

PHASE I DESK STUDY

GRANGE TRAVEL COACH HIRE, CANAL ROAD, GRAVESEND, KENT, DA12 2RS

Job Number:

DS-GTCH-001-24

Site Address:

Grange Travel Coach Hire
Canal Road
Gravesend
Kent
DA12 2RS

Report Date:

1st April 2024

Version Number:

Version 1 – (FINAL)

Customer:

M2 Technical Services Ltd (on behalf of Grange Travel Coach Hire Ltd)
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PHASE 1 DESK STUDY

EXECUTIVE SUMMARY

A Phase 1 Desk Study was requested by Grange Travel Coach Hire Limited. The purpose of the non-intrusive assessment was to identify any contaminative issues associated with former land use at *Grange Travel Coach Hire, Canal Road, Gravesend, DA12 2RS* which might impact on the site's redevelopment.

SITE DETAILS

Approximate site area	0.27 ha
Current use / historic use	A single, relatively new built structure in use as a coach servicing and maintenance unit currently occupies the east of the site, with steel containers/portacabins to the west of the site in use as offices. Information obtained from the landowner suggested historically, the site was used as a Timber Yard. The Thames and Medway Canal also ran through the site until approximately 1969 where it was infilled.
Proposed use	Erection of a new portal frame shed for servicing and maintaining coaches, including an office on a mezzanine floor & storage on the ground floor.

PHASE 1 NON-INTRUSIVE INVESTIGATION

Expected geology	Superficial deposits of Alluvium and Tidal River or Creek Deposits underlain by the Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation.
Groundwater	Alluvium and Tidal River/Creek Deposits are classified as a Secondary (Undifferentiated) aquifer suggesting variable permeability. The underlying bedrock Lewes Nodular Chalk Formation, Seaford Chalk and Newhaven Chalk Formation is classified as a Principle Aquifer. The site does not lie within a Source Protection Zone.
Surface water	Gravesend Canal Basin is located approximately 20m west of the site. The river Thames is located approximately 100 m north of the site.

PRELIMINARY RISK ASSESSMENT

Risk Assessment	There is considered to be generally a low to moderate risk of significant contamination present at the site given the current site condition.
Recommendations	The Thames and Medway Canal which formerly ran through the site has been infilled. The provenance of this material is uncertain and Phase II intrusive investigation is recommended to include chemical analysis of soil. A programme of hazardous ground gas and groundwater monitoring should be included.

SECTION 1 INTRODUCTION

- 1.1 Grange Travel Coach Hire Limited proposes to develop an area of land located at Grange Travel Coach Hire, Canal Road, Gravesend, Kent for commercial development purposes. The proposed development comprises the *"erection of a portal framed shed for servicing and maintaining coaches, including an office on a mezzanine floor & storage on the ground floor"*.
- 1.2 G.D. Ground Engineering Services Limited (hereby referred to as GDGES) has been commissioned by M2 Technical Services Ltd (on behalf of Grange Travel Coach Hire Ltd) to undertake a non-intrusive, desk-based assessment of the site and to advise on the geo-environmental implications of the development of the site for the proposed end use.
- 1.3 The objectives of the investigation are to:
- i. Identify likely surface and sub-surface ground conditions;
 - ii. Identify the potential for contaminative land uses on the site and surrounding areas;
 - iii. Identify potential pollutant linkages associated with past and current uses; and
 - iv. Recommend further phases of assessment as necessary.
- 1.4 A Phase 1 (Non-intrusive Investigation) has been undertaken for the subject site.
- 1.5 This report presents the findings of the desk-based geo-environmental investigation and provides an interpretation of the geo-environmental conditions that exist at the site. The contaminative status of the site and the implications with respect to development have been interpreted in accordance with the current government guidance on source-pathway-receptor risk assessment. This report uses a Tier 1 risk assessment to define a conservative qualitative appraisal of the hazards associated with the site.
- 1.6 This report has been prepared for M2 Technical Services (on behalf of Grange Travel Coach Hire Limited) for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Grange Travel Coach Hire Ltd and GDGES Ltd as to the extent to which the findings may be appropriate for their use.
- 1.7 This report may be submitted as evidence to support the discharge of any future planning condition relating to contaminated land particularly with reference to a Phase 1 Desk Study & Preliminary Risk Assessment & is to be submitted with the planning application package.

SECTION 2 PHASE 1 (NON-INTRUSIVE INVESTIGATION)

2.1 INTRODUCTION

- 2.1.1 The non-intrusive investigation has been conducted with reference to the documents and sources detailed in Table 1. below:

Table 1: Published Data and Information Sources

Source Data	Envirocheck Data
BGS Historical Boreholes	Ordnance Survey (OS) historical maps scaled at 1:10,560, 1:10,000, 1:2,500 and 1:1,250 dated 1869 - 2023
BGS Geology of Britain 1:50,000 online maps	Water abstraction, discharge and pollution data
Radon: guidance on protection measures for new dwellings	Registered waste management sites
Environment Agency (EA) online data maps	Mining records and natural ground stability data
UK National Air Quality Archive, online	Protected areas of environmentally sensitive land use or conservation

- 2.1.2 The above sources are all authoritative and it is believed that they are reasonably reliable. However, independent verification of the information supplied has not necessarily been carried out and GDGES cannot be held liable for inaccuracies or deficiencies in the information.

2.2 SITE LOCATION AND SETTING

- 2.2.1 The site is located Grange Travel Coach Hire, Canal Road, Gravesend, Kent, DA12 2RS.
- 2.2.2 The site occupies an area of approximately 0.27 hectares located at National Grid Reference 565810, 174210 and indicated on the drawing presented in Appendix 1 of this report.

2.3 SITE WALKOVER

- 2.3.1 A site walkover was undertaken at the site address on 15th March 2024 by an Engineer from G.D. Ground Engineering Services Ltd. This survey was carried out in accordance with BS1075:2011. Several Photographs were taken at the time of the site inspection and these should be viewed in conjunction with this report on photo plates 1-2.
- 2.3.2 The site under consideration was a 0.27 Ha L-shaped plan area. It was accessible via Canal Road off Canal Basin which ran adjacent to western and northern boundaries of the site. The entrance to the site was located on the northern boundary, composed of a short concrete driveway leading into the main site which was primarily comprised of



what appeared to be newly laid tarmac hard standing. The general topography of the site was flat and relatively even. Hard standing was present across the entire site in the forms of concrete and tarmac with no areas of soft landscaping observed.

- 2.3.3 The site itself is currently in use as an active coach park and with car parking facilities for staff. Coaches are stored in the east portion of the site with staff car parking located on the southern boundary. In general, the site was in good condition and relatively even in topography across all areas, the entire site was bounded by palisade fencing. Information obtained suggested that the site was formerly used as Timber Yard.
- 2.3.4 The main structure on-site located along the eastern boundary leading up to the near centre of the site, was a single storey, relatively newly built rectangular corrugated zinc portal frame structure, currently in use as a servicing and maintenance facility for the coaches on site. Information from staff suggested this was approximately only 12 months old.
- 2.3.5 Two nr. temporary portacabins (stacked upon one another) were in use as offices and staff welfare were present along the western boundary of the site. There was also another steel portacabin situated next to the offices, presumably used as a storage facility.
- 2.3.6 On the eastern boundary, beyond the palisade fencing was a neighbouring industrial building. The building was undergoing refurbishment and at the time of the walkover a steel-erect scaffolding and protective netting had been erected.
- 2.3.7 Beyond the northern boundary, there were various industrial-use buildings operating as metal merchants, MOT service center and a nuts-and-bolts suppliers.
- 2.3.8 Various inter-alia material was observed laden along the eastern boundary, primarily timber pallets loaded with glass windscreens, assumed to be spares for the coaches on site. Just to the left of the entrance on the northern boundary, a small stockpile was observed, comprised of general building materials (concrete, tarmac, stone and gravel) the source of which was unknown. There were also rubber coach tyres resting against the palisade fencing on the northern boundary.
- 2.3.9 No surface water was observed on site at the time of the inspection. It was noted that an 11kV OH line ran E-W adjacent to the northern boundary just before the entrance to the site. Information from the site owner suggested no known buried services were running beneath the site.

PHASE 1 DESK STUDY

2.4 SITE HISTORY

- 2.4.1 The site history, based on a review of the historic and current maps, dating from 1869 to 2023 is summarised in Table 2. below. Potentially contaminative land uses are shown in **bold**. Copies of key maps used in this review are provided in Appendix 2.

Table 2: Summary of the key features shown on historic maps

Data Source	Site / Surroundings
1869 – 1874 (1:2,500 and 1:10,560 scale).	Site: The site was an undeveloped area with the Thames and Medway Canal running directly through the centre of the site. The west of the site was part of the lock for the Canal Basin. Surroundings: Canal Steam Mills was present approximately 20m north and a Soap works factory immediately west of the site. A Gas works was present immediately south of the site. The Albion Baths were present approximately 100 m northeast of the site. A Coal Store was present approximately 100 m southwest of the site. The Canal Basin is located less than 100m west of the site.
1897 – 1899 (1:2,500 and 1:10,560 scale).	Site: The site remains undeveloped with the Thames and Medway Canal running directly through the site. Surroundings: Milton and Thames Iron works were present approximately 120 m northwest of the site. The Gas works are still present immediately south of the site. A tramway runs W-E into the Gas Works through the southern boundary.
1909 – 1910 (1:2,500 and 1:10,560 scale).	Site: No significant changes from the previous map edition. Surroundings: The surroundings to the site remain relatively unchanged. However, a residential road (Russel Road) is situated approximately 110 m southwest of the. A relatively large, unnamed building is located approx. 60m southwest of the site.
1923 (1:10,560 scale)	Site: No significant changes from the previous map edition. Surroundings: The unnamed building in the previous map edition is now labelled as an Electrical Works, located approx. 60m southwest of the site.
1931 – 1932 (1:10,560 scale).	Site: No significant changes from the previous map edition. Surroundings: An increase in industrial developments to the north of the site. There is also an increase in the development of residential dwellings approximately 100m southwest of the site.
1936 (1:2,500 scale).	Site: No significant changes from the previous map edition. Surroundings: Various industrial developments: Engineering Works, Foundries, a Timber Yard and Thames Iron Works are located approx 50-100m north of the site. There several chimneys labelled on buildings within 100m diameter of the site.

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Data Source	Site / Surroundings
1938 – 1951 (1:10,560 scale).	Site: No significant changes from the previous map edition. Surroundings: No significant changes from the previous map edition.
1954 (1:2,500 scale)	Site: No significant changes from the previous map edition. Surroundings: Campbell Engineering Works is located approx. 50m northwest of the site.
1964 – 1969 (1:1,250 scale)	Site: No significant changes from the previous map edition. Surroundings: A veneer works is present approx. 80m northwest of the site with other numerous industrial works and a timber yard approx. 20m north of the site. The Gas Works immediately south of the site is now labelled as Gasholder Station . A power station is now present 80m southwest of the site with a chemical works present approx. 250m southwest of the site.
1969 – 1984 (1:1,250 and 1:10,000 scale).	Site: The Thames and Medway Canal running through the site appears to have been infilled . The Canal Basin is approx. 20m west of the site. A single unlabelled structure is now present on the western part of the site. Surroundings: A timber yard is located approx. 50m east of the site. A Mill and various works are situated approx. 20m north of the site. The former power station is now labelled Laboratories located 80m southwest of the site.
1993-1999 (1:1,250 and 1:10,000 scale).	Site: No significant changes from the previous map edition. Surroundings: No significant changes from the previous map edition.
1999 (Historic Aerial Photography)	Site: In addition to the existing unlabelled structure, aerial photography reveals there is now numerous containers located in the eastern part of the site. Surroundings: What appears to be a scrap metal yard is located approx. 20m north of the site. A car storage facility located approx. 40m northeast of the site.
2006 (Google Earth Imagery)	Site: The site remains relatively unchanged. Surroundings: There is a large semi-circular development named "Ian Mack loose covers and upholstery" located approx. 30m southwest of the site.
2013 (Google Earth Imagery)	Site: The structure on the western part of the site is no longer present. It appears there is a Timber yard now present on the eastern portion of the site. Surroundings: No significant changes from the previous map edition.
2018 (Google Earth Imagery)	Site: There is little or no development on the site Surroundings: A general increase in industrial developments surrounding the site.

Data Source	Site / Surroundings
2019 – 2023 (Google Earth Imagery)	Site: The site appears to be in use in its current form as a coach park. Surroundings: The Gas works to the south of the site appear to have been demolished between 2021-2022.

- 2.4.2 In summary, historic plans show that, the site was undeveloped until approximately 1969 when a single structure was present on the site. The surrounding area, particularly north of the site, has consistently been linked with industrial developments since the 1800s. The Thames and Medway Canal ran through the site until somewhere between 1969-1974 where it appears to have been infilled. The site itself has experienced no or minimal changes between 1969 - 2013 where satellite imagery suggests the site was in use as a Timber Yard. The current site configuration has been present since 2019.
- 2.4.3 The historic maps show evidence of potentially significant contaminative land uses within 250m of the site. The most significant being a former Gas Works located immediately south of the site. Online information suggests that the Gasholder stations approx. 100m south of the site were retired from use in 2010 and demolished between 2021-2022.
- 2.4.4 The surrounding land use within 250m of the site generally comprised industrial works and scrap yards to the north and east with gas depot/power station/laboratory to the south. The historic maps show potentially contaminative uses in the surrounding areas as follows:
- i. Industrial Factories & Mills;
 - ii. Chemical Works;
 - iii. Metal works;
 - iv. Gas works;
 - v. Scrap Metal Yards;
 - vi. Depots;
 - vii. Power station;
 - viii. Laboratories;
 - ix. Chimneys;
- 2.4.5 Given the nature of the historical mapping process (scale, representation of conditions at discrete time intervals frequency etc.), any such maps and plans may not provide a comprehensive account of a site's history. Identification of pertinent land uses and associated potentially contaminative activities, may therefore be absent from mapping records.

2.5 GEOLOGY

2.5.1 The British Geological Survey (BGS) & Envirocheck Report indicates that the site is underlain by the following geological sequence:

Table 3: Summary of Published Geology

Geological Unit	Type	Description
Superficial	Alluvium	Clay, silt, sand and peat
	Tidal River or Creek Deposits	Tidal channel deposits, silts, clays and localised peat.
Bedrock	Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation	Chalk

2.5.2 There are 4 accessible historic BGS borehole logs within 100 m of the site. These can be viewed and found in Appendix 3.

2.5.3 The borehole log: 'TQ67SE71' was taken approximately 80 m south west of the site. The geology discovered can be described as follows:

Table 4: Summary of Historic Borehole Logs (TQ67SE71)

Interpreted geological unit	Strata (General Description)	Depth to Top of Range (m bgl)	Thickness Range (m)
Made Ground	Made Ground	0	0 – 1.00
Superficial (Alluvium)	Soft blue-grey and brown silty clay with peat and organic mud, occasional flint fragments/Firm blue-grey silty clay with pockets of peat.	1.00	1.00 – 9.10

2.5.4 The Envirocheck report and BGS data indicates that the site contains made/infilled ground from the Thames and Medway Canal which formally ran through the centre of the site.

2.6 Background Soil Chemistry

2.6.1 A summary of the data published by the BGS of estimated soil chemistry is summarised in Table 5 below:

Table 5: Summary of published estimated soil chemistry

Arsenic	Lead	Cadmium	Chromium	Nickel
15-25 mg/kg	200-300 mg/kg	<1.8 mg/kg	90-120 mg/kg	30-45 mg/kg

2.6.2 The values for each of these determinands are all below the safe screening values for a new commercial development.

2.7 HYDROGEOLOGY

2.7.1 The Aquifer status of groundwater held within the geological units, the presence of Source Protection Zones and Groundwater Vulnerability are summarised in Table 6 below:

Table 6: Summary of Published Geology

Geological Unit	Aquifer Designation	Source Protection Zone	Groundwater Vulnerability
Superficial	Secondary Undifferentiated	No	High
Bedrock	Principle Aquifer	No	High

2.7.2 There is a single groundwater abstraction located approx. 838 m SE of the site.

2.7.3 The risk on site to groundwater flooding is low. However, approximately 26m west of the site, there is high risk relating to the Canal Basin.

2.8 HYDROLOGY

2.8.1 The Canal Basin is located approximately 20m to the west of the site, this runs into the Thames Estuary which is located approximately 120m north/north-west of the site.

2.8.2 There is a high risk of flooding from rivers and the sea on site according to the Environment Agency (EA). Flood defences are located to the North of the site.

2.8.3 A site-specific Flood Risk Assessment was undertaken on the site by DKM Consultants Ltd in February 2022 who concluded that the level of flood risk posed by all sources being; rivers and sea, directly from rainfall on the ground surface and overwhelmed sewers and drainage systems combined with the level topography of the site, poses low risk to the development.

2.9 CURRENT SITE ISSUES

2.9.1 Potentially significant environmental issues have been investigated within relevant distances of the site, based on the database of records supplied by Envirocheck. These relate to the following searches:

- i. Water discharge or pollution incidents within 250 m of the site;
- ii. Waste management sites within 250 m of the site;
- iii. Statutory authorisations within 50 m of the site;
- iv. Trade directory entries of possible contaminative use within 50 m of the site;
- v. Special protection or conservation areas within 50 m of the site; and
- vi. Any other relevant issues.

2.9.2 Potentially significant environmental issues identified by the above searches are summarised in Table 7.

Table 7: Potentially significant environmental issues

Environmental Category	Description
Water discharge or pollution incidents within 250 m	Discharge consents include the following - Ref: PO3509 - Recorded on 19th March 1991 – The discharge of ‘Other Matter-Surface Water’ from was discharged from either land or soakaway into land approx. 185m South of the site. - There are 4 other discharge consents which replicate the above between 195-205m south of the site. Pollution incidents include the following: 230m west – On the 22nd December 1993 - the incident involved an industrial chemical spill (Aluminium Sulphate) (Ref: 93T306). No impact was recorded for water/air or land however, the impact was classed as Significant (Category 2).
Historical landfill sites within 250 m	Historical Landfill Sites: 0m west & 215m southeast – Inert and commercial waste by Gas Works – Canal (Ref: 2200/7031). Local Authority Landfill Coverage is provided by Gravesham Borough Council
Waste management sites within 250 m	There are no active waste management sites within 250m

Environmental Category	Description
Statutory authorisations within 50 m	An historic permit for the use of bulk cement was located 30m northwest of the site.
Trade directory entries of possible contaminative use within 50 m	Current (active) potentially contaminative industrial sites within 50 m include: Garage Services, 7 and 37 m northwest; Historic trade directory entries for an Oil Company, Car body repairs and Car breakers/dismantlers and engine re-builders were located 0m northeast, 6m northwest and 35 m northwest of the site. It is considered that these facilities have the potential to impact the site.
Special protection or conservation areas within 50 m	None.
Other relevant issues	The site lies within a Nitrate Vulnerable Zone. It is located within the Coastal Streams to Lower Thames zone which is vulnerable through groundwater.

2.10 INDICATIVE GROUND STABILITY HAZARDS

2.10.1 The following natural ground subsidence hazard rating have been prescribed:

Table 8: Summary of Natural Ground Subsidence Hazards

Type	Hazard rating
Shrink swell clays	Low
Running sands	Very Low
Compressible deposits	Very Low
Collapsible deposits	Negligible
Landslides	Very Low
Ground dissolution of soluble rocks	Negligible



2.11 RADON GAS

2.11.1 The licensed Radon Potential Dataset for the site has been consulted. The site is in a Lower Probability Radon area (Less than 1% of homes are estimated to at or above the Action Level).

2.11.2 No Radon protection measures are necessary in the construction of new dwellings or extensions.

2.12 UXO

2.12.1 Regional Unexploded Bomb Risk Maps published by Zetica have been consulted which show that the area is within a High Bomb Risk zone. Therefore, a detailed UXO Risk Assessment should be undertaken. Alternatively, should any intrusive works be carried out upon the site, it is recommended that on-site UXO support is present to mitigate the risk.

2.13 AIR QUALITY

2.13.1 The site does not lie within a designated Air Quality Management Area (AQMA) for Gravesham Borough Council.

2.14 ECOLOGY

2.14.1 There were no ecological receptors found that are considered to be relevant to the land contamination conceptual site model.

2.15 PREVIOUS INVESTIGATIONS

2.15.1 No known previous investigation data exists for the site.

2.16 PRELIMINARY CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

2.16.1 From the Phase 1 assessment a preliminary site conceptual model and risk assessment have been produced using the framework established in Part IIA of the *Environmental Protection Act 1990* and detailed in Environment Agency guidance *Land Contamination Risk Management* published on www.gov.uk.

2.16.2 Risk from contamination has been assessed using the source-pathway-receptor and pollutant linkage methodology, whereby a risk can only exist if all elements of: source, pathway and receptor, are present.

2.16.3 Potential Sources

2.16.4 Potential Sources of contamination on site and its surroundings include:

-
- I.* Infilled ground has been identified by the Envirocheck records which is source of ground gas.
 - II.* The area surrounding the site has been subject to numerous industrial uses (Iron works, Mills, Scrap metal yards, Chemical Works, Gas Works, Power Station).
 - III.* Current adjacent land uses include: MOT service stations/ Car repair workshops and Metal works.
- 2.16.5 The above are potential sources of a range of contaminants including heavy metals, Total Petroleum Hydrocarbons (TPH), Polyaromatic Hydrocarbons (PAH), asbestos and ground/gas vapours.
- 2.16.6 Potential Pathways
- 2.16.7 Potential pathways for contamination exposure include; direct contact, ingestion/ inhalation of soils and dusts, inhalation of gases and vapours. Migration of ground gas could occur in the permeable superficial deposits beneath the site. Permeable strata would also allow the migration of groundwater and any contamination within.
- 2.16.8 The migration of contamination will however, be limited by the presence of hard standing across the site.
- 2.16.9 Potential Receptors
- 2.16.10 Potential receptors include the following:
- i.* Adjacent commercial properties;
 - ii.* New infrastructure;
 - iii.* Underlying Secondary aquifer within the Alluvium and Principle aquifer in the Chalk.
 - iv.* Construction workers; and
 - v.* Future site users and general public.
- 2.16.11 Pollutant Linkages and Risk Ratings
- 2.16.12 From the Phase 1 assessment a preliminary site conceptual model has been produced as Table 9 which identifies the potential pollutant linkages. These have been used to inform the Phase 2 intrusive investigation presented in the subsequent sections.

Table 9: Preliminary Conceptual Model

Possible Pollutant Linkage			Risk Characterisation
Potential Sources	Pathways	Receptors	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (current users)	Low to Moderate risk identified. Thames and Medway Canal which formerly ran through the site has been infilled. Potential for fill material to contain made ground. However, hardstanding is present across most of site.
	Ingestion and inhalation of contaminated soil and dust	Human health (current users)	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (future residents and construction workers)	Low to Moderate risk identified. Thames and Medway Canal which formerly ran through the site has been infilled. Potential for fill material to contain made ground. However, hardstanding is present across most of site.
	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	
Asbestos (made ground)	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	Moderate risk identified. Thames and Medway Canal which formerly ran through the site has been infilled. If this includes construction and demolition waste the presence of asbestos would be strongly suspected.
Contamination (all forms)	Vertical migration to aquifer	Controlled waters	Low to Moderate risk identified. Potential for contamination if present, to affect the alluvium aquifer
Contamination (all forms)	Horizontal migration to surface water	Controlled waters	Low to Moderate risk identified. Surface waters adjacent to the site could be affected by contamination. The Canal Basin is approx. 20m west of the site. The potential exists for runoff to enter the canal unless carefully managed. The migration of contamination will however, be limited by the presence of Hardstanding across the site and its general topography.
Hydrocarbons	Direct contact	Plastic water pipes	Low to Moderate risk identified. Cannot rule out presence of hydrocarbon contamination at this stage.
Hazardous Gas/Vapours in soil	Ingress into buildings and voids	Human health (future residents and construction workers)	Moderate risk identified. Potential for made/infilled ground which could act as source of hazardous gas. Cannot rule out fuel spillages as source of vapours.

SECTION 3 CONCLUSIONS

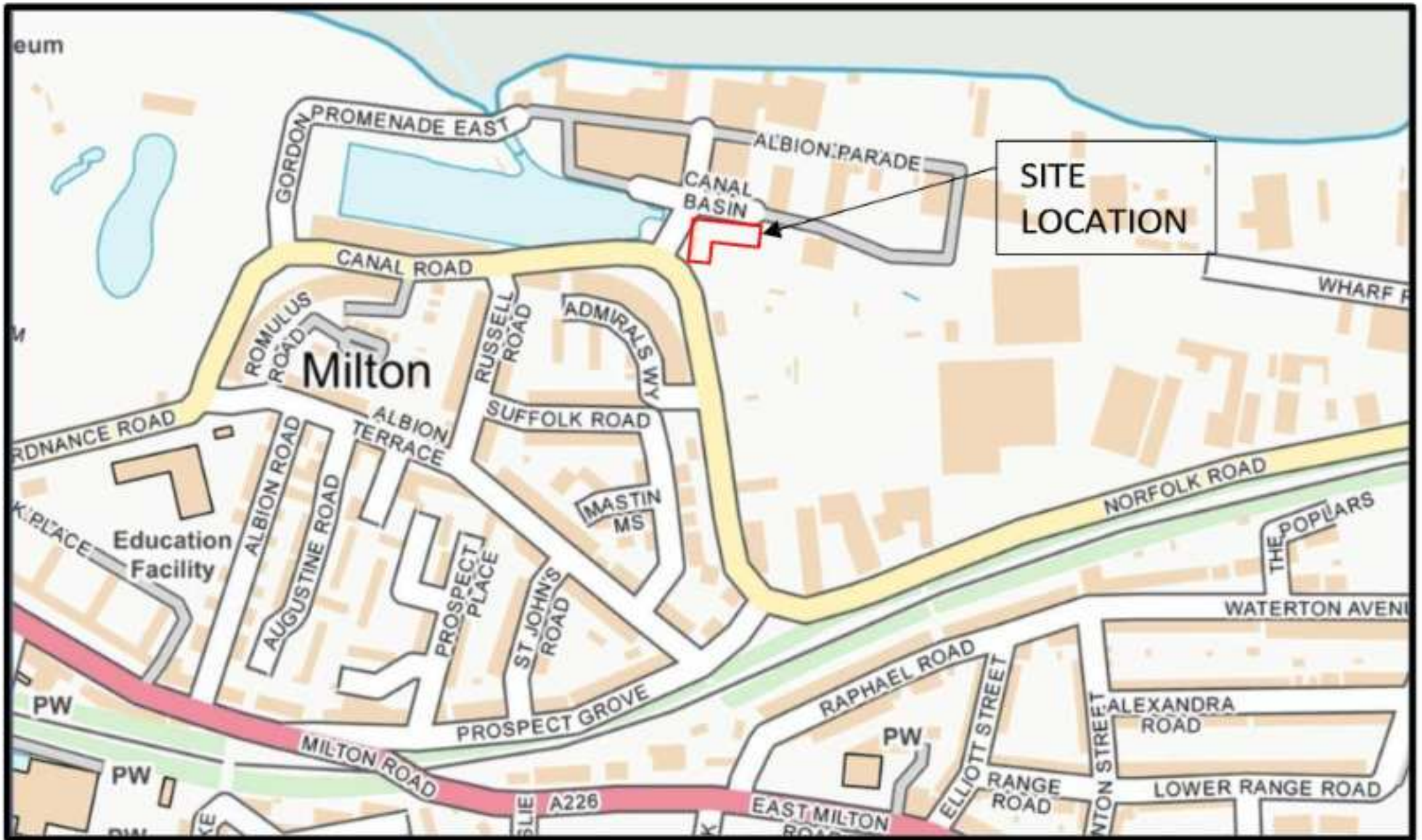
- 3.1 A desk study site appraisal has been undertaken for the site known as Grange Travel Coach Hire, Canal Road. The site was undeveloped until approximately 1969, whereby a single structure was present on the site. The Thames and Medway Canal which ran through the site has also been infilled from this date. The current site layout has been in place since 2019. It is also noted that historic potentially contaminative land uses have been identified within 250 m of the site including factories, chemical works, gas works, power station, and laboratories.
- 3.2 No significant previous contaminated land uses have been identified on the site.
- 3.3 A conceptual model has been produced in which a **Low to Moderate** contamination risk has been identified for the following:
- I. Heavy metals and hydrocarbons (made/infilled ground)
 - II. Asbestos (made ground)
 - III. Contamination (all forms – vertical migration)
 - IV. Contamination (all forms – horizontal migration)
 - V. Hydrocarbons
 - VI. Hazardous Gas/Vapours in soil
- 3.4 The Thames and Medway Canal formally running through the site has been infilled and the provenance of this material is not known. It is recommended that a Phase II Intrusive Investigation should be undertaken which includes chemical analysis of soil in conjunction with a programme of hazardous gas and groundwater monitoring.

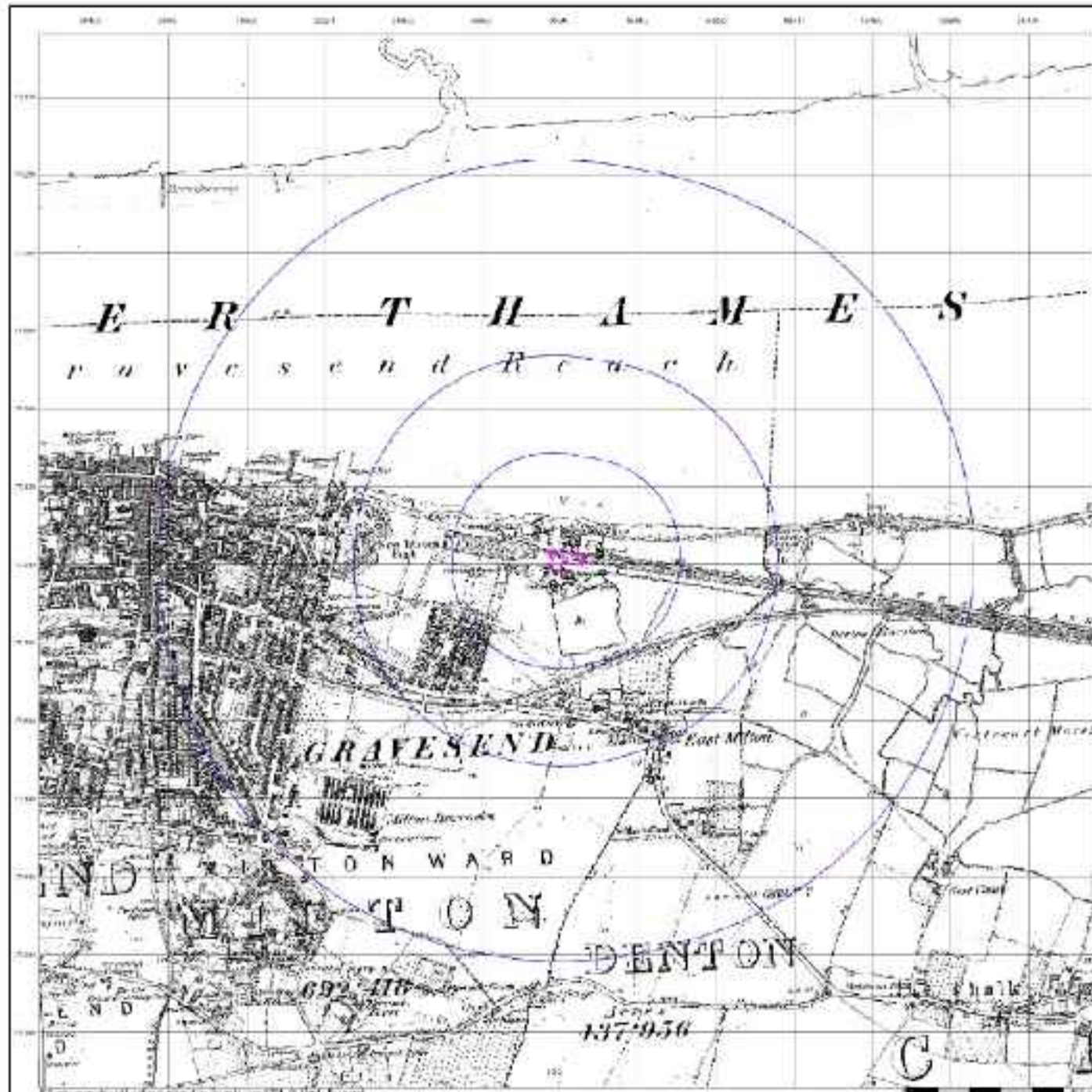


APPENDIX 1 ▪ Drawings



APPENDIX 2 ■ Historical Plans





Envirocheck

LANDMARK INFORMATION GROUP

Kent

Published 1869

Source map scale - 1:10,560

The historical maps shown were reproduced from maps and documents held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:10,560 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given the title is often more years later than the survey date. Below 1875, all 1:10,560 maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving this to significant wariness in scaling areas. In the late 1940's, a Provisional Ordnance Survey produced, which updated the 1:10,560 maps from a number of sources. The maps appear unaltered - with all military camps and other strategic sites removed. These maps were initially compared with the National Grid, in 1973, to a 1:10,560 scale. The maps were produced using the Transverse Mercator Projection. The system process was used and corrected, with some errors appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 33063757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Scale: A
Site Area (Ha): 0.27
Search Buffer (m): 1050

Site Details

Orange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
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Essex

Published 1872

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,000 maps. The published date given therefore is often some years later than the surveyed date. Before 1898, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,000 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

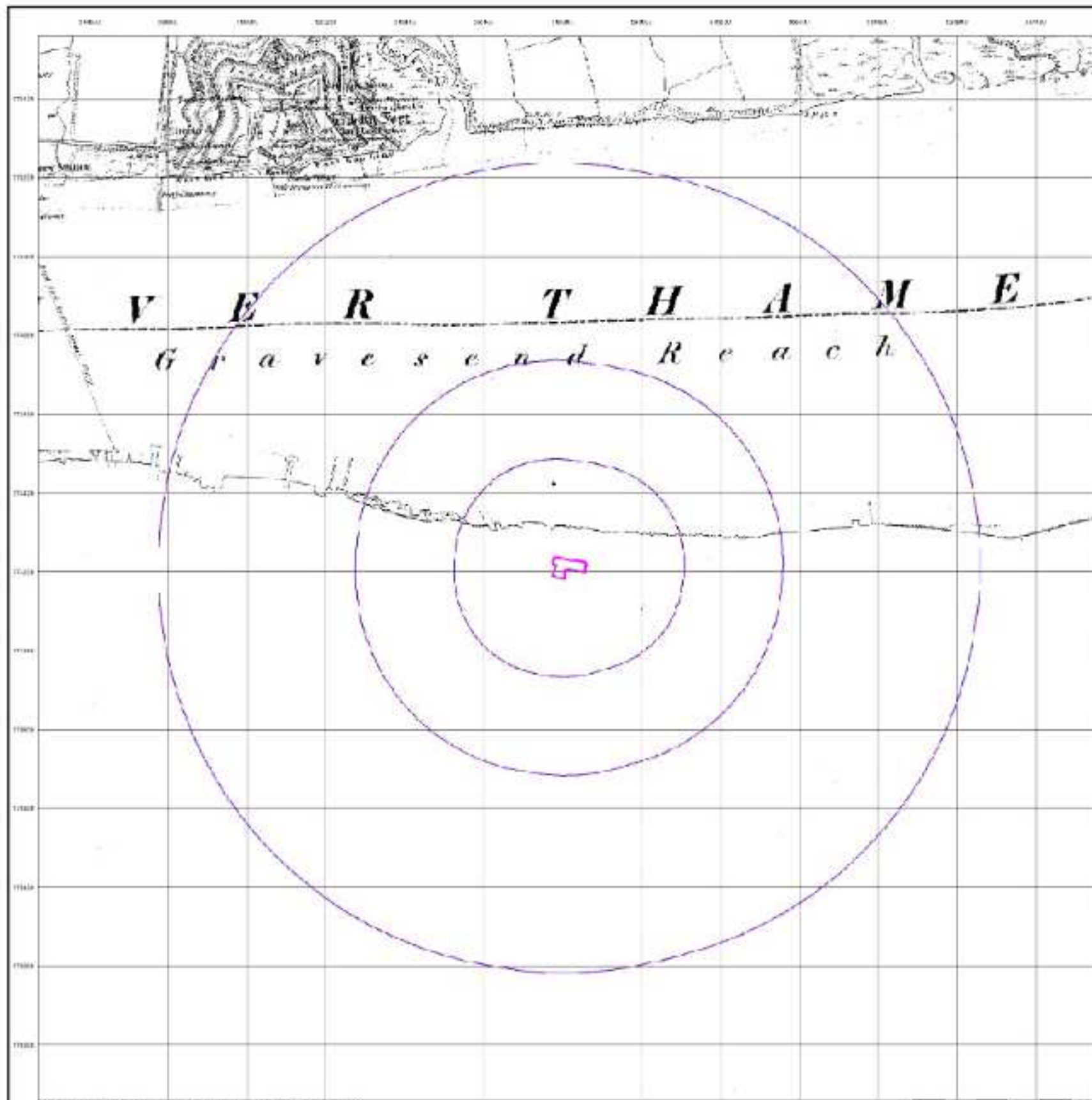
Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Kent

Published 1898 - 1899

Source map scale - 1:10,560

The Ordnance Survey maps were produced from maps predominantly sold at the time ordered for England, Wales and Scotland in the 1810's. In 1824 the 1:250,000 scale was adopted for mapping whole areas. These maps were produced on the 1:10,560 scale. The published data were therefore in effect some years later than the surveyed data. Before 1860, all OS maps were based on the Cassini Projection, with subsequent surveys of a single county or group of counties, giving rise to significant distortions in survey areas. In the late 1830s, a Protractor Edition was produced, which updated the 1:10,560 map to show a number of features. The maps appear to be a reprint of the 1:10,560 map with other changes. These maps were a single one of the 1:10,560 scale. In 1875, the 1:10,560 maps were produced using the Transverse Mercator Projection. The majority of maps were produced with accuracy, with some areas appearing slightly off-point or in the wrong place.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 336217ET 1:1
Customer Ref: QTC400
National Grid Reference: 595210, 174210
Slice: A
Site Area (ha): 0.27
Search Buffer (m): 1000

Site Details

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Essex

Published 1899

Source map scale - 1:10,560

The historical maps shown were reproduced from maps, and where necessary held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:10,560 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given the date the data were taken from the original data. From 1938, all 1:10,560 maps were based on the Ordnance Survey, with independent surveys of a single county or group of counties, giving this to significant way in which, in the late 1940's, a Provisional Ordnance Survey, which updated the 1:10,560 maps from a number of sources. The maps appear to be of a 1:10,560 scale, with all military camps and other strategic sites removed. These maps were likely completed with the National Grid in 1933, as a 1:10,560 map was produced using the Ordnance Survey's Provisional. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

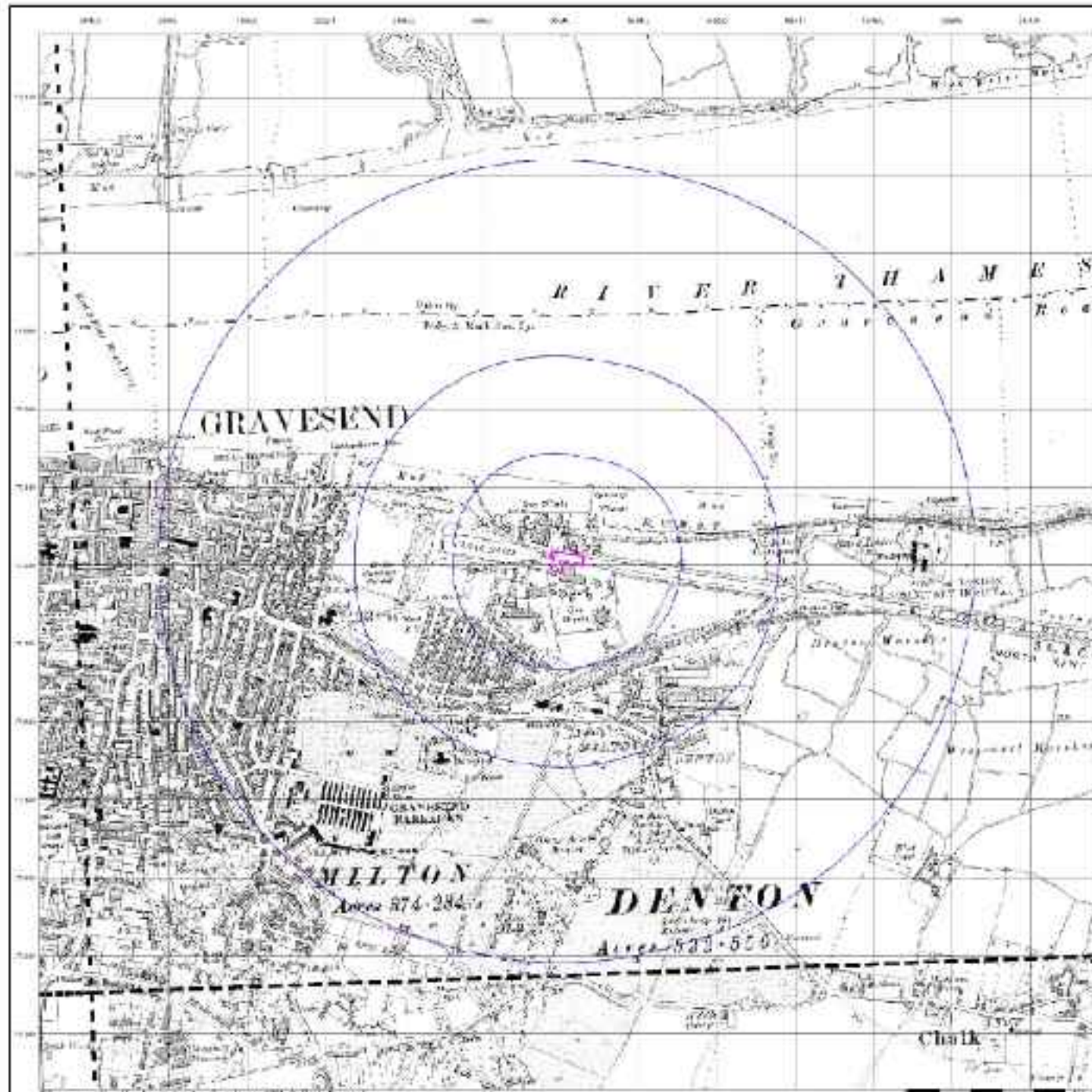
Order Number: 330631757_1_1
Customer Ref: 670CHG0
National Grid Reference: 565810, 174210
Site: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Kent

Published 1909 - 1910

Source map scale - 1:10,560

The historical maps shown were reproduced from maps and documents held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:10,560 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 scale. The published date given the title is often more years later than the survey date. Below 1910, all 1:10,560 maps were based on the Cassini Projection, with independent surveys of a single survey or group of counties, giving this to significant waywardness in scaling areas. In the late 1940's, a Provisional Ordnance Survey produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unaltered - with all military camps and other strategic sites removed. These maps were related to the National Grid in 1973, as a 1:10,560 map was produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

OSNW 1910 1:10,560	OSNW 1909 1:10,560
OSNW 1909 1:10,560	OSNW 1908 1:10,560

Historical Map - Slice A



Order Details

Order Number: 330631757_1_1
Customer Ref: 67CHG0
National Grid Reference: 568610, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Kent

Published 1909

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1858, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1840's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,560 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

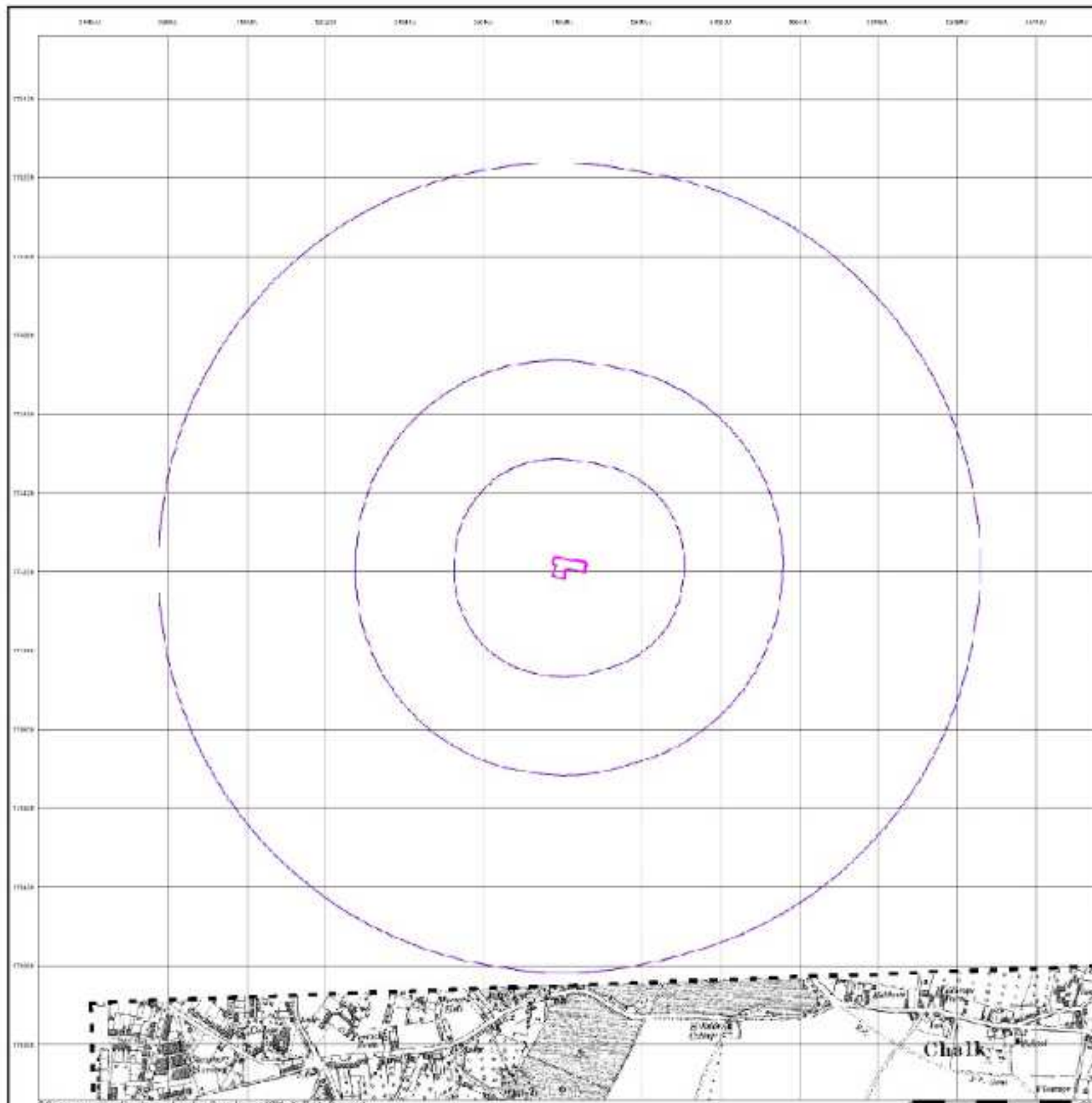


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Kent

Published 1909

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,000 maps. The published date given therefore is often some years later than the surveyed date. Before 1858, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1840's, a Provisional Edition was produced, which updated the 1:10,000 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1976, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

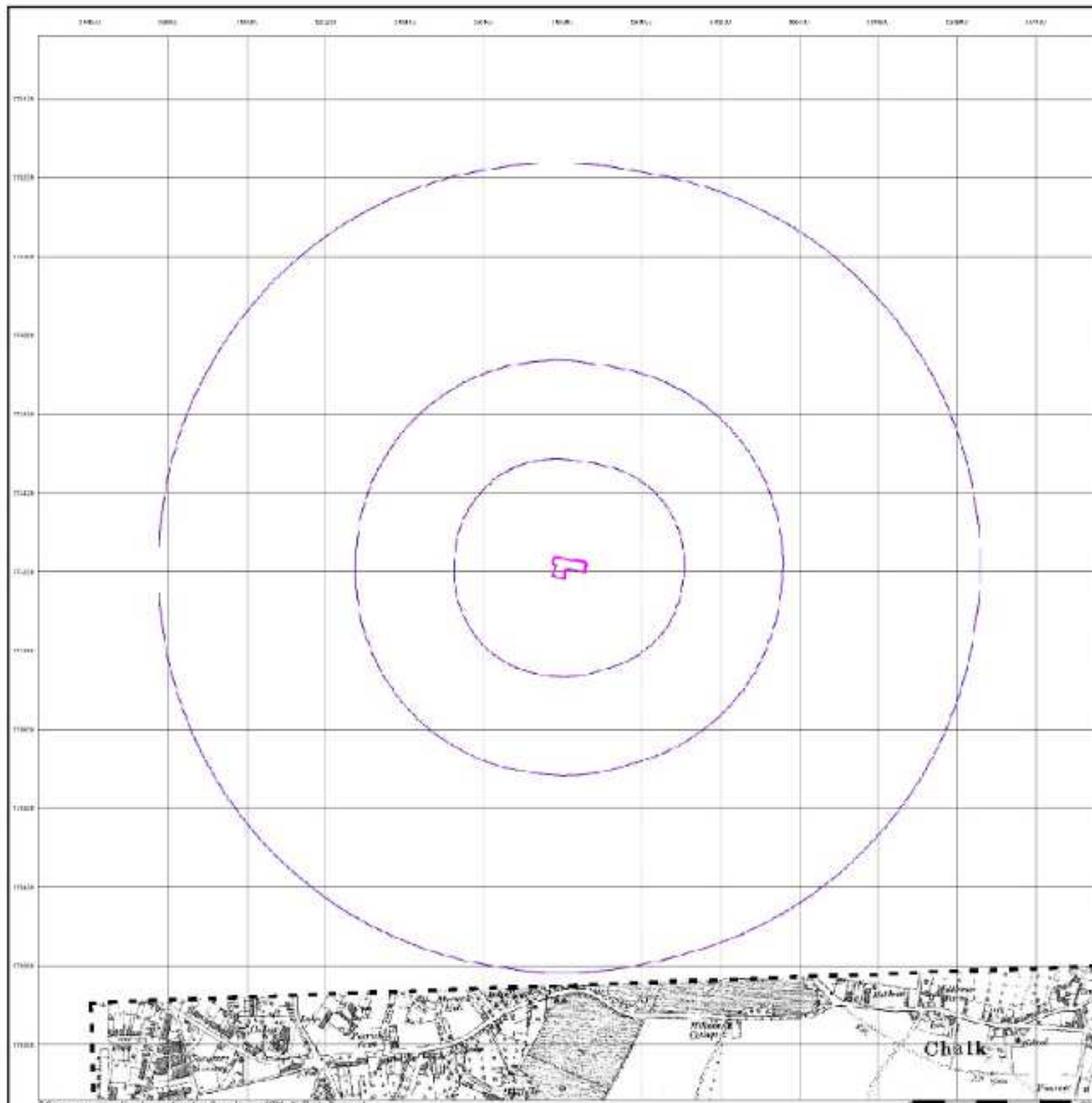


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Kent

Published 1931 - 1932

Source map scale - 1:10,560

The Ordnance Survey maps were produced from maps predominantly sold at the time ordered for England, Wales and Scotland in the 1810's. In 1824 the 1:10,560 scale was adopted for mapping urban areas. These maps were produced on the 1:10,560 scale. The published date given therefore is often some years later than the surveyed date. Before 1900, all OS maps were based on the Cassini Projection, with subsequent surveys of a single county or group of counties, giving rise to significant distortions in survey areas. In the late 1880s, a Professional Order was introduced, which updated the 1:10,560 mapping from a number of sources. The maps appear unaltered, with all urban areas and other buildings measured. These maps were a single one of the 1:10,560 scale. In 1913, the 1:10,560 maps were produced using the Transverse Mercator Projection. The distortion in the maps is very small, with only a few inches of error in 100 miles or so for the entire map.

Map Name(s) and Date(s)



Historical Map - Slice A

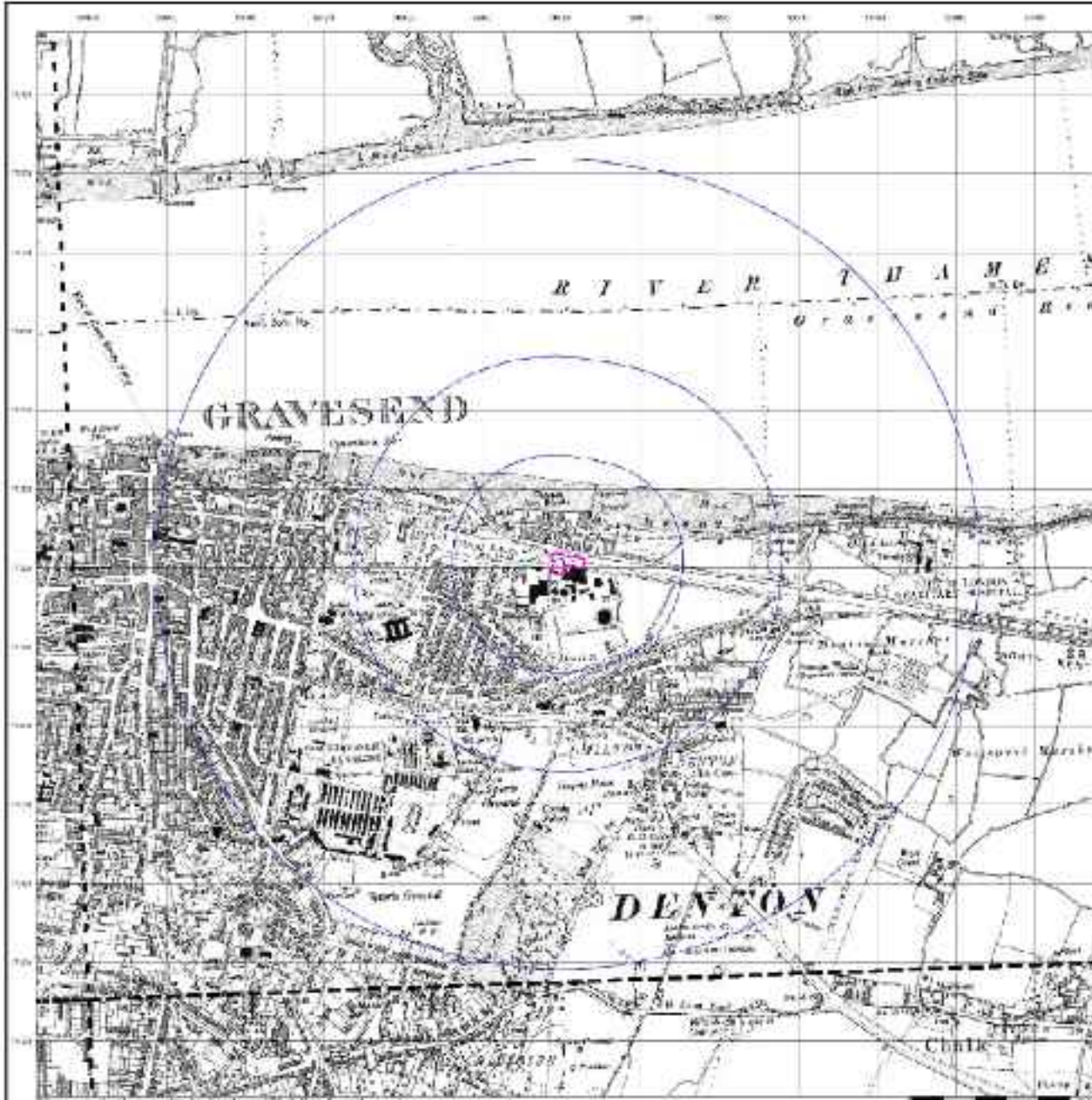


Order Details

Order Number: 336217ET 1
Customer Ref: QTC400
National Grid Reference: 595210, 174210
Slice: A
Site Area (sqm): 0.27
Search Buffer (m): 5000

Site Details

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Essex

Published 1938

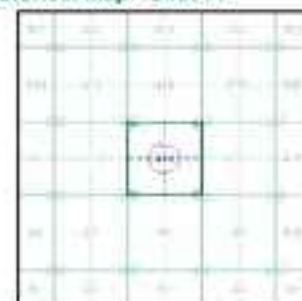
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1889 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1955, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Transverse Mercator projection was adopted, which updated the 1:10,560 mapping from a number of sources. The maps appear 'distorted', with all existing surveys and other information also converted. These maps were initially converted to the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 339831767_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Published 1938

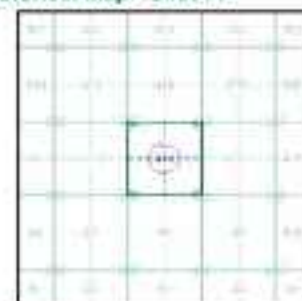
Source map scale - 1:10,560

The historical maps shown were extracted from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1940's. In 1938 the 1:25,000 scale was adopted for mapping urban areas; those maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Transverse Mercator projection was adopted, which updated the 1:10,560 mapping from a number of sources. The maps appear unaltered, with all existing survey and other information given in colour. These maps were initially incorporated into the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

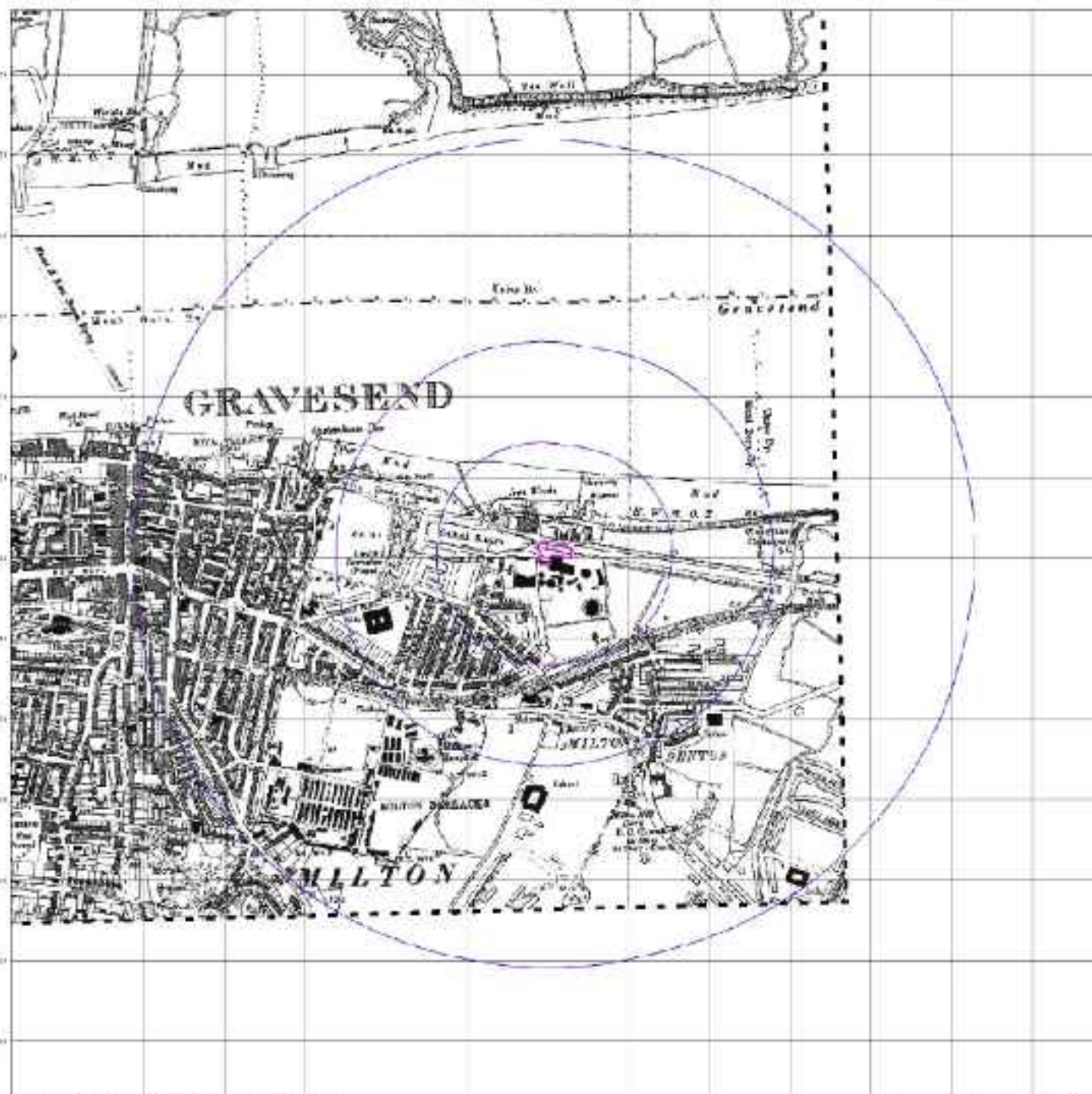
Order Number: 339831767_1_1
Customer Ref: GTCHEG
National Grid Reference: 565810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

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Historical Aerial Photography

Published 1947

Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1940 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. There are only two dates in the 1950's noted that every photograph was rechecked for potentially sensitive information with security sites replaced by false fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both versions it is not easy to spot the edits. Where available Landmark have included both versions.

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Map Name(s) and Date(s)

FOOTW 1947 1:10,560	FOOTW 1947 1:10,560
FOOTW 1947 1:10,560	FOOTW 1947 1:10,560

Historical Aerial Photography - Slice A



Order Details

Order Number: 339821757_1_1
Customer Ref: GTOHGD
National Grid Reference: 585810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1966 - 1967

Source map scale - 1:10,000

The Ordnance Survey Plan was produced from maps produced by the Ordnance Survey for England, Wales and Scotland in the 1912-1913 and 1923-1924 series. These maps were produced for mapping urban areas. Most urban areas shown on the 1:10,000 maps. The published date given therefore is often some years later than the surveyed date. Before 1906, all OS maps were based on the Cassini Projection, with subsequent surveys of a single locality or group of localities, giving rise to significant distortions in survey areas. In the late 1930s, a Photoreduction Survey was introduced, which replaced the 1:10,000 map by a number of sheets. The maps appear undistorted, with all urban areas and other developments recorded. These maps were a double overprint on the National Grid, in 1973, the 1:10,000 maps were produced using the Transverse Mercator Projection. The accuracy of the maps may vary with the accuracy of the data used in the survey, which may be up to 10 years or so for the urban areas.

Map Name(s) and Date(s)

OS Plan 1:10,000	OS Plan 1:10,000
1966	1967
1:10,000	1:10,000

Historical Map - Slice A



Order Details

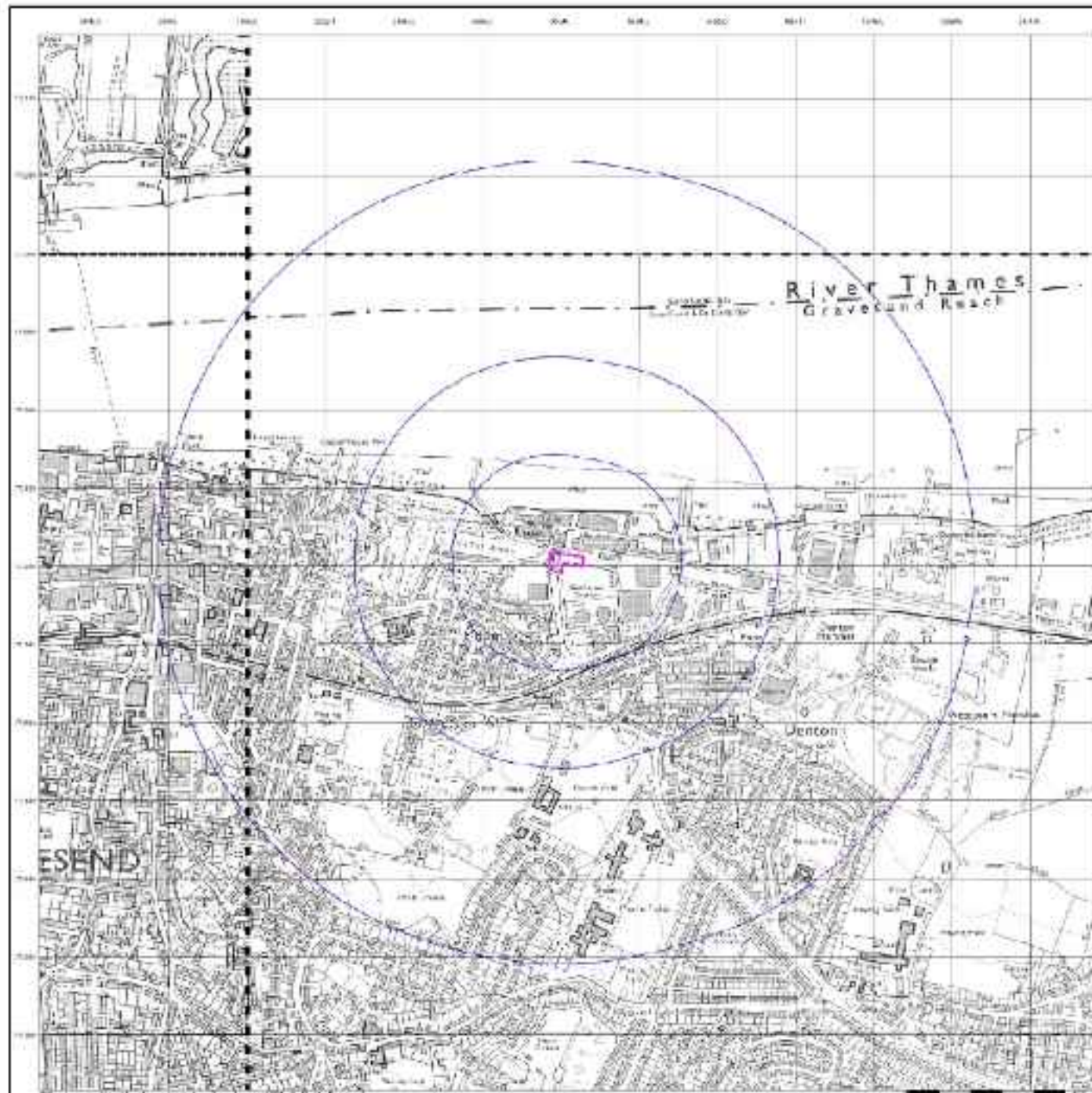
Order Number: 336217ET 1:1
Customer Ref: 07CH00
National Grid Reference: 595210, 174210
Sheet: A
Site Area (sqm): 0.27
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1880 - 1884

Source map scale - 1:10,000

The historical maps shown were researched from maps and documents held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:10,000 scale was adopted for mapping urban areas; these maps were used to update the 1:10,000 scale. The published date gives the date when the maps were published, not the survey date. Between 1878, all 1:10,000 maps were based on the Cassini Projection, with independent surveys of a single survey or group of counties, giving this to significant survey errors in surveying areas. In the late 1940's, a projected datum was produced, which updated the 1:10,000 maps from a number of sources. The maps appear unaltered - with all military camps and other strategic sites removed. These maps were fully incorporated with the National Grid in 1971, as a 1:10,000 map was produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 330631757_1_1
Customer Ref: 670430
National Grid Reference: 565810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

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100% DATA
100% DATA
100% DATA

Ordnance Survey Plan

Published 1991 - 1993

Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1884 the 1:2,500 scale was adopted for mapping urban areas, these maps were used to update the 1:10,000 maps. The published date given therefore is often some years later than the surveyed date. Before 1936, all OS maps were based on the Cassini Projection, with subsequent surveys of a single county or group of counties, giving rise to significant inaccuracies in bulky areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,000 mapping from a number of sources. The maps appear unaltered - with all military camps and other strategic sites removed. These maps were initially overlaid with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

10674W 1992 1:10,000	10674E 1991 1:10,000
10674W 2001 1:10,000	

Historical Map - Slice A

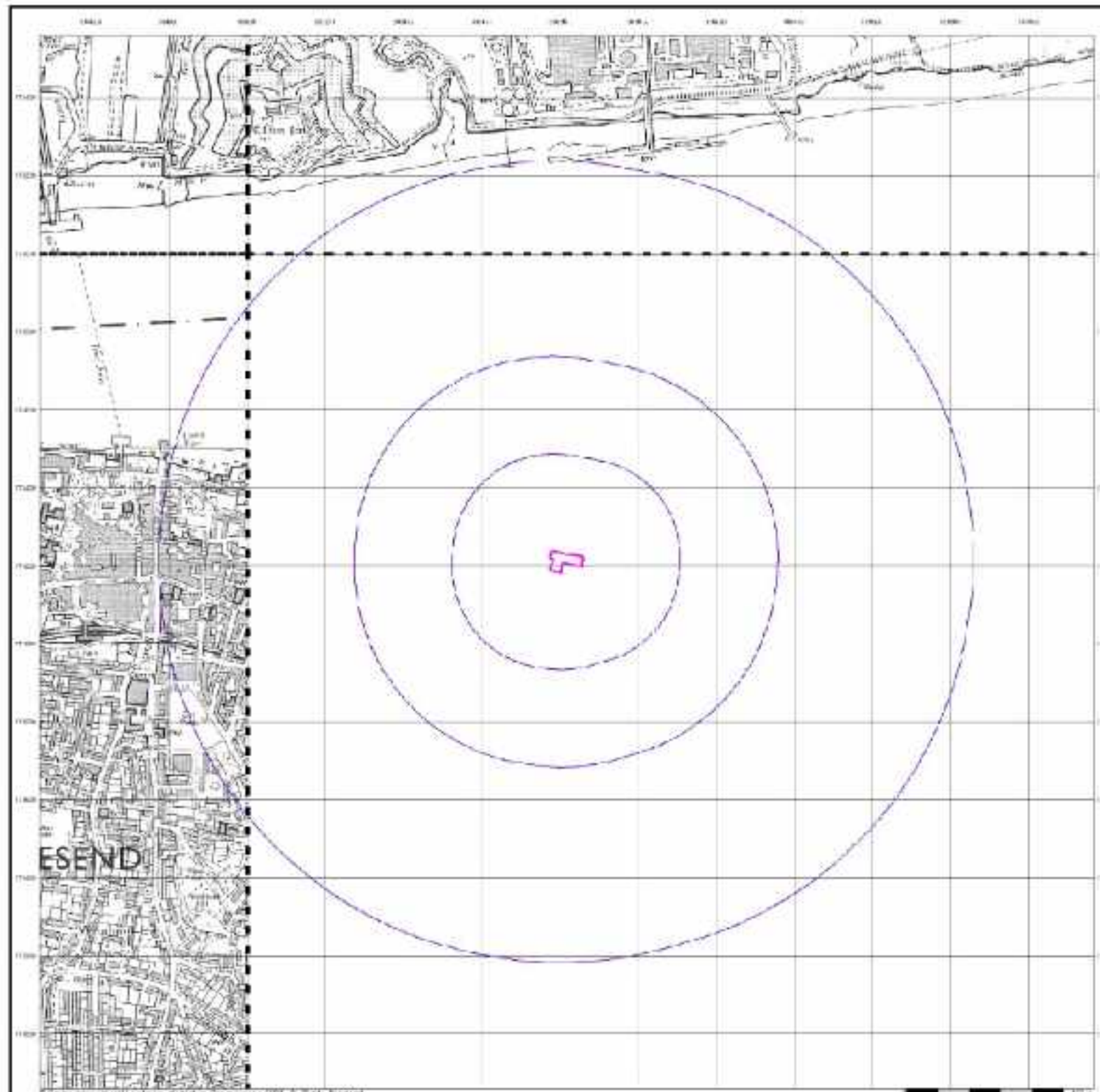


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



Ordnance Survey Plan

Published 1994

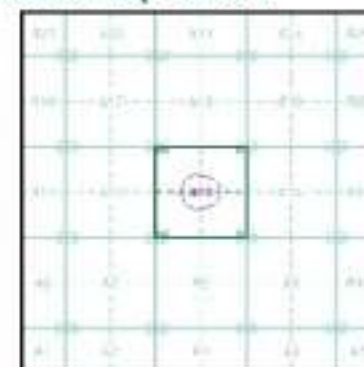
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overspread with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

TQ67NW
1994
1:10,000

Historical Map - Slice A

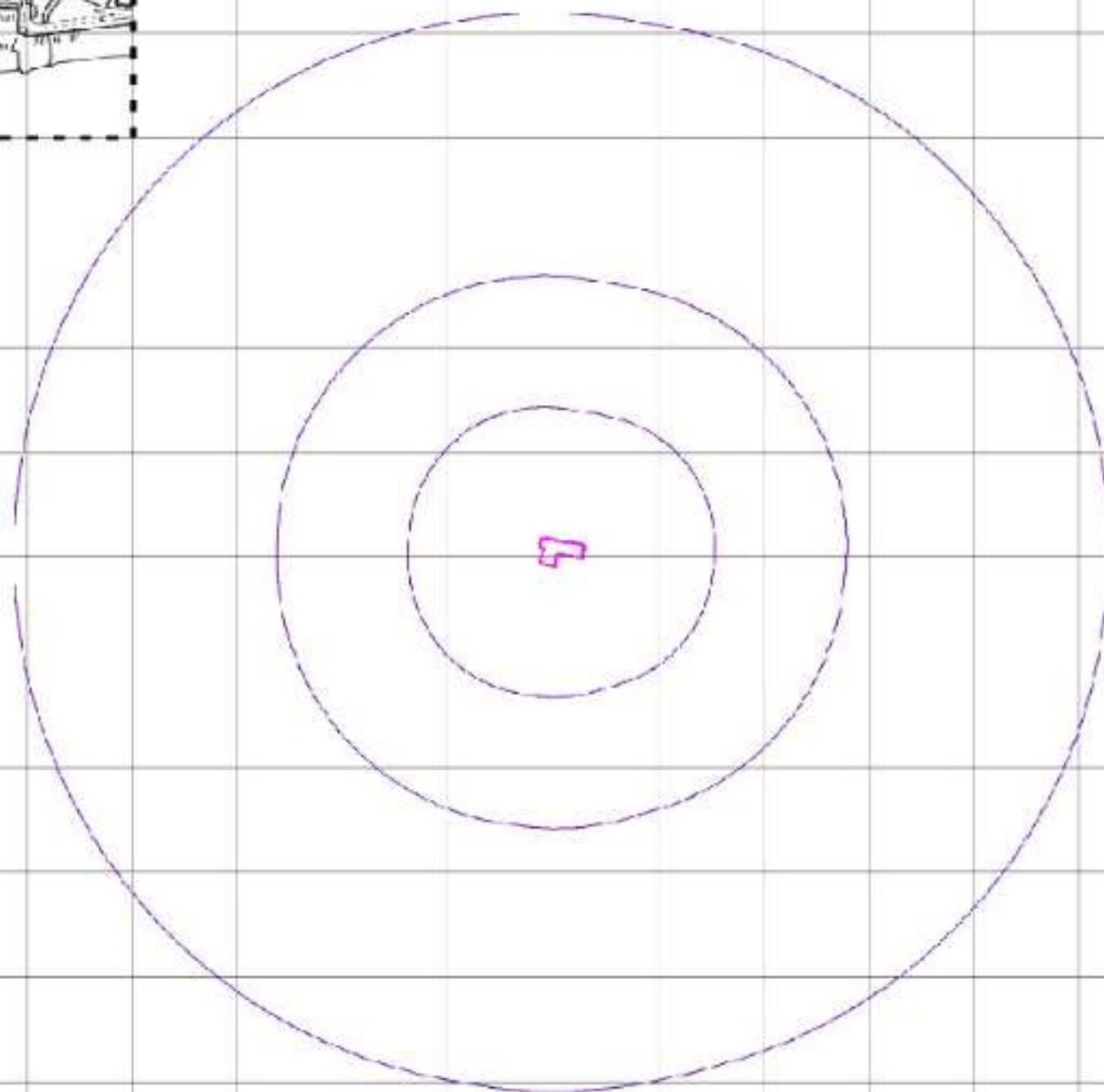
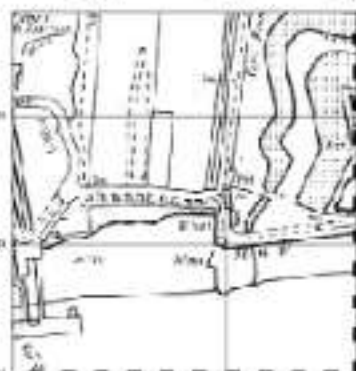


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 1000

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



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10k Raster Mapping

Published 1999

Source map scale - 1:10,000

The Envirocheck raster maps were produced from the Ordnance Survey's 1:10,000 colour raster mappings. These maps are derived from 'Landline' which represents the 1:10,000 maps originally published in 1993. This data is highly detailed showing buildings, features and terrain as ordered as well as all roads, tracks and paths. Road names are also included, together with the relevant road number and classification. Secondary information available includes county, police authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TOWN	TOWN
1999	1999
1:10,000	1:10,000
1:10,000	1:10,000
1:10,000	1:10,000

Historical Map - Slice A



Order Details

Order Number: 339631/54_1_1
 Customer Ref: GTC100
 National Grid Reference: 595210, 174210
 Slice: A
 Site Area (ha): 0.27
 Search Buffer (m): 3000

Site Details

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Landmark

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10k Raster Mapping

Published 2006

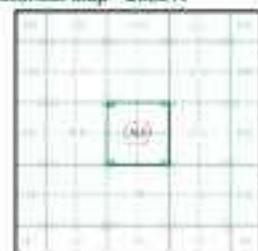
Source map scale - 1:10,000

This historical map is derived from a professional survey for the City of Surrey by T. H. G. & Co. Ltd. in 1906. This is a historical map and does not show current boundaries or other information which may have been added since 1906. The map is highly detailed of every building, fence and road boundary as well as all roads, bridges and canals. Road names are also indicated together with the present road number and classification. Extensive information topographical features, railway, railway, streets, rivers, canals and waterways.

Map Name(s) and Date(s)

1000000 1906	1000000 1906
1000000 1906	1000000 1906
1000000 1906	1000000 1906

Historical Map - Slice A



Order Details

Order Number: 333831757
Customer Ref: GTCHGD
Field and Grid Reference: 540400, 176310
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Orange Travel Coach Hire Ltd, Canal Road, CRAVESEND, DA12 2TS

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1000000
1906

1000000
1906

VectorMap Local

Published 2023

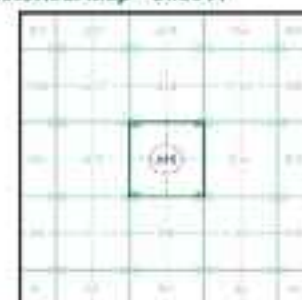
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed base map mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain. This has been designed for creating graphical mapping. OS VectorMap Local is derived from large scale information surveyed at 1:25,000 scale (including major towns and cities), 1:25,000 scale (including towns, villages and developed rural areas), and 1:10,000 scale (including roads, railways and rural estate areas).

Map Name(s) and Date(s)

TO011W 2023 10/01/23	TO011E 2023 10/01/23
TO011W 2023 10/01/23	TO011E 2023 10/01/23

Historical Map - Slice A



Order Details

Order Number:	330031757_1_1
Customer Ref:	GTCHGD
National Grid Reference:	563810, 174210
Sheet:	A
Site Area (Ha):	0.27
Search Buffer (m):	1000

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

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LANDMARK INFORMATION GROUP

Kent

Published 1874

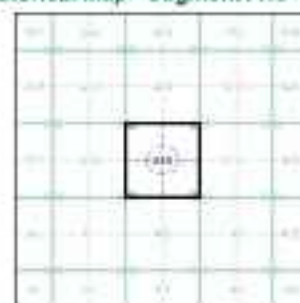
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1884 the 1:2,500 scale was adopted for mapping urban areas and by 1898 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1880, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

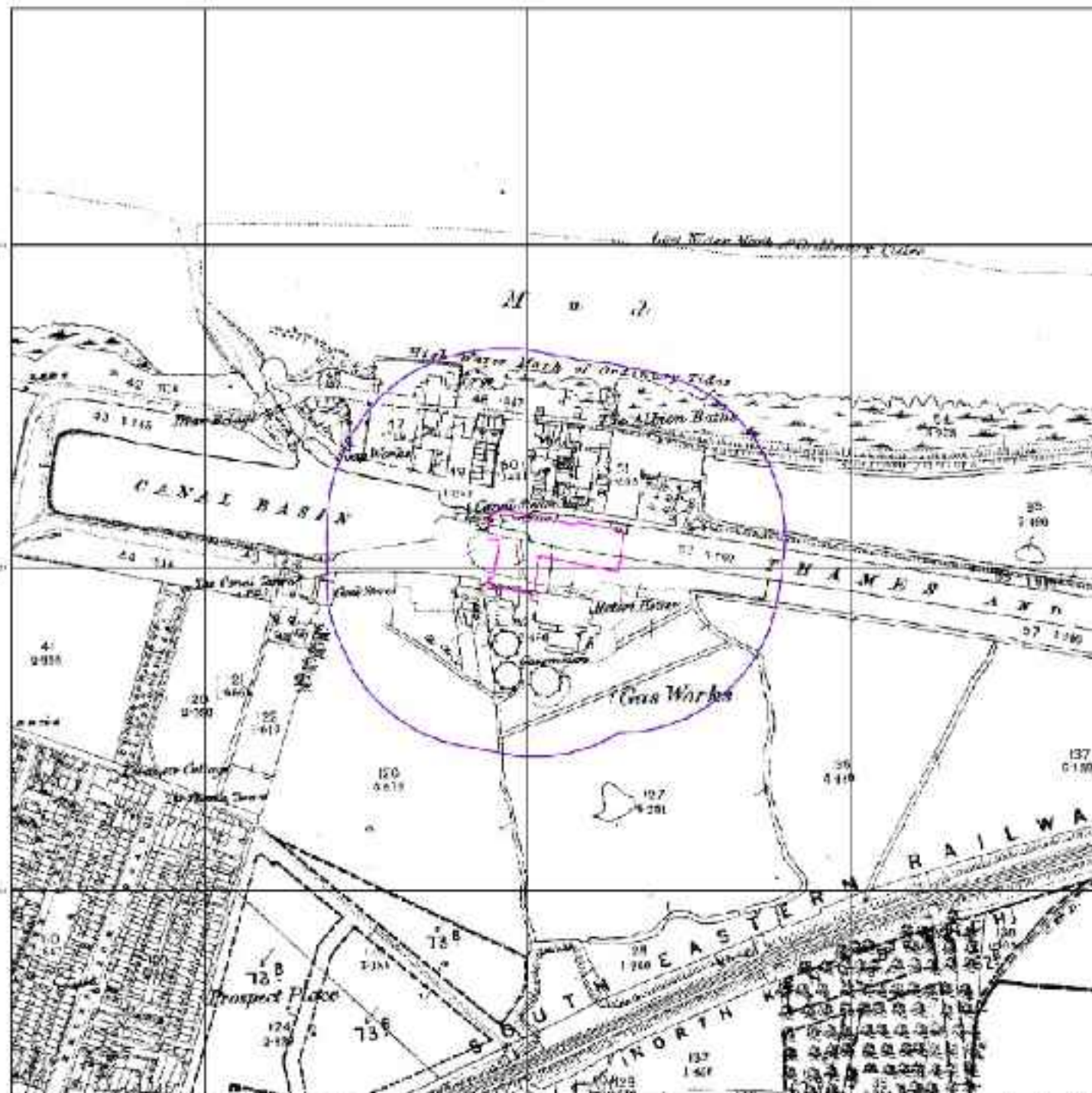
Order Number: 330831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 563810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 100

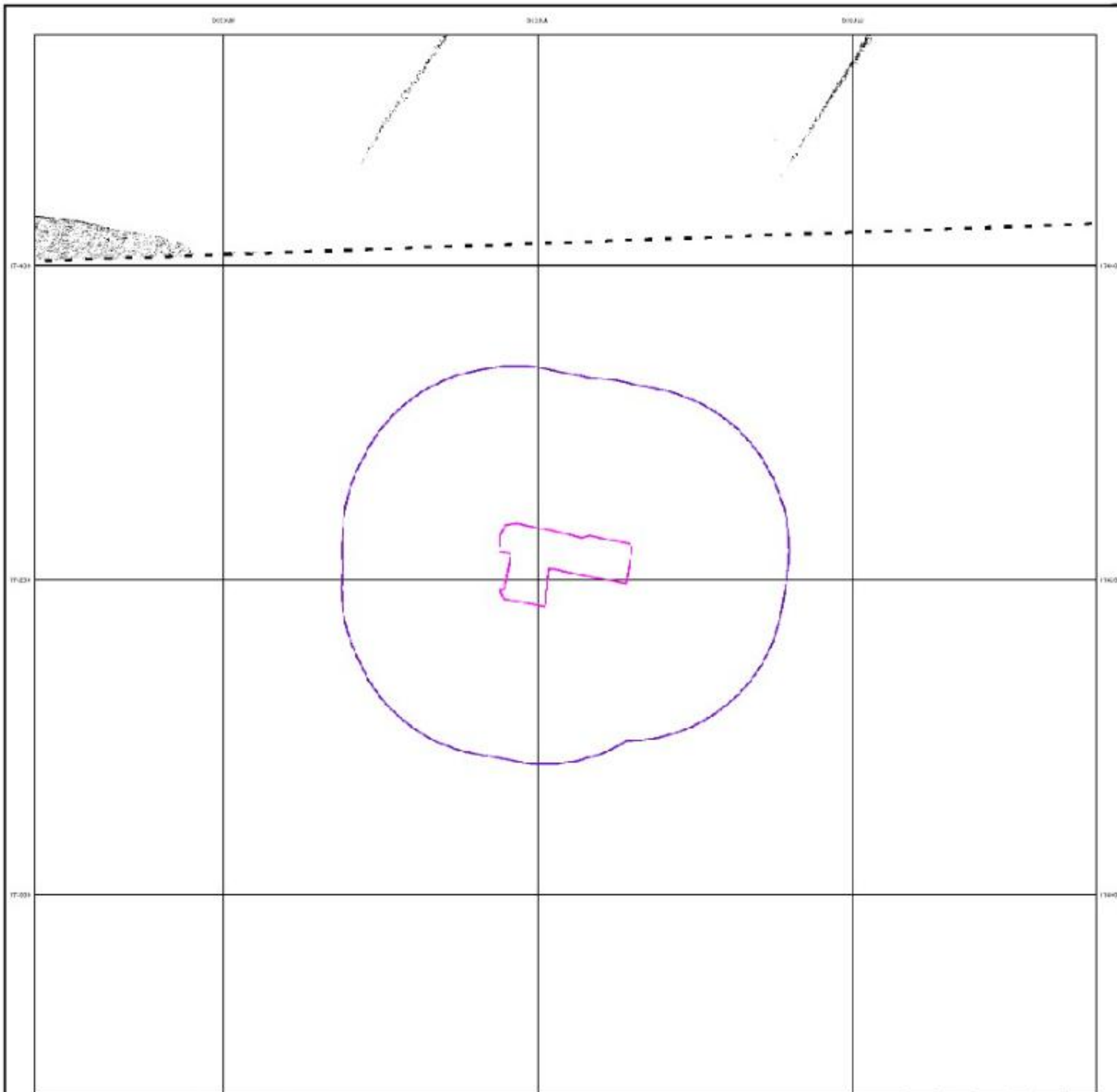
Site Details

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Essex

Published 1888

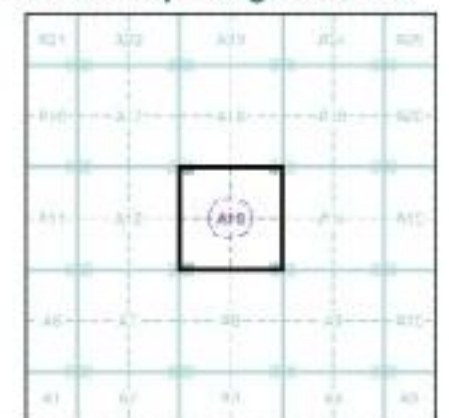
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339831757_1_1
 Customer Ref: GTCHGD
 National Grid Reference: 565810, 174210
 Slice: A
 Site Area (Ha): 0.27
 Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
 LANDMARK INFORMATION GROUP

Tel: 0844 944 9852
 Fax: 0844 944 9851
 Web: www.envirocheck.co.uk

Envirocheck

LANDMARK INFORMATION GROUP

Kent

Published 1897

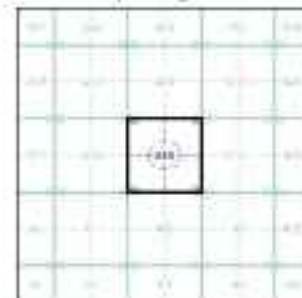
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1889 the 1:2,500 scale was adopted for mapping urban areas and by 1899 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1889, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

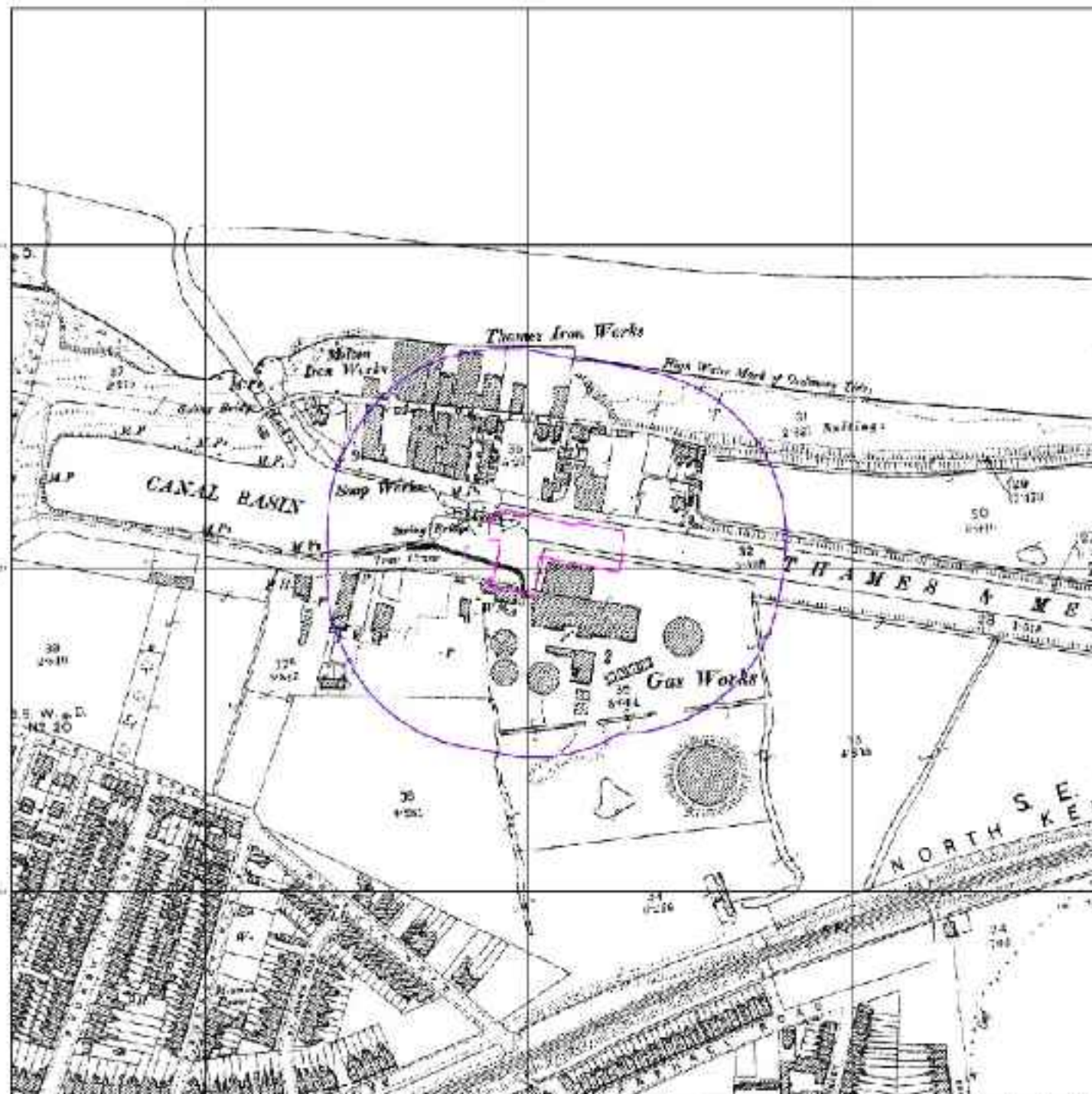
Order Number: 330831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 563810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
Historical Information Group

Tel: 01474 760100
Fax: 01474 760101
Email: info@landmark.co.uk



Essex

Published 1897

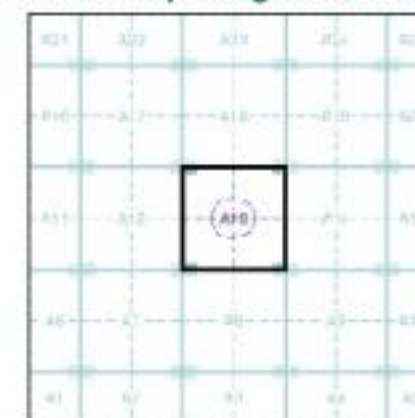
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

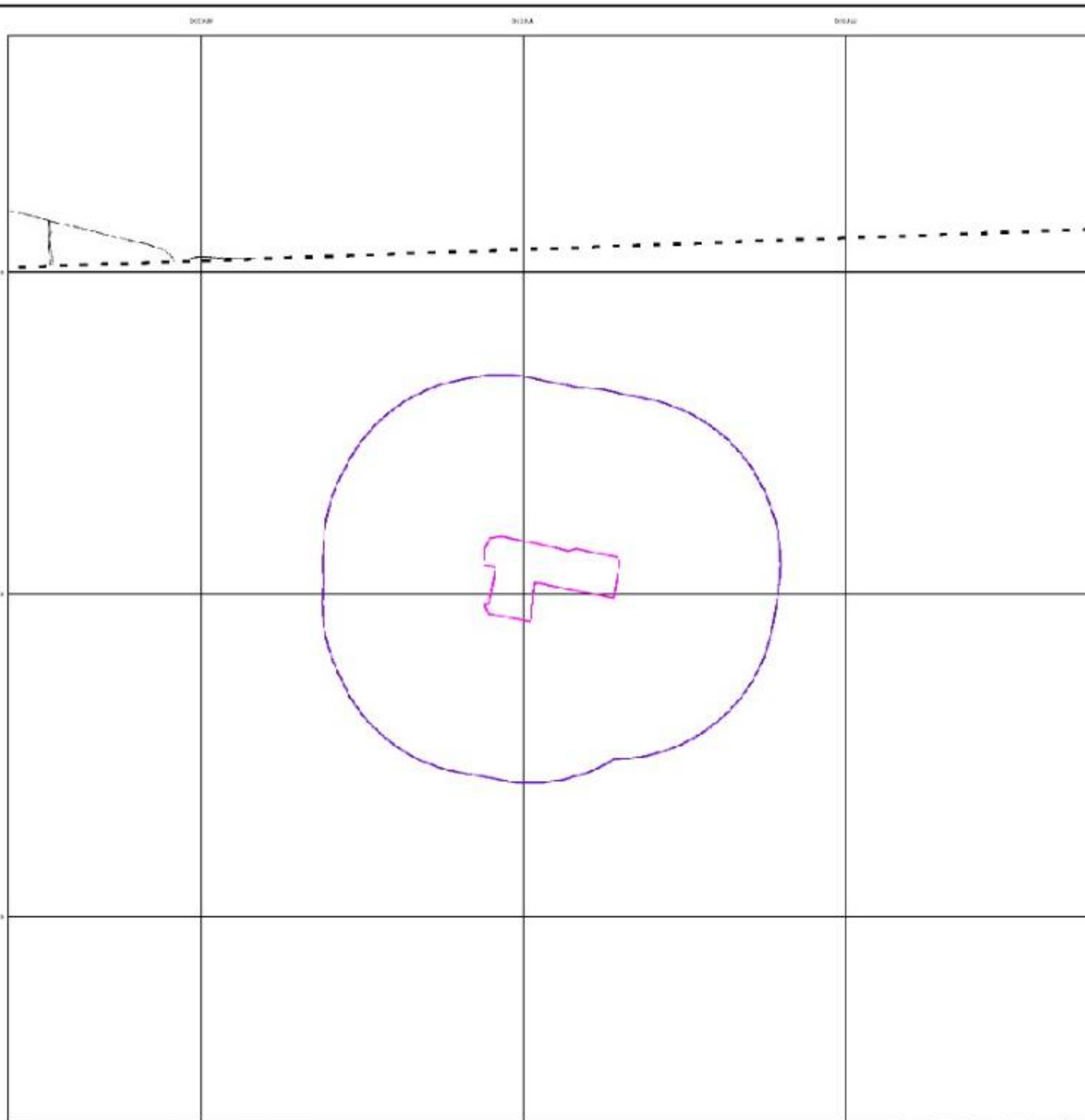


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



Kent

Published 1909

Source map scale - 1:2,500

The historical maps shown were reproduced from maps and drawings held at the scale adopted for England, Wales and Scotland in the 1840's. In 1884 the 1:2,500 scale was adopted for mapping urban areas and by 1890 it covered the whole of what were considered to be the urbanised parts of Great Britain. The published date given refers to the year the map was first surveyed. Before 1900, all OS maps were based on the Cassini Projection, with subsequent surveys of a single county or group of counties, giving it as significant inaccuracies in outlining a road.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339631767_1_1
Customer Ref: GTCHEQ
National Grid Reference: 585810, 174210
Sheet: A
Site Area (Hectares): 0.27
Search Buffer (m): 100

Site Details

Orange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 3RS

Kent

Published 1936

Source map scale - 1:2,500

The historical maps shown were reproduced from maps and drawings held at the scale adopted for England, Wales and Scotland in the 1840's. In 1884 the 1:2,500 scale was adopted for mapping urban areas and by 1898 it covered the whole of what were considered to be the built-up parts of Great Britain. The published date given refers to the year the map was first surveyed. Before 1908, all OS maps were based on the Cassini Projections, with independent surveys of a single county or group of counties, giving it as significant inaccuracies in joining areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 33963767_1_1
Customer Ref: GTCHEG
National Grid Reference: 585810, 174210
Sheet: A
Site Area (Hectares): 0.27
Search Buffer (m): 100

Site Details

Orange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Ordnance Survey Plan

Published 1954

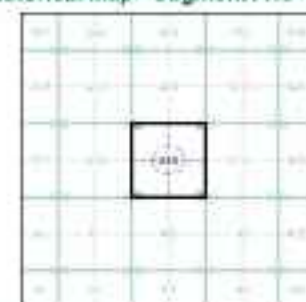
Source map scale - 1:1,250

The historical maps shown were downloaded from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1849 the 1:2,500 scale was adopted for mapping urban areas and by 1899 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1950, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

Ordnance Survey	1:2,500
OS Grid Reference	563810, 174210
Scale	1:2,500
Published Date	1954
Scale	1:2,500

Historical Map - Segment A13



Order Details

Order Number	330831757_1_1
Customer Ref	GTCHGD
National Grid Reference	563810, 174210
Sheet	A
Site Area (Ha)	0.27
Search Buffer (m)	100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

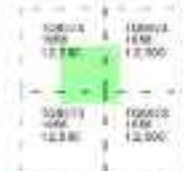
Ordnance Survey Plan

Published 1955 - 1958

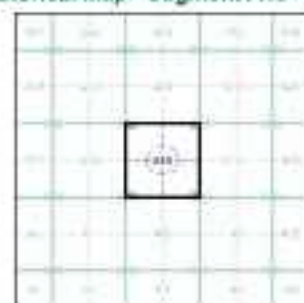
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1884 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1955, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 330631757_1_1
Customer Ref: GTCHGD
National Grid Reference: 563810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Ordnance Survey Plan

Published 1960 - 1976

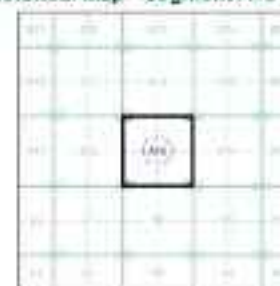
Source map scale - 1:1,250

The historical maps shown were researched from maps previously held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:12,500 scale was adopted for mapping urban areas and by 1890 it covered the whole of what were considered to be the urbanised parts of Great Britain. The published date given refers to the year the map was first surveyed. Before 1900, all OS maps were based on the Cassini Projection, with subsequent surveys of a single county or group of counties, giving it as significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

Sheet	1
Eastings	151 152 153 154
Northings	174 175 176 177
Sheet	1
Eastings	151 152 153 154
Northings	174 175 176 177

Historical Map - Segment A13



Order Details

Order Number:	339631767_1_1
Customer Ref:	OTCHGD
National Grid Reference:	585810, 174210
Sheet:	A
Site Area (Hectares):	0.27
Search Buffer (m):	100

Site Details

Orange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 3RS

Ordnance Survey Plan

Published 1964 - 1969

Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1940's. In 1954, the 1:2,500 scale was adopted for mapping urban areas and by 1969 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1935, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

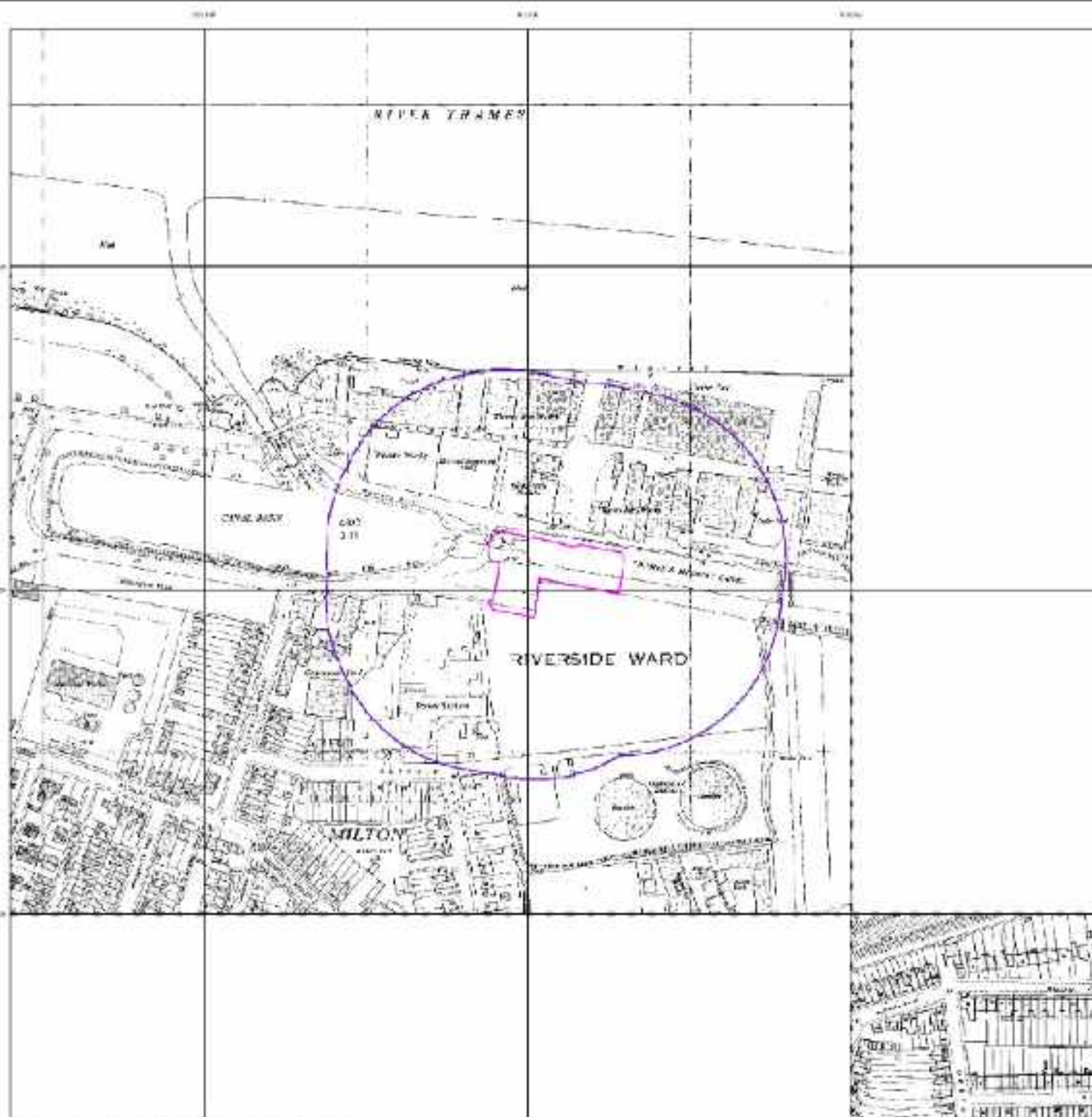


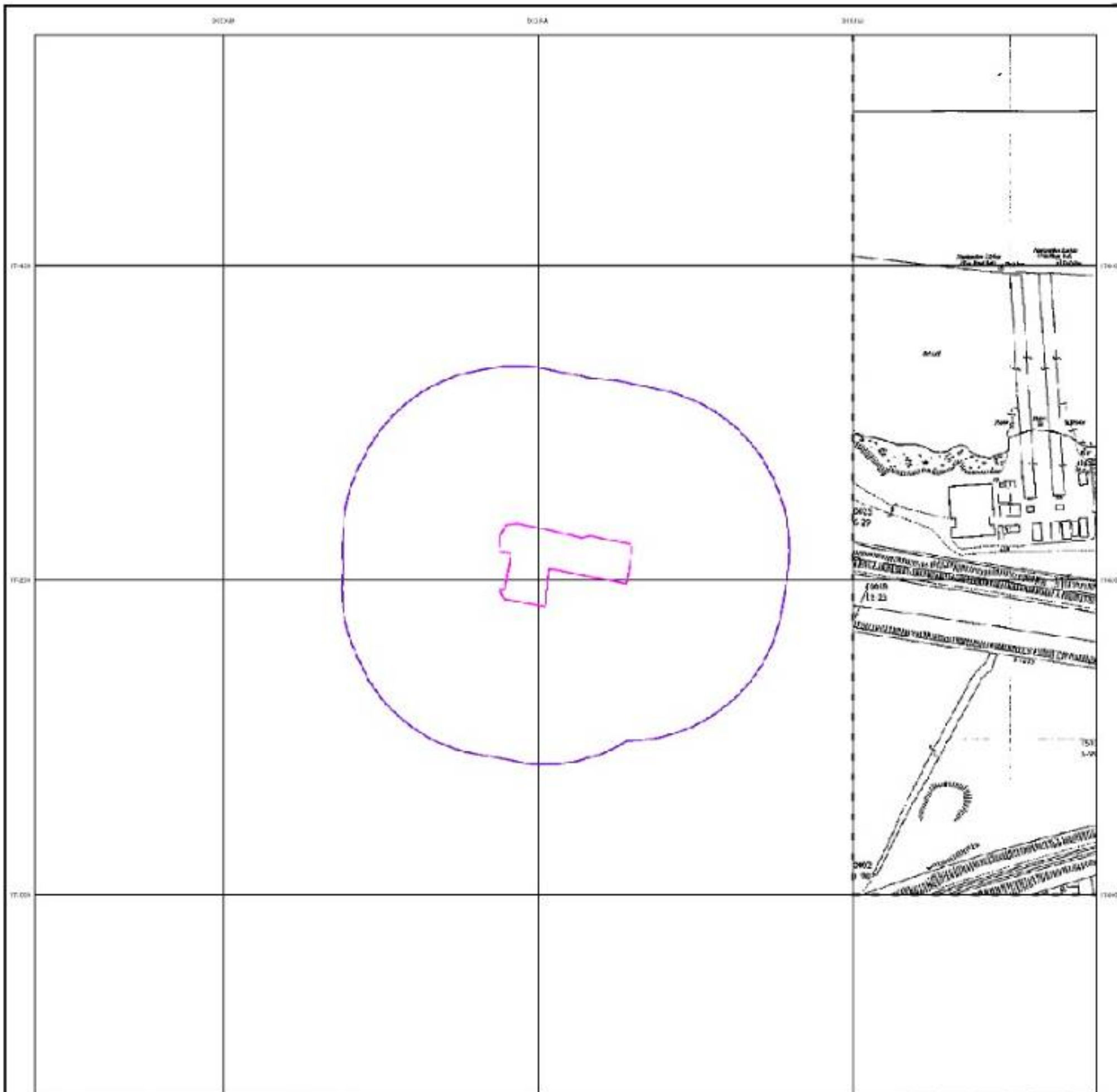
Order Details

Order Number: 339831757_1_1
Customer Ref: GCHGD
National Grid Reference: 565810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS





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Additional SIMs

Published 1964

Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Site: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
INFORMATION GROUP

Tel: 0844 844 9852
Fax: 0844 844 9851
Web: www.envirocheck.co.uk

Ordnance Survey Plan

Published 1969 - 1984

Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1940's. In 1954 the 1:2,500 scale was adopted for mapping urban areas and by 1966 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1935, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

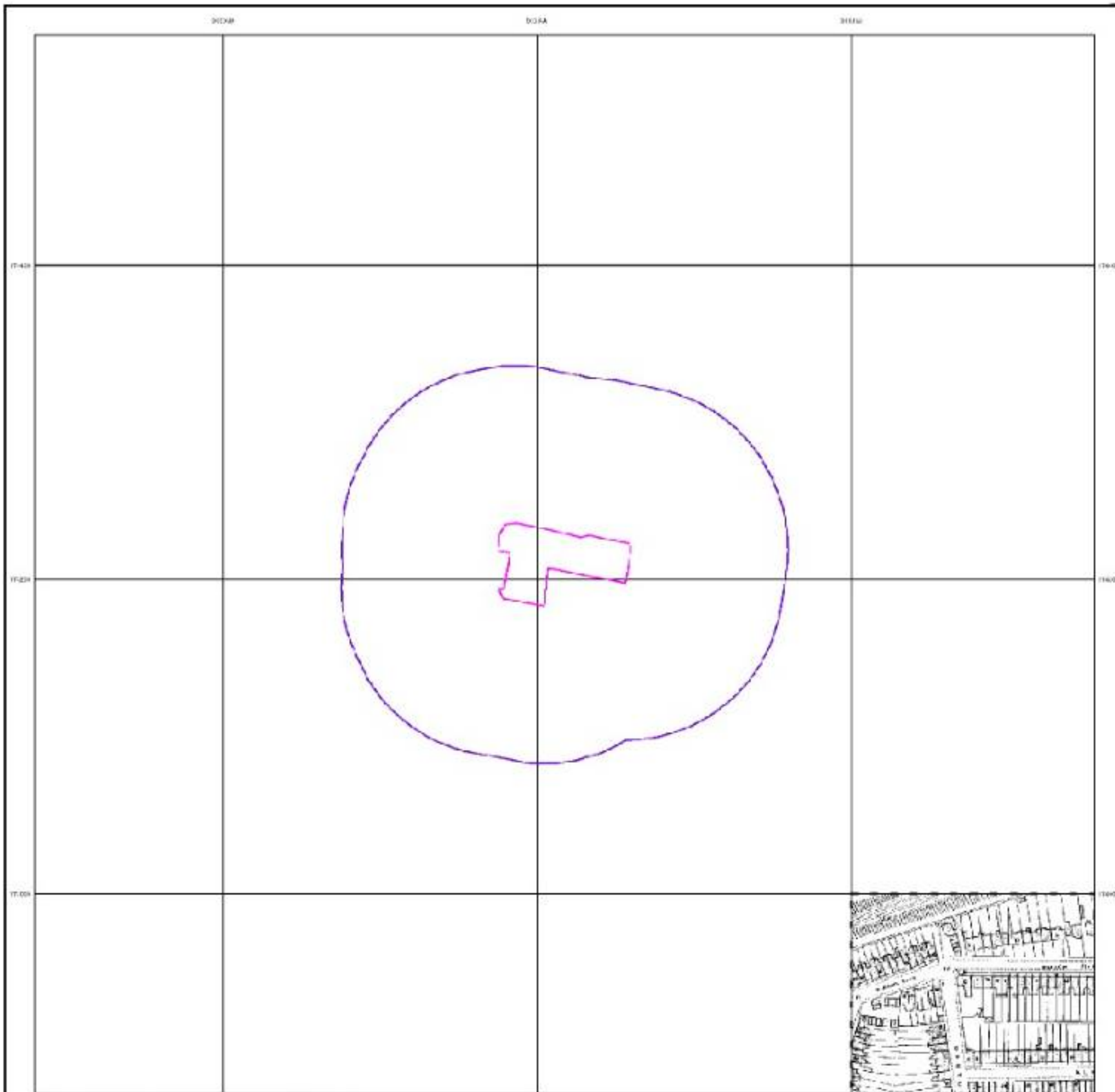


Order Details

Order Number: 339831757_1_1
Customer Ref: GCHGD
National Grid Reference: 565810, 174210
Sheet: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



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Ordnance Survey Plan

Published 1970

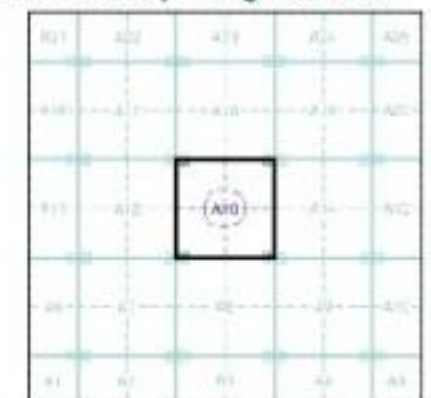
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Site: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
LANDMARK INFORMATION GROUP

Tel: 0844 844 9852
Fax: 0844 844 9851
Web: www.envirocheck.co.uk

Supply of Unpublished Survey Information

Published 1974

Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339531757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

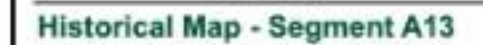
Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



Published 1978

Source map scale - 1:1,250

Map Name(s) and Date(s)



Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND,
DA12 2RS

Additional SIMs

Published 1978 - 1988

Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Mires') are further minor editions of mapping which were produced and published in series in the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

1007444	1:1,250
1007445	1:1,250
1007446	1:1,250
1007447	1:1,250
1007448	1:1,250
1007449	1:1,250
1007450	1:1,250
1007451	1:1,250
1007452	1:1,250
1007453	1:1,250
1007454	1:1,250
1007455	1:1,250
1007456	1:1,250
1007457	1:1,250
1007458	1:1,250
1007459	1:1,250
1007460	1:1,250
1007461	1:1,250
1007462	1:1,250
1007463	1:1,250
1007464	1:1,250
1007465	1:1,250
1007466	1:1,250
1007467	1:1,250
1007468	1:1,250
1007469	1:1,250
1007470	1:1,250
1007471	1:1,250
1007472	1:1,250
1007473	1:1,250
1007474	1:1,250
1007475	1:1,250
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1007500	1:1,250

Historical Map - Segment A13

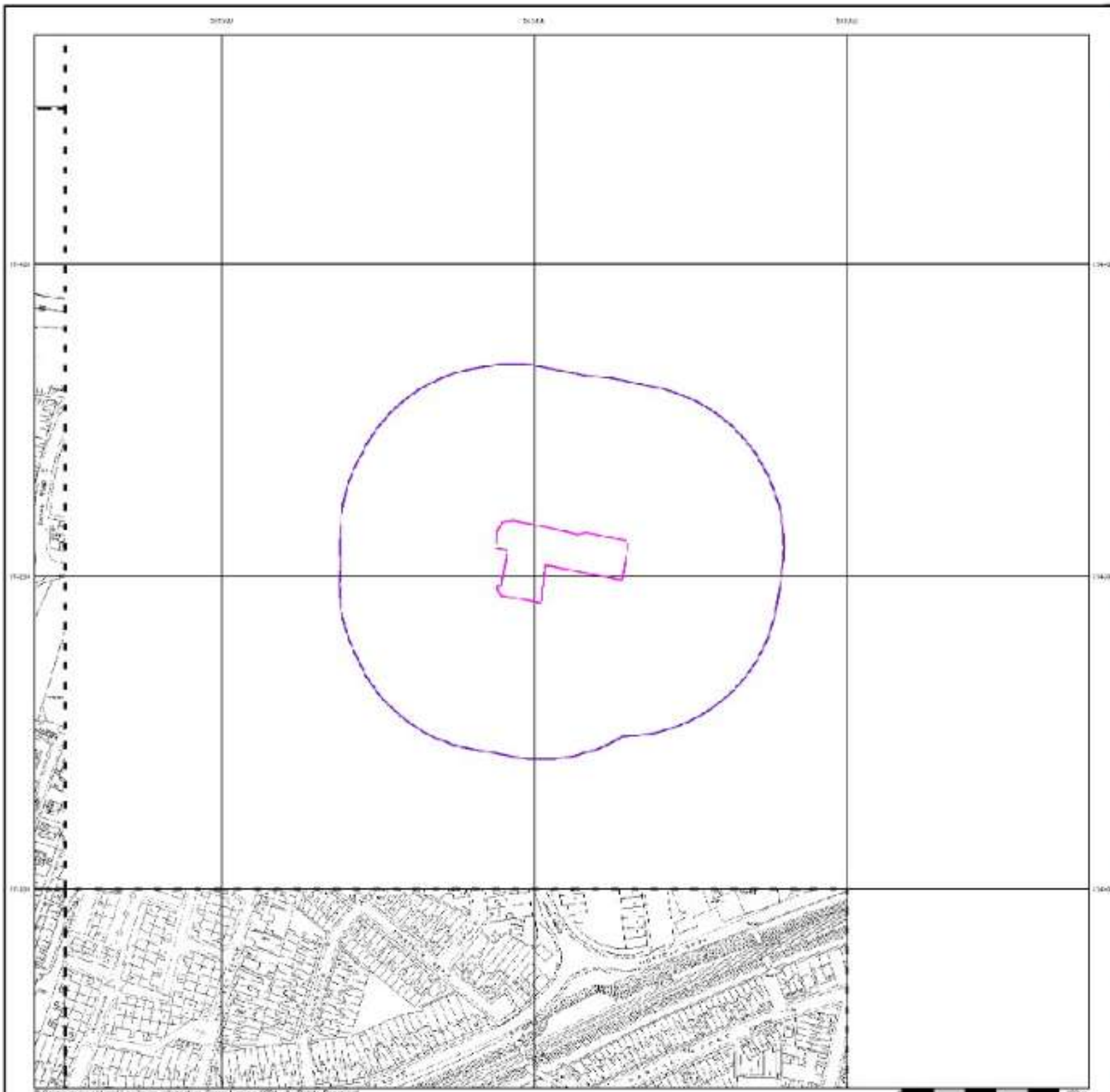


Order Details

Order Number: 330831757_1_1
 Customer Ref: GTCHGD
 National Grid Reference: 563810, 174210
 Sheet: A
 Site Area (Ha): 0.27
 Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



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Additional SIMs

Published 1981 - 1992

Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

10817-40W
000
1:1,250
10817-40W
000
1:1,250
10817-40W
000
1:1,250
10817-40W
000
1:1,250

Historical Map - Segment A13



Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Published 1992

Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

TC65734W
1032
1:1,250



Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND,
DA12 2RS

Large-Scale National Grid Data

Published 1993

Source map scale - 1:1,250

Large Scale National Grid Data superseded 500 yards (Ordnance Survey's Survey of Information on Marshes) in 1992 and continued to be produced until 1994. These maps were the forerunners of digital mapping and so provide detailed information on houses and roads, but tend to show less landscape features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

Grid Ref	Scale	Year
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993
563810	1:250	1993

Historical Map - Segment A13



Order Details

Order Number: 330831757_1_1
 Customer Ref: GTCHGD
 National Grid Reference: 563810, 174210
 Sheet: A
 Site Area (Ha): 0.27
 Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

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Large-Scale National Grid Data

Published 1993

Source map scale - 1:1,250

Large Scale National Grid Data superimposed 50m units (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the forerunners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339531757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Site: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
LANDMARK INFORMATION GROUP

Tel: 01474 444 000
Fax: 01474 444 001
Web: www.envirocheck.co.uk

Large-Scale National Grid Data Published 1994

Source map scale - 1:1,250

*Large Scale National Grid Data superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the forerunners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

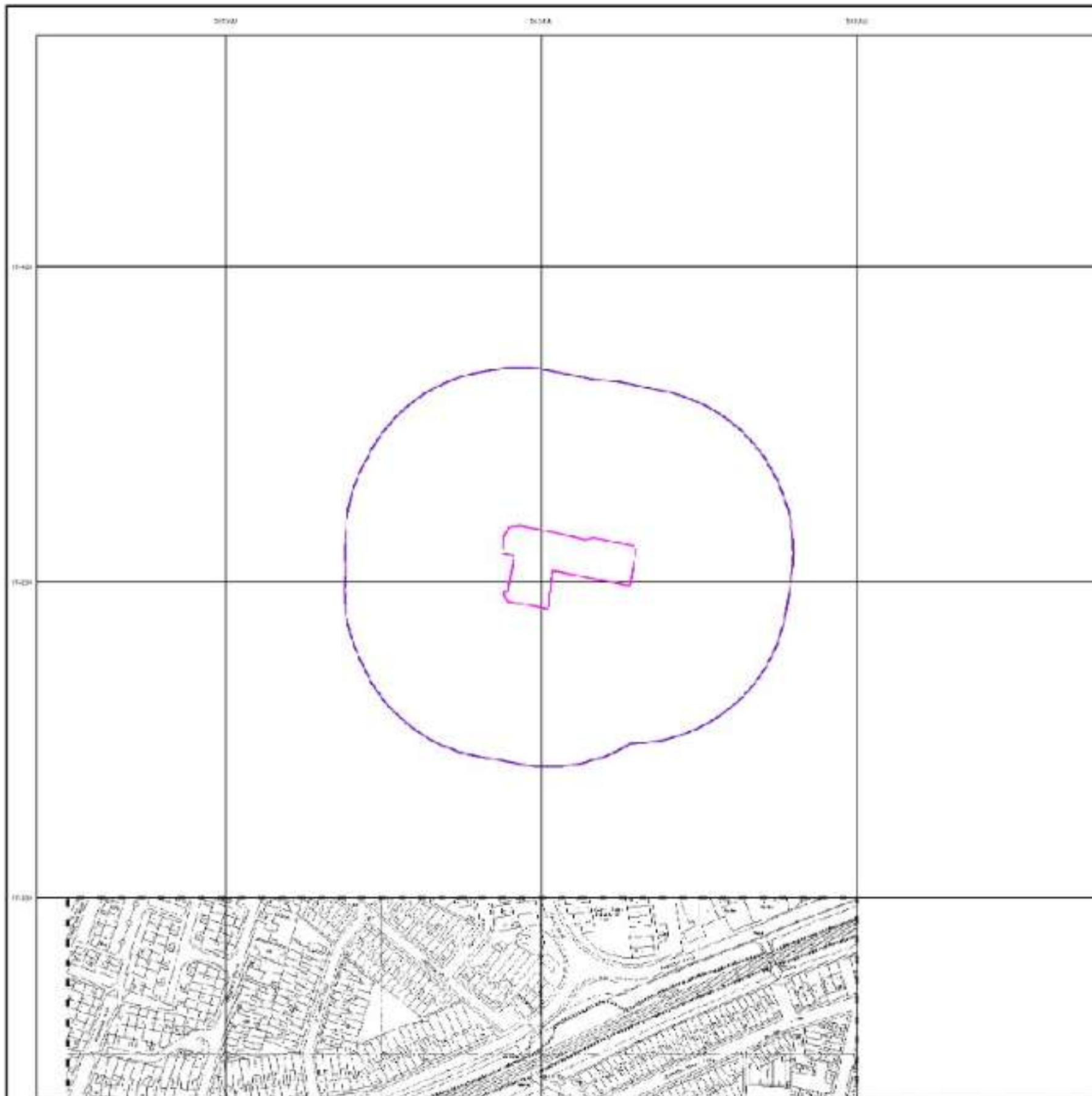


Order Details

Order Number: 339831757_1_1
Customer Ref: GTCHGD
National Grid Reference: 565810, 174210
Slice: A
Site Area (Ha): 0.27
Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS



Large-Scale National Grid Data

Published 1996

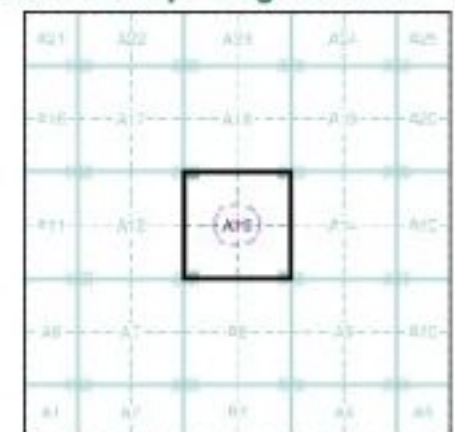
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 339831757_1_1
 Customer Ref: GTCHGD
 National Grid Reference: 565810, 174210
 Slice: A
 Site Area (Ha): 0.27
 Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

17-429

17-429

17-429





Envirocheck

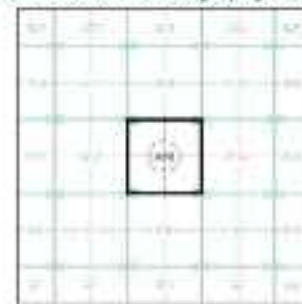
LANDMARK INFORMATION GROUP

Historical Aerial Photography

Published 1999

This aerial photography was produced by GeoMapping. Some vertical aerial photographs provide a near true, full colour survey of the whole of Great Britain.

Historical Aerial Photography - Segment A13



Order Details

Order Number: 330031757_1_1
 Customer Ref: GTCHGD
 National Grid Reference: 563810, 174210
 Sheet: A
 Site Area (Ha): 0.27
 Search Buffer (m): 100

Site Details

Grange Travel Coach Hire Ltd, Canal Road, GRAVESEND, DA12 2RS

Landmark
 LANDMARK INFORMATION GROUP

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APPENDIX 3 ▪ BGS Borehole Logs

KENT COUNTY COUNCIL
HIGHWAYS LABORATORY

Sheet 1 of 2

BOREHOLE LOG TQ67SE71

TQ 65739 74215

Date started 20th. June 1973 Date completed 26th. June 1974

Scheme Norfolk Rd./Canal Rd. Link

Location

Borehole No. 3 Ground Level 4.645 m AOD

KEY

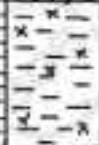
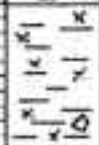
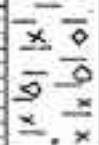
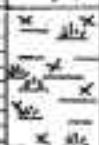
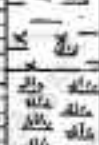
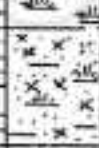
● **Disturbed Sample**

Bulk Disturbed Sample

105 mm Undisturbed Sample:

Standard Penetration Test

Δ Water Sample

Sample			Section	Depth about O.D. or below Ground Level	Thickness of Stratum m.	Description of Soil	Penetration Test	
No.	Type	Depth m.					Pen't'n mm.	No. of Blow
1	•	0.50		1.00	1.00	Chalk, silt, ash, coal and gravel MADE GROUND		
2	•	0.90						
3	•	1.00						
4	•	1.50		2.00	1.00	Soft blue-grey and brown silty CLAY, with peat and organic mud. ALLUVIUM/MADE GROUND		
5	•	1.70						
6	•	2.25						
7	•	2.25		2.00	2.00	Soft gray-green or blue silty CLAY. Scattered flint fragments becoming grey, with apparent polished faces. ALLUVIUM		
8	•	3.00						
9	•	3.20						
10	•	4.00		4.00	1.40	Firm blue grey silty CLAY with peat pockets, and scattered shell fragments. ALLUVIUM		
11	•	4.15						
12	•	4.90						
13	•	5.15		5.40	0.70	Very soft peat. ALLUVIUM		
14	•	5.75						
15	•	6.40						
16	•	6.50		6.90	0.80	Medium dense pale grey sandy clay SILT, with a little peat. ALLUVIUM		
17	•	7.00						
18	•	7.35						
19	•	7.55		9.10	2.20	Medium dense, alternating bands of pale grey SILT and silty SAND. Not fully penetr- ated. and peat pockets. ALLUVIUM	375	23
20	•	8.10						
21	•	8.65						
22	•					End of borehole.		27

To 67 SE 73
6592 7424

HOLST & CO. LTD.

SITE INVESTIGATION DEPT.

PARKSIDE LANE

LEEDS LS115SX.

Contract No. T3770/F1622

Location Gravesend

Client Livesey, Henderson & Partners

Borehole No. 1

Ground Level

Date 28th July, 1970

BOREHOLE LOG

STRATA	Legend	Depth below Ground Level	Thickness of Strata	Type of Sample	c lb/sq. ft.	deg.	m.c %	γ lb/cu. ft.	N
MADE GROUND:- Soil, Ashes Brick, Stones.			7'3"	2'3" I					6
		7'3"		8'0" I					25
MADE GROUND:- Chalk and Clay		12'6"	5'3"	13'6" I					
Very soft light brown silty mottled clay		16'0"	3'6"	17'6" □	200	0	39.3	113	
Very soft dark grey organic silty clay			8'0"	□	190	0	54.0	98	
		24'0"		25'0" □					
Brown Peat		26'0"	2'0"	□	450	0	32.9	112	
Light grey organic silt		29'6"	3'6"	30'0" I					25
Compact sand, gravel and flints		34'6"	5'0"	35'3" I					57
Compact light grey silt		37'0"	2'6"	40'0" I					21
Compact gravel and flints		45'0"	8'0"	45'3" I					24
Compact light brown sand gravel and flints			19'0"	51'0" I					18
				56'3" I					28
				60'0" I					30
		64'0"							

IGS 1554 (1148) 5000 5/75

Institute of Geological Sciences
RECORD OF SHAFT OR BOREHOLE

1:10 000 Map Registration No.

TQ 67 SE/25

Name and Number of Shaft or Borehole:

Trial hole at Gas Works

National Grid Reference

6587. 7418

For whom made

Town or Village Gravesend County Kent

Exact site (reference to a fixed point on 1-in or 1:50 000 Map)

1-in or 1:50 000
New Series Map No.

Enter 'C' if
Confidential

271

Purpose for which made

Ground level at shaft relative to O.D. Estimated shaft
bore m. If not ground level give O.D. of beginning of bore m.

Made by

Date of sinking

Information from

Section at a trial hole at the Gas Works,
GRAVESEND, KENT.

From The F.C. Construction Co. Ltd.

1st Sheet 271



Geological
Classification

	Fe
Made Ground	5
Blue Clay	3
Brown Clay	8 1/2
Peat	2
Blue sandy clay	2
Blue clay and Small Ballast	2
White chalky Sand	7 1/2

5th December 1927.

Thickness
metres

Depth
metres

KENT COUNTY COUNCIL HIGHWAYS LABORATORY

Sheet 1 of 2BOREHOLE LOG TQ 67SE 72TQ 65693 74206Date started 15th June 1978. Date completed 19th June 1978Scheme Norfolk Rd./Canal Rd. Link.

Location _____

Borehole No. 4 Ground Level 4.475 m AOD

- KEY**
- Disturbed Sample
 - ↑ Bulk Disturbed Sample
 - 105 mm Undisturbed Sample
 - | Standard Penetration Test
 - Δ Water Sample

Sample			Section	Depth about O.D. or below Ground Level	Thickness of Stratum m.	Description of Soil	Penetration Test	
No.	Type	Depth m.					Pen't'n mm.	No. of Blow.
1	●	0.40		0.40	0.40	Coal dust. MADE GROUND		
2	●	0.60				Olive brown very silty fine SAND, with ash, flint, chalk and roots. MADE GROUND		
3	●	1.10			1.20			
	●	1.60						
4	●	1.80		1.60		Loose pale grey SILT, with ash, peat, chalk. DISTURBED ALLUVIUM		
5	●	2.10			1.10			
6	●	2.55				Pale blue, becoming chocolate brown soft silty CLAY, with decayed roots and peat pockets, and traces of chalk and flints.		
7	●	2.70		2.70				
8	●	2.85						
9	●	3.30						
10	●	3.50						
11	●	3.70						
12	●	4.15						
13	●	4.35			3.20			
14	●	4.45				Hard CHALK lumps, fragments, peat pockets, and grey/yellow silty sand. ALLUVIUM		
15	●	4.90						
16	●	5.30				Sub-angular flint GRAVEL, 50mm, with a little silty fine sand. ALLUVIUM		
17	●	5.55			0.70			
18	●	6.00		5.90		Medium dense blue-grey sandy SILT, with traces of chalk, flints, and shell. ALLUVIUM		
19	●	6.10						
20	●	6.55		6.90		Uniform grey/gold sandy coarse SILT. ALLUVIUM		
21	●	7.05			0.95			
22	●	7.10		7.60		Uniform grey/gold sandy coarse SILT. ALLUVIUM		
23	●	7.75						
24	●	7.85				Uniform grey/gold sandy coarse SILT. ALLUVIUM		
25	●	8.30						
26	●	8.40				Uniform grey/gold sandy coarse SILT. ALLUVIUM		
27	●	8.45						
28	●	8.90				Uniform grey/gold sandy coarse SILT. ALLUVIUM		
29	●	9.00						
30	●	9.45		9.55		Uniform grey/gold sandy coarse SILT. ALLUVIUM		
31	●	9.55			0.95			
32	Δ	10.00		10.00		Not fully penetrated		



APPENDIX 4 ▪ Site Walkover Photos



Figure 1: Overview – Looking south-west into site entrance – Hardstanding present across most of the site. Site offices seen to R.H.S of photo frame.



Figure 2: Looking north – Metal works situated directly opposite the site (approx. 10 m from site entrance).



Figure 3: Looking west along Canal Road. Surrounding works visible opposite the site. Works comprise MOT service centre and Nuts and Bolts suppliers.



Figure 4: Looking east along Canal Road. Northern boundary of site marked by palisade fencing to R.H.S of photo frame.

Photo plate 1



Figure 5: Stockpile of general building material comprising concrete, tarmac, stone and gravel located on the northern boundary close to the site entrance.



Figure 6: Alongside the eastern boundary – Timber pallets storing spare glass windshields for the coaches. The existing coach servicing building can be seen in the background.



Figure 7: Looking south-east – main structure on site currently in use as the coach servicing building. Note the palisade fencing to the R.H.S of photo frame marks the southern boundary.



Figure 8: Looking east - Lay down area for the coaches. Note the existing Coach servicing building to R.H.S of photo frame. The proposed development is an extension of the existing structure which will cover most of the area in the photo. Note concrete hardstanding throughout the east of the site.