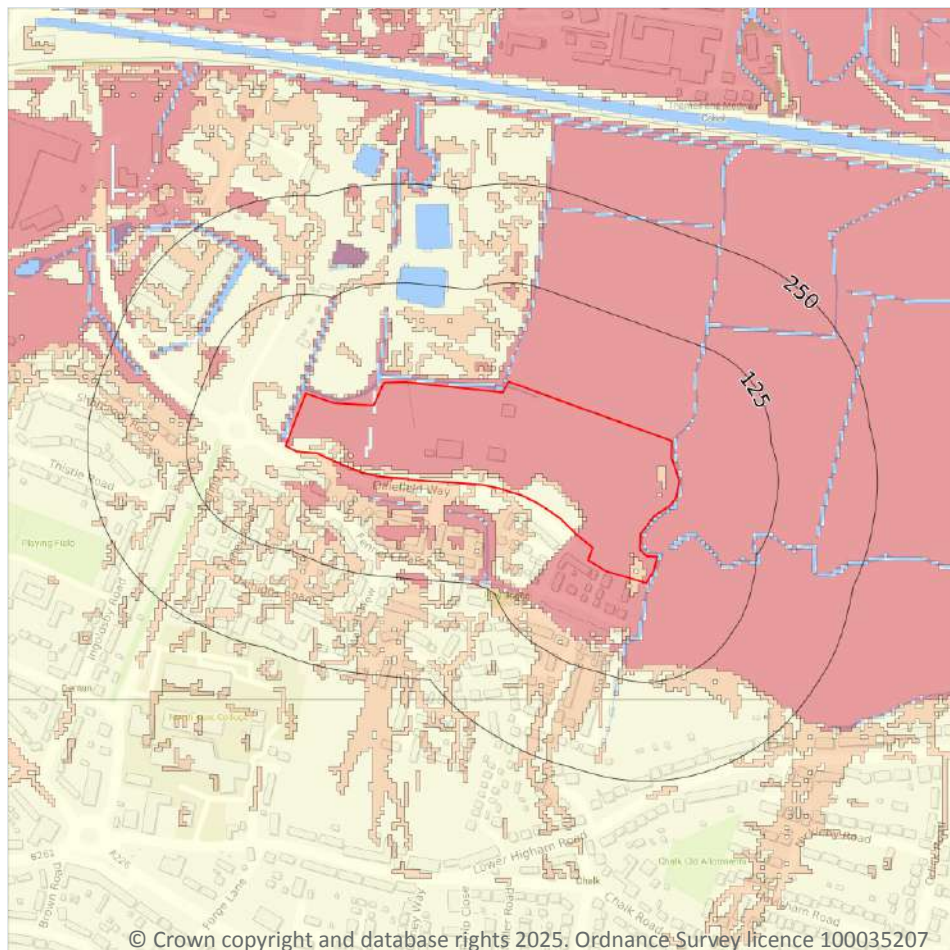
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

High

Highest risk within 50m

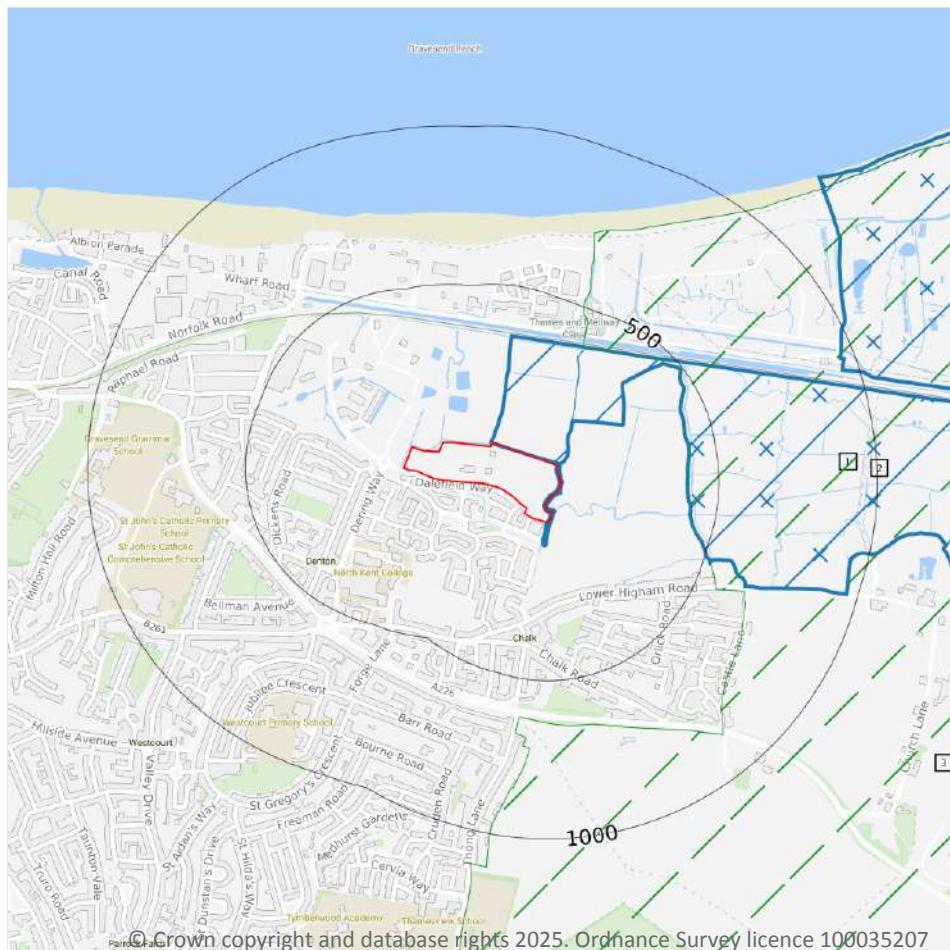
High

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 73 >](#)

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- × Conserved wetland sites (Ramsar sites)
- Special Protection Areas (SPA)
- Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

2

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

Features are displayed on the Environmental designations map on [page 74](#) >

ID	Location	Name	Data source
1	On site	South Thames Estuary and Marshes SSSI	Natural England



ID	Location	Name	Data source
A	949m E	South Thames Estuary and Marshes SSSI	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	2
-----------------------------	----------

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

Features are displayed on the Environmental designations map on [page 74 >](#)

ID	Location	Site	Details
2	On site	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
A	949m E	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.

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

1

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

Features are displayed on the Environmental designations map on [page 74 >](#)

ID	Location	Name	Species of interest	Habitat description	Data source
4	1213m NE	Thames Estuary & Marshes	Hen harrier; Pied avocet; Ringed plover; Grey plover; Red knot; Common redshank; Black-tailed godwit; Dunlin	Shingle, Sea cliffs, Islets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Dry grassland, Steppes; Humid grassland, Mesophile grassland; Salt marshes, Salt pastures, Salt steppes	Natural England

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

0

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

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

2

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

Features are displayed on the Environmental designations map on [page 74 >](#)

ID	Location	Name	Local Authority name
3	378m NE	London Green Belt	Gravesham
-	1744m N	London Green Belt	Thurrock

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

2

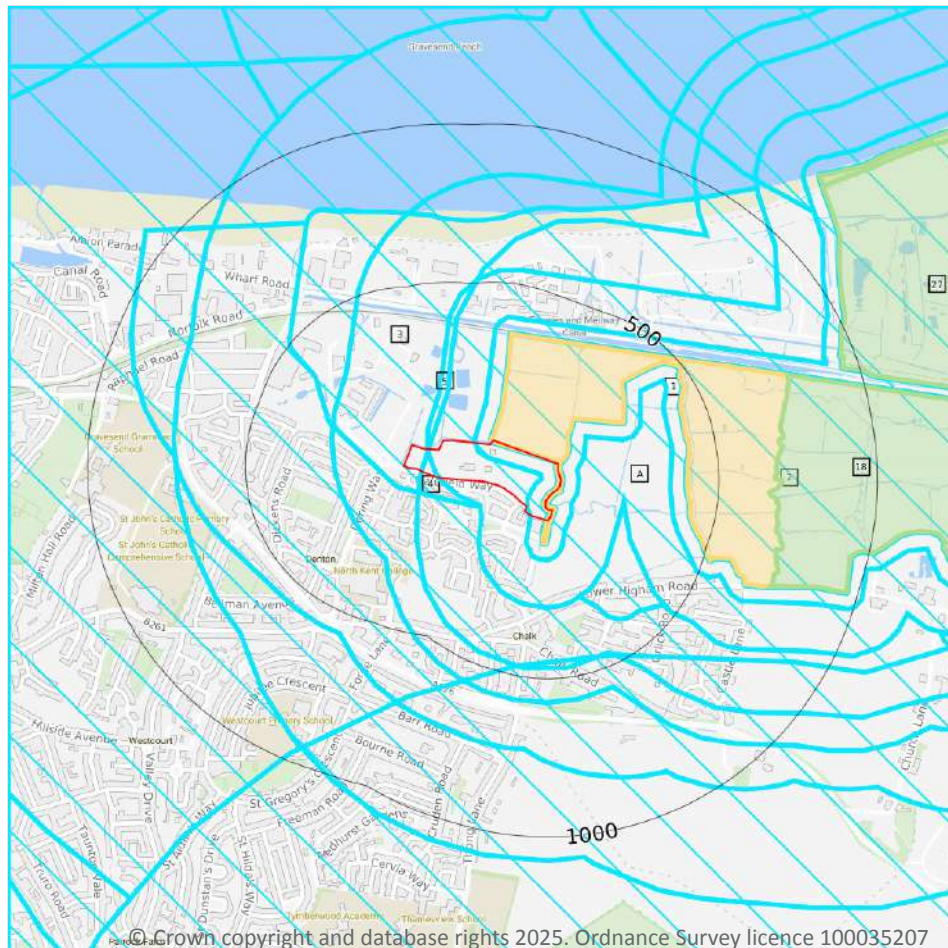
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	COASTAL STREAMS TO LOWER THAMES NVZ	Surface Water	665	Existing
On site	North Kent	Groundwater	65	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

6

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 80](#) >

ID	Location	Type of developments requiring consultation
1	On site	All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS. Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.
2	On site	All applications - ALL PLANNING APPLICATIONS.



ID	Location	Type of developments requiring consultation
3	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential development of 10 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.



ID	Location	Type of developments requiring consultation
4	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential development of 10 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.



ID	Location	Type of developments requiring consultation
5	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: Strategic solutions for recreational impacts are in place. Please contact your Local Planning Authority as they have the information to advise on specific requirements.



ID	Location	Type of developments requiring consultation
A	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply . Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

6

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

Features are displayed on the SSSI Impact Zones and Units map on [page 80 >](#)

ID: A
 Location: On site
 SSSI name: South Thames Estuary and Marshes
 Unit name: Westcourt And Great Clane Marshes
 Broad habitat: Neutral Grassland - Lowland
 Condition: Unfavourable - No change
 Reportable features:



Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, <i>Panurus biarmicus</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, <i>Anas querquedula</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, <i>Anas acuta</i>	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, <i>Recurvirostra avosetta</i>	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, <i>Mareca strepera</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, <i>Tringa nebularia</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, <i>Pluvialis squatarola</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, <i>Calidris canutus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, <i>Anas acuta</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, <i>Charadrius hiaticula</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: 18
 Location: 660m E
 SSSI name: South Thames Estuary and Marshes
 Unit name: Filborough Marsh W
 Broad habitat: Neutral Grassland - Lowland



Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, <i>Panurus biarmicus</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, <i>Anas querquedula</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, <i>Anas acuta</i>	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, <i>Recurvirostra avosetta</i>	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, <i>Mareca strepera</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, <i>Tringa nebularia</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, <i>Pluvialis squatarola</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, <i>Calidris canutus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, <i>Anas acuta</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, <i>Charadrius hiaticula</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900



ID: 27
 Location: 949m E
 SSSI name: South Thames Estuary and Marshes
 Unit name: Shorne Marsh W
 Broad habitat: Neutral Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, <i>Panurus biarmicus</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, <i>Anas querquedula</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, <i>Anas acuta</i>	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, <i>Recurvirostra avosetta</i>	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, <i>Mareca strepera</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, <i>Tringa nebularia</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, <i>Pluvialis squatarola</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, <i>Calidris canutus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, <i>Anas acuta</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, <i>Charadrius hiaticula</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Lowland open waters and their margins	Not Recorded	01/01/1900



Feature name	Feature condition	Date of assessment
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

ID: 33
 Location: 1213m NE
 SSSI name: South Thames Estuary and Marshes
 Unit name: Gravesham Mudflats
 Broad habitat: Littoral Sediment
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900



Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900

ID: -
 Location: 1323m E
 SSSI name: South Thames Estuary and Marshes
 Unit name: Filborough Marsh E
 Broad habitat: Neutral Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, <i>Panurus biarmicus</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, <i>Anas querquedula</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, <i>Anas acuta</i>	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, <i>Recurvirostra avosetta</i>	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, <i>Mareca strepera</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, <i>Tringa nebularia</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, <i>Pluvialis squatarola</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, <i>Calidris canutus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, <i>Anas acuta</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Unfavourable - Declining	03/03/2021



Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Ringed plover, <i>Charadrius hiaticula</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
 Location: 1623m E
 SSSI name: South Thames Estuary and Marshes
 Unit name: Shorne Marsh Mid
 Broad habitat: Neutral Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, <i>Panurus biarmicus</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, <i>Anas querquedula</i>	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, <i>Anas acuta</i>	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, <i>Recurvirostra avosetta</i>	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, <i>Limosa limosa islandica</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, <i>Numenius arquata</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, <i>Calidris alpina alpina</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, <i>Mareca strepera</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, <i>Tringa nebularia</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, <i>Pluvialis squatarola</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, <i>Circus cyaneus</i>	Not Recorded	01/01/1900



Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Knot, <i>Calidris canutus</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, <i>Anas acuta</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, <i>Tringa totanus</i>	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, <i>Charadrius hiaticula</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, <i>Tadorna tadorna</i>	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, <i>Anas clypeata</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, <i>Anas crecca</i>	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, <i>Anser albifrons albifrons</i>	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

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



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

0

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



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

11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

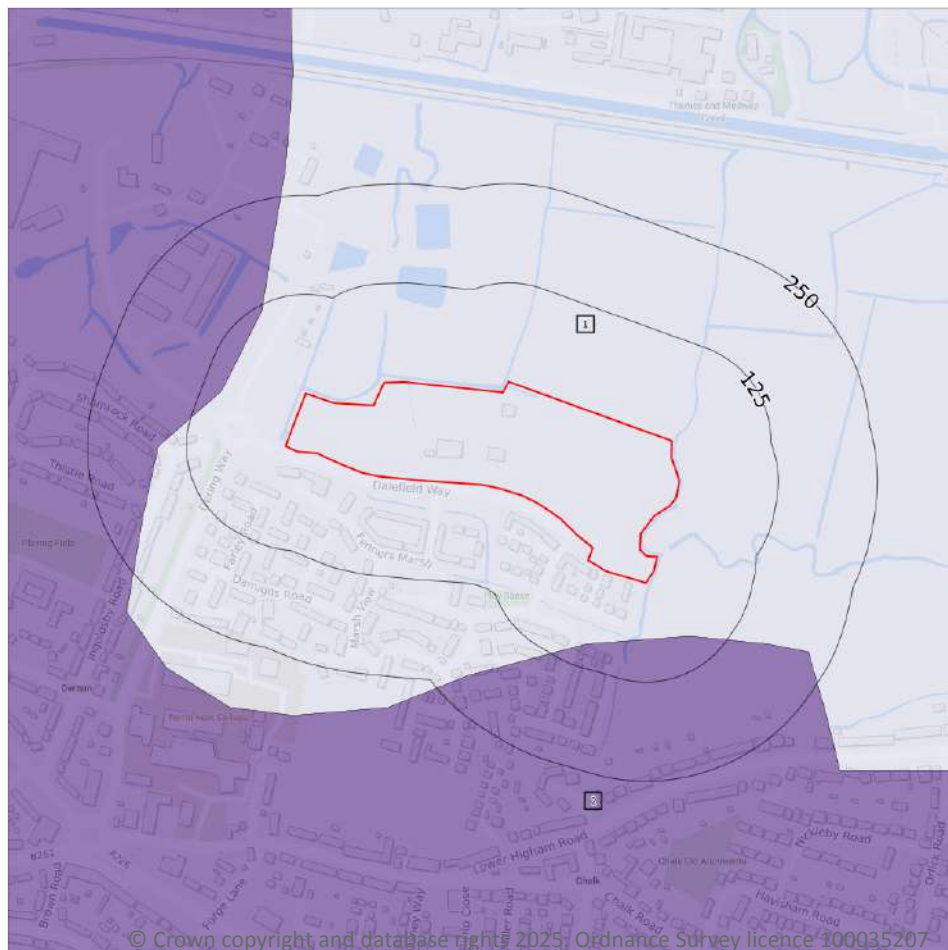
0

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

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



12 Agricultural designations



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

12.1 Agricultural Land Classification

Records within 250m

2

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 94](#) >

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



ID	Location	Classification	Description
2	71m SE	Urban	Non-agricultural/no quality assigned

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

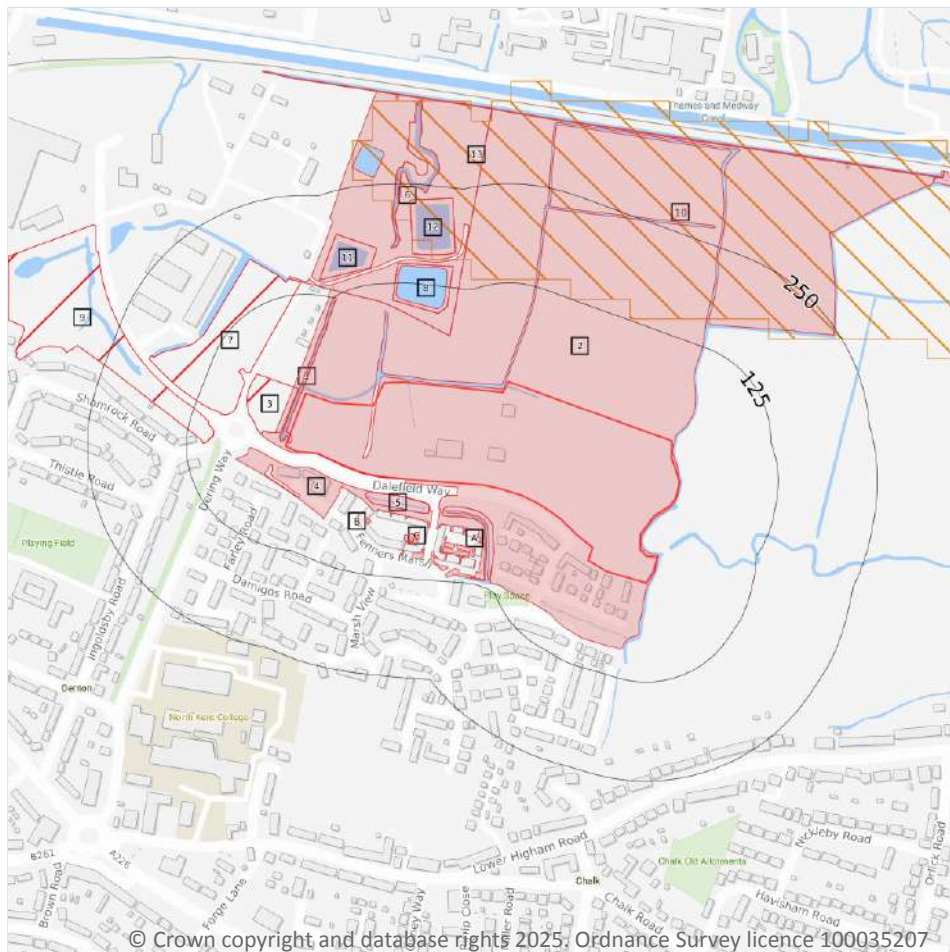
0

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

This data is sourced from Natural England.



13 Habitat designations



- 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

31

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 96](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
2	On site	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
4	19m W	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
5	21m W	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)



ID	Location	Main Habitat	Other habitats
A	30m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
B	53m W	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
B	54m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
6	64m NW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	65m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	68m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	68m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	73m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	75m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	77m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	79m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	79m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	81m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	82m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	82m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	85m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	86m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	87m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
C	90m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
8	91m NW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	91m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	92m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	93m SW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
A	95m S	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
11	144m NW	No main habitat but additional habitats present	Main habitat: RBEDS (INV > 50%)
12	162m NW	No main habitat but additional habitats present	Main habitat: RBEDS (INV > 50%)
13	169m NW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (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 96 >](#)

ID	Location	Type	Habitat
10	125m N	Network Enhancement Zone 1	Not specified

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

3

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

Features are displayed on the Habitat designations map on [page 96 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
3	11m W	HLD_refs: EAHLD1930 1	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-
7	74m W	Former Quarry at Denton Marshes	High	BugLife All Of A Buzz Data	UK Perspectives Aerial Photography	-
9	92m W	Former Quarry at Denton Marshes	High	BugLife All Of A Buzz Data	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.



13.4 Limestone Pavement Orders

Records within 250m

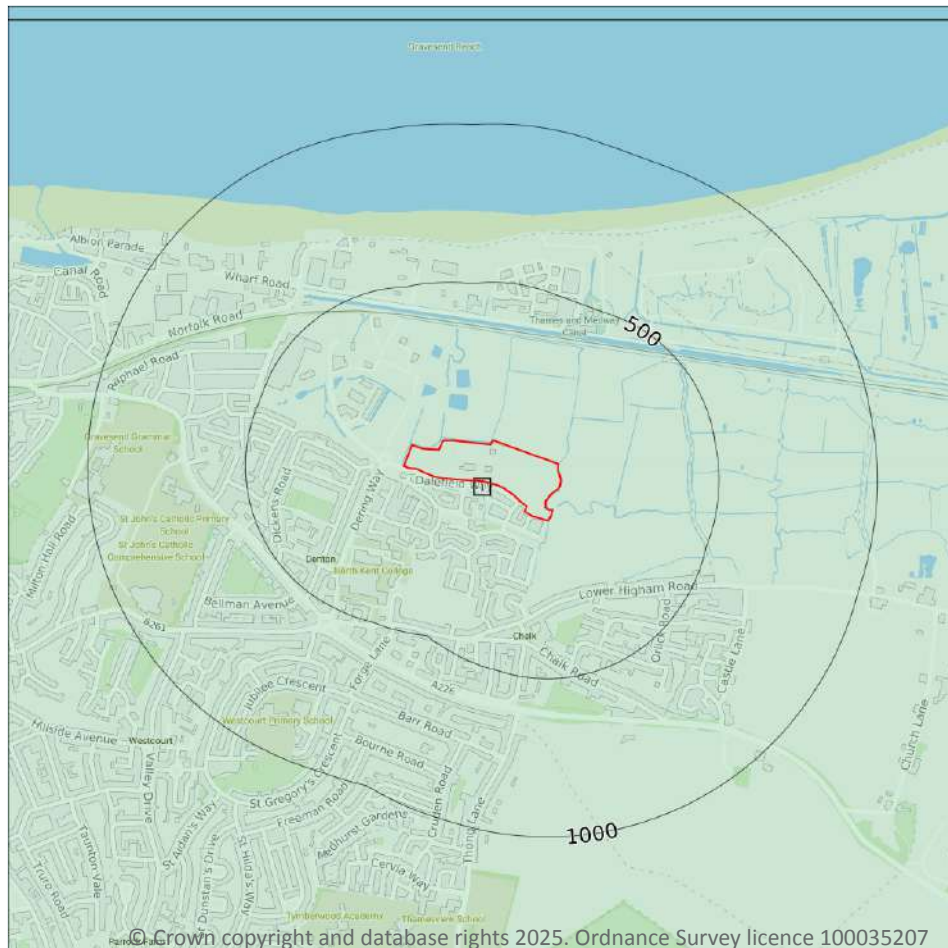
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



14.1 10k Availability

Records within 500m

1

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

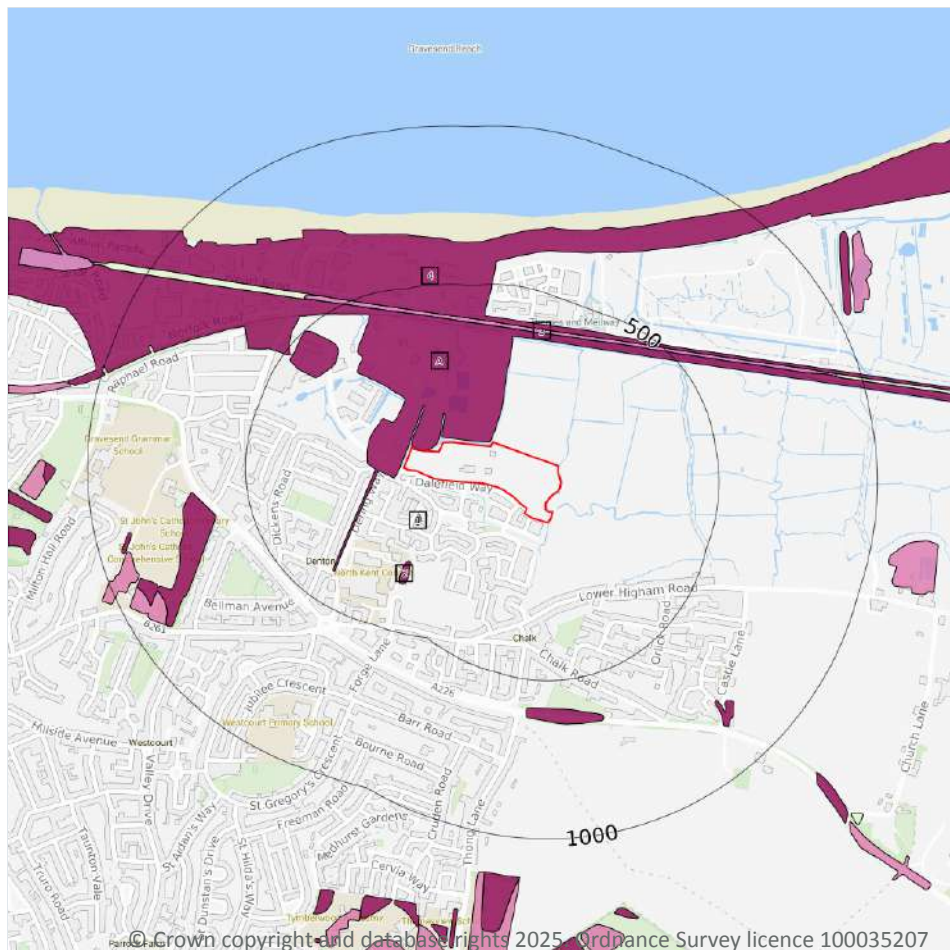
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 100](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TQ67SE

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

6

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 101](#) >

ID	Location	LEX Code	Description	Rock description
A	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
1	125m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	273m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	357m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

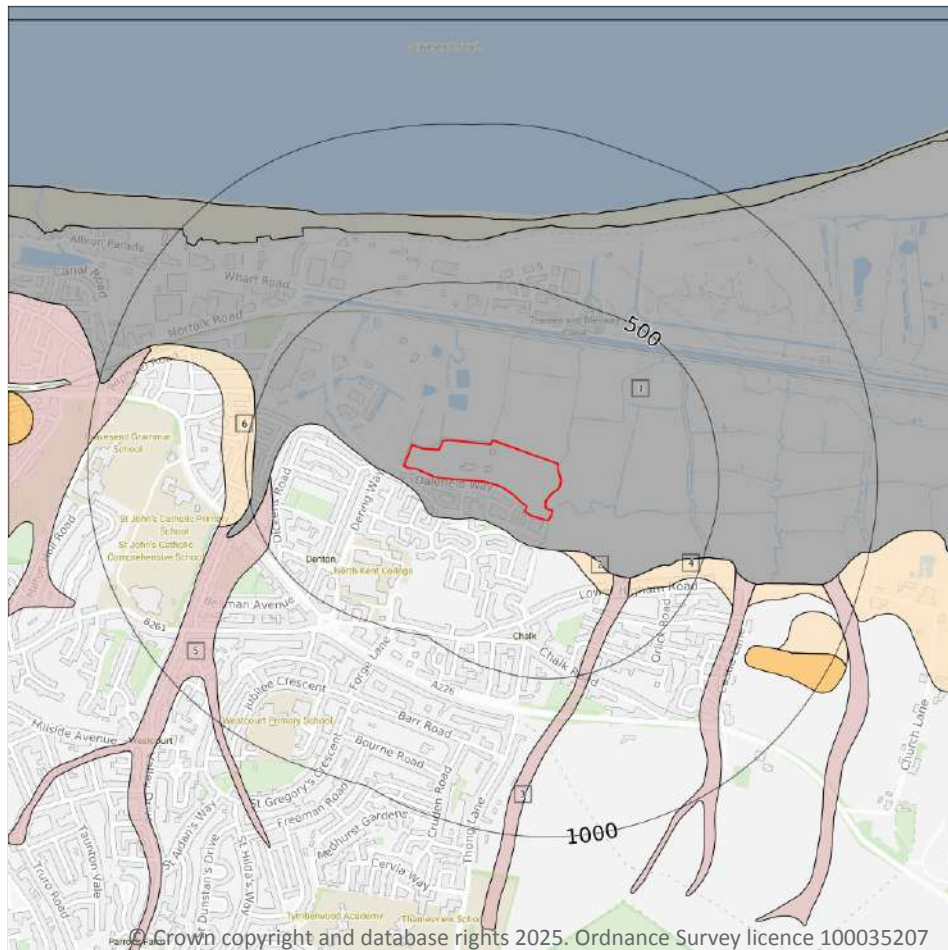


ID	Location	LEX Code	Description	Rock description
3	365m N	WGR-VOID	Worked Ground (Undivided)	Void
4	376m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

6

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 103](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
2	103m SE	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel
3	269m SE	HEAD-DMTN	Head - Diamicton	Diamicton



ID	Location	LEX Code	Description	Rock description
4	319m SE	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel
5	422m W	HEAD-DMTN	Head - Diamicton	Diamicton
6	475m W	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

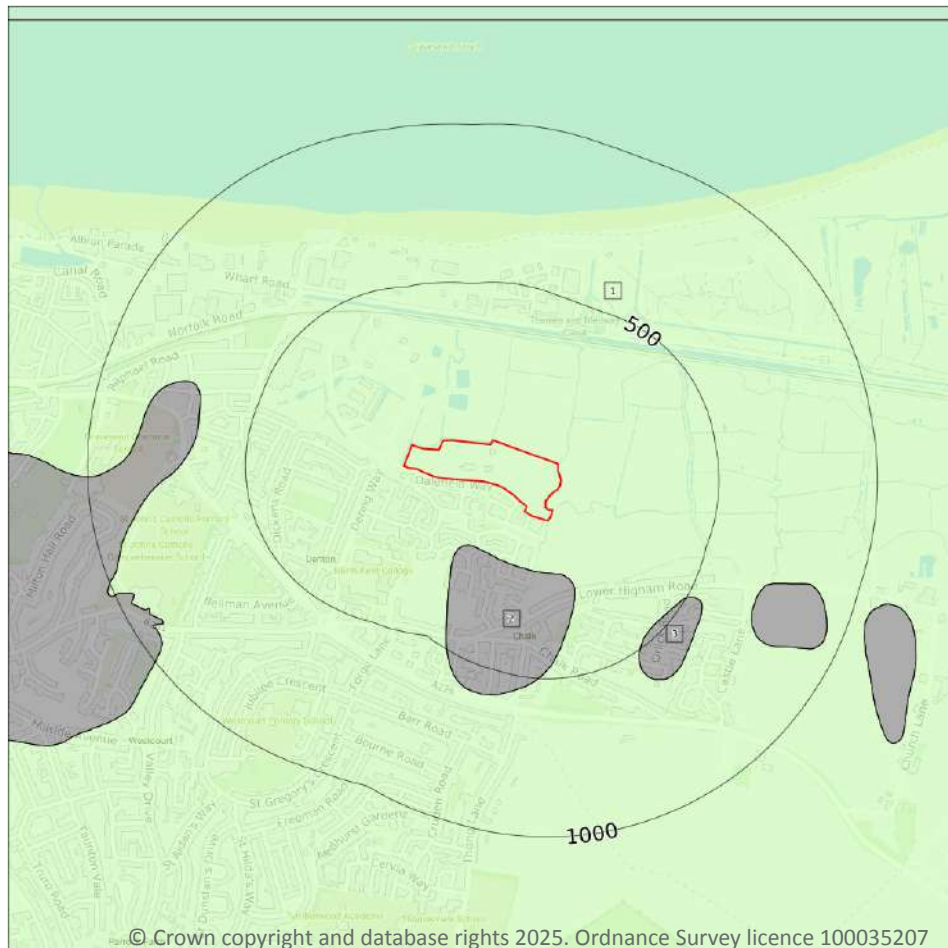
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

14.5 Bedrock geology (10k)

Records within 500m

3

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 105 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	SECK-CHLK	Seaford Chalk Formation - Chalk	Santonian Age - Coniacian Age
2	165m SE	TAB-SANDU	Thanet Sand Formation - Sand	Thanetian Age
3	471m SE	TAB-SANDU	Thanet Sand Formation - Sand	Thanetian Age

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

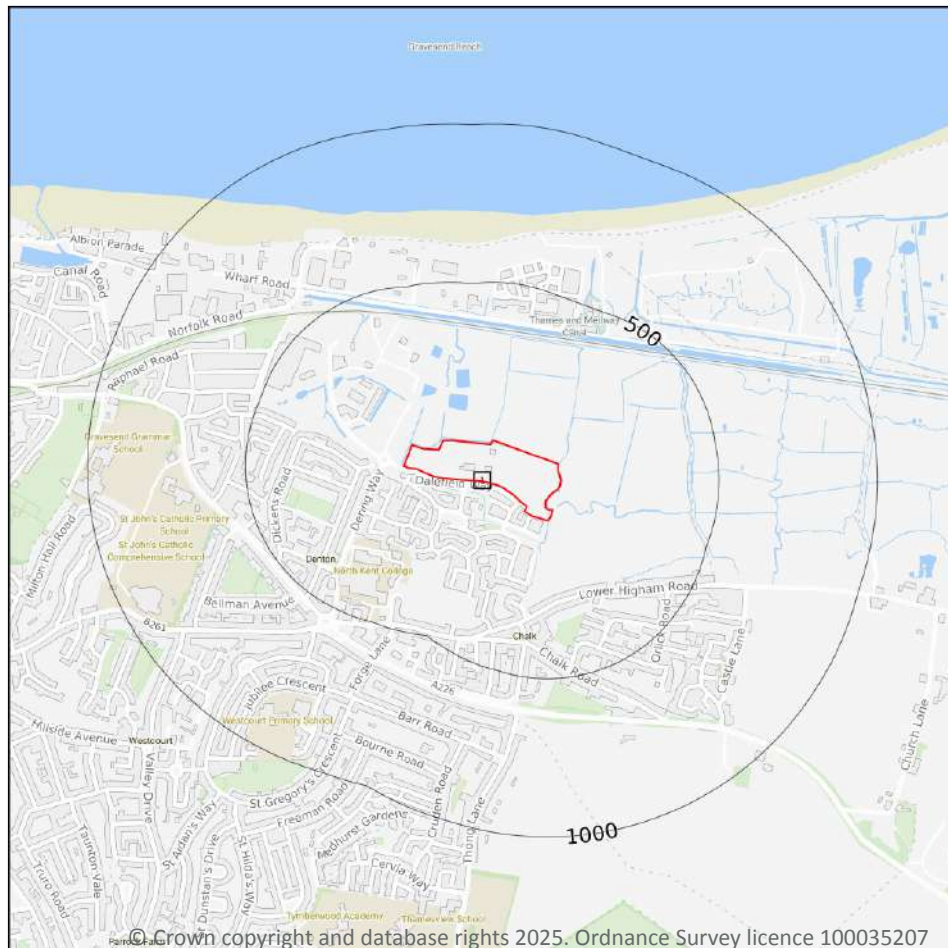
0

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



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.

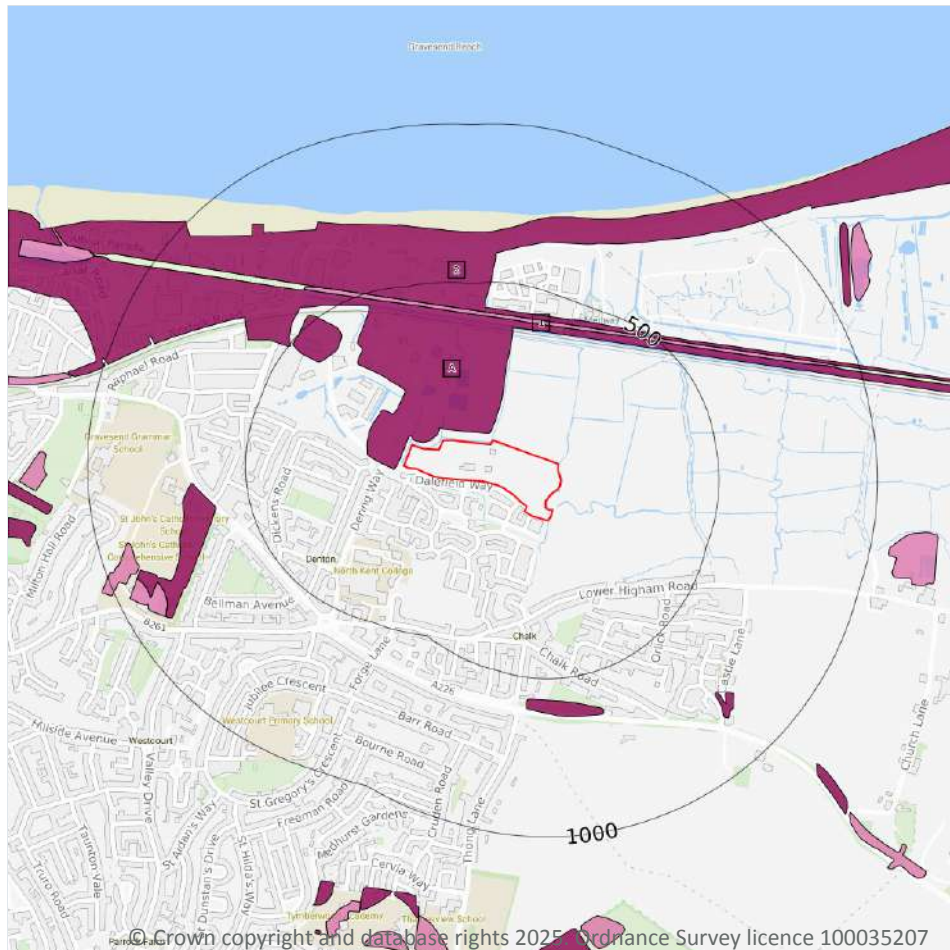
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 107](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW271_dartford_v4

This data is sourced from the British Geological Survey.



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



- Site Outline**
- Search buffers in metres (m)**
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

4

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 108](#) >

ID	Location	LEX Code	Description	Rock description
A	15m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	382m NW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
1	386m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	398m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT



This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

1

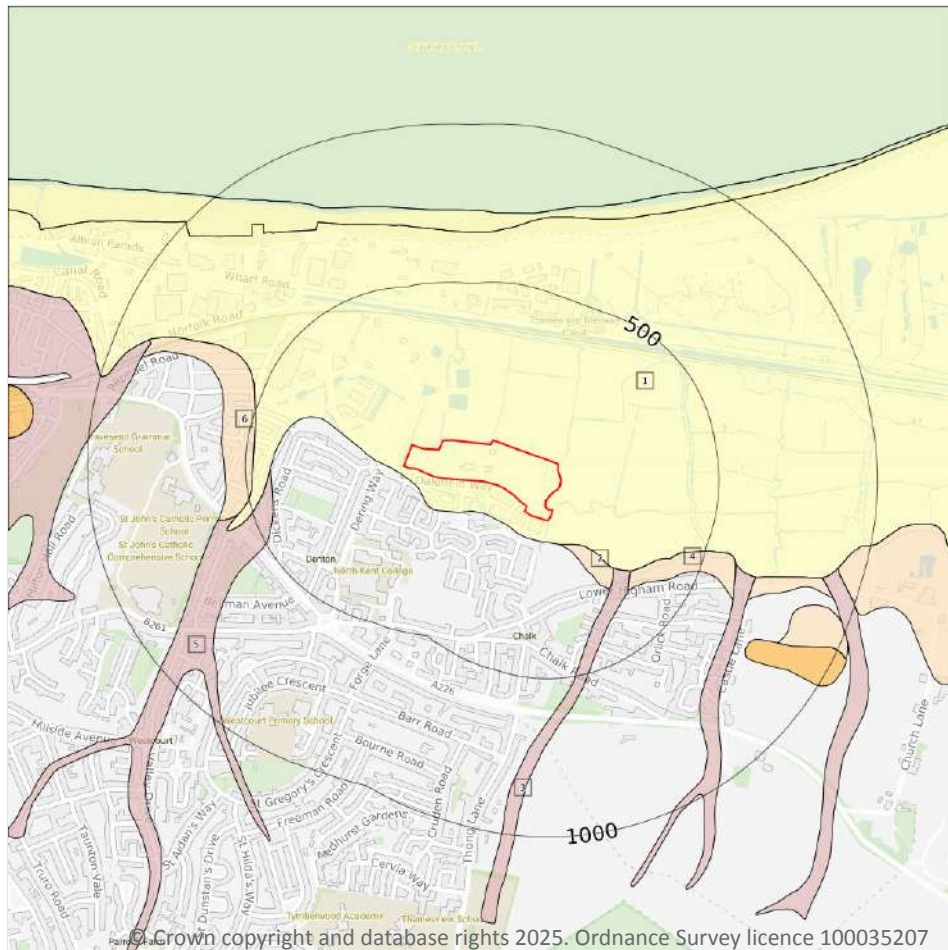
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
15m N	Mixed	Very High	Low

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

6

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 110](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
2	84m SE	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL
3	256m SE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
4	307m SE	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL
5	421m W	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
6	476m W	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Moderate	Very 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

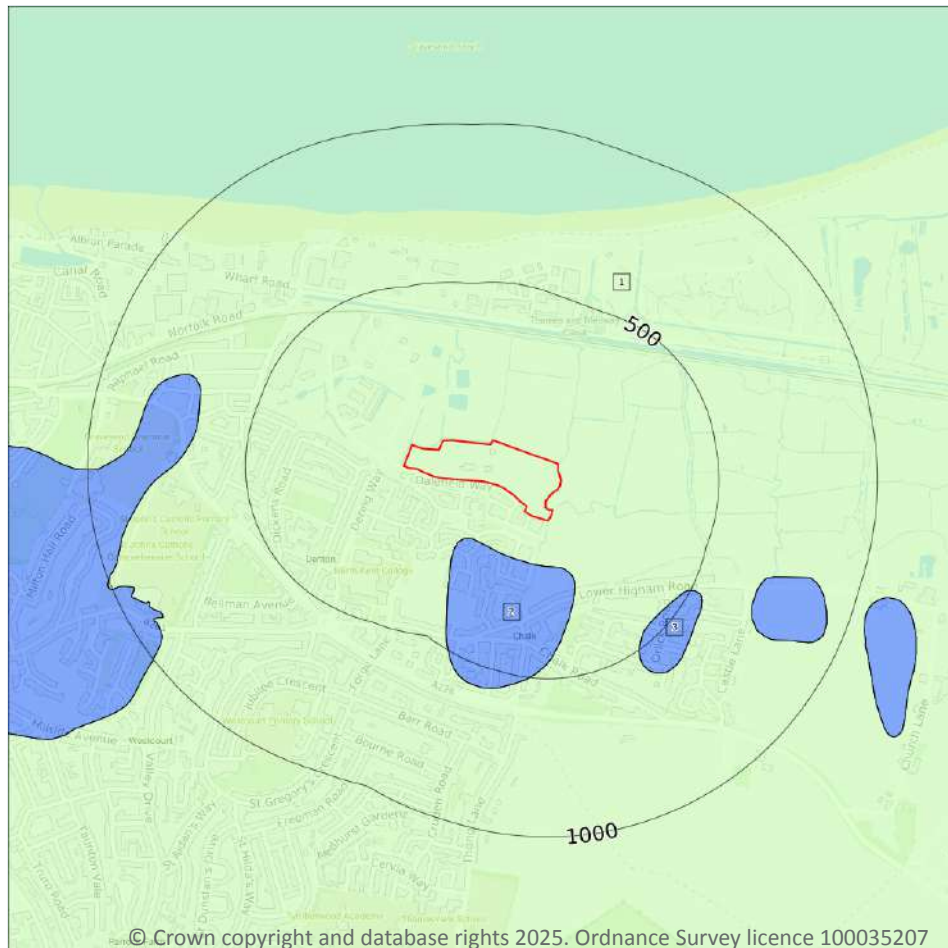
0

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

3

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 112](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LSNCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED) - CHALK	TURONIAN
2	144m SE	TAB-S	THANET FORMATION - SAND	THANETIAN
3	457m SE	TAB-S	THANET FORMATION - SAND	THANETIAN



This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Very High	Very High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

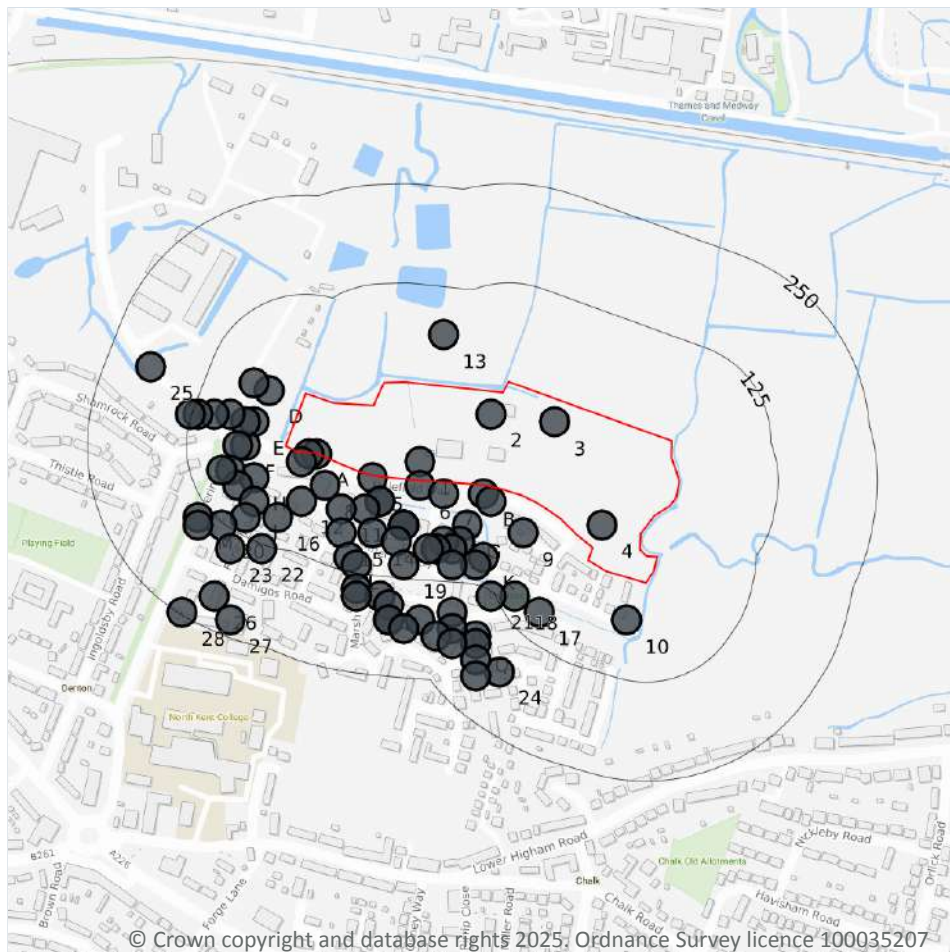
0

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

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

85

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 114](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	566910 173570	WESTCOURT MARSHES DERING WAY 94GMTP3	-	Y	N/A
2	On site	567000 173630	WESTCOURT MARSHES DERING WAY 94GMTP4	-	Y	N/A
3	On site	567080 173620	WESTCOURT MARSHES DERING WAY 94GMTP5	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	567140 173490	WESTCOURT MARSHES DERING WAY 94GMTP9	-	Y	N/A
A	1m W	566780 173580	WESTCOURT MARSHES DERING WAY 94GMTP11	-	Y	N/A
A	2m W	566770 173580	WESTCOURT MARSHES DERING WAY 01WYTP1	-	Y	N/A
5	3m W	566850 173550	WESTCOURT MARSHES DERING WAY 01WYTP2	-	Y	N/A
6	6m W	566910 173540	WESTCOURT MARSHES DERING WAY 01WYTP3	-	Y	N/A
B	10m SW	566990 173530	WESTCOURT MARSHES DERING WAY SLTP35	-	Y	N/A
A	13m W	566760 173570	WESTCOURT MARSHES DERING WAY TP03STTP21	-	Y	N/A
7	14m SW	566940 173530	WESTCOURT MARSHES DERING WAY 2	-	Y	N/A
B	18m S	567000 173520	WESTCOURT MARSHES DERING WAY 94GMTP6	-	Y	N/A
C	31m W	566860 173520	WESTCOURT MARSHES DERING WAY 94GMTP2	-	Y	N/A
C	31m W	566860 173520	WESTCOURT MARSHES DERING WAY SLTP39	-	Y	N/A
8	33m W	566790 173540	WESTCOURT MARSHES DERING WAY 01WYTP7	-	Y	N/A
9	42m S	567040 173480	WESTCOURT MARSHES DERING WAY SLTP33	-	Y	N/A
D	44m W	566720 173660	WESTCOURT MARSHES DERING WAY 97SMBH5	-	Y	N/A
C	45m W	566840 173510	WESTCOURT MARSHES DERING WAY 01WYBH4	-	Y	N/A
E	48m W	566700 173620	WESTCOURT MARSHES DERING WAY 97SMTP4	-	Y	N/A
F	50m W	566690 173590	WESTCOURT MARSHES DERING WAY 97SMBH4	-	Y	N/A
G	52m SW	566970 173490	WESTCOURT MARSHES DERING WAY SLBH4	-	Y	N/A
10	52m SE	567170 173370	WESTCOURT MARSHES DERING WAY 94GMTP1	-	Y	N/A
11	53m W	566810 173510	WESTCOURT MARSHES DERING WAY 1	-	Y	N/A
H	57m W	566700 173550	PROP RESD DEV GORDON SCH TP3	-	Y	N/A
E	58m W	566690 173620	DENTON RELIEF ROAD GRAVESEND KENT TP4	-	Y	N/A
I	58m SW	566890 173490	WESTCOURT MARSHES DERING WAY TP03STTP12	-	Y	N/A
I	58m SW	566890 173490	WESTCOURT MARSHES DERING WAY TP03STTP13	-	Y	N/A
I	58m SW	566890 173490	WESTCOURT MARSHES DERING WAY SLTP27	-	Y	N/A
F	60m W	566680 173590	DENTON RELIEF ROAD GRAVESEND KENT 4	-	Y	N/A
12	62m W	566760 173520	PROP RESD DEV GORDON SCH TP4	-	Y	N/A
13	64m NW	566940 173730	WESTCOURT MARSHES DERING WAY SLTP28	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
D	66m W	566700 173670	DENTON RELIEF ROAD GRAVESEND KENT 5	-	Y	N/A
14	72m SW	566850 173480	WESTCOURT MARSHES DERING WAY SLTP26	-	Y	N/A
G	73m SW	566960 173470	WESTCOURT MARSHES DERING WAY TP03STTP19	-	Y	N/A
G	74m SW	566940 173470	WESTCOURT MARSHES DERING WAY 01WYBH3	-	Y	N/A
H	76m W	566670 173560	WESTCOURT MARSHES DERING WAY 97SMBH6&6A	-	Y	N/A
H	78m W	566680 173540	PROP RESD DEV GORDON SCH 4	-	Y	N/A
I	79m SW	566880 173470	WESTCOURT MARSHES DERING WAY 3	-	Y	N/A
E	80m W	566670 173630	WESTCOURT MARSHES DERING WAY 97SMTP5	-	Y	N/A
J	81m W	566700 173520	PROP RESD DEV GORDON SCH 5	-	Y	N/A
15	81m SW	566810 173480	WESTCOURT MARSHES DERING WAY TP03STTP11	-	Y	N/A
G	83m SW	566950 173460	WESTCOURT MARSHES DERING WAY 01WYTP6	-	Y	N/A
G	85m SW	566930 173460	WESTCOURT MARSHES DERING WAY TP03STTP16	-	Y	N/A
G	86m SW	566920 173460	WESTCOURT MARSHES DERING WAY TP03STTP15	-	Y	N/A
H	86m W	566660 173560	DENTON RELIEF ROAD GRAVESEND KENT 6/6A	-	Y	N/A
16	87m W	566730 173500	PROP RESD DEV GORDON SCH 6	-	Y	N/A
K	88m S	566990 173450	WESTCOURT MARSHES DERING WAY SLTP40	-	Y	N/A
17	91m S	567060 173380	WESTCOURT MARSHES DERING WAY 01WYTP5	-	Y	N/A
E	99m W	566650 173630	DENTON RELIEF ROAD GRAVESEND KENT TP5	-	Y	N/A
K	100m S	566980 173440	WESTCOURT MARSHES DERING WAY TP03STTP18	-	Y	N/A
18	103m S	567030 173400	WESTCOURT MARSHES DERING WAY 94GMTP8	-	Y	N/A
J	103m W	566690 173500	PROP RESD DEV GORDON SCH TP5	-	Y	N/A
G	103m SW	566950 173440	WESTCOURT MARSHES DERING WAY TP03STTP17	-	Y	N/A
L	107m SW	566820 173450	WESTCOURT MARSHES DERING WAY 4	-	Y	N/A
19	108m SW	566890 173440	WESTCOURT MARSHES DERING WAY 94GMTP7	-	Y	N/A
L	115m SW	566830 173440	WESTCOURT MARSHES DERING WAY TP03STTP10	-	Y	N/A
E	117m W	566630 173630	WESTCOURT MARSHES DERING WAY 97SMBH3	-	Y	N/A
E	127m W	566620 173630	DENTON RELIEF ROAD GRAVESEND KENT 3	-	Y	N/A
20	128m W	566660 173490	PROP RESD DEV GORDON SCH 2	-	Y	N/A



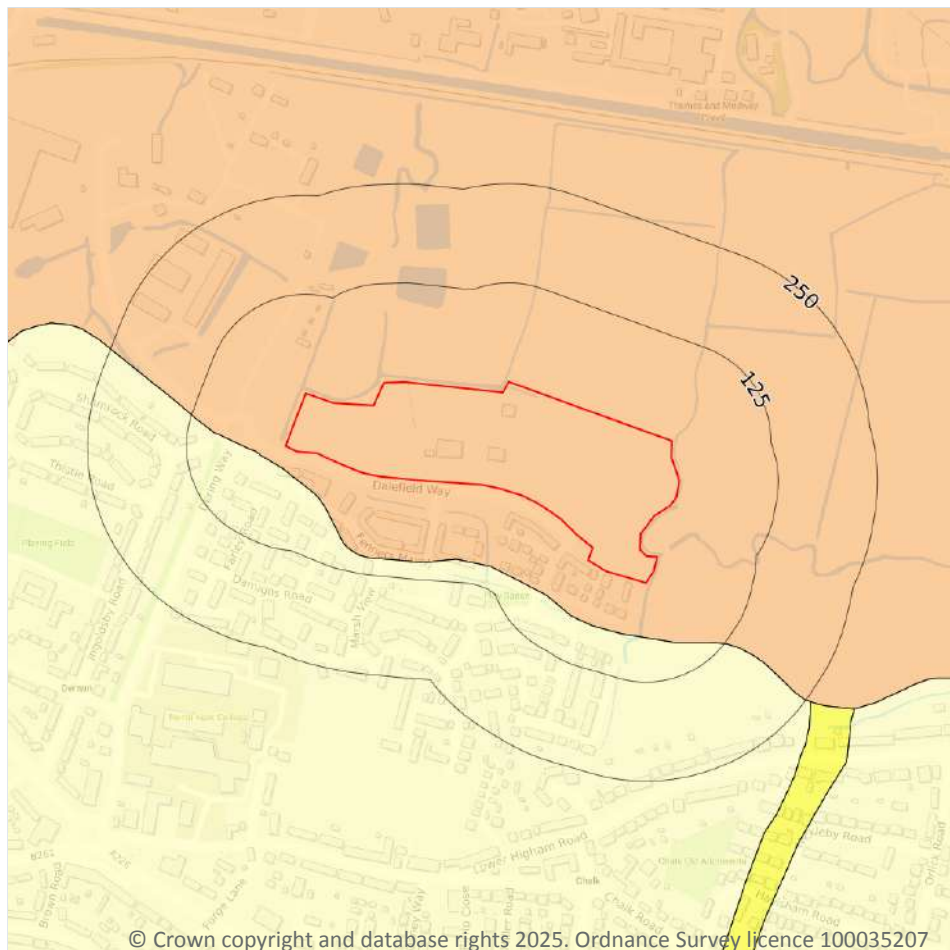
ID	Location	Grid reference	Name	Length	Confidential	Web link
21	130m S	567000 173400	WESTCOURT MARSHES DERING WAY SLTP29	-	Y	N/A
22	131m W	566710 173460	PROP RESD DEV GORDON SCH 3	-	Y	N/A
M	142m W	566630 173500	WESTCOURT MARSHES DERING WAY 97SMTP6	-	Y	N/A
N	144m SW	566830 173410	WESTCOURT MARSHES DERING WAY TP03STTP9	-	Y	N/A
23	148m W	566670 173460	PROP RESD DEV GORDON SCH TP6	-	Y	N/A
M	149m W	566630 173490	DENTON RELIEF ROAD GRAVESEND KENT TP6	-	Y	N/A
O	151m SW	566860 173400	WESTCOURT MARSHES DERING WAY 01WYBH2	-	Y	N/A
N	154m SW	566830 173400	WESTCOURT MARSHES DERING WAY SLTP20	-	Y	N/A
O	160m SW	566870 173390	WESTCOURT MARSHES DERING WAY SLTP21	-	Y	N/A
P	163m S	566950 173380	WESTCOURT MARSHES DERING WAY TP03STTP8	-	Y	N/A
Q	171m S	566980 173350	WESTCOURT MARSHES DERING WAY TP03STTPM2	-	Y	N/A
O	176m SW	566910 173370	WESTCOURT MARSHES DERING WAY SLTP22	-	Y	N/A
Q	177m S	566980 173340	WESTCOURT MARSHES DERING WAY TP03STTPM3	-	Y	N/A
O	180m SW	566870 173370	WESTCOURT MARSHES DERING WAY TP03STTP1	-	Y	N/A
O	180m SW	566870 173370	WESTCOURT MARSHES DERING WAY TP03STTPM1	-	Y	N/A
24	180m S	567010 173305	WESTCOURT MARSHES DERING WAY TP03STTPM5	-	Y	N/A
P	183m S	566950 173360	WESTCOURT MARSHES DERING WAY 01WYBH1	-	Y	N/A
O	188m SW	566890 173360	WESTCOURT MARSHES DERING WAY TP03STTP2	-	Y	N/A
Q	190m S	566980 173320	WESTCOURT MARSHES DERING WAY TP03STTPM4	-	Y	N/A
P	195m S	566930 173350	WESTCOURT MARSHES DERING WAY TP03STTP3	-	Y	N/A
25	195m W	566570 173690	DENTON RELIEF ROAD GRAVESEND KENT 2	-	Y	N/A
P	202m S	566950 173340	WESTCOURT MARSHES DERING WAY 6	-	Y	N/A
Q	204m S	566980 173300	WESTCOURT MARSHES DERING WAY TP03STTP4	-	Y	N/A
26	210m SW	566650 173400	PROP RESD DEV GORDON SCH 1	-	Y	N/A
27	229m SW	566670 173370	PROP RESD DEV GORDON SCH TP2	-	Y	N/A
28	247m SW	566610 173380	PROP RESD DEV GORDON SCH TP1	-	Y	N/A



This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



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

17.1 Shrink swell clays

Records within 50m

2

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

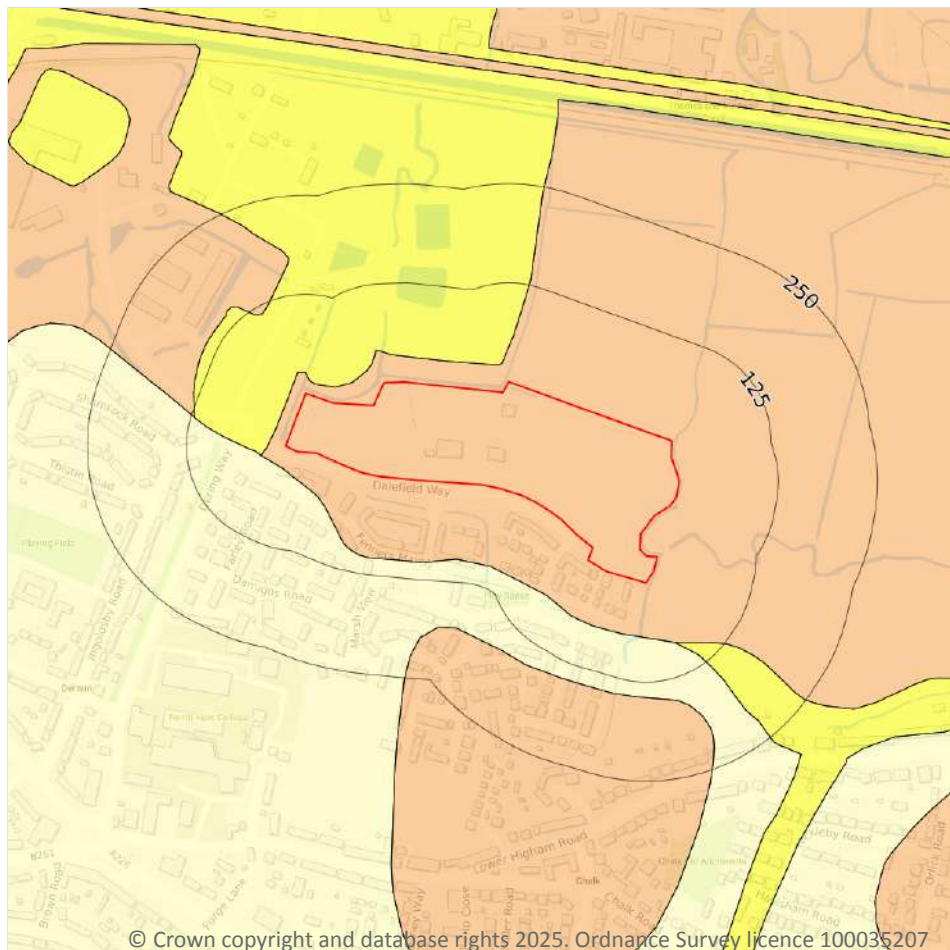
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 119](#) >

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.
26m W	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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

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17.2 Running sands

Records within 50m

3

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 120 >](#)

Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

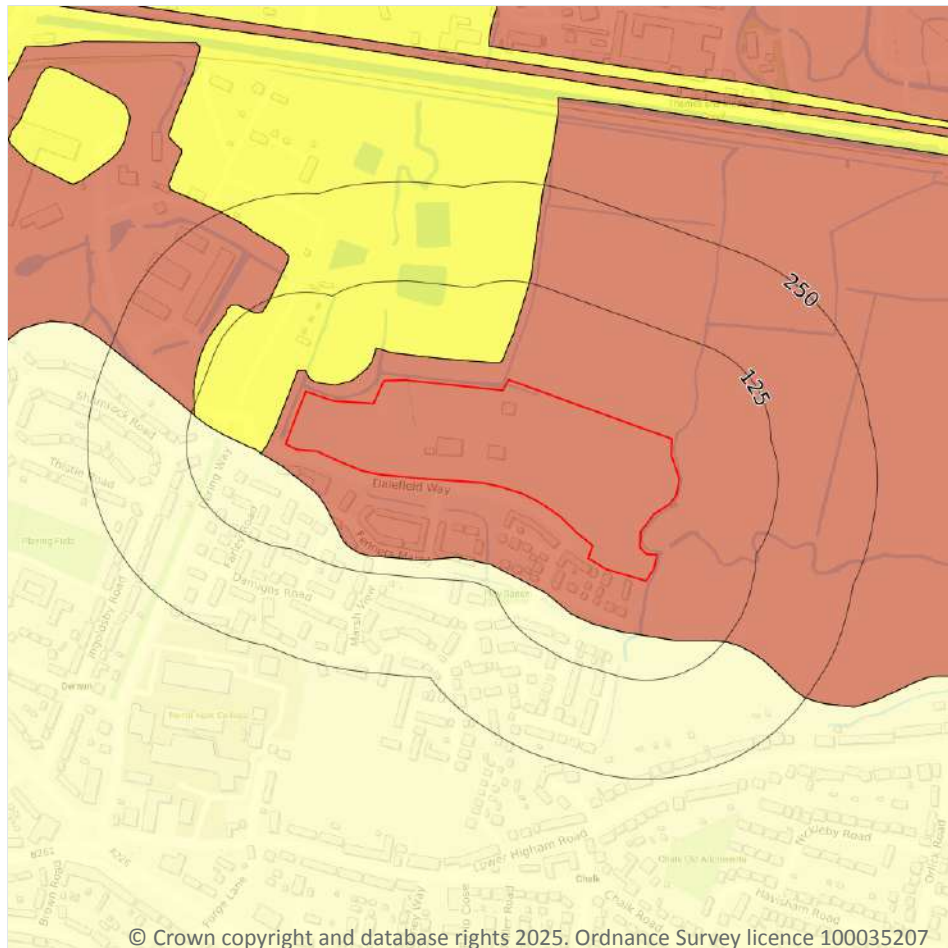


Location	Hazard rating	Details
15m W	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
26m W	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



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

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17.3 Compressible deposits

Records within 50m

3

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 122 >](#)

Location	Hazard rating	Details
On site	High	Highly compressible strata present. Significant constraint on land use depending on thickness.
15m W	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

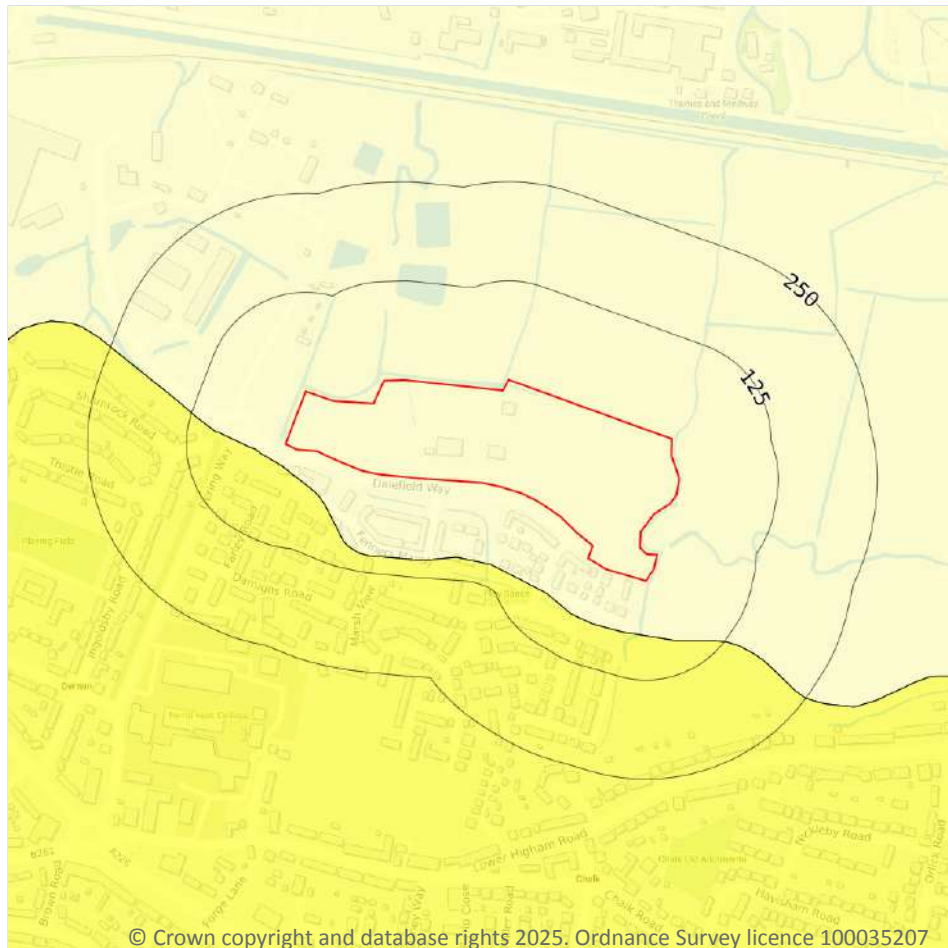


Location	Hazard rating	Details
26m W	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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

17.4 Collapsible deposits

Records within 50m

2

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.

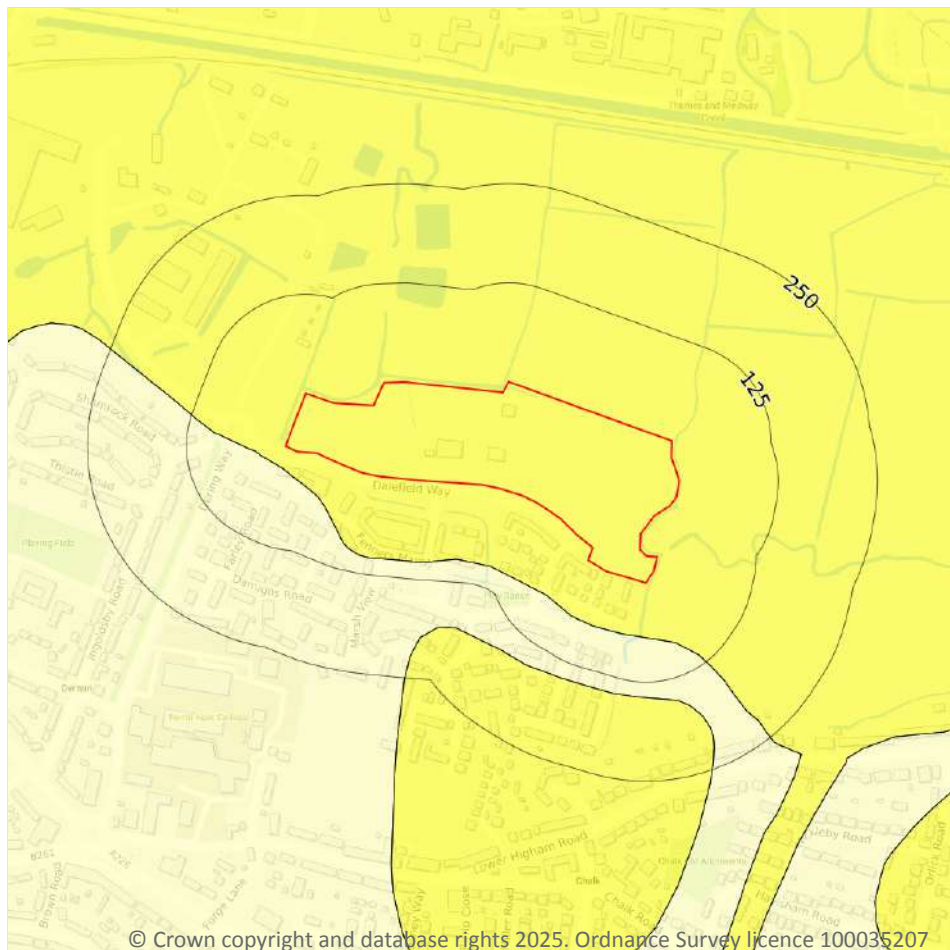
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 124 >](#)

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
26m W	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



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

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17.5 Landslides

Records within 50m

2

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 125 >](#)

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

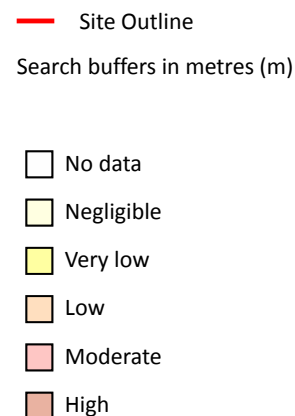
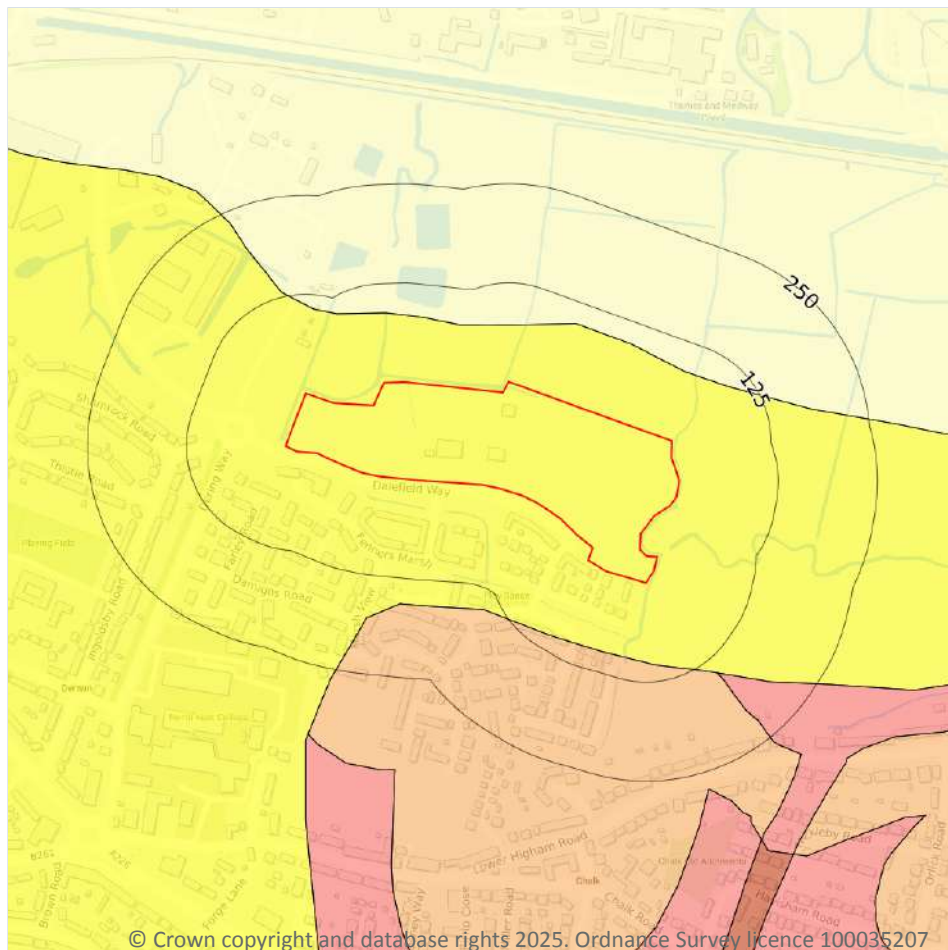


Location	Hazard rating	Details
26m W	Negligible	Slope instability problems are not thought to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

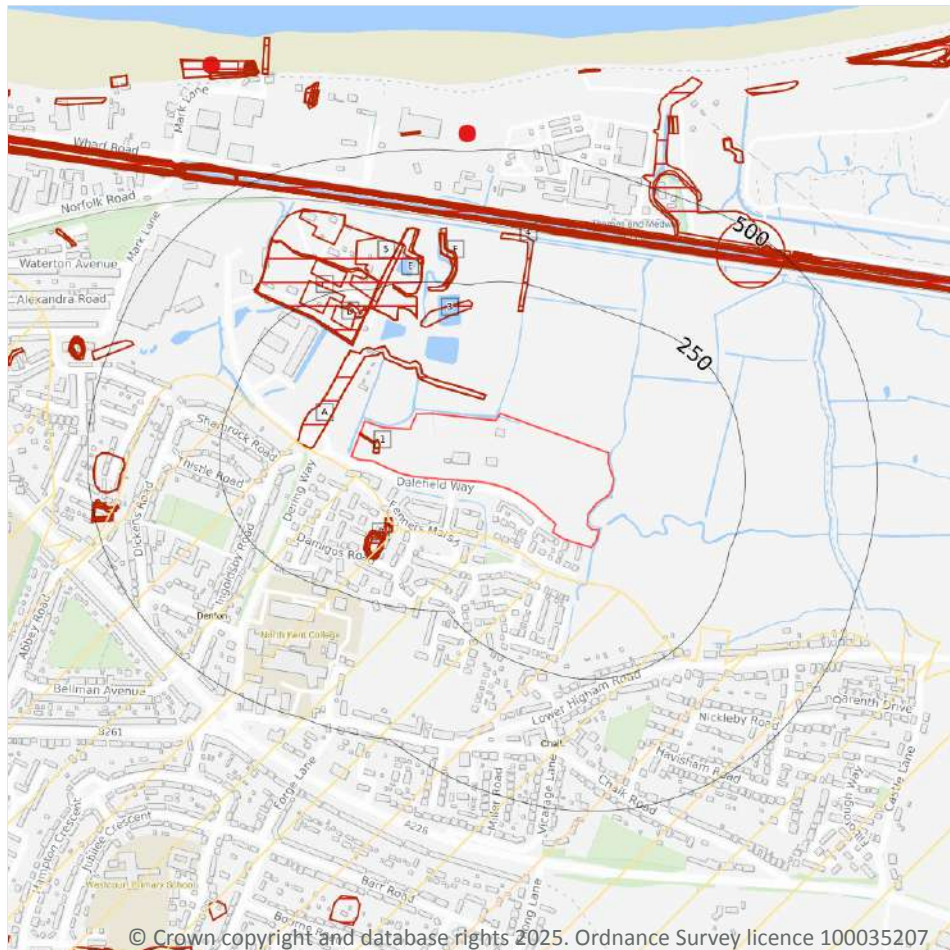
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 127](#) >

Location	Hazard rating	Details
On site	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.

This data is sourced from the British Geological Survey.



18 Mining and ground workings



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

18.1 BritPits

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

30

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 129 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Pond	1865	1:10560
A	38m N	Unspecified Ground Workings	1955	1:10560
A	38m N	Unspecified Ground Workings	1966	1:10560
B	86m SW	Ponds	1895	1:10560
B	97m SW	Ponds	1865	1:10560
B	117m SW	Pond	1923	1:10560
B	122m SW	Pond	1895	1:10560
B	122m SW	Pond	1895	1:10560
B	124m SW	Pond	1938	1:10560
B	124m SW	Pond	1951	1:10560
B	124m SW	Pond	1907	1:10560
B	124m SW	Pond	1895	1:10560
B	124m SW	Pond	1923	1:10560
B	125m SW	Pond	1932	1:10560
B	126m SW	Pond	1888	1:10560
C	145m NW	Sewage Works	1938	1:10560
C	150m NW	Sewage Works	1951	1:10560
C	152m NW	Sewage Works	1932	1:10560
C	152m NW	Sewage Works	1932	1:10560
3	164m NW	Unspecified Ground Workings	1966	1:10560
D	174m NW	Sludge Bed	1951	1:10560
E	182m NW	Refuse Heaps	1932	1:10560
E	182m NW	Refuse Heaps	1932	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
D	197m NW	Refuse Heap	1951	1:10560
4	198m N	Unspecified Ground Workings	1973	1:10000
C	220m NW	Filter Beds	1951	1:10560
5	224m NW	Sludge Beds	1951	1:10560
F	233m N	Unspecified Ground Workings	1955	1:10560
F	233m N	Unspecified Ground Workings	1966	1:10560
F	241m N	Unspecified Ground Workings	1981	1:10000

This data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

0

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

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

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 129 >](#)

ID	Location	Name	Commodity	Class	Likelihood
2	26m W	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.
-	956m W	Milton Hall Road	Chalk	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should 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

2

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

Location	Mineral type
479m N	Unspecified
485m N	Unspecified

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

0

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

This data is sourced from the Coal Authority.



18.13 Brine areas

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

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

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

18.14 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

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

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

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



19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

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

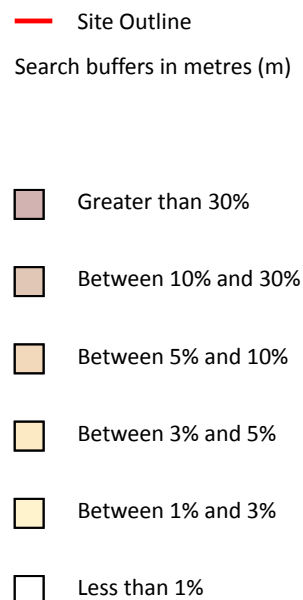
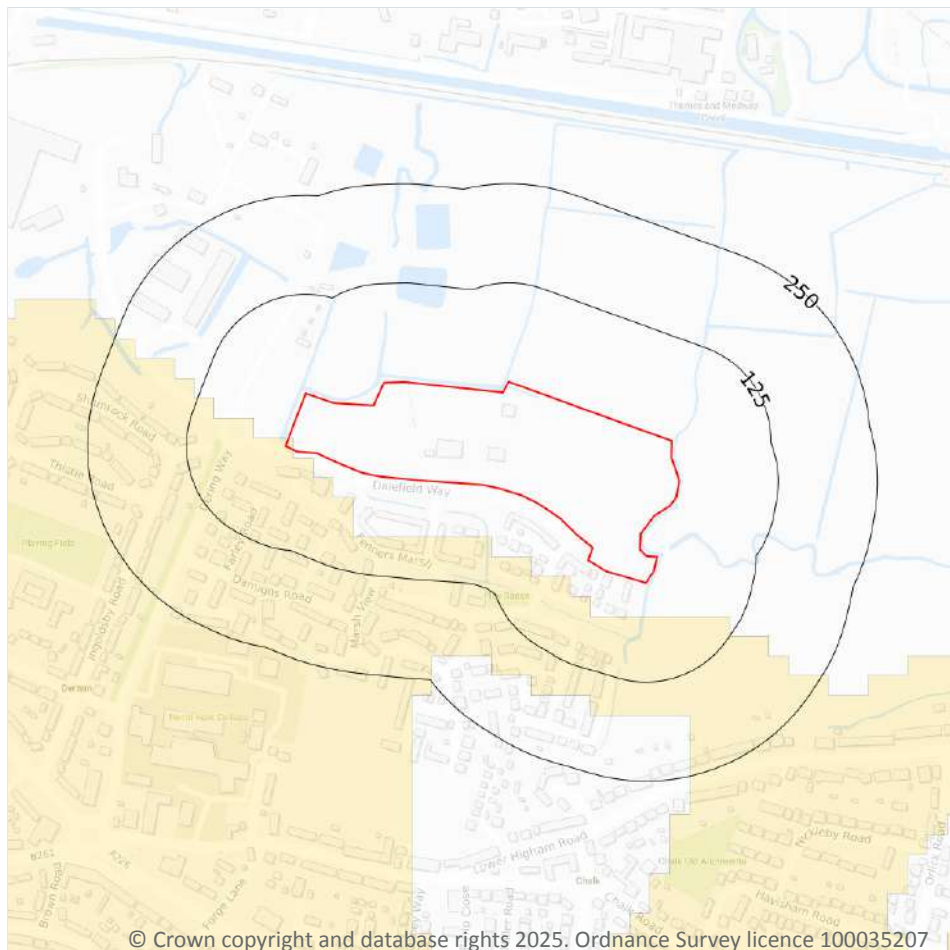
Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

2

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 137](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None



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

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



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

5

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
26m SW	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
38m S	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



21.3 BGS Measured Urban Soil Chemistry

Records within 50m

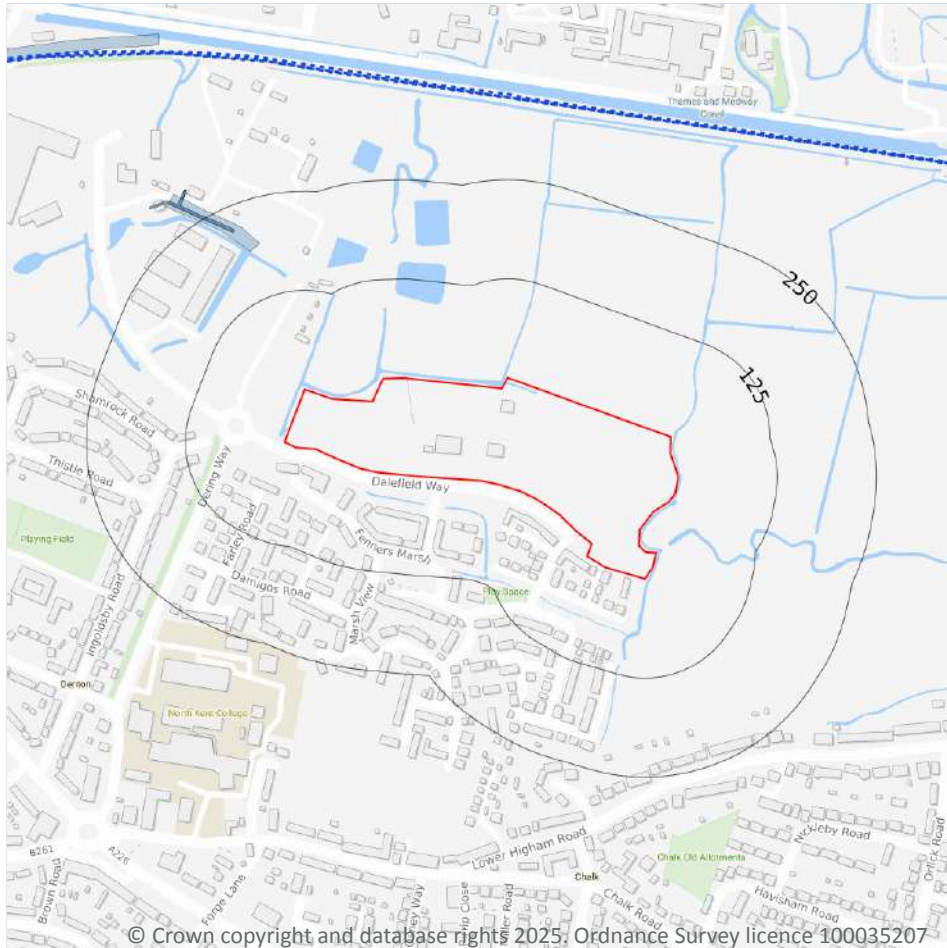
0

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

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



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

22.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

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



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

6

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

Features are displayed on the Railway infrastructure and projects map on [page 141](#) >

Location	Land Use	Year of mapping	Mapping scale
187m NW	Railway Sidings	1951	10560
217m NW	Railway Sidings	1953	1250
218m NW	Railway Sidings	1969	1250
218m NW	Railway Sidings	1955	2500
218m NW	Railway Sidings	1964	2500
218m NW	Railway Sidings	1970	2500

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

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

This data is sourced from Groundsure/the Postal Museum.



22.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.



Data providers

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

Terms and conditions

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



APPENDIX C

FIGURES



Figure 1: Recent Aerial Photograph (14/05/2025)



Figure 2: View overlooking land at Dalefield Way (West) from southwest side of site boundary



Figure 3: View overlooking land at Dalefield Way (West) from south side of site boundary



Figure 4: View overlooking land at Dalefield Way (West) from southeast side of site boundary

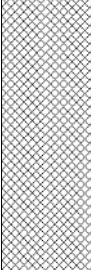
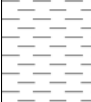
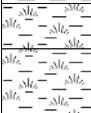


Figure 5: View overlooking land at Dalefield Way (West) from southeast side of site boundary, showing neighbouring Dalefield Way Industrial Estate

APPENDIX D

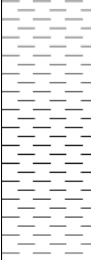
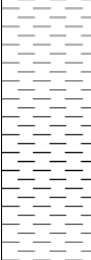
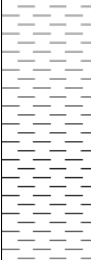
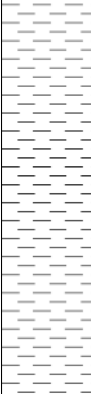
BGS BOREHOLE RECORDS

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. BH1 Sheet 1 of 4	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 567057E - 173547N		Hole Type CP	
Location: Gravesend, Kent				Level:		Scale 1:50	
Client: Riverdale Developments				Dates: 22/02/2016		Logged By AP	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	D	N=11 (2,2/2,4,3,2)	1.80		 Grass overlying brown and off-white silty reworked chalk. MADE GROUND	1	
		1.50 1.50 - 1.95	S D						
		2.30	D						
		3.00 - 3.45	U	Ublow=25	3.00		 Firm dark grey CLAY. ALLUVIUM	3	
		3.50	D						
		4.50 4.50 - 4.95	S D						
		5.50	D	Ublow=15	6.70		 Soft brown CLAY. ALLUVIUM	4	
		6.00 - 6.45	U						
		6.50 6.70	D D						
		7.50 7.50 - 7.95	S D	N=3 (1,0/1,0,1,1)	8.50		 Brown PEAT. ALLUVIUM	7	
		8.50	D						
		9.00 - 9.45	U						
		9.50 9.70	D D	Ublow=20	9.30		 Very soft amoufous PEAT. ALLUVIUM	9	
		9.50	D						
		9.70	D						
						 Very soft light grey slightly sandy CLAY. ALLUVIUM	10		
					 Flint COBBLES. ALLUVIUM				

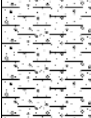
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks Standing time and day works 14.5 hours. Four mobilisations. Groundwater at 16.8m bgl, rose to 10.10m bgl after 20 minutes, standing at 5m the following day	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
150	10.00	16.80	10.10				
200	12.00						
150	32.00						

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log		Borehole No. BH1 Sheet 2 of 4	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 567057E - 173547N	
Location: Gravesend, Kent		Level:		Scale 1:50	
Client: Riverdale Developments		Dates: 22/02/2016		Logged By AP	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		10.20	D	N=17 (2,1/2,4,4,7)	10.20		Loose blue grey SILT with flint cobbles. ALLUVIUM	11	
		10.50	C						
		10.50 - 10.95	D						
		10.50 - 11.00	B						
		11.10	D	Ublow=35	11.10		Soft light brown and blue grey mottled SILT. ALLUVIUM	12	
		11.50	D						
		12.00 - 12.45	U						
		12.50	D						
		13.50	S	N=10 (1,2/2,2,3,3)	13.50		Soft to firm brown and grey mottled CLAY. ALLUVIUM	14	
		13.50 - 13.95	D						
		14.50	D						
		15.00 - 15.45	U						
		15.50	D	Ublow=40	15.50		...becoming firm blue grey clay from 12.30m bgl.	15	
		16.50	S						
		16.50 - 16.95	D						
17.50	D								
18.00 - 18.45	U	Ublow=25	18.00		...becoming grey silty clay from 15.30m bgl.	16			
18.00 - 18.50	B								
18.50 - 18.95	U								
19.50	S								
19.50 - 19.95	D	N=26 (1,3/4,5,7,10)	19.80		Firm green grey mottled sandy CLAY with fine chalk	19			
Continued on Next Sheet								20	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
150	10.00	16.80	10.10			Standing time and day works 14.5 hours. Four mobilisations. Groundwater at 16.8m bgl, rose to 10.10m bgl after 20 minutes, standing at 5m the following day	
200	12.00						
150	32.00						

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log			Borehole No. BH1 Sheet 3 of 4	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 567057E - 173547N		Hole Type CP
Location: Gravesend, Kent				Level:		Scale 1:50
Client: Riverdale Developments				Dates: 22/02/2016		Logged By AP

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		20.50	D	N=9 (2,3/2,2,2,3)	20.80		 fragments and flint gravel. ALLUVIUM	21	
		20.80	D						CHALK. CHALK
		21.00	S						
		21.00 - 21.45	D						
		22.00	D	N=10 (1,3/2,3,2,3)				22	
		22.50	S						
		22.50 - 22.95	D					23	
		23.50	D						N=31 (2,3/5,7,8,11)
		24.00	S				24		
		24.00 - 24.45	D						
		25.00	D	N=30 (2,4/6,6,8,10)					
		25.50	S						
25.50 - 25.95	D		26						
26.50	D				N=32 (4,5/6,7,9,10)				
27.00	S		27						
27.00 - 27.45	D								
28.50	S	N=44 (6,8/10,11,10,13)					28		
28.50 - 28.95	D								
30.00	S					29			
30.00 - 30.45	D								

Continued on Next Sheet

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth	Strike	Depth from	Depth to		
150	10.00	16.80	10.10				
200	12.00						
150	32.00						

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. BH1 Sheet 4 of 4	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 567057E - 173547N		Hole Type CP	
Location: Gravesend, Kent				Level:		Scale 1:50	
Client: Riverdale Developments				Dates: 22/02/2016		Logged By AP	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		31.50 31.50 - 31.95	S D	N=38 (4,6/9,8,10,11)	36.45				31	
										32
		33.00 33.00 - 33.45	S D	N=27 (4,5/6,6,6,9)					33	
		34.50 34.50 - 34.95	S D	N=34 (5,6/6,7,9,12)					34	
		36.00 36.00 - 36.45	S D	N=37 (4,6/7,9,9,12)					35	
							End of Borehole at 36.50m		36	
									37	
									38	
									39	
									40	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
150	10.00	16.80	10.10			
200	12.00					
150	32.00					





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP1
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 66959.00 - 73624.00
Level:

Date
23/02/2016

Location: Gravesend, Kent

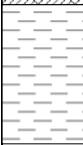
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(m):

Scale
1:25

Client: Riverdale Developments

Depth
0.70

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.20	ES	PP=1.8kg/cm2	0.24			Grass overlying dark brown silty clay with roots and rootlets. TOPSOIL	1 2 3 4 5	
	0.20	PP					High Strength orange brown and grey mottled silty CLAY with fine roots. ALLUVIUM		
	0.50	D	PP=1.6kg/cm2	0.70			End of Pit at 0.70m		
	0.50	PP							
Water Strikes									
Depth Strike	0.60	Rose to (m bgl)	0.55	Remarks					Groundwater depth 0.60m bgl.
				Stability					







Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP2
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67098.00 - 73646.00
Level:

Date
23/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

Depth
0.50

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grass overlying brown silty clay with roots and fine roots. TOPSOIL	
	0.20	PP	PP=1.5kg/cm2	0.24			Medium to high strength brown silty CLAY with fine roots. ALLUVIUM	
	0.50	D						
	0.50	PP	PP=3kg/cm2	0.50			End of Pit at 0.50m	
								1
								2
								3
								4
								5
Water Strikes								
Depth Strike	Rise to (m bgl)							
0.45	0.40	Remarks Groundwater depth 0.45m bgl.						
		Stability						





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP3
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67156.00 - 73626.00
Level:

Date
22/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

Depth
1.50

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20 0.20	ES PP	PP=1.5kg/cm2	0.50			Grass overlying dark brown silty clay with roots and rootlets. TOPSOIL	
	0.50 0.50	ES PP	PP=1.5kg/cm2				Grey CLAY with frequent black peat bands and frequent timber. MADE GROUND	
	1.00 1.00	ES PP	PP=0.5kg/cm2	1.50				1
	1.50 1.50	ES PP	PP=0kg/cm2				End of Pit at 1.50m	2
								3
								4
								5
Water Strikes								
Depth Strike	Notes to (m/bgl)							
0.20	0.20	Remarks Pit very unstable, Groundwater depth 0.20m bgl.						
		Stability						





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP4
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67153.00 - 73526.00
Level:

Date
22/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

Depth
2.50

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grass overlying dark brown silty clay with roots and rootlets. TOPSOIL	
	0.20	PP	PP=1.5kg/cm2					
	0.50	D						
	0.60	PP	PP=1.5kg/cm2	0.55			High to extremely low strength light brown CLAY with frequent fine roots (to 1.80m) and occasional brown peat bands. ALLUVIUM	
	1.00	D						1
	1.00	PP	PP=0.8kg/cm2					
	1.50	D						
	1.50	PP	PP=0.5kg/cm2					
	2.00	D						2
	2.00	PP	PP=0kg/cm2					
	2.50	D						
	2.50	PP	PP=0kg/cm2	2.50			End of Pit at 2.50m	3
								4
								5
Water Strikes								
Depth Strike	Rose to (m bgl)							
0.80	1.00	Remarks Pit very unstable, side of pit sheared at 2.50m bgl. Groundwater depth 0.80m bgl.						
		Stability						





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP5
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67103.00 - 73592.00
Level:

Date
23/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

Depth
0.50

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.20			Grass overlying brown silty clay with roots. TOPSOIL	
	0.20	PP	PP=1.5kg/cm2				Medium strength brown silty CLAY with frequent fine roots. ALLUVIUM	
	0.50	D		0.50				
	0.50	PP	PP=1.5kg/cm2				End of Pit at 0.50m	
								1
								2
								3
								4
								5
Water Strikes Depth Strike: 0.30 Rise to (m bgl): 0.20		Remarks: Groundwater depth 0.30m bgl Stability						





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP6
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67034.00 - 73599.00
Level:

Date
23/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

Depth
0.50

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grass overlying brown silty CLAY with fine roots.	
	0.20	PP	PP=0.5kg/cm2	0.35			TOPSOIL	
	0.50	D		0.50			High strength brown and orange brown mottled silty CLAY.	
	0.50	PP	PP=2kg/cm2				ALLUVIUM	End of Pit at 0.50m
								1
								2
								3
								4
								5
Water Strikes								
Depth Strike	Rise to (m bgl)	Remarks						
0.45	0.40	Groundwater depth 0.45m bgl.						
		Stability						





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP7
Sheet 1 of 1

Project Name: Land Off Dalefield Way, Gravesend

Project No.
Ge15338

Co-ords: 67085.00 - 73525.00
Level:

Date
22/02/2016

Location: Gravesend, Kent

Dimensions
(m):

Scale
1:25

Client: Riverdale Developments

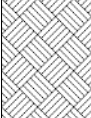
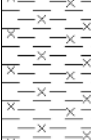
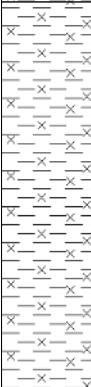
Depth
3.10

Logged
AP

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grass overlying grey sandy silt with frequent chalk fragments and rare brick, plastic, concrete, limestone cobbles and flint. MADE GROUND	
	0.50	ES						
	1.00	ES						1
	1.50	ES						
	2.00	ES						2
	2.20	PP	PP=3.5kg/cm2	2.20			High strength black and dark grey CLAY with occasional peat bands. ALLUVIUM	
	2.50 2.50	D PP	PP=2.2kg/cm2	2.70			Medium strength brown CLAY. ALLUVIUM	
	3.00 3.00	D PP	PP=1kg/cm2	3.10			End of Pit at 3.10m	3
								4
								5
Water Strikes								
Depth Strike	Rose to (mbgl)	Remarks Groundwater depth DRY.						
		Stability						



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS1 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 67135E - 73458N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 22/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D		0.40			Dark brown silty clay with rootlets and occasional fine to medium subangular to angular flint gravels. TOPSOIL	
		0.50	D					Dark greyish brown soft silty CLAY. ALLUVIUM	
		1.00	D		0.90			Light orangish grey soft silty CLAY. ALLUVIUM	1
		1.50	D						
		2.00	D		2.20			Light grey very softy silty CLAY with peat. ALLUVIUM	2
		2.50	D						
		3.00	D		4.00				3
		3.50	D						
		4.00	D						
									End of Borehole at 4.00m
								5	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
		0.50	0.50			Ground water depth 0.5m bgl



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS2 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 67119E - 73535N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 22/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D		0.30			Dark brown silty clay with rootlets. TOPSOIL	
		0.50	D					Light orangish grey soft to very soft silty CLAY. ALLUVIUM	
		1.00	D						
		1.50	D						
		2.00	D						
		2.50	D						
		3.00	D						
		3.30							
							Dark blueish grey very soft silty CLAY with peat. ALLUVIUM		
									
									
									
									
									
									
									
									
									
									
									

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS3	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 67188E - 73605N		Sheet 1 of 1 Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 22/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
	▼	0.30	D		0.30		 Dark brown silty clay with rootlets. TOPSOIL	1	
0.50		D				 Dark brown soft silty CLAY. ALLUVIUM			
0.80									
1.00		D				 Dark orange mottled brown soft silty CLAY with peat. ALLUVIUM	2		
1.50		D							
2.00		D							
2.50		D							
3.00		D							3
3.50		D							
4.00		D							
						4			
					4.00		End of Borehole at 4.00m	5	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
		0.73	0.73				

Ground water depth 0.73m bgl

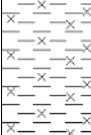
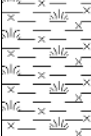
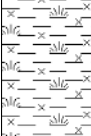
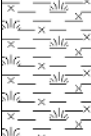
 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS4 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 66913E - 73564N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 23/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
	▼	0.30	D		1.70			Dark greyish brown gravelly silty clay with frequent to abundant fragments of brick and rubble. Gravels were fine to medium angular to subangular chalk and flint. MADE GROUND	1
		0.50	D						
		1.00	D						
		1.50	D						
		2.00	D						
		2.50	D						
		3.00	D						
		3.50	D						
		4.00	D		4.00			Dark brownish grey soft silty CLAY with peat. ALLUVIUM	2
									3
									4
									5
								End of Borehole at 4.00m	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
		1.05	1.05			Ground water depth 1.05m bgl



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS5 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 66909E - 73672N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 23/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D		0.30			Dark brown silty clay with rootlets. MADE GROUND	
		0.50	D		0.80		Dark greyish brown soft silty CLAY. ALLUVIUM		
		1.00	D				Dark bluish grey very soft silty CLAY with peat. ALLUVIUM		
		1.50	D						
		2.00	D						
		2.50	D						
		3.00	D						
		3.50	D						
		4.00	D						
								5	

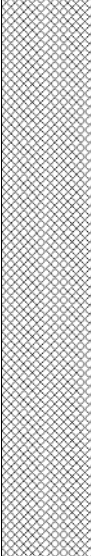
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks Ground water depth 0.5m bgl	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
		0.50	0.50				

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS6 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 67004E - 73661N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 23/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D		0.30			Dark brwo gravelly silty clay. Gravels were fine to medium angular to subangular chalk and flint. TOPSOIL	
		0.50	D					Dark greyish brown soft silty CLAY. ALLUVIUM	
		0.80				Dark grey very soft silty CLAY with peat. ALLUVIUM			
		1.00	D						
		1.50	D						
		2.00	D						
		2.50	D						
		3.00	D						
		3.50	D						
		4.00	D						
							End of Borehole at 4.00m		4
									5

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks Ground water depth 0.3m bgl	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
		0.30	0.30				

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS7 Sheet 1 of 1	
Project Name: Land Off Dalefield Way, Gravesend		Project No. Ge15338		Co-ords: 66989E - 73553N		Hole Type WS	
Location: Gravesend, Kent				Level:		Scale 1:25	
Client: Riverdale Developments				Dates: 23/02/2016		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D				 Dark greyish brown gravelly silty clay with frequent to abundant fragments of brick and rubble. Gravels were fine to medium angular to subangular chalk and flint. MADE GROUND	1	
		0.50	D						
		1.00	D						
		1.50	D						
	▼	2.00	D		1.85 2.00	 Dark greyish black very soft clayey PEAT. ALLUVIUM	 Dark brownish grey very soft silty CLAY with peat. ALLUVIUM	2	
		2.50	D						
		3.00	D				 Dark brownish grey very soft silty CLAY with peat. ALLUVIUM	3	
		3.50	D						
		4.00	D		4.00				
									End of Borehole at 4.00m
								5	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
		2.05	2.05			Ground water depth 2.05m bgl

