



Preliminary Geo-Environmental Risk Assessment

'White Land', Parcels R5-R10, Land at White House Farm, Sprowston, Norwich

Presented to **Persimmon Homes, Taylor Wimpey & Hopkins Homes**

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Delta-Simons Project No. 17-0337.01



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Report Details

Client	Persimmon Homes, Taylor Wimpey & Hopkins Homes
Report Title	Preliminary Geo-Environmental Risk Assessment
Site Address	Land off Salhouse Road, Sprowston, Norwich, NR13 6LB
Project No.	17-0337.01
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About us

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Specialising in Environment, Health & Safety and Sustainability, Delta-Simons provide support and advice within the property development, asset management, corporate and industrial markets. Operating from eight locations - Lincoln, London, Leeds, Manchester, Norwich, Nottingham, Durham and Dublin - we employ over 70 environmental professionals, bringing experience from across the private consultancy and public sector markets.

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Executive Summary

Brief	Delta-Simons was instructed by Persimmon Homes, Taylor Wimpey and Hopkins Homes to produce a Preliminary Geo-Environmental Risk Assessment for a parcel of land known as 'White Land', Parcels R5-R10, land at White House Farm, located on the outskirts of Sprowston, Norwich, NR13 6LB, for a proposed residential development.
Site Use & Surrounding Area	The Site currently comprises an irregularly shaped parcel of arable farm land with an area of woodland in the south-east, and is located in a predominantly agricultural area, with Sprowston Manor Golf Club to the north and White House Farm to the west.
Environmental Setting	<p>The Site is likely underlain by a sequence of Topsoil, which is in turn underlain by Glacial Till in the north-west and part of the western area of the Site, but otherwise over the Sherringham Cliffs Formation (Sand & Gravel), followed by solid geology comprising the Crag Group (Sand & Gravel) and the Lewes Nodular Chalk. The superficial Glacial Till is classified as Unproductive Strata, the Sherringham Cliffs Formation is classified as a Secondary A Aquifer and the Lewes Nodular Chalk bedrock is classified as a Principal Aquifer.</p> <p>A pond and a drain are present in the east of the Site and a further drain is present along the north-western boundary of the Site.</p>
Contamination Potential Sources	Limited potential sources of contamination have been identified, comprising the agricultural use of the Site, potential localised Made Ground deposits and an adjacent historical gravel pit and landfill.
Contaminated Land Risk Associated with Ownership	There is considered to be a low risk of enforcement action by the regulatory authorities under Part 2A of the Environmental Protection Act, the Water Resources Act or the Environmental Damage Regulations. The potential for legal action by surrounding landowners / Third Parties based on the potential for contamination to migrate off-Site (ongoing or historically) is considered to be low.
Development Considerations	<p>Widespread contamination is considered unlikely and the preliminary risk assessment has identified a Low to Moderate risk of soil/groundwater contamination and hazardous ground gas at the Site.</p> <p>Following the C681 risk assessment process; in combination with the high regional bomb risk and lack of post war development it is considered that there would be a low to moderate risk that UXO will be encountered during proposed intrusive investigation works involving borehole drilling/ trial pit excavations; but that a moderate overall risk would apply in a development context; assuming currently perceived extent of likely ground disturbance and construction techniques anticipated.</p> <p>No potentially substantial geohazards have been identified at the Site.</p>
Recommendations	<p>It is recommended that an intrusive geo-environmental Site investigation is undertaken to assess the potential for contamination and ground gases to impact on the proposed development. The investigation will also refine the Site-specific ground model and groundwater regime and enable an assessment of foundation and engineering solutions to be made.</p> <p>A detailed specialist UXO assessment should be undertaken in accordance with C681 2009 to clarify the risks and scope of potential UXO mitigation approaches (or combination of approaches) which could be adopted. As a minimum, it is recommended Site staff should be made aware of the potential for UXO hazards to be present and that discussion and responses to these risks be included in the Site Health & Safety programme for the duration of the project.</p>

This is intended as a summary only. Further detail and the limitations of the assessment is provided within the main body of the Report.

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1.0 Introduction

1.1 Appointment

Delta-Simons Environmental Consultants Limited ("Delta-Simons") was instructed by Persimmons Homes, Taylor Wimpey and Hopkins Homes (the "Client") to prepare a Preliminary (Geo-Environmental) Risk Assessment for a parcel of land known as 'White Land', Parcels R5-R10, land at White House Farm, located on the outskirts of Sprowston, Norwich, NR13 6LB (the "Site").

1.2 Context & Purpose

The aim of this report is to identify likely environmental and geotechnical issues associated with soil and groundwater conditions that may affect the proposed development of the site. This report is designed in accordance with 'the Model Procedures for the Management of Land Contamination (CLR 11)' and the relevant Planning Practice Guidance (Land Affected by Contamination) <https://www.gov.uk/guidance/land-affected-by-contamination>.

It is understood that the Site is to be redeveloped for residential use, comprising approximately 1,200 homes, however, a specific proposed development plan has not been viewed by Delta-Simons.

1.3 Scope of Works

- ▲ Review of the environmental setting of the Site, including the current use / status of the Site and surrounding area, and review of the geology, hydrogeology and hydrology;
- ▲ Review of the historical activities of the Site and surrounding area;
- ▲ Review of regulatory information relating to the Site;
- ▲ Review of the online planning records for the Site;
- ▲ Consult and review information from the Local Authority in relation to Part 2A of the 1990 Environmental Protection Act;
- ▲ Complete a Site reconnaissance by undertaking a visual inspection of readily accessible areas of the Site;
- ▲ Develop an outline Conceptual Site Model and undertake a Preliminary Risk Assessment with respect to potential contamination focussed on the proposed land use;
- ▲ Consider preliminary UXO hazard risks in accordance with C681 2009;
- ▲ Identify potential contamination risks and / or liabilities associated with the proposed acquisition of the Site;
- ▲ Provide commentary on potential land contamination and geotechnical constraints in the context of the proposed development; and,
- ▲ Summarise readily available data on the flood risk associated with the Site.

In completing this Assessment, Delta-Simons has utilised the following data sources and third party information:

- ▲ Current and Historical Ordnance Survey (OS) maps;
- ▲ British Geological Survey (BGS) data;
- ▲ Environment Agency (EA) online data;
- ▲ A Landmark Envirocheck® Report for the Site (Ref. 123227967_1_1), dated May 2017;
- ▲ Review of Zetica Regional Unexploded Bomb Risk mapping;
- ▲ Historical Maps included as part of the Envirocheck® Report; and
- ▲ Information provided by Broadland District Council.

1.4 Limitations

The standard limitations associated with this assessment are presented in Appendix A. In addition, there are the following specific limitations that apply to this assessment:

- ▲ No specific development plans have been made available for the proposed redevelopment, therefore, an assumption has been made that the majority of the Site will comprise residential properties with associated gardens and roadway infrastructure, which represents the most sensitive end-use for the Site, from a contaminated land perspective; and
- ▲ The Consultant undertaking the Site inspection will observe for evidence of invasive species, particularly Japanese Knotweed. It should be noted however that the Consultant is not a trained ecologist and a separate survey undertaken by an experienced Ecologist should be completed to provide a robust assessment.

2.0 Site Context & Data Review

2.1 Site information

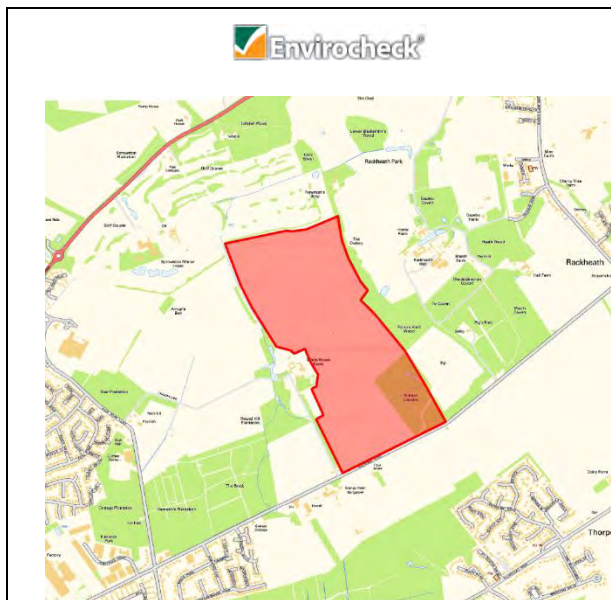


Figure 1: Contains OS data ©, Crown Copyright and Database Right (2016)



Figure 2: Contains OS data ©, Crown Copyright and Database Right (2016)

Site Location		Site Layout	
Co-ordinates	Centred approximately at National Grid Reference 626680, 311980	Elevation	25 to 49 m AOD The central area of the Site is at a higher elevation than the remainder of the Site.
		Area	66 Ha
Site Location	The Site is located on the outskirts of Sprowston, off Salhouse Road, approximately 2 km east of Sprowston town centre.		
Current Site Use	The Site is predominantly occupied by arable farm land with an area of woodland, known as Bulmer Coppice, present in the south-eastern corner of the Site. Part of the western area of the Site is currently utilised as a 'pick your own' fruit and vegetables area, associated with White House Farm. <i>No potential sources of contamination have been identified on-Site.</i>		
Proposed Development Description	It is understood that the Site is to be redeveloped for residential use, comprising approximately 1,200 houses, however, a specific development plan has not been viewed by Delta-Simons.		
Site Reconnaissance	Delta-Simons conducted a Site visit on 13 th June 2017. A series of Site photographs are presented in Figure 3, and pertinent information that was observed or reported on-Site is summarised as follows: The Site was in agricultural use, with crops covering the majority of the Site, including a 'pick your own' area associated with White House Farm, comprising orchards and fruit		

	<p>crops. The Site was predominantly bound by mature hedgerows and wooded areas and a number of tracks were present, generally separating or bordering fields.</p> <p>A water tank and large containers of plant feed (glycerine) were present in the central area of the Site, which appeared to feed the sprinkler system for the fruit crops.</p> <p>A gravelled car park and track were present to the north of the 'pick your own' area, with a shed containing toilets and a further building associated with cider production. Some unidentified pipework was observed adjacent to the east of the cider production building.</p> <p>Evidence of a fire was observed in the west of the Site, with remains comprising wood, glass, metal and unidentifiable tins. A stockpile of wood was also observed in this area.</p> <p>White House Farm was located to the east of the Site and was observed to comprise two residential properties, a loosely gravelled car park, a large barn and a series of buildings occupied by a café, gift shop, hair salon, beauticians and a dance studio. A septic tank was also present adjacent to the Site, to the north of White House Farm. A track was present off-Site to the south of White House Farm and appeared to be an area for waste dumping, including an old lorry container.</p>	
	<p>The agricultural use of the Site is considered to represent a potential source of contamination, however, is unlikely to result in significant contamination concerns.</p>	
Current Surrounding Area	North	Sprowston Manor Golf Club, beyond which is Wroxham Road (A1151).
	East	Agricultural land, woodland and Rackheath Park.
	South	Salhouse Road, limited residential properties, agricultural land and woodland.
	West	White House Farm, agricultural land and Sprowston Manor Golf Club (in the north).
	No potential off-Site sources of contamination have been identified.	

2.2 Environmental Setting

Published Geology	<p>From the British Geological Survey online viewer, the Site is indicated as being underlain by superficial deposits of Glacial Till in the north-west and part of the western area of the Site, but otherwise over the Sherringham Cliffs Formation (Sand & Gravel), followed by solid geology comprising the Crag Group (Sand & Gravel) and the Lewes Nodular Chalk. Given the current agricultural use, Topsoil is likely to be present overlying the superficial deposits.</p>
Specific Ground Conditions	<p>Logs recorded from two boreholes located approximately 50 m and 80 m west of the Site at White House Farm (TG21SE12 & TG21SE2) indicate ground conditions to comprise the following:</p> <ul style="list-style-type: none"> ▲ Topsoil to a maximum depth of 0.30 m bgl; ▲ Sand and clay (Norwich Brick Earth) to a maximum depth of 7.60 m bgl and 15.20 m bgl respectively; ▲ Sand and gravel (Norwich Crag) to a maximum depth of 21.90 m bgl and 22.90 m bgl respectively; and ▲ Chalk to a maximum depth of 91.40 m bgl. <p>A band of limestone was encountered, interbedded with the chalk strata, in TG12SE2 from 29.90 m bgl to 30.50 m bgl.</p>

Hydrogeology	<p>The EA classify the superficial Glacial Till as Unproductive Strata and the Sherringham Cliffs Formation as a Secondary A Aquifer.</p> <p>The Lewes Nodular Chalk at depth beneath the Site is understood to be classified as a Principal Aquifer.</p> <p>The EA data also indicates that the Site is located within a Total Catchment (Zone 3) groundwater Source Protection Zone (SPZ). According to the Envirocheck® Report, there are ten water abstractions from groundwater located within 500 m of the Site, the nearest of which is located approximately 35 m north-east of the Site and is utilised for agricultural spray irrigation, permit dated August 2014. No potable water abstractions are recorded within 1 km of the Site.</p> <p>The available BGS borehole information indicated groundwater to be present at approximately 13.90 m bgl.</p>
Hydrology	<p>The Envirocheck® Report indicates that the nearest surface water features are a drain and a pond located in the east of the Site, in the wooded area known as Bulmer Coppice. A drain is also present along the north-western boundary of the Site.</p> <p>According to the Envirocheck® Report, there are no licensed abstraction records from surface water located within 1 km of the Site.</p> <p>EA online flood risk maps indicate that the Site is not at risk of flooding from rivers, the sea or reservoirs. Furthermore, the majority of the Site is indicated to be at very low risk of flooding from surface water, with the exception of areas in the vicinity of on-Site drains, and the pond in Bulmer Coppice in the south-east of the Site.</p> <p>BGS data included within the Envirocheck® Report indicates that the Site has limited potential for groundwater flooding to occur.</p>
Coal Mining, Ground Stability Hazards & Estimated Soil Chemistry	<p>According to the Envirocheck® Report, the Site is not located within an area which is affected by coal mining.</p> <p>BGS data included in the Envirocheck® Report indicates that the Site has a no hazard to very low hazard potential of collapsible, compressible, ground dissolution, landslide and running sand ground stability hazards. The north-west of the Site has a low hazard potential of shrinking or swelling clay ground stability hazards.</p> <p>The Envirocheck® Report indicates that the Site has generally low concentrations of arsenic, cadmium, chromium, lead and nickel, but may have higher concentrations (40-60 mg/kg) of chromium in the north-west of the Site. These indicative concentrations have not been identified to exceed the generic assessment criteria (GAC) in the context of a residential with plant uptake end-use.</p>
Radon Gas	<p>The Site lies within a lower probability radon area, where less than 1% of homes are estimated to be at or above the Action Level, therefore, no radon protective measures are necessary in the construction of new dwellings or extensions at the Site.</p>
Ecological Receptors	<p>It is understood from information provided within the Envirocheck® Report that the Site is located within a Nitrate Vulnerable Zone (NVZ) and Bulmer Coppice, in the east of the Site, is recorded as an Ancient Woodland. No other ecological receptors are recorded within 250 m of the Site.</p>
Heritage Interest	<p>According to sketchmap.co.uk, Rackheath Hall, located approximately 326 m east of the Site, is Grade II Listed. Furthermore, a bridge, located approximately 460 m east of the Site, is also Grade II Listed.</p>
Preliminary Unexploded	<p>General</p>

<p>Ordnance (UXO) Risk</p>	<p>There is the potential that during any future ground investigation works and sub-surface groundworks during redevelopment, any UXO located beneath the Site (if present), could be triggered and detonate, therefore, a Preliminary UXO Risk Assessment has been undertaken.</p> <p>The main source of UXO within the UK are from: military activities/sites; explosive manufactories; and bombs dropped during WWI and WWII.</p> <p>It should be noted that there is a lack of publicly available information relating to UXO sources (e.g. some military sites were not shown on historical maps) and to obtain specific information for the Site, even if information is available publicly, it could be difficult to find (e.g. within newspaper articles). The following provides an assessment primarily based on the largest threat of UXO - from Unexploded Bombs (UXB) during WWII. It is recommended that the future construction contractors consider what sub-surface works they will undertake and assesses their own health and safety risks.</p> <p>Site Specific Assessment</p> <p>From historical information available for the Site, while military activities and explosives manufacturing have not been identified at or close to the Site, the Site is close to a major city, Norwich.</p> <p>According to the Regional Unexploded Bomb Risk Map obtained by Zetica (provided in Appendix E), the Site lies at the edge of both high and low regional bomb risk categories predominantly owing to utilities, industrial and transport infrastructure associated with Norwich.</p> <p>The Site has not undergone significant post world war development and the Site is considered likely to have been in agricultural use during the war. Located to the east of Norwich, the potential for the Site to have been used as a decoy for German air bomb raids cannot be discounted and in any case the local population is likely to have been low and the potential for bombs to have landed unnoticed would remain a possibility.</p> <p>The highest risk of encountering aerial delivered UXO is during high density piles and deep/large scale excavations (e.g. basements). Given the anticipated geology and likely competence of the ground in the context of a residential development, it is considered unlikely that either of these will be required and excavations are likely to be restricted to relatively shallow depth associated with traditional shallow foundations and associated services/ drainage infrastructure.</p> <p>Following the risk assessment process discussed above; in combination with the high regional bomb risk and lack of post war development it is considered that there would be a low to moderate risk that UXO will be encountered during proposed intrusive investigation works involving borehole drilling/ trial pit excavations; but that a moderate risk would apply in a development context; assuming currently perceived extent of likely ground disturbance and construction techniques as anticipated above.</p> <p>It is, therefore, recommended all groundworks contractors review their proposed methods of works and undertakes appropriate Health and Safety assessment. In view of the moderate overall risk and scale of the development, it is considered a detailed specialist UXO assessment should be undertaken in accordance with C681 2009 to clarify the risks and scope of potential UXO mitigation approaches (or combination of approaches) which could be adopted.</p> <p>As a minimum, it is recommended Site staff should be made aware of the potential for UXO hazards to be present and that discussion and responses to these risks be included in the Site Health & Safety programme for the duration of the project.</p>
<p>Environmental Sensitivity</p>	<p>The Site is considered to be of a moderate environmental sensitivity given the presence of underlying Secondary A and Principal Aquifers, the agricultural use of the Site and surrounding land and the area of ancient woodland in the south-east of the Site.</p>

2.3 Historical Use of the Site & Surrounding Area

Approach	The historical development of the Site and surrounding area has been assessed through a review of available historical OS maps and Google Earth historical satellite imagery. A summary of the key historical Site uses and developments in the surrounding area is presented below. Copies of pertinent historical maps are included as Appendix C.
Historical Features On-Site	<p>From the earliest available mapping of 1885, the Site appears to have been in agricultural use, with an area of woodland, labelled as Bulmer Coppice, and a pond in the south-eastern area of the Site. A pond was also present in the west of the Site until at least circa 1957 (potentially infilled). White House Farm was shown to the west of the Site until present day.</p> <p>By 1971, drains were labelled in the central area of the Site and in Bulmer Coppice in the south-east. The drain in the centre of the Site was no longer present by circa 1985.</p> <p>By circa 1985, a further drain was labelled along the north-western boundary of the Site and a track was shown through Bulmer Coppice in the south-eastern corner.</p> <p>By circa 1986, the central area of the Site, adjacent to White House Farm, was shown to be in agricultural use with an area of orchard and the Site resembled its current layout.</p> <p>The potentially infilled pond in the west of the Site is considered to represent a potential source of contamination.</p>
Potentially Contaminative Historical Features Off-Site	<p>Potential sources of contamination within 250 m of the Site include:</p> <ul style="list-style-type: none"> ▲ A Gravel Pit located adjacent to the east of the Site from circa 1985, labelled as a Refuse Tip by circa 1989; and ▲ A Refuse Tip, located adjacent to the Site from circa 1989 and shown to be covered with grass by 1999 aerial photography. <p>It is considered that the gravel pit and refuse tip identified off-Site represent potential sources of contamination.</p>

2.4 Environmental Database Review

Approach	The Landmark Envirocheck® Report provides a database of environmental information held by various statutory bodies including the EA, Local Authority (LA), Health & Safety Executive (HSE) and HPA amongst others. A full copy of the Envirocheck® Report is provided in Appendix D and the most relevant information is summarised below.
Features On-Site	The Landmark Envirocheck® Report does not contain any records (other than previously mentioned) pertaining directly to the Site.
Potentially Contaminative Features Off-Site	<p>Pertinent entries included within the Landmark Envirocheck® Report located within 250 m of the Site include:</p> <ul style="list-style-type: none"> ▲ One Discharge Consent located approximately 25 m south-east of the Site, relating to the release of unknown discharge into an unknown watercourse, dated November 1990, revoked in October 1996; ▲ One BGS Recorded Mineral Site located approximately 85 m south-east of the Site, relating to Sprowston Grange Pit (ceased), which is recorded as an opencast facility for the extraction of sand and gravel; and ▲ Three Contemporary Trade Directory Entries (active and inactive), the nearest of which is located approximately 30 m east of the Site and relates to case manufacturers (inactive). The nearest active entry relates to car dealers, located approximately 115 m south-east of the Site.

	<p>The following entries relate to a former landfill located adjacent to the east of the Site:</p> <ul style="list-style-type: none"> ▲ One Licensed Waste Management Facility (Landfill Boundaries) located 10 m east of the Site, dated December 1988, categorised as a household, commercial and industrial waste site (closed); ▲ One Licensed Waste Management Facility (Locations) located approximately 175 m east of the Site, dated December 1988, listed as closed; ▲ One Registered Landfill Site located approximately 170 m east of the Site, recorded as having a large (equal to or greater than 75,000 and less than 250,000 tonnes per year) input rate, with authorised waste including Norfolk Cat. A non-decomposing waste and Norfolk Cat.B general waste (slow decomposition). The landfill is recorded as closed, dated December 1988; and ▲ Two Public Infrastructure Points of Interest located approximately 115 m and 130 m east of the Site, relating to a refuse tip and a disused refuse tip respectively.
<p>Implications for Land Contamination Risk</p>	<p>No potential sources of contamination have been identified at the Site from the regulatory information. The historical landfill to the east of the Site is considered to represent a potential off-Site source of contamination and will be considered in the preliminary risk assessment. Whilst other potentially contaminative sources have been identified off-Site, given their distance from the Site and the time elapsed since activity ceased, they are not considered to represent a significant risk to the Site.</p>

2.5 Planning Review / Regulatory Enquiries

<p>On-line Planning Portal</p>	<p>Broadland District Council</p>	<p>Date Accessed</p>	<p>03/05/17</p>
<p>Findings</p>	<p>No planning applications pertaining to the Site have been identified from Broadland District Council's online planning database.</p>		
<p>Part 2A of the Environmental Protection Act (EPA) 1990</p>	<p>The Contaminated Land Officer (CLO) confirmed that the Site is not on the Council's list of potential sites for inspection under Part 2A.</p> <p>The CLO noted that there are some small areas of potentially infilled land located on-Site, which were considered unlikely to pose a significant risk to current land use, however, if the Site is to be considered for residential use, they may need to be considered further.</p>		

3.0 Conceptual Site Model

3.1 Introduction

A Conceptual Site Model (CSM) represents the relationships between contaminant sources, pathways and receptors, to support the identification and assessment of Possible Pollutant Linkages (PPL).

3.2 Potential Contamination Sources

Identified potential contamination sources are presented in the following table:

Reference	Source	Location	Dates Present	Potential Associated Contaminants of Concern
S1	Agricultural use of the Site	On-Site	Pre-1882 to present	Pesticides, herbicides and localised hydrocarbon contamination
S2	Potentially infilled pond	In the west of the Site	From 1882, no longer present by 1986	Hazardous ground gases
S3	Gravel pit	Adjacent to the east of the Site	From 1985, but labelled as a refuse tip by circa 1989	Hazardous ground gases
S4	Historical landfill	10 m to 175 m east of the Site	From 1988, no longer present by 1999	Hazardous landfill gases, leachates*

* Based on UK Department of the Environment Industry Profiles

3.3 Potential Receptors

Relevant potential receptors are considered to include:

- ▲ R1 - Construction workers.
- ▲ R2 - Third parties during construction (adjacent Site users and adjacent residents).
- ▲ R3 - Future Site residents and maintenance workers.
- ▲ R4 – Drains and ponds on-Site.
- ▲ R5 - The underlying aquifers.
- ▲ R6 - The Built Environment (new buildings and infrastructure / utilities).

3.4 Potential Pathways

The potential pathways are considered to be as follows:

- ▲ P1 - Direct contact, ingestion or inhalation of soil bound contaminants / dust during or following redevelopment.
- ▲ P2 - Inhalation of organic vapours associated with contamination.
- ▲ P3 - Migration of ground gas / vapours into on-site buildings causing asphyxiation or risk of explosion.

- ▲ P4 - Leaching of contamination into groundwater followed by migration of groundwater to the wider groundwater environment or discharge to surface waters.
- ▲ P5 - Direct contact between aggressive ground conditions and new infrastructure.

Pollutant Linkage Assessment					
Source(s)	Pathway(s)	Receptor(s)	Risk Rating	Justification & Mitigation (if required)	Requires Investigation
S1 Agricultural land use of the Site	P1, P2, P3, P4, P5	R1, R2, R3, R4, R5, R6	Low Risk	<p>Any contamination present at the Site is considered likely to be highly localised (if present at all) and unlikely to represent a significant risk to the receptors identified.</p> <p>Potential risk to residents of the proposed development is likely to be easily mitigated via the incorporation of a topsoil capping system in garden areas (topsoil for which could be sourced from the Site, subject to appropriate confirmation testing), and risk to groundworkers is considered to be low following implementation of safe working procedures, and good standards of personal hygiene and appropriate levels of personal protective equipment (PPE) are adopted</p>	Y
S1 Potentially infilled pond	P1, P2, P3, P4	R1, R2, R3, R6	Low Risk	<p>Given the presence of a potentially infilled pond in the west of the Site, it is considered that a localised area of Made Ground may exist and subsequently, the presence of contamination cannot be discounted. It is recommended that the presence and matrix of any Made Ground is confirmed through an intrusive investigation at the Site.</p> <p>The risk posed to future residents is considered low as only limited inert Made Ground is anticipated. A clean layer of certified suitable for use topsoil may be required in garden areas and any landscaped areas to mitigate the risk of direct contact.</p> <p>The risk posed to construction workers and off-Site human receptors during the redevelopment of the Site is considered low as safe working procedures should be implemented, good standards of personal hygiene should be observed and appropriate levels of personal protective equipment (PPE) provided and utilised to reduce the potential risks.</p> <p>The risk posed by hazardous ground gases is considered low as it is anticipated that Made Ground is likely to be shallow and limited in extent. However, it is considered prudent to undertake a ground gas risk assessment at the time of any environmental assessment, in order to confirm the ground gas regime beneath the Site, and potential requirement for ground gas protection measures within new buildings.</p>	Y

Pollutant Linkage Assessment					
Source(s)	Pathway(s)	Receptor(s)	Risk Rating	Justification & Mitigation (if required)	Requires Investigation
				There is considered to be a plausible pollutant linkage between the potentially limited Made Ground and the underlying aquifers and the adjacent watercourses. However, contamination sources are historical and any mobile contaminants may have already migrated and / or degraded.	
S2 Gravel pit	P3	R1, R3, R6	Low Risk	<p>There is potential for migration of hazardous ground gases onto the Site from the adjacent historical gravel pit, given the probable low to moderate permeability of the superficial deposits across the Site.</p> <p>It is recommended that a ground gas risk assessment is undertaken at the time of any environmental investigation at the Site, in order to confirm the ground gas regime beneath the Site, and potential requirement for ground gas protection measures within new buildings.</p>	Y
S3 Historical landfill	P1, P2, P3, P4,	R1, R2, R3, R4, R5, R6	Low to Moderate Risk	<p>There is potential for migration of hazardous ground gases and mobile contaminants onto the Site from the adjacent historical landfill, given the probable low to moderate permeability of the superficial deposits across the Site and the presence of a drain in the vicinity of the former landfill, in the south-east of the Site.</p> <p>The risk posed to future residents is considered to be low to moderate, given the potential for mobile contaminants to be present.</p> <p>The risk posed to construction workers and off-Site human receptors during the redevelopment of the Site is considered low as safe working procedures should be implemented, good standards of personal hygiene should be observed and appropriate levels of personal protective equipment (PPE) provided and utilised to reduce the potential risks.</p> <p>The risk posed by hazardous ground gases is considered low to moderate, given the ground gas generation potential from the historical landfill. It is recommended that a ground gas assessment is undertaken at the time of any environmental investigation at the Site in order to confirm the ground gas regime beneath the</p>	Y

Pollutant Linkage Assessment					
Source(s)	Pathway(s)	Receptor(s)	Risk Rating	Justification & Mitigation (if required)	Requires Investigation
				<p>Site, and potential requirement for ground gas protection measures within new buildings.</p> <p>There is considered to be a plausible pollutant linkage between any mobile contaminants and the underlying aquifers and the adjacent watercourses. Although contamination sources are historical and any mobile contaminants may have already migrated and / or degraded, it is recommended that an environmental investigation is undertaken at the Site in order to confirm the absence/presence of contamination.</p>	

4.0 Preliminary Ground Engineering Appraisal

4.1 Preliminary Ground Model

Based on the available information, it is anticipated that the Site is likely underlain by a sequence of Topsoil, which is in turn underlain by Glacial Till in the north-west and part of the western area of the Site, but otherwise over the Sherringham Cliffs Formation (Sand & Gravel), followed by solid geology comprising the Crag Group (Sand & Gravel) and the Lewes Nodular Chalk. BGS boreholes located approximately 50 m and 80 m west of the Site indicated groundwater to be present at approximately 13.90 m bgl.

4.2 Plausible Geohazards

A review of available information, including BGS data within the Envirocheck® Report, indicates that the Site has a no hazard to very low hazard potential of collapsible, compressible, ground dissolution, landslide and running sand ground stability hazards. The north-west of the Site has a low hazard potential of shrinking or swelling clay ground stability hazards. Accordingly, it is considered that there are no substantial ground related risks associated with the proposed development.

5.0 Development Considerations

5.1 Potential Remediation Requirements & Solutions

Soils	<p>The risk of the Site requiring widespread remediation to protect end users is considered to be low. Imported clean topsoil and subsoil may be required in garden and landscaped areas, in line with BS3882:2015, although Site derived materials may be suitable for re-use, subject to appropriate testing.</p> <p>If contamination and / or asbestos containing materials (ACM) are identified, then this may have an impact on waste disposal costs.</p>
Groundwater	<p>Significant widespread groundwater contamination is not anticipated.</p>
Ground Gas	<p>The potential for ground gas to migrate onto the Site from the historical gravel pit and landfill to the east of the Site is considered to be low to moderate.</p> <p>A period of ground gas monitoring should form part of any environmental investigation at the Site in order to confirm the ground gas regime and requirement for any ground gas protection measures within new buildings.</p>
Building Fabric & Services	<p>Widespread contamination at the Site is considered unlikely. However, services are recommended to be placed in clean corridors. A drinking water pipeline assessment may be required following soils chemical results. Aggressive ground chemistry may attack buried concrete and therefore there may be a requirement for protection measures to be put in place at the Site.</p>

5.2 Geotechnical Considerations

Foundations & Floor Slabs	<p>The shallow ground conditions are anticipated to comprise Topsoil, underlain by Glacial Till in the north-west and part of the western area of the Site, but otherwise over the Sherringham Cliffs Formation (Sand & Gravel).</p> <p>Traditional shallow foundations and ground bearing floor slabs may be suitable, given that the proposed residential development is likely to comprise low-rise, lightly loaded structures.</p> <p>A geotechnical ground investigation is recommended in order to confirm ground conditions and inform subsequent foundation design.</p>
Groundworks	<p>The borehole logs from the surrounding area indicate groundwater to be at approximately 13.90 m bgl. Therefore, this is not expected to cause problems with excavation at the Site. This should be confirmed during recommended ground investigation works at the Site.</p> <p>Given that the Site is predominantly level, with the exception of the central area, it is considered that significant cut and fill earthworks will not be required.</p>
UXO	<p>Following the C681 risk assessment process; in combination with the high regional bomb risk and lack of post war development it is considered that there would be a low to moderate risk that UXO will be encountered during proposed intrusive investigation works involving borehole drilling/ trial pit excavations; but that a moderate risk would apply in a development context; assuming currently perceived extent of likely ground disturbance and construction techniques anticipated.</p> <p>It is, recommended all groundworks contractors review their proposed methods of works and undertakes appropriate Health and Safety assessment. In view of the moderate overall risk and scale of the development, it is considered a detailed</p>

	specialist UXO assessment should be undertaken in accordance with C681 2009 to clarify the risks and scope of potential UXO mitigation approaches (or combination of approaches) which could be adopted.
External Works	California Bearing Ratio testing will be required to determine road construction thickness. Consideration will need to be given for the potential for differential settlement to affect road surfaces and services and appropriately mitigated within the design.
Ground Instability	No plausible ground instability issues have been identified at the Site.

6.0 Conclusions & Recommendations

6.1 Land Contamination

<p>Contamination Risks Associated with Ownership (Current Use)</p>	<p>There is considered to be a Low risk of enforcement action by the regulatory authorities under Part 2A of the Environmental Protection Act, the Water Resources Act or the Environmental Damage Regulations, whilst the Site remains in its current agricultural use. The potential for legal action by surrounding landowners / Third Parties based on the potential for contamination to migrate off-Site (ongoing or historically) is considered to be Low.</p>
<p>Potential Contaminated Land Development Risks</p>	<p>Widespread contamination is considered unlikely and the preliminary risk assessment has identified a Low to Moderate risk of soil/groundwater contamination and hazardous ground gas at the Site. Asbestos may be present within any Made Ground.</p>
<p>Plausible Geotechnical Development Risks</p>	<p>No substantial geotechnical development risks have been identified at the Site.</p>
<p>Recommendations</p>	<p>Potential off-Site sources of contamination have been identified, therefore, a geo-environmental ground investigation is recommended to ascertain the following:</p> <ul style="list-style-type: none"> ▲ Presence, thickness and nature of any Made Ground; ▲ Presence and concentrations of substances of concern in shallow soils (including Made Ground) on-Site; ▲ Presence of substances of concern in any perched water/soil pore water or shallow groundwater beneath Site; ▲ Likelihood of significant ground gas and/or soil vapour intrusion into future on-Site and off-Site buildings; and ▲ Confirmation of ground conditions and soil properties for foundation design; and ▲ A detailed specialist UXO assessment should be undertaken in accordance with C681 2009 to clarify the risks and scope of potential UXO mitigation approaches (or combination of approaches) which could be adopted. As a minimum, it is recommended Site staff should be made aware of the potential for UXO hazards to be present and that discussion and responses to these risks be included in the Site Health & Safety programme for the duration of the project.

Figure 3 – Key Site Features Plan

PH01: Looking north across the Site.



PH02: Water tank and containers of plant feed.



PH03: Evidence of a fire in the west of the Site.



PH04: Cider production shed and car park.



PH05: Unidentified pipework associated with the cider production shed.



PH06: Looking south across the Site towards Salhouse Road.



TITLE:
Key Site Features Plan
White Lands, Parcels R5-R10
Sprowston, Norwich

DWN:	GT	SCA:	Not to scale	PROJECT NO.:	17-0337.01
CHK:	TH	REV:	-	FIGURE NO.:	3
DATE:	June 2017				

Appendix A - Limitations

Limitations

The recommendations contained in this Report represent Delta-Simons professional opinions, based upon the information listed in the Report, exercising the duty of care required of an experienced Environmental Consultant. Delta-Simons does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions.

Delta-Simons obtained, reviewed and evaluated information in preparing this Report from the Client and others. Delta-Simons conclusions, opinions and recommendations has been determined using this information. Delta-Simons does not warrant the accuracy of the information provided to it and will not be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

Appendix B – Risk Definitions

Land Contamination Risk Definitions

The following methodology is based on the methodology presented in CIRIA C552 Contaminated Land Risk Assessment: A Guide to Good Practice 2001. It requires the classification of the:

- △ Magnitude of the potential consequence (severity) of the Risk occurring: and
- △ Magnitude of the Probability (likelihood) of the Risk occurring.

The classifications are then compared to indicate the risk presented by each pollutant linkage.

Consequence to Receptor Definition Matrix

	Human Health	Controlled Waters	Buildings/Services
Severe Consequence	Acute or chronic permanent impact on human health.	Sensitive controlled water pollution ongoing, or just about to occur.	Catastrophic collapse
Medium Consequence	Chronic permanent impact on human health	Gradual pollution of sensitive controlled water	Degradation of materials
Mild Consequence	Chronic temporary impact on human health	Gradual pollution of non-sensitive controlled water	Damage to building rendering it unsafe to occupy (eg foundation damage resulting in instability).
Minor Consequence	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc).	Slight discoloration of water	Easily repairable effects of damage to buildings, structures and services, i.e discoloration of concrete

Probability Definitions

Probability	Definition in Context
Higher	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution. Positive evidence of source, pathway and receptor.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term. Suspect source, pathway, and receptor
Low Likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term No evidence of hazard, pathway, and receptor

Standard Risk Matrix

		Consequence/ Magnitude of impact			
		Severe	Medium	Mild	Minor
Probability	High	Very High	High	Moderate	Moderate/Low
	Likely	High	Moderate	Moderate/low	Low
	Low Likelihood	Moderate	Moderate/low	Low	Very Low
	Unlikely	Moderate/low	Low	Very Low	Very Low

Classified risks and likely action

Significance Level	Definition/Comments
Very High Risk	<p>There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening.</p> <p>This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.</p> <p>Demonstrable contaminated land situation, highest threat & liability level, urgent action recommended.</p>
High Risk	<p>Harm is likely to arise to a designated receptor from an identified hazard.</p> <p>Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.</p> <p>Likely contaminated land situation, risk assessment and action recommended.</p>
Moderate	<p>It is possible that harm could arise to a designated receptor from an identified hazard. However, if is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild</p> <p>Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.</p> <p>Plausible contaminated land situation, risk assessment and possible action recommended.</p>
Low Risk	<p>It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.</p> <p>Unlikely contaminated land situation, possible risk assessment and possible action.</p>
Very Low Risk	<p>There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.</p> <p>Negligible risk, no action recommended except vigilance for changes in conditions.</p>

Geotechnical Risk Definitions

The geohazards listed in the report within Section 4 follow guidance presented in Clayton, C.R.I. (2001) Managing Geotechnical Risk, Thomas Telford and the Highways Agency document HD22/08 'Managing Geotechnical Risk' (2008) which aims to identify and manage the geotechnical risks associated with a scheme throughout its lifespan, from planning to construction to maintenance.

For each geohazard the probability of the hazard occurring (P) has been considered together with the impact it would have (I) if it were to happen to calculate the risk rating between 1 and 25.

Risks that fall within Moderate, Significant and Severe categories below are considered to be substantial and are therefore listed within the report.

Probability	(P)
Very Likely (VLk)	5
Likely (Lk)	4
Plausible (P)	3
Unlikely (U)	2
Very Unlikely (VU)	1

X

Impact	(I)
Very High (VH)	5
High (H)	4
Medium (M)	3
Low (L)	2
Very Low (VL)	1

=

(R)	Risk
20 – 25	Severe
15 – 19	Substantial
10 – 14	Moderate
5 – 9	Minor
1 – 4	Negligible

Appendix C – Historical Maps

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

- Gravel Pit
- Sand Pit
- Other Pits
- Quarry
- Shingle
- Orchard
- Osiers
- Reeds
- Marsh
- Mixed Wood
- Deciduous
- Brushwood
- Fir
- Furze
- Rough Pasture
- Arrow denotes flow of water
- Trigonometrical Station
- Site of Antiquities
- Bench Mark
- Pump, Guide Post, Signal Post
- Well, Spring, Boundary Post
- 285** Surface Level
- Sketched Contour
- Instrumental Contour
- Main Roads
- Minor Roads
- Sunken Road
- Raised Road
- Road over Railway
- Railway over River
- Railway over Road
- Level Crossing
- Road over River or Canal
- Road over Stream
- Road over Stream
- County Boundary (Geographical)
- County & Civil Parish Boundary
- Administrative County & Civil Parish Boundary
- County Borough Boundary (England)
- County Burgh Boundary (Scotland)
- Rural District Boundary
- Civil Parish Boundary

Ordnance Survey Plan 1:10,000

- Chalk Pit, Clay Pit or Quarry
- Gravel Pit
- Sand Pit
- Disused Pit or Quarry
- Refuse or Slag Heap
- Lake, Loch or Pond
- Dunes
- Boulders
- Coniferous Trees
- Non-Coniferous Trees
- Orchard
- Scrub
- Coppice
- Bracken
- Heath
- Rough Grassland
- Marsh
- Reeds
- Saltings
- Building
- Glasshouse
- Sloping Masonry
- Pylon
- Electricity Transmission Line
- Pole
- Cutting
- Embankment
- Standard Gauge Multiple Track
- Standard Gauge Single Track
- Siding, Tramway or Mineral Line
- Narrow Gauge
- Geographical County
- Administrative County, County Borough or County of City
- Municipal Borough, Urban or Rural District, Burgh or District Council
- Borough, Burgh or County Constituency
- Civil Parish
- BP, BS Boundary Post or Stone
- Ch Church
- CH Club House
- F E Sta Fire Engine Station
- FB Foot Bridge
- Fn Fountain
- GP Guide Post
- MP Mile Post
- MS Mile Stone
- Pol Sta Police Station
- PO Post Office
- PC Public Convenience
- PH Public House
- SB Signal Box
- Spr Spring
- TCB Telephone Call Box
- TCP Telephone Call Post
- W Well

1:10,000 Raster Mapping

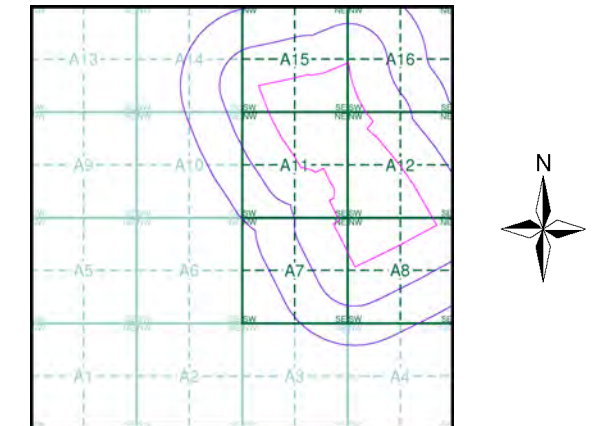
- Gravel Pit
- Rock
- Boulders
- Shingle
- Sand
- Slopes
- General detail
- Overhead detail
- Multi-track railway
- County boundary (England only)
- District, Unitary, Metropolitan, London Borough boundary
- Area of wooded vegetation
- Non-coniferous trees (scattered)
- Coniferous trees (scattered)
- Orchard
- Rough Grassland
- Scrub
- Water feature
- MHW(S) Mean high water (springs)
- Telephone line (where shown)
- Bench mark (where shown)
- Point feature (e.g. Guide Post or Mile Stone)
- Site of (antiquity)
- General Building
- Refuse tip or slag heap
- Rock (scattered)
- Boulders (scattered)
- Mud
- Sand Pit
- Top of cliff
- Underground detail
- Narrow gauge railway
- Single track railway
- Civil, parish or community boundary
- Constituency boundary
- Non-coniferous trees
- Coniferous trees
- Positioned tree
- Coppice or Osiers
- Heath
- Marsh, Salt Marsh or Reeds
- Flow arrows
- MLW(S) Mean low water (springs)
- Electricity transmission line (with poles)
- Triangulation station
- Pylon, flare stack or lighting tower
- Glasshouse
- Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1885 - 1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950	8
Ordnance Survey Plan	1:10,000	1957 - 1958	9
Ordnance Survey Plan	1:10,000	1971 - 1979	10
Norwich	1:10,000	1980	11
Ordnance Survey Plan	1:10,000	1985 - 1987	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Historical Map - Slice A



Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

	Government and Administrative Buildings		Military and Industrial Buildings
	Military and Communication Areas		Subway Entrance
	Fireproof Building		Prominent Fireproof Building
	Non-fireproof Building		Non-fireproof Building (non-dwelling)
	Factory, mill, and flour mill, with chimneys		Factory, mill, and flour mill, without chimneys
	Power Station, drawn to scale		Hydroelectric Power Station
	Radio Station, drawn to scale		Telephone Station, drawn to scale
	Abandoned Open-pit Mine or Quarry		Open-pit Salt Mine
	Pit		Oil Deposit or Well
	Oil Seepage		Natural Gas Tank
	Tailings Pile		Fuel Storage Tanks
	Bench Mark		Drill Hole
	Burial Mound		Triangulation Point on Burial Mound
	Single-track Railroad		Double-track Railroad
	Railroad and Station Building		Small Bridge
	Pipe (Culvert)		Tunnel
	Coniferous Forest		Deciduous Forest
	Mixed Forest		Lawns
	Citrus Orchard		Wet Ground
	Scattered Vegetation		

243,8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0,2 Velocity of the current, width of river bed, depth of river
180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

	Government and Administrative Buildings		Military and Industrial Buildings
	Military and Communication Areas		Subway Entrance
	Partly Demolished Buildings		Demolished Buildings
	Built-Up Area with Fireproof Buildings Predominant		Built-Up Area with Non-Fireproof Buildings Predominant
	Individual Fireproof Building		Prominent Industrial Building
	Individual Dwelling, Fireproof		Ruins of an Individual Dwelling
	Factory or Mill Chimney		Factory or Mill with Chimney
	Factory or Mill without Chimney		Salt Mine
	Operating Shaft or Mine		Non-Operating Shaft or Mine
	Tailings Pile		Gas Pump or Service Station
	Fuel Storage or Natural Gas Tank		Oil or Natural Gas Derrick
	Small Hydroelectric Power Station		Power Station
	Transformer Station		Cemetery
	Burial Mound (height in metres)		Triangulation Point on Burial Mound
	Triangulation Point		Bench Mark
	Bench Mark (monumented)		Telegraph Office
	Telephone Station		Radio Station
	Radio Tower		Airfield or Seaplane Base
	Landing Strip		Cut
	Fill		Km Post
	Plantings		Width of Road
	Steep Grade		Telegraph/Telephone Lines
	Main Highway		Highway under Construction
	Improved Dirt Road (former truck road)		Small Bridge
	Pipe (Culvert)		Tunnel
	Dismantled Railroad		Double-track Railroad with First Class Station
	Railroad Under Construction		Shore Embankment
	River or Ditch with Embankment		Water Gauge
	Direction and velocity of current		Water Level Mark
	Well		Spring
	Water Reservoir or Rain Water Pit		Isobath with value
	Heavy (Index) Contour Line		Half Contour Line
	Contour Line and Value		Spot Elevation Value
	Coniferous		Deciduous
	Mixed		Scrub

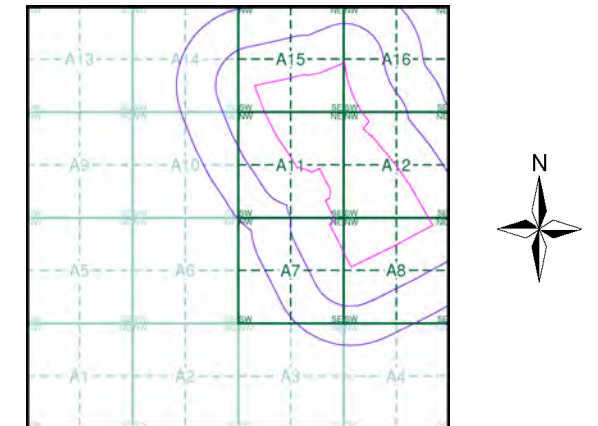
Key to Numbers on Mapping



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1885 - 1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
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Russian Map - Slice A



Order Details

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 Customer Ref: 17-0337.01.
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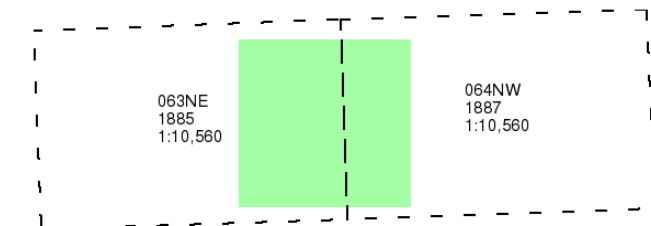
Norfolk

Published 1885 - 1887

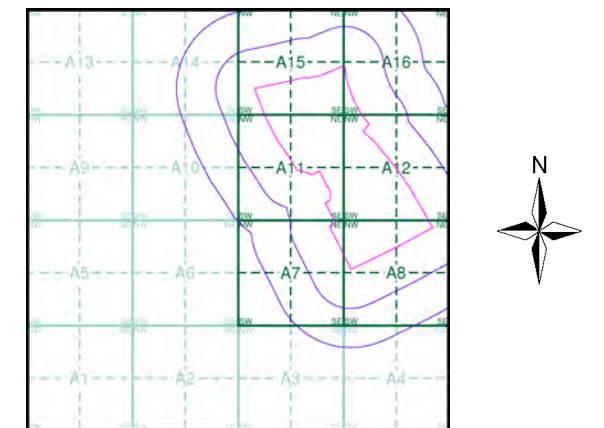
Source map scale - 1:10,560

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 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 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

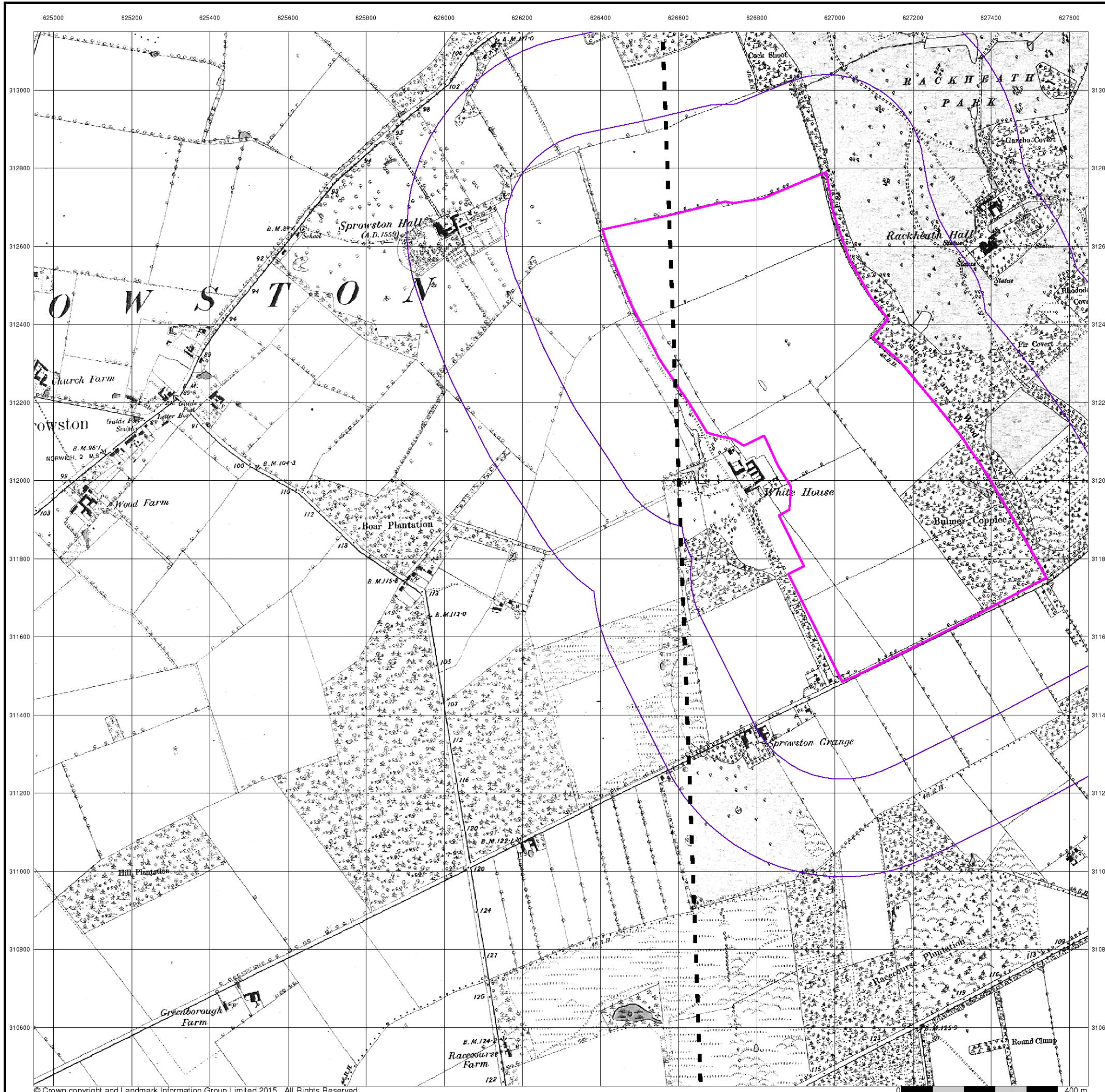


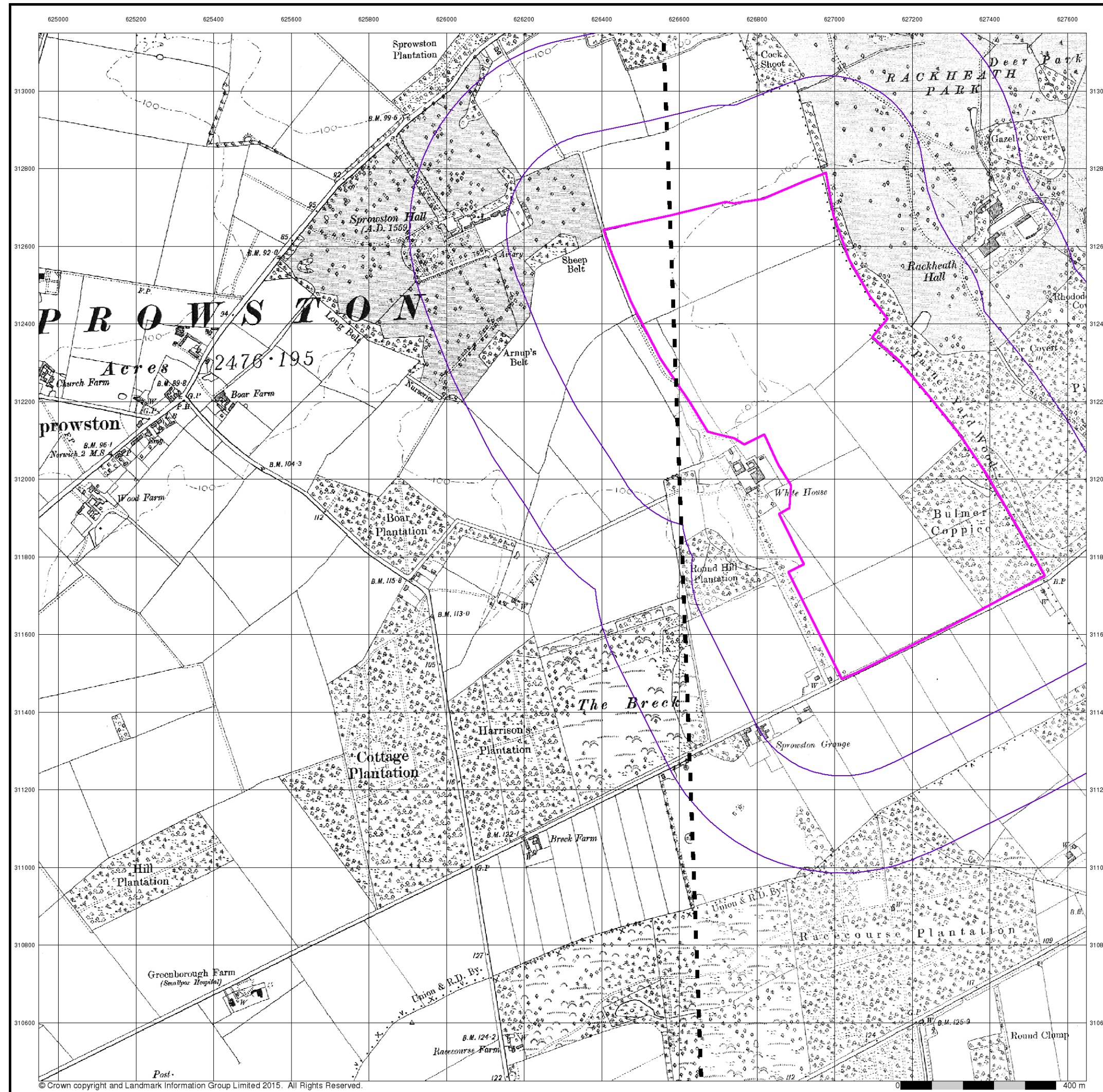
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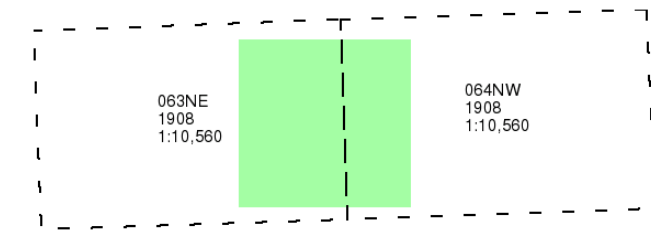




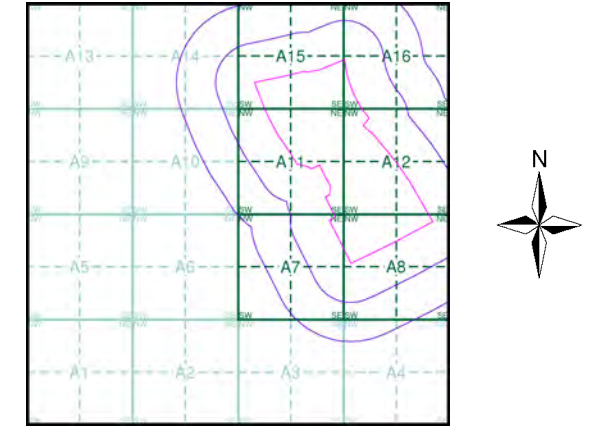
Norfolk
Published 1908
Source map scale - 1:10,560

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 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 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)



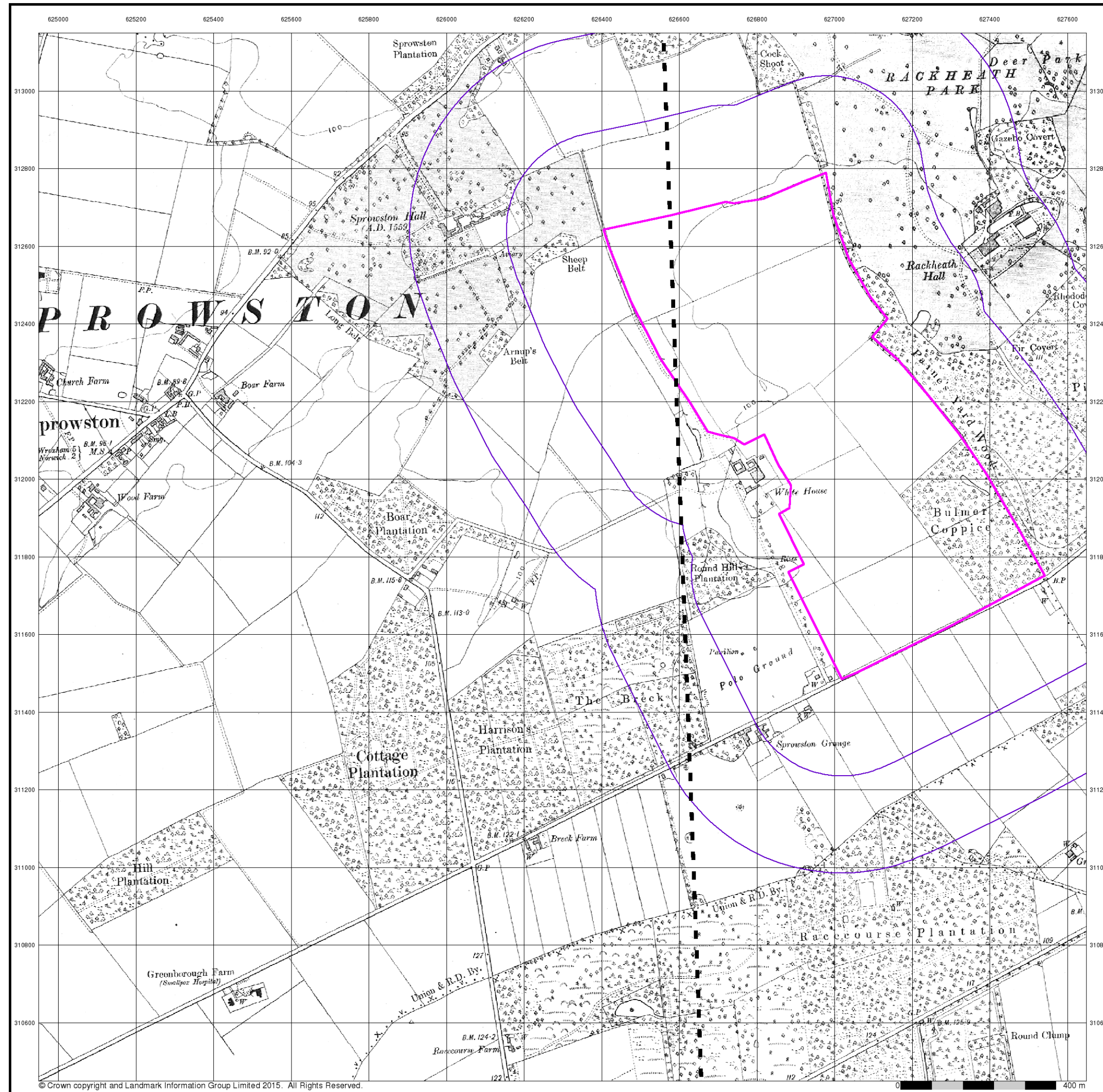
Historical Map - Slice A



Order Details
 Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details
 White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

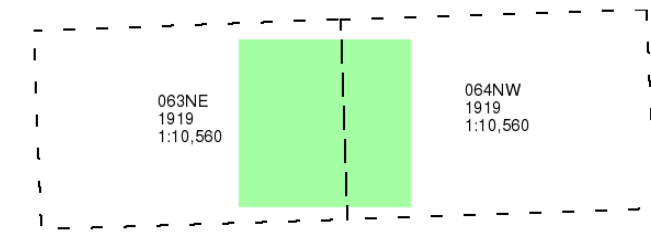
Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



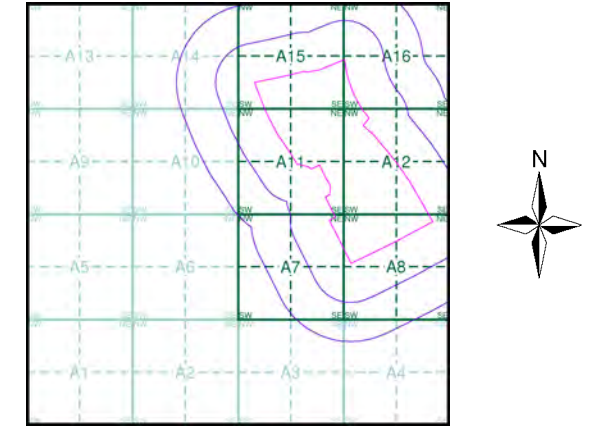
Norfolk
Published 1919
Source map scale - 1:10,560

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 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 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)



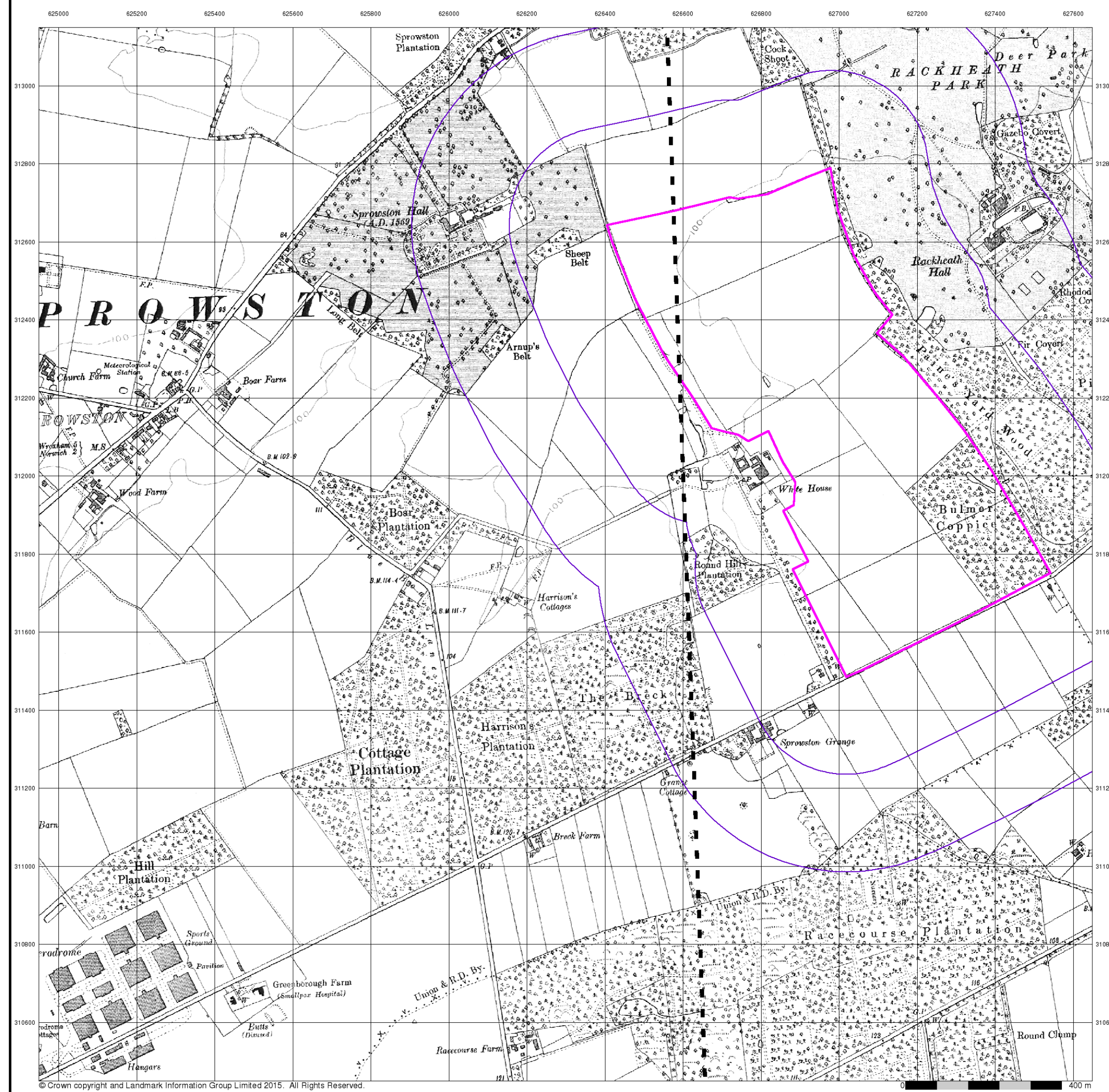
Historical Map - Slice A



Order Details
 Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details
 White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

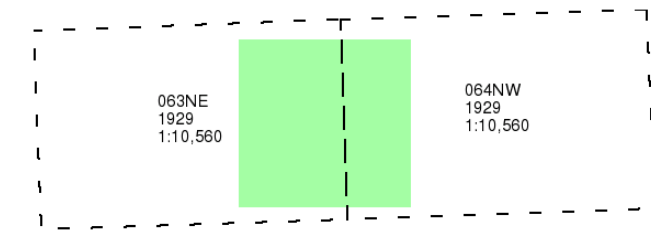
Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



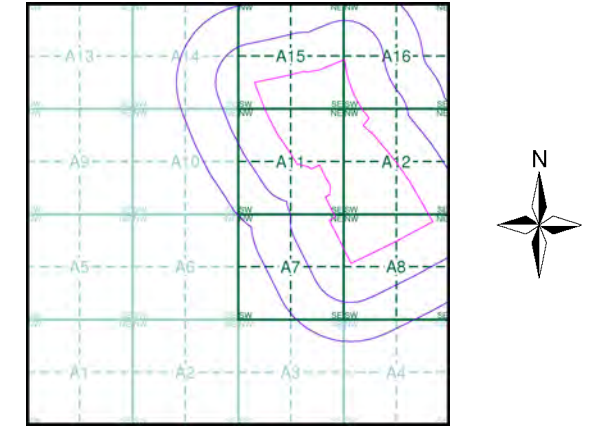
Norfolk
Published 1929
Source map scale - 1:10,560

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 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 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: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details
 White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

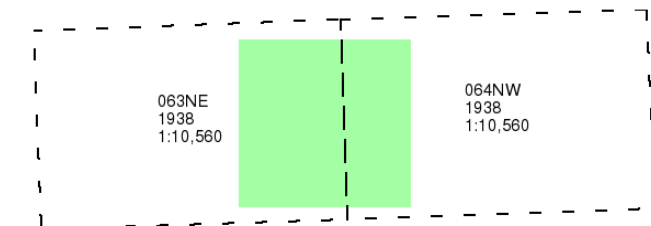
Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

Norfolk
Published 1938

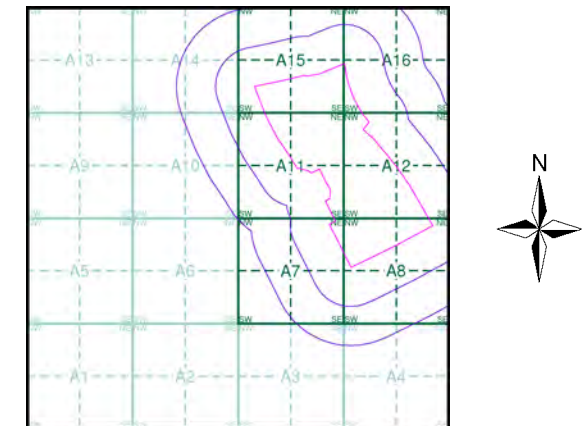
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 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 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

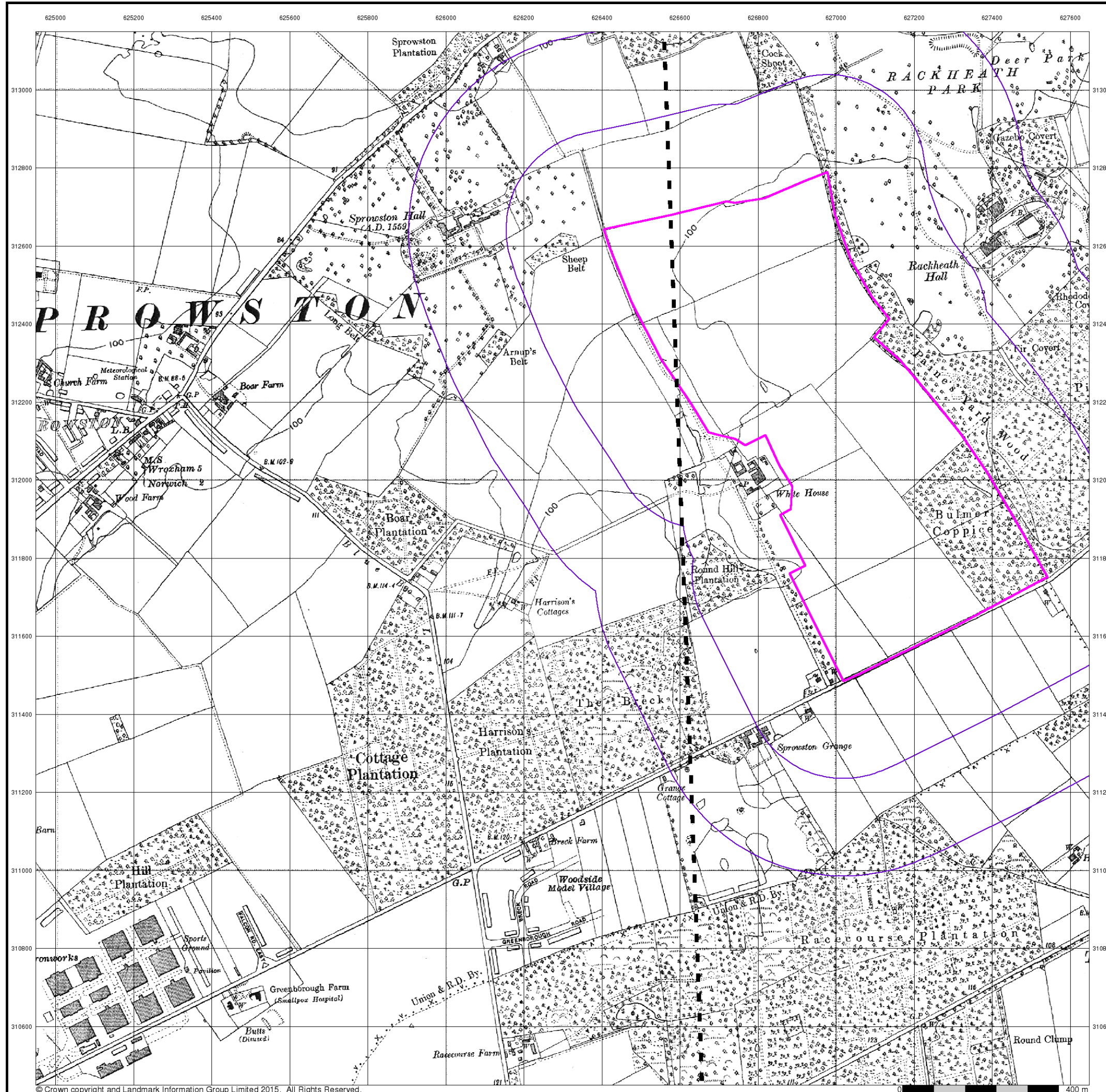


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



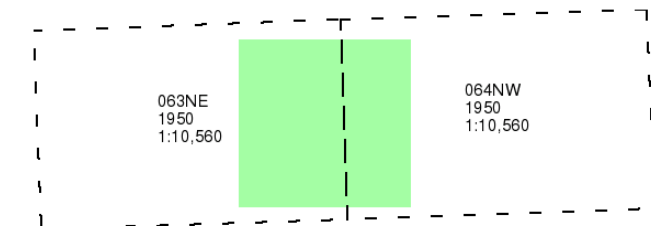
Norfolk

Published 1950

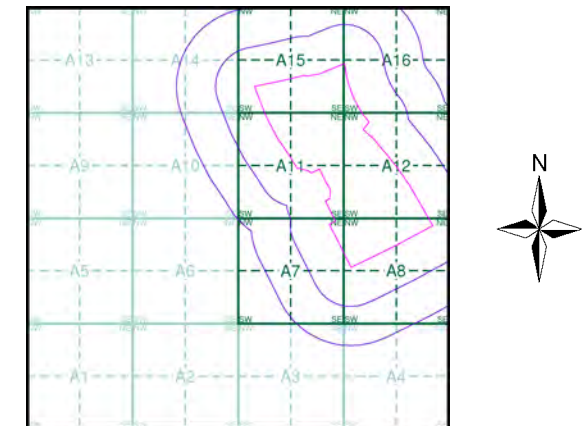
Source map scale - 1:10,560

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 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 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

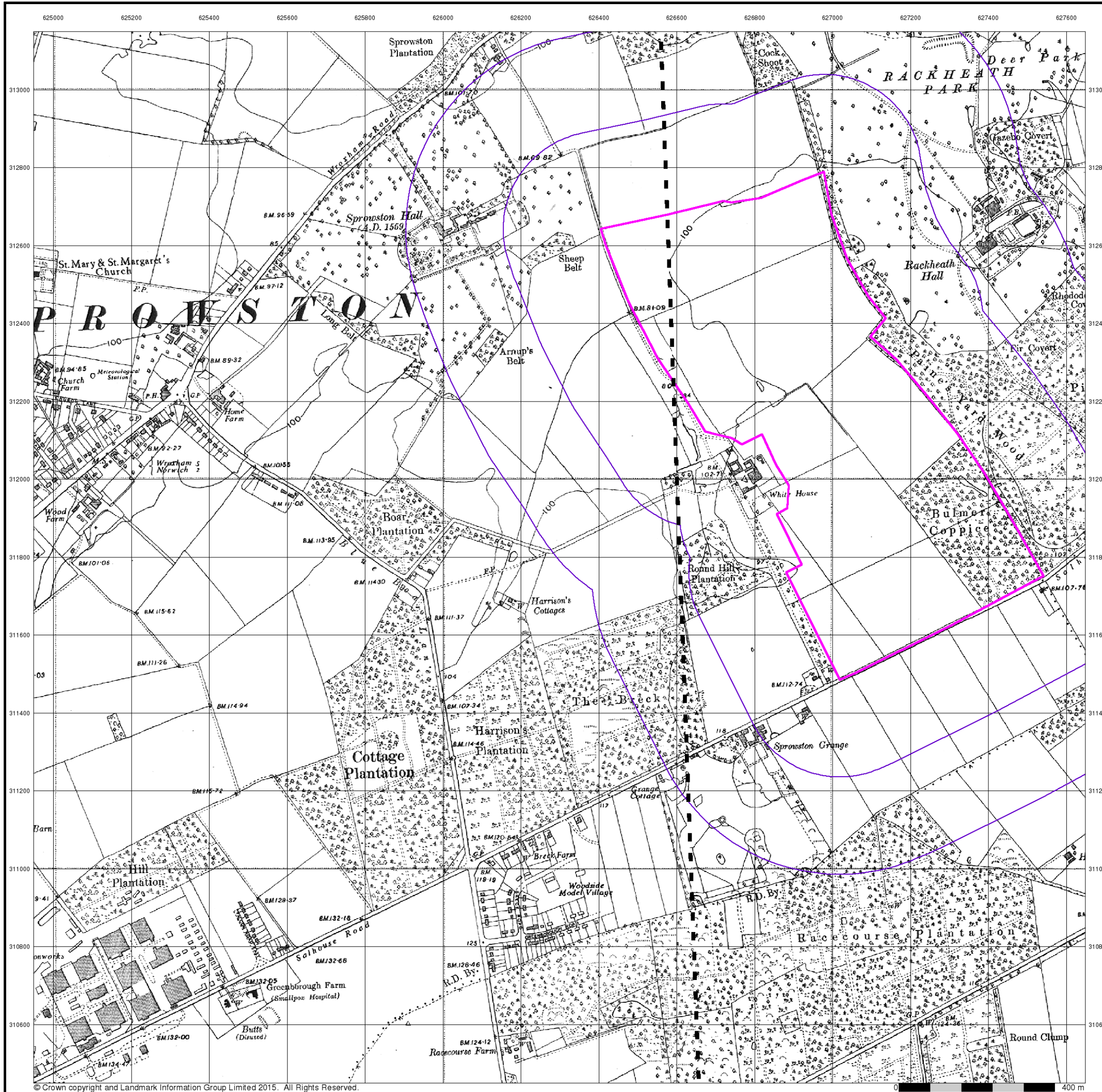


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



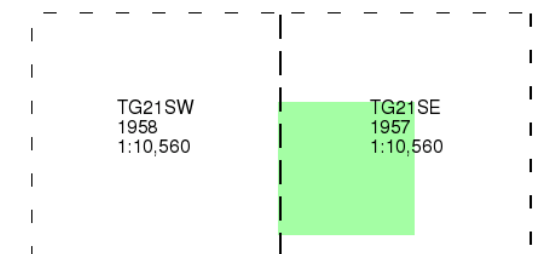
Ordnance Survey Plan

Published 1957 - 1958

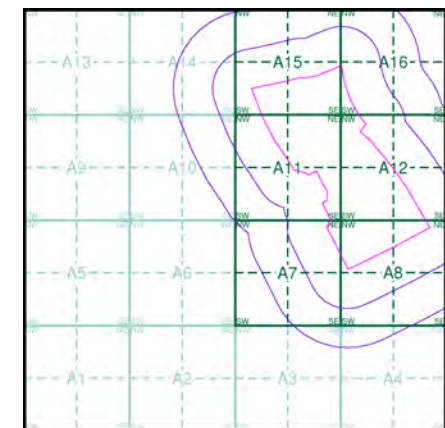
Source map scale - 1:10,000

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 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

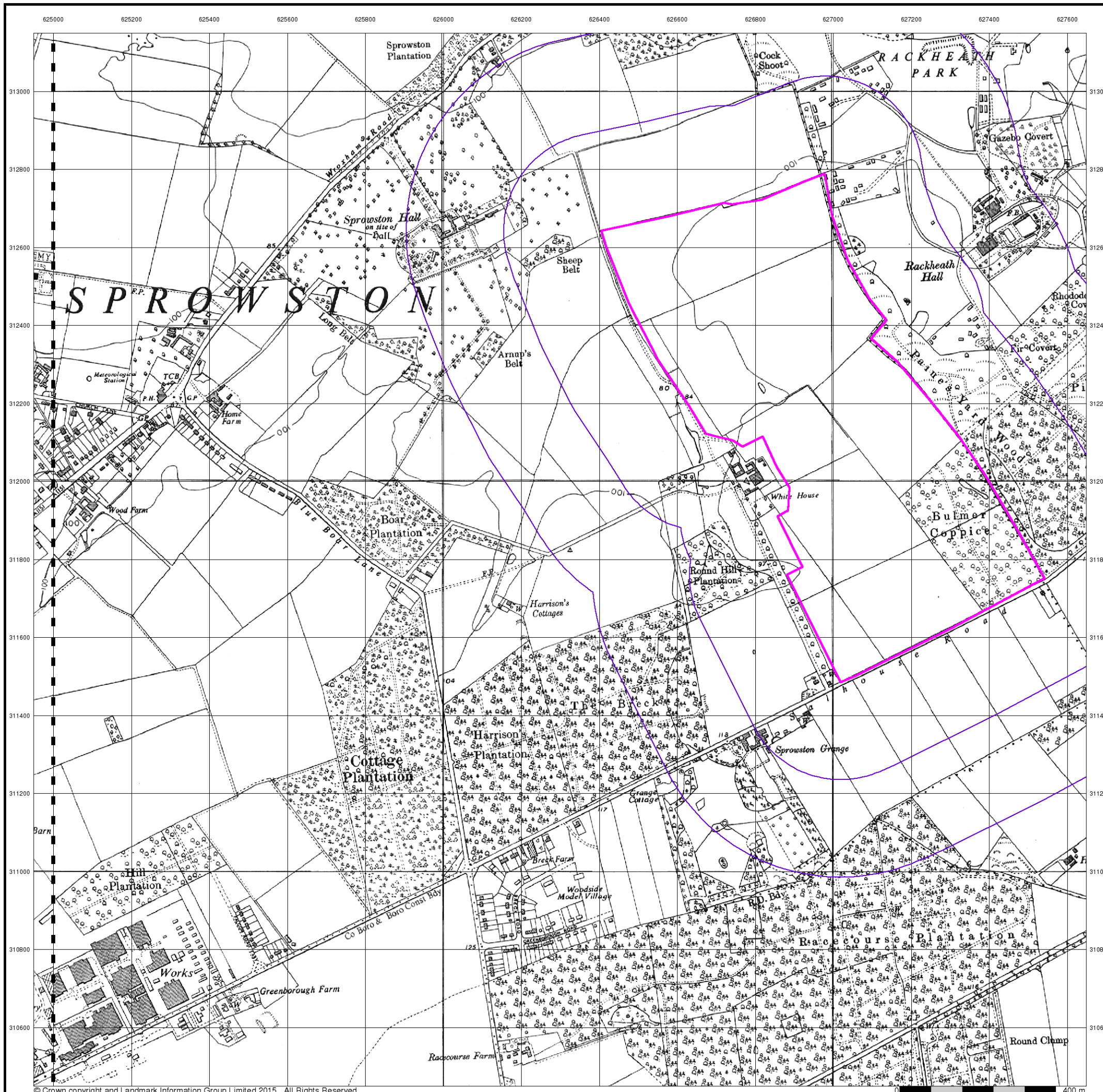


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
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 Slice: A
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 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



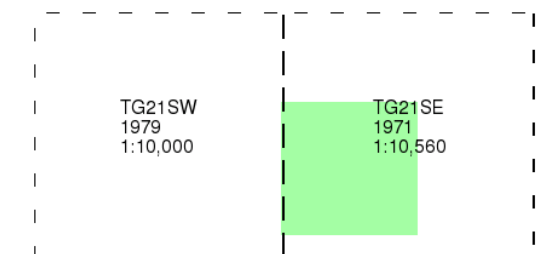
Ordnance Survey Plan

Published 1971 - 1979

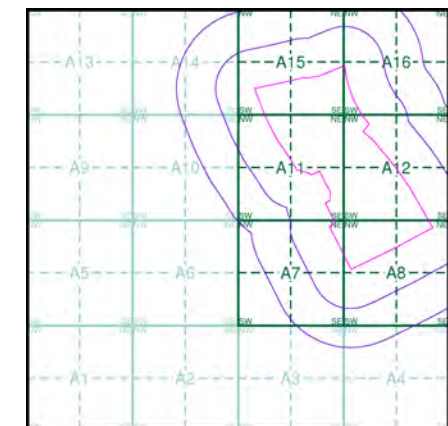
Source map scale - 1:10,000

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 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

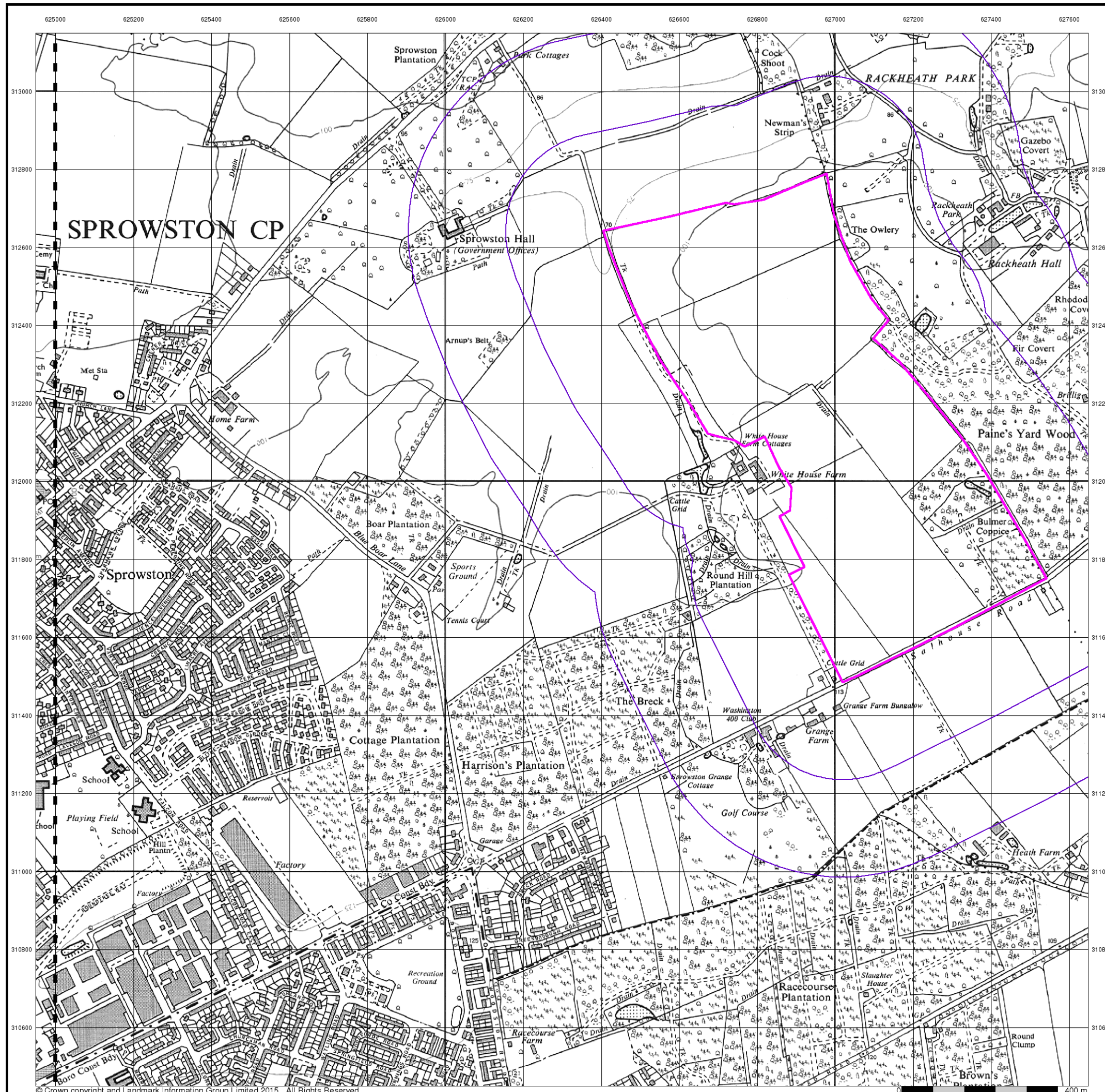


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626680, 311980
 Slice: A
 Site Area (Ha): 65.82
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Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



Norwich

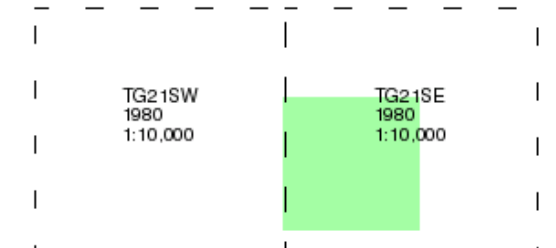
Published 1980

Source map scale - 1:10,000

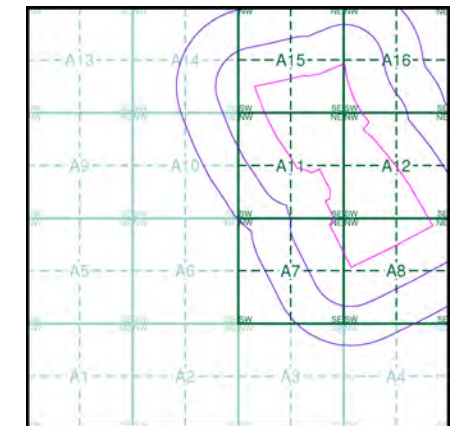
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)



Russian Map - Slice A

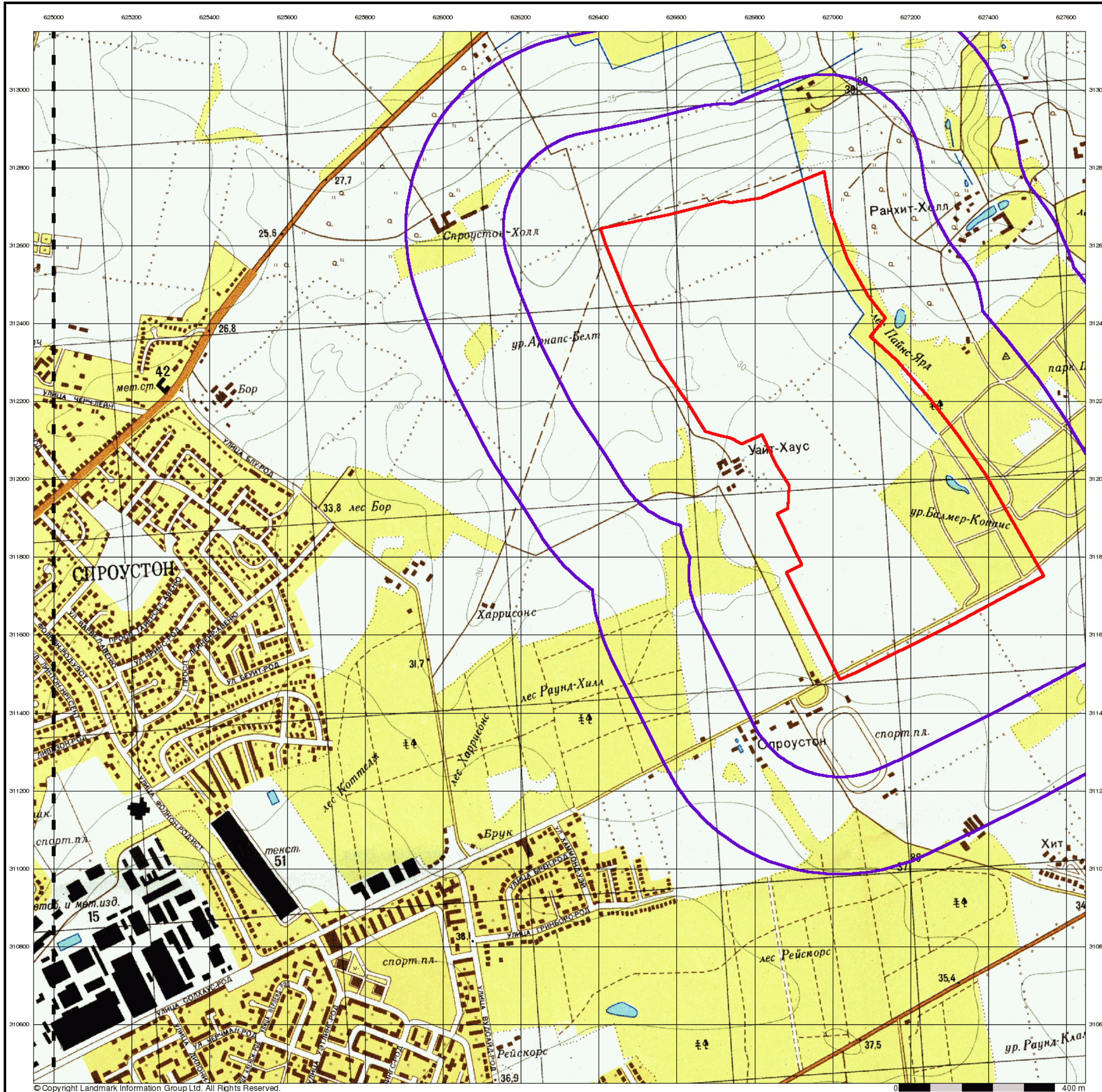


Order Details

Order Number: 123227967_1_1
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 Slice: A
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Site Details

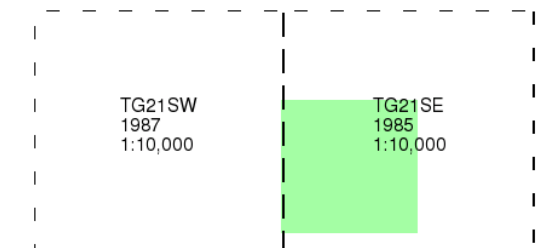
White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



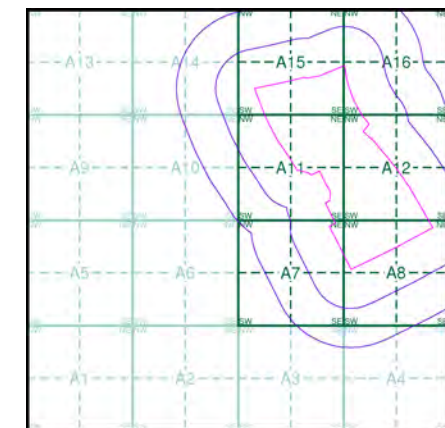
Ordnance Survey Plan
Published 1985 - 1987
Source map scale - 1:10,000

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 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

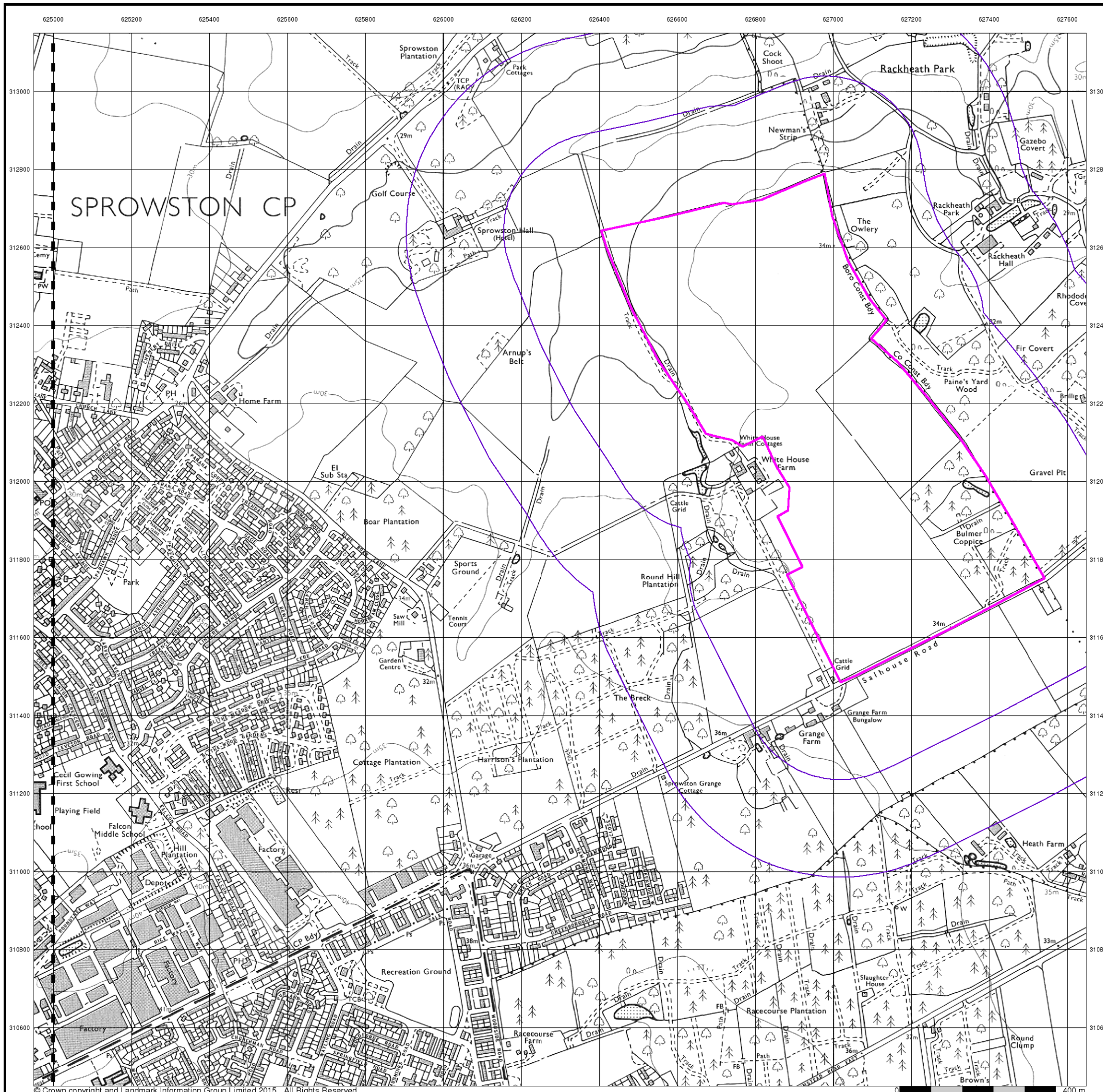


Order Details

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 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



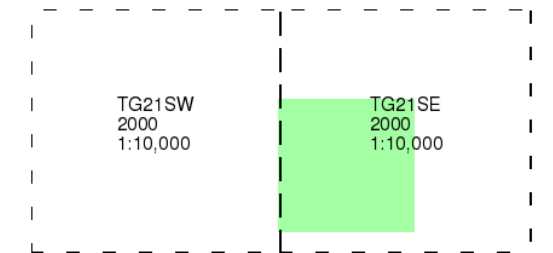
10k Raster Mapping

Published 2000

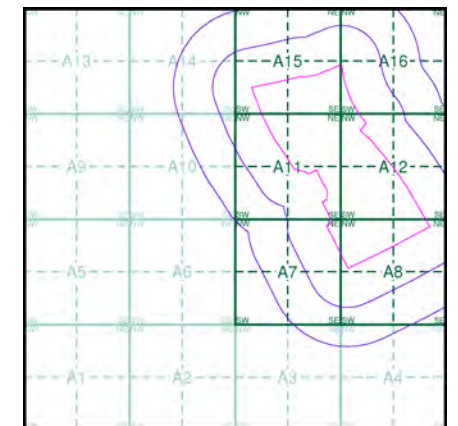
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A

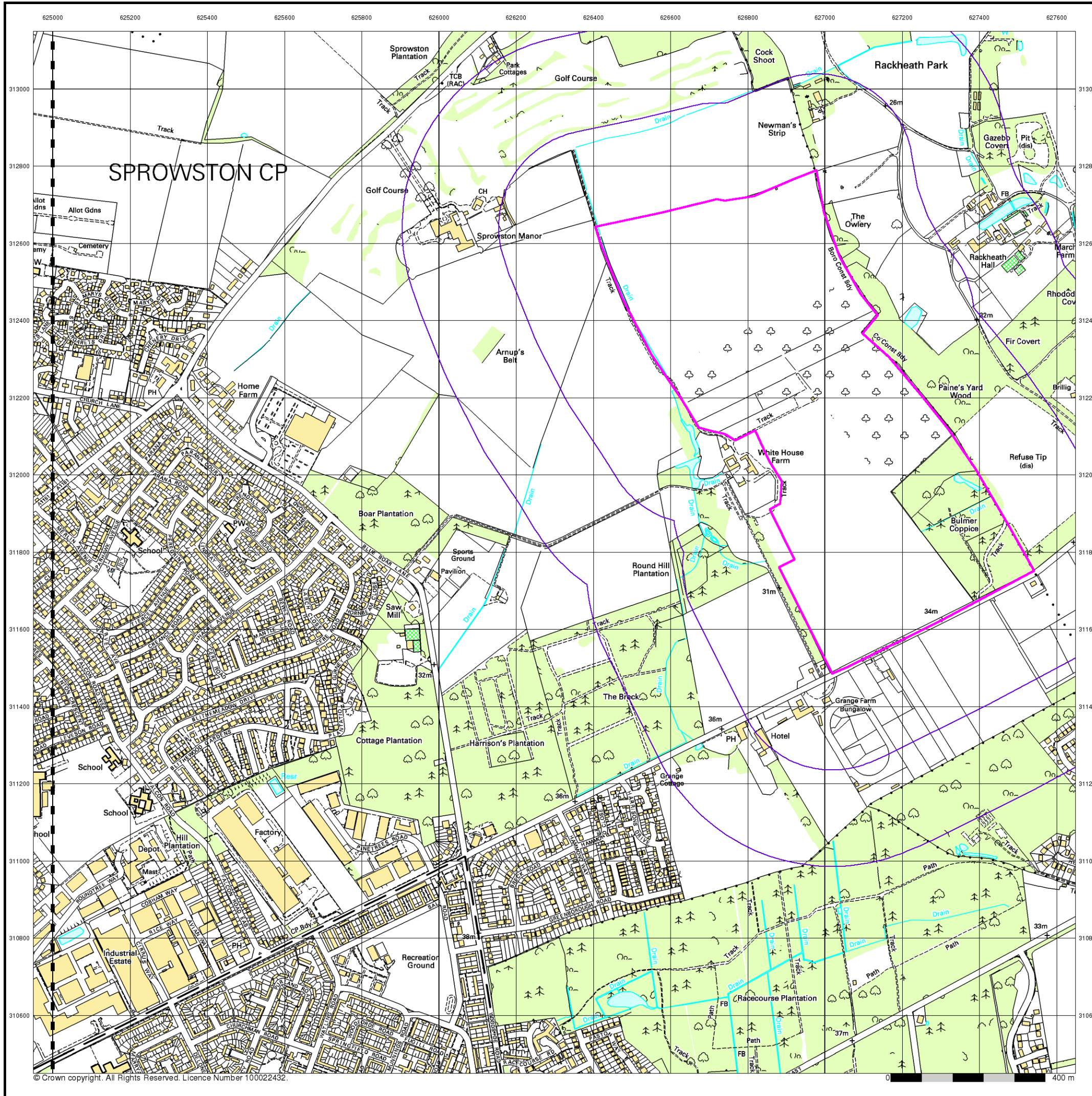


Order Details

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 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



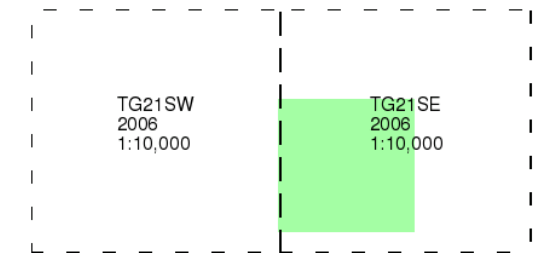
10k Raster Mapping

Published 2006

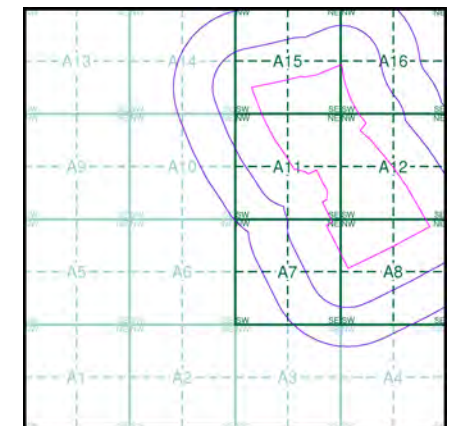
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A

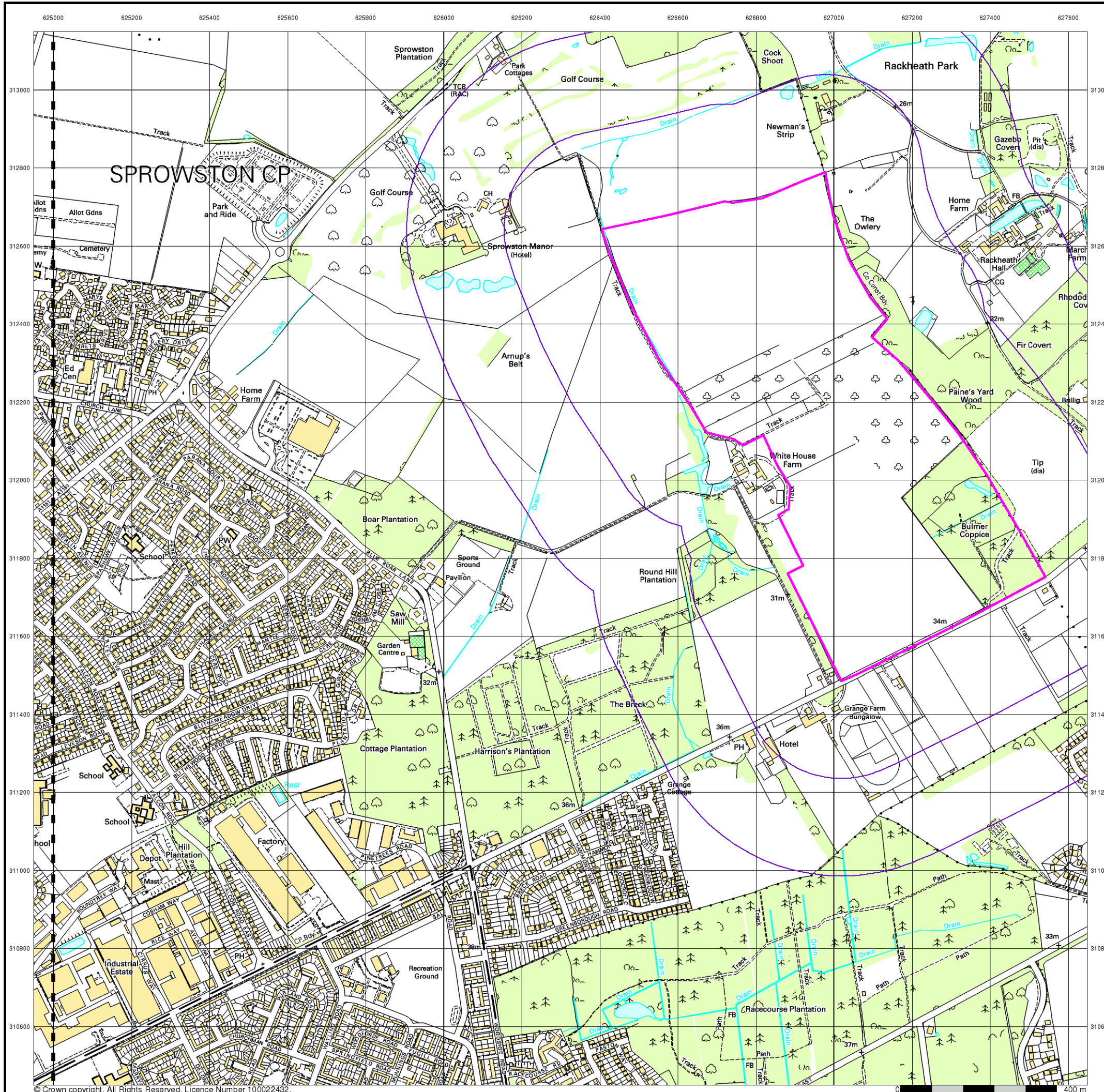


Order Details

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Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS





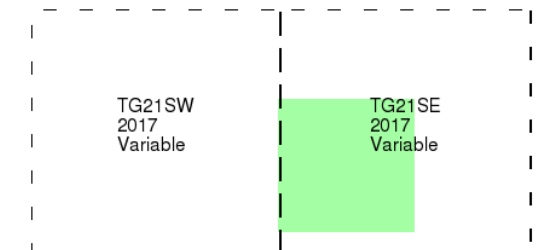
VectorMap Local

Published 2017

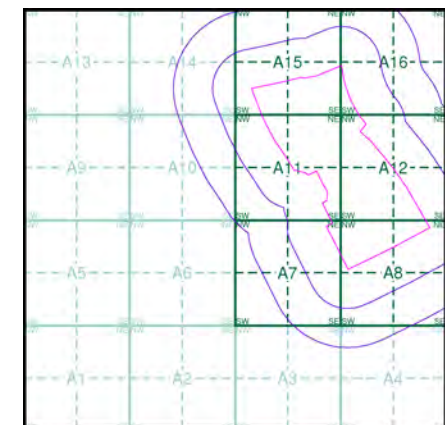
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' 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, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

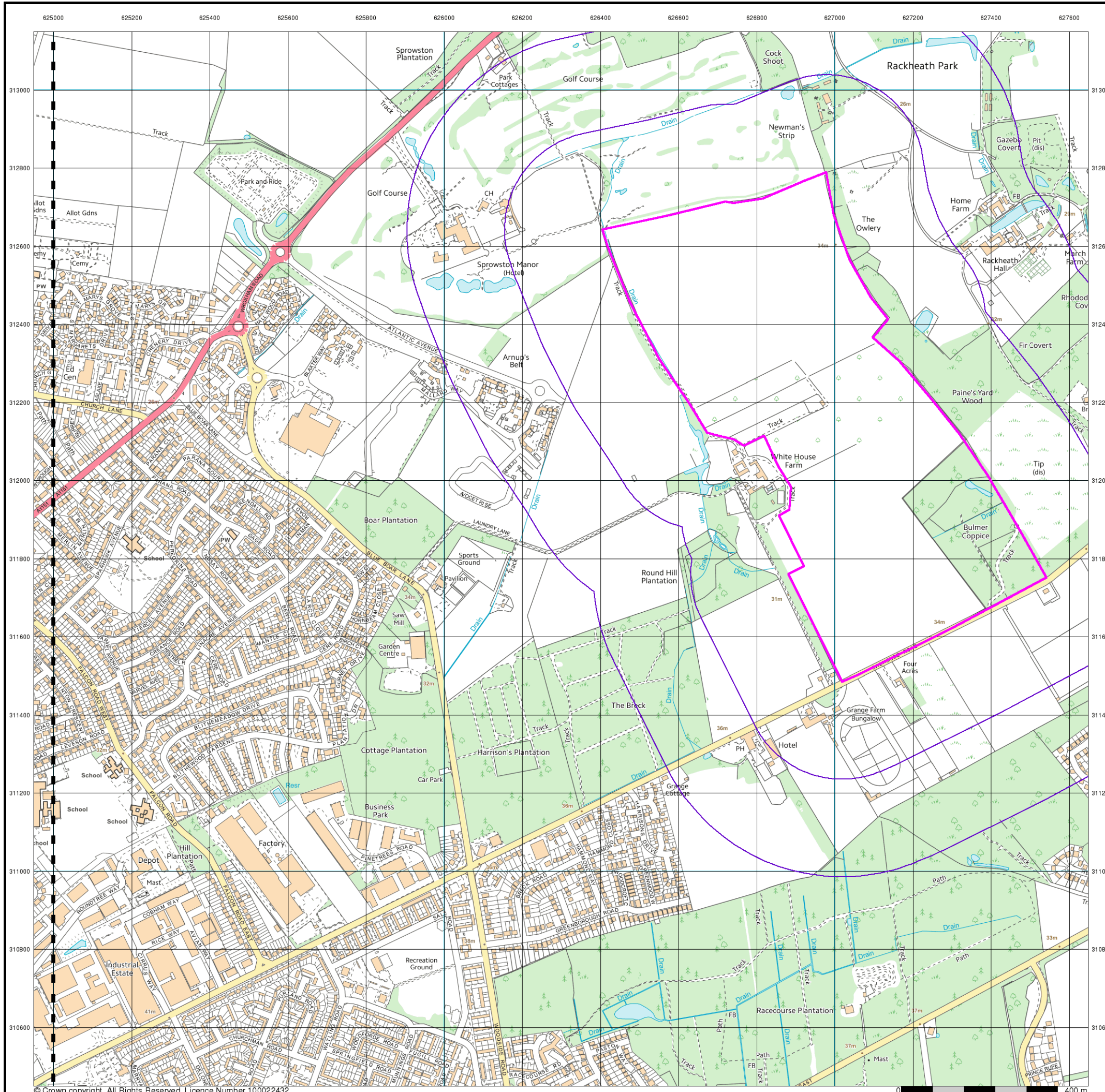
Order Number: 123227967_1_1
Customer Ref: 17-0337.01
National Grid Reference: 626680, 311980
Slice: A
Site Area (Ha): 65.82
Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	-285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Coppice		Heath
	Rough Grassland		Marsh
	Reeds		Saltings
	Building		Glasshouse
	Sloping Masonry		Pylon
	Electricity Transmission Line		Pole
	Cutting		Embankment
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		
	Administrative County, County Borough or County of City		
	Municipal Borough, Urban or Rural District, Burgh or District Council		
	Borough, Burgh or County Constituency Shown only when not coincident with other boundaries		
	Civil Parish Shown alternately when coincidence of boundaries occurs		
	BP, BS Boundary Post or Stone		Pol Sta Police Station
	Ch Church		PO Post Office
	CH Club House		PC Public Convenience
	F E Sta Fire Engine Station		PH Public House
	FB Foot Bridge		SB Signal Box
	Fn Fountain		Spr Spring
	GP Guide Post		TCB Telephone Call Box
	MP Mile Post		TCP Telephone Call Post
	MS Mile Stone		W Well

1:10,000 Raster Mapping

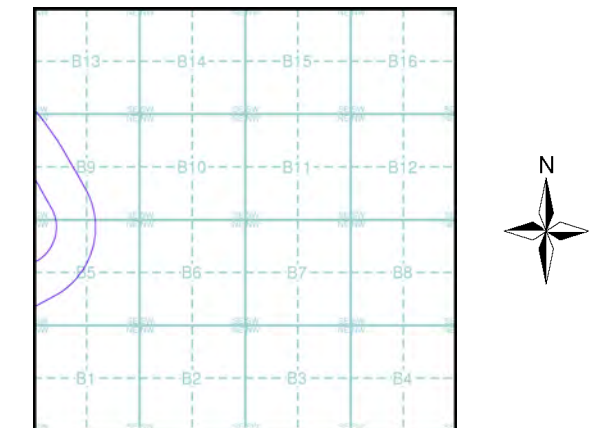
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	MHW(S) Mean high water (springs)		MLW(S) Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950	8
Ordnance Survey Plan	1:10,000	1957	9
Ordnance Survey Plan	1:10,000	1971 - 1974	10
Norwich	1:10,000	1980	11
Ordnance Survey Plan	1:10,000	1985 - 1987	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Historical Map - Slice B



Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 628010, 311880
 Slice: B
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Fireproof Building

Prominent Fireproof Building

Non-fireproof Building

Non-fireproof Building (non-dwelling)

Factory, mill, and flour mill, with chimneys

Factory, mill, and flour mill, without chimneys

Power Station, drawn to scale

Hydroelectric Power Station

Radio Station, drawn to scale

Telephone Station, drawn to scale

Abandoned Open-pit Mine or Quarry

Open-pit Salt Mine

Pit

Oil Deposit or Well

Oil Seepage

Tailings Pile

Fuel Storage Tanks

Natural Gas Tank

Bench Mark

Drill Hole

Burial Mound

Triangulation Point on Burial Mound

Fill

Cut

Small Bridge

Double-track Railroad and Station Building

Single-track Railroad

Coniferous Forest

Deciduous Forest

Mixed Forest

Lawns

Citrus Orchard

Wet Ground

Scattered Vegetation

243,8 Values for prominent elevations

186.0 Numbers for spot elevations, depth soundings, contour lines, etc.

0.2 Velocity of the current, width of river bed, depth of river

180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Partly Demolished Buildings

Demolished Buildings

Built-Up Area with Fireproof Buildings Predominant

Built-Up Area with Non-Fireproof Buildings Predominant

Individual Fireproof Building

Prominent Industrial Building

Individual Dwelling, Fireproof

Ruins of an Individual Dwelling

Factory or Mill Chimney

Factory or Mill with Chimney

Factory or Mill without Chimney

Mine or Open Pit Mine

Operating Shaft or Mine

Non-Operating Shaft or Mine

Salt Mine

Tailings Pile

Pit

Stone Quarry

Gas Pump or Service Station

Fuel Storage or Natural Gas Tank

Oil or Natural Gas Derrick

Small Hydroelectric Power Station

Power Station

Transformer Station

Cemetery

Burial Mound (height in metres)

Triangulation Point on Burial Mound

Triangulation Point

Bench Mark

Bench Mark (monumented)

Telegraph Office

Telephone Station

Radio Station

Radio Tower

Airfield or Seaplane Base

Landing Strip

Cut

Fill

Km Post

Plantings

Width of Road

Steep Grade

Telegraph/Telephone Lines

Main Highway

Highway under Construction

Improved Dirt Road (former truck road)

Small Bridge

Pipe (Culvert)

Tunnel

Dismantled Railroad

Double-track Railroad with First Class Station

Railroad Under Construction

Shore Embankment

River or Ditch with Embankment

Direction and velocity of current

Water Gauge

Water Level Mark

Well

Water Reservoir or Rain Water Pit

Spring

Isobath with value

Heavy (Index) Contour Line

Contour Line and Value

Half Contour Line

Spot Elevation Value

Coniferous

Deciduous

Mixed

Scrub

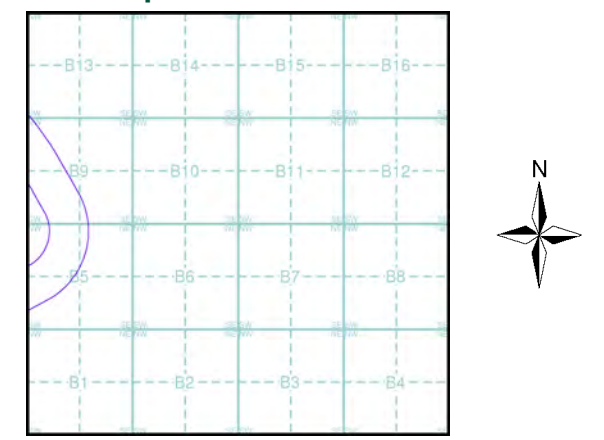
Key to Numbers on Mapping



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950	8
Ordnance Survey Plan	1:10,000	1957	9
Ordnance Survey Plan	1:10,000	1971 - 1974	10
Norwich	1:10,000	1980	11
Ordnance Survey Plan	1:10,000	1985 - 1987	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Russian Map - Slice B



Order Details

Order Number: 123227967_1_1

Customer Ref: 17-0337.01.

National Grid Reference: 628010, 311880

Slice: B

Site Area (Ha): 65.82

Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

Landmark INFORMATION GROUP

Tel: 0844 844 9952
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 Web: www.envirocheck.co.uk

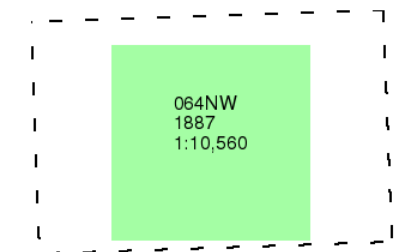
Norfolk

Published 1887

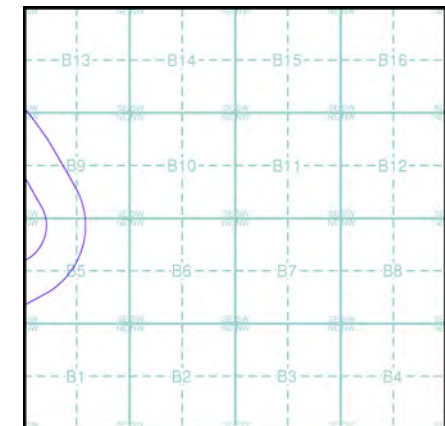
Source map scale - 1:10,560

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 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 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 B

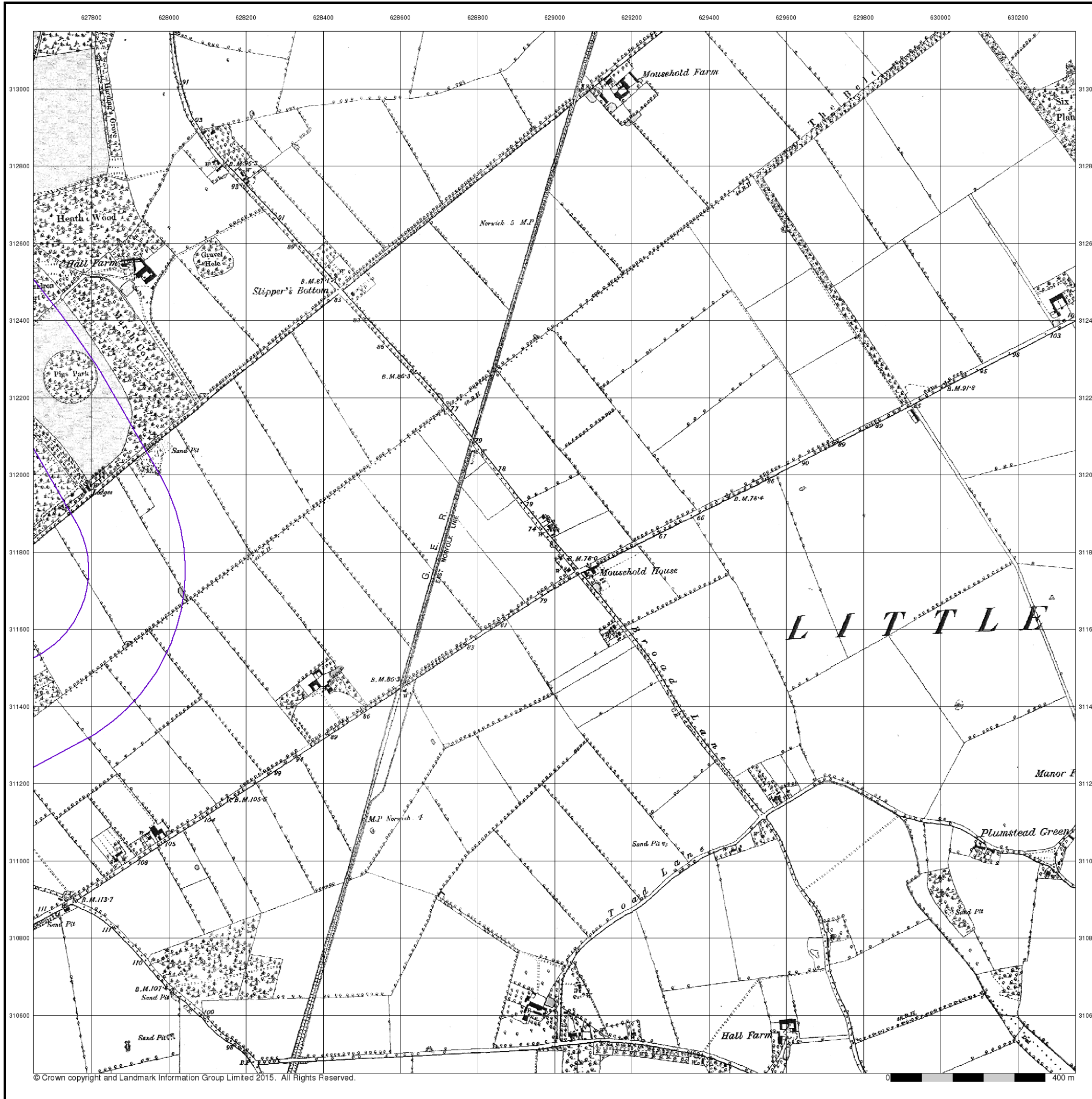


Order Details

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 National Grid Reference: 628010, 311880
 Slice: B
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Site Details

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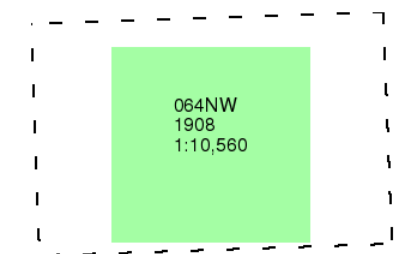
Norfolk

Published 1908

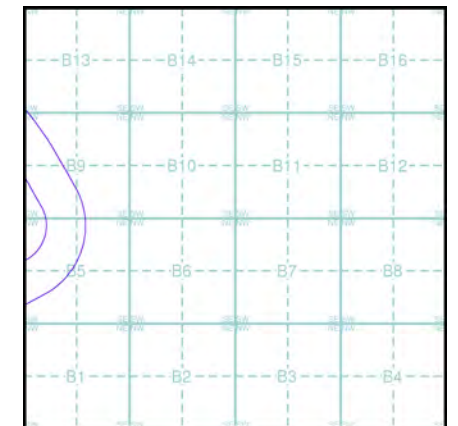
Source map scale - 1:10,560

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 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 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 B

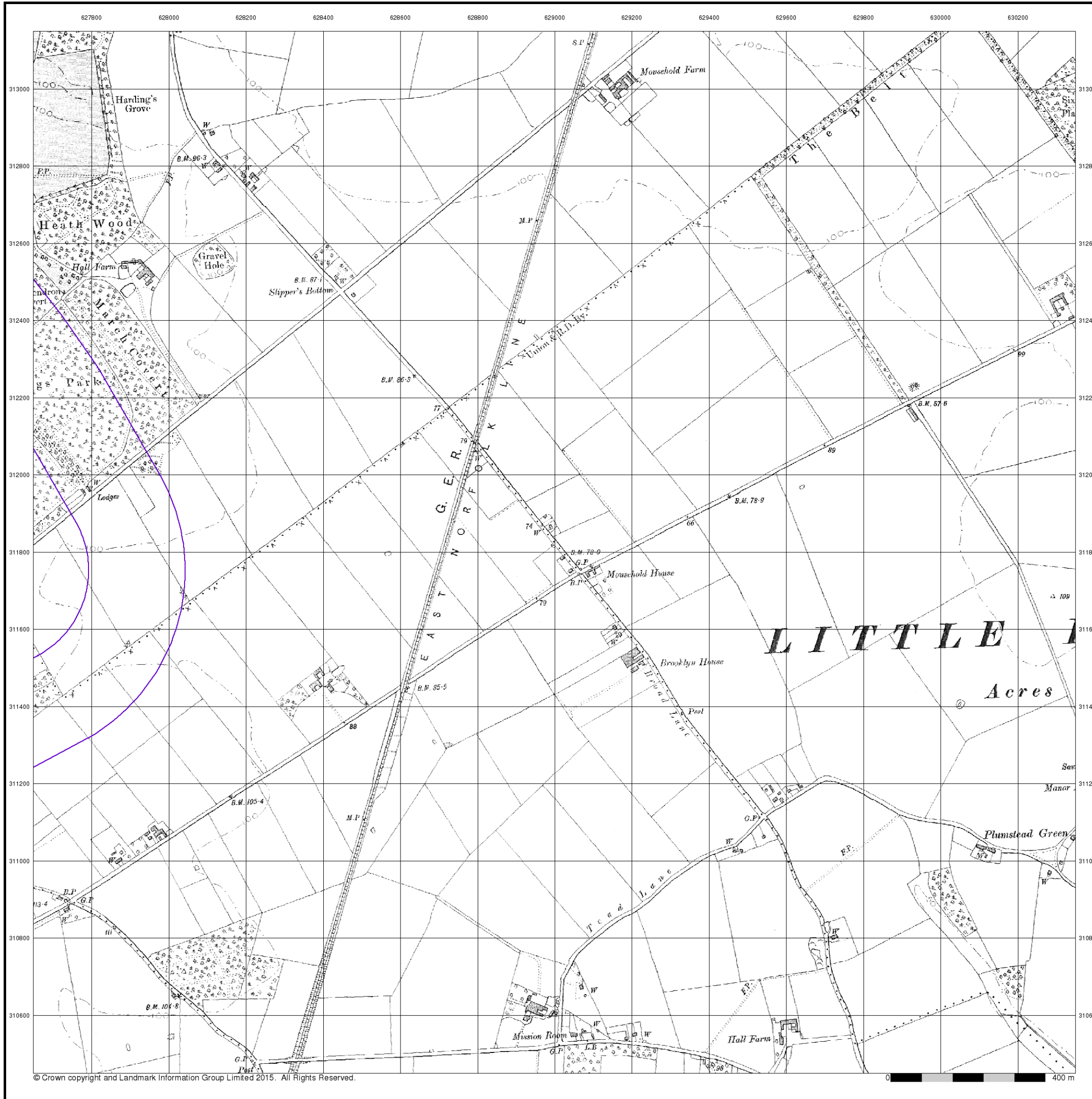


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Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



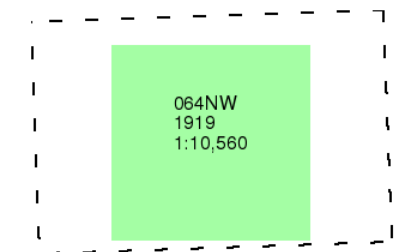
Norfolk

Published 1919

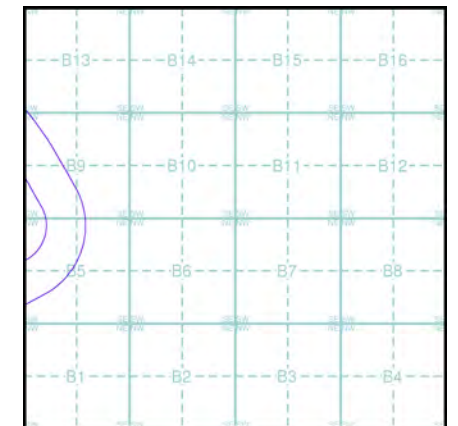
Source map scale - 1:10,560

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 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 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 B

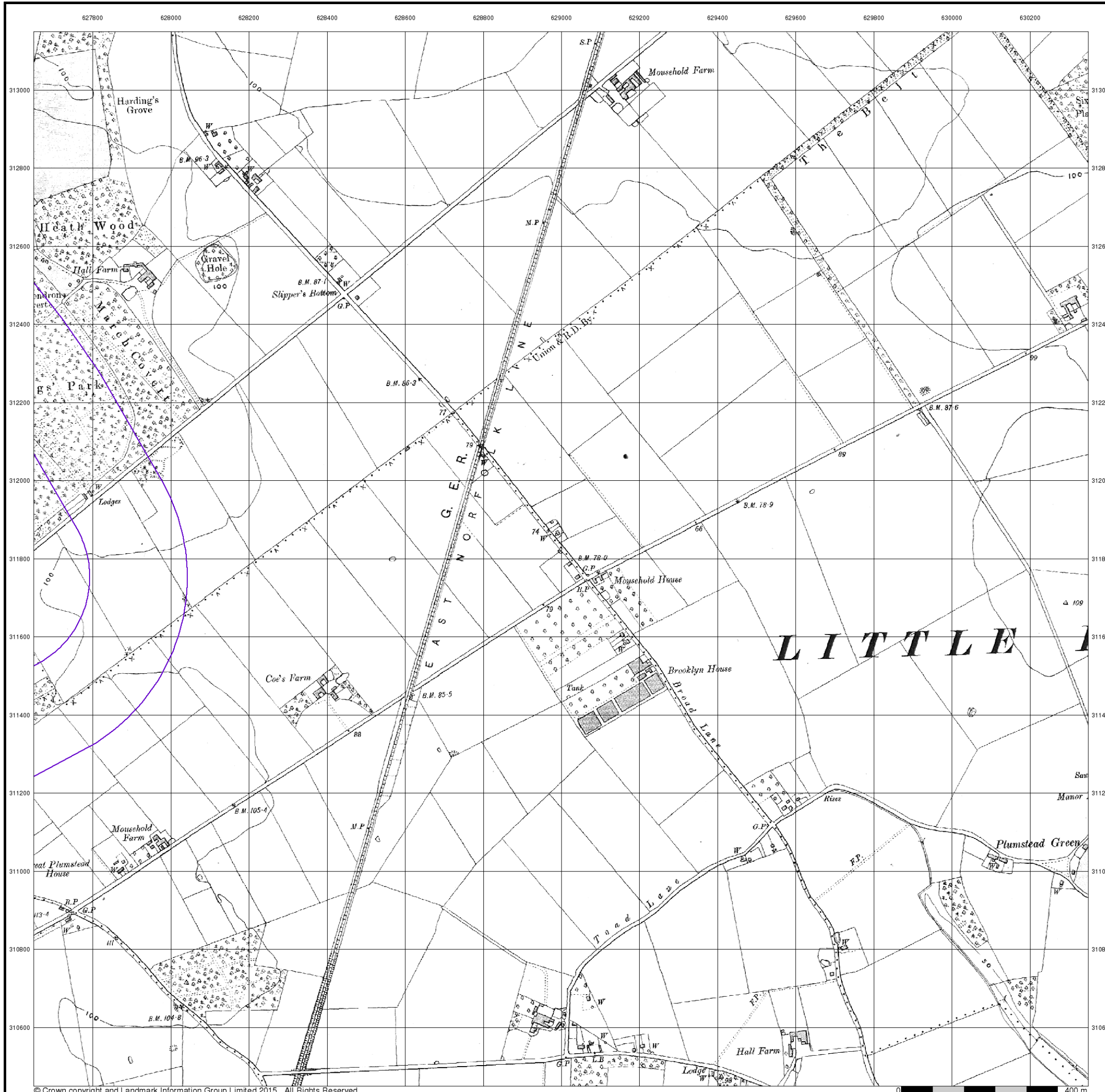


Order Details

Order Number: 123227967_1_1
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 National Grid Reference: 628010, 311880
 Slice: B
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 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



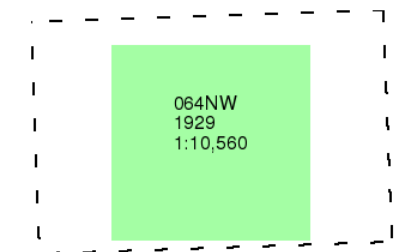
Norfolk

Published 1929

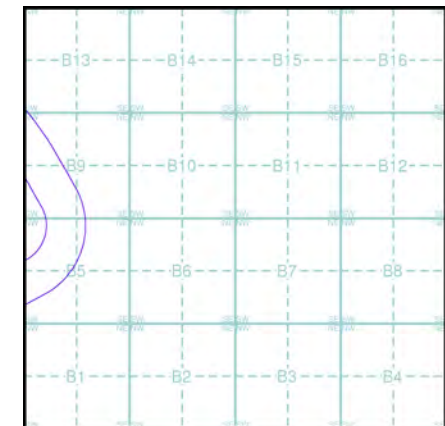
Source map scale - 1:10,560

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 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 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 B

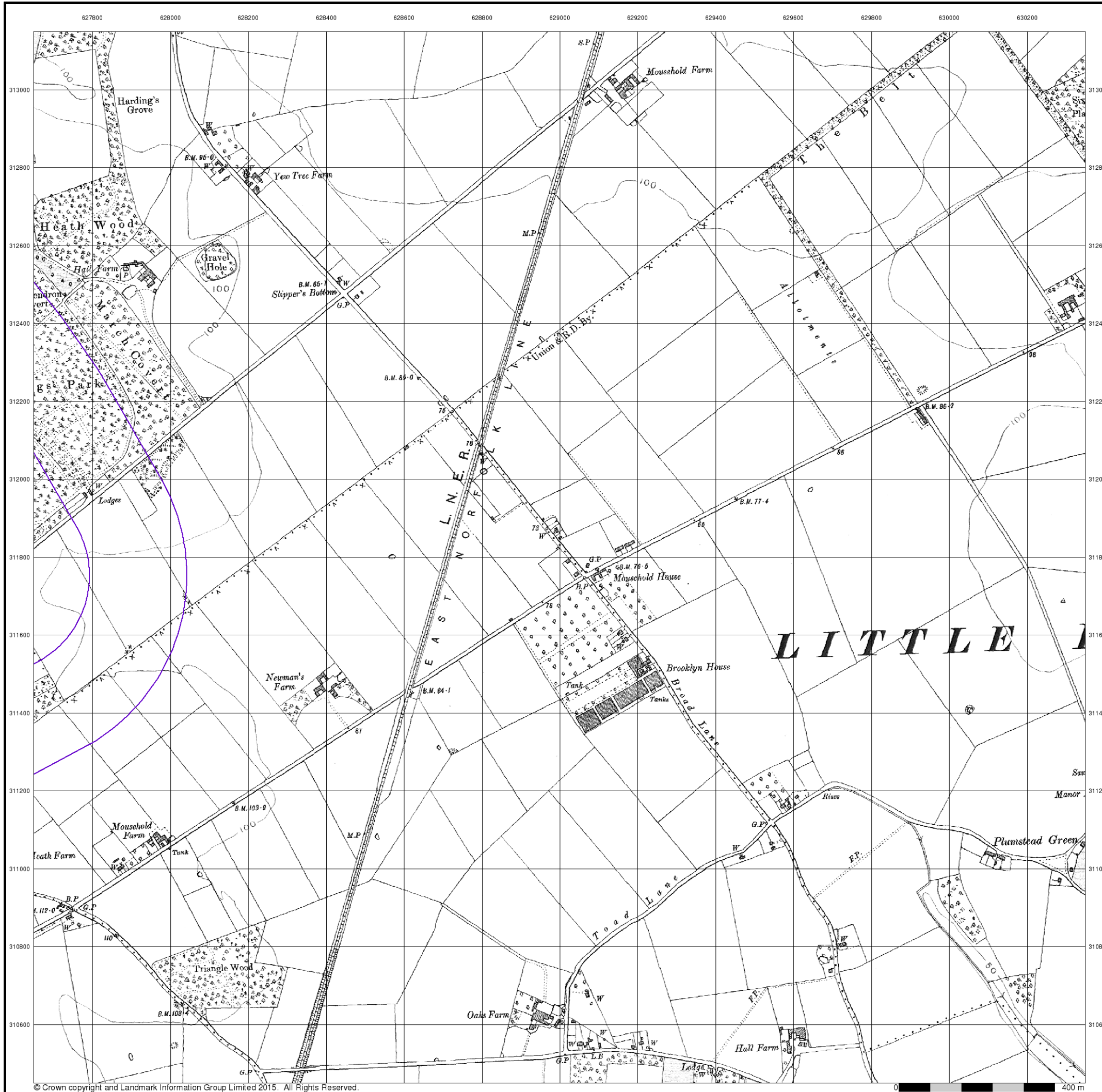


Order Details

Order Number: 123227967_1_1
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 National Grid Reference: 628010, 311880
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 Site Area (Ha): 65.82
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Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



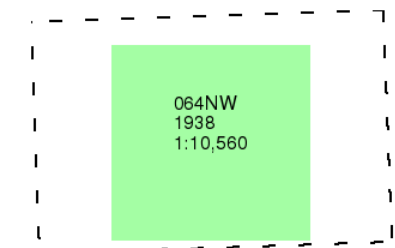
Norfolk

Published 1938

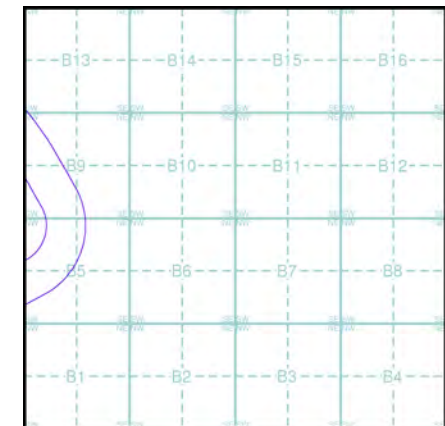
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. 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 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 B

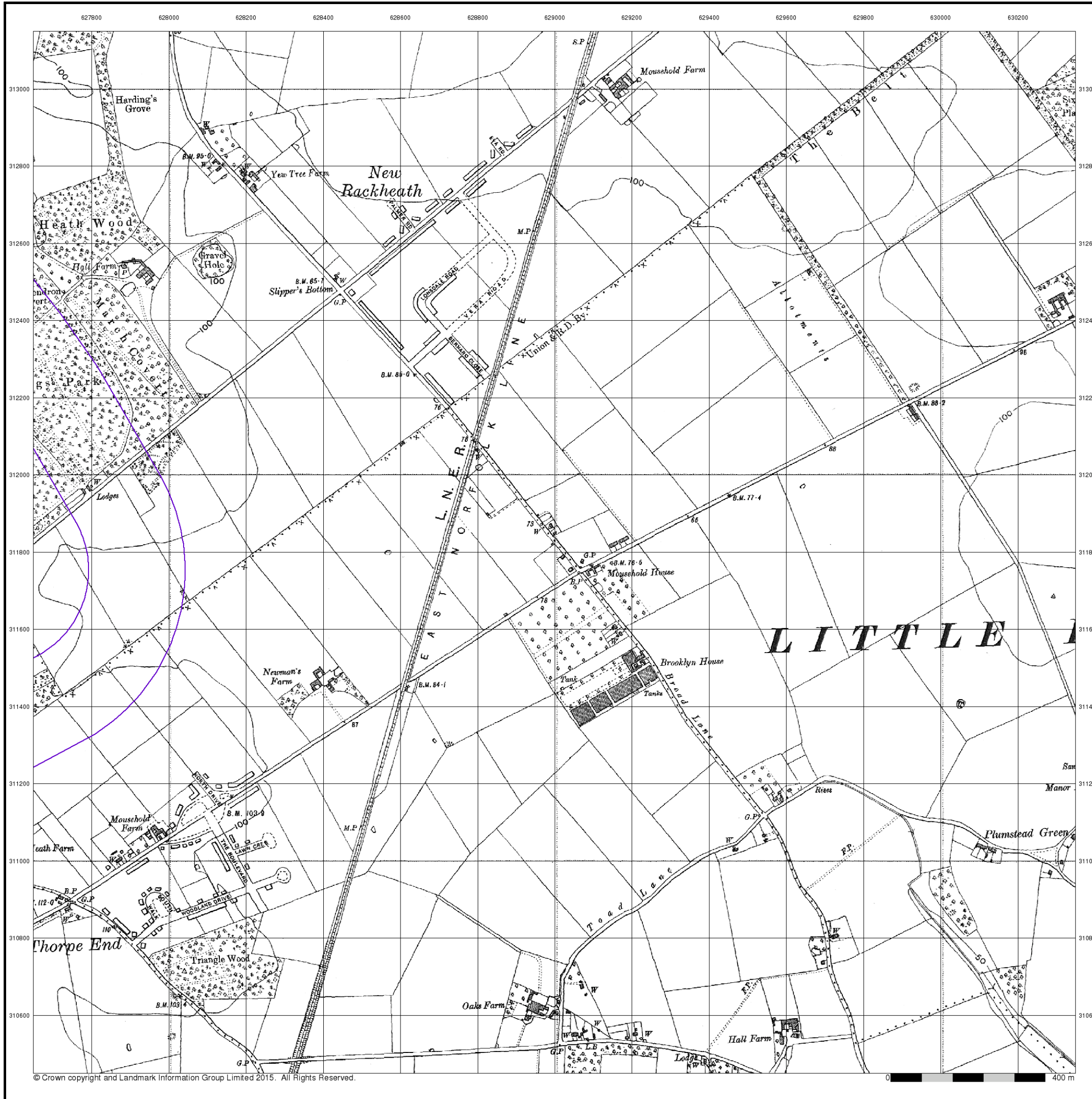


Order Details

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 Customer Ref: 17-0337.01
 National Grid Reference: 628010, 311880
 Slice: B
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



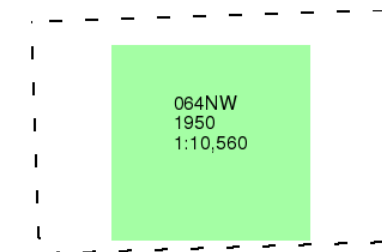
Norfolk

Published 1950

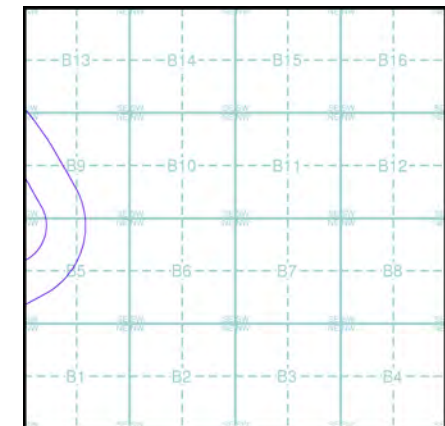
Source map scale - 1:10,560

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 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 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 B

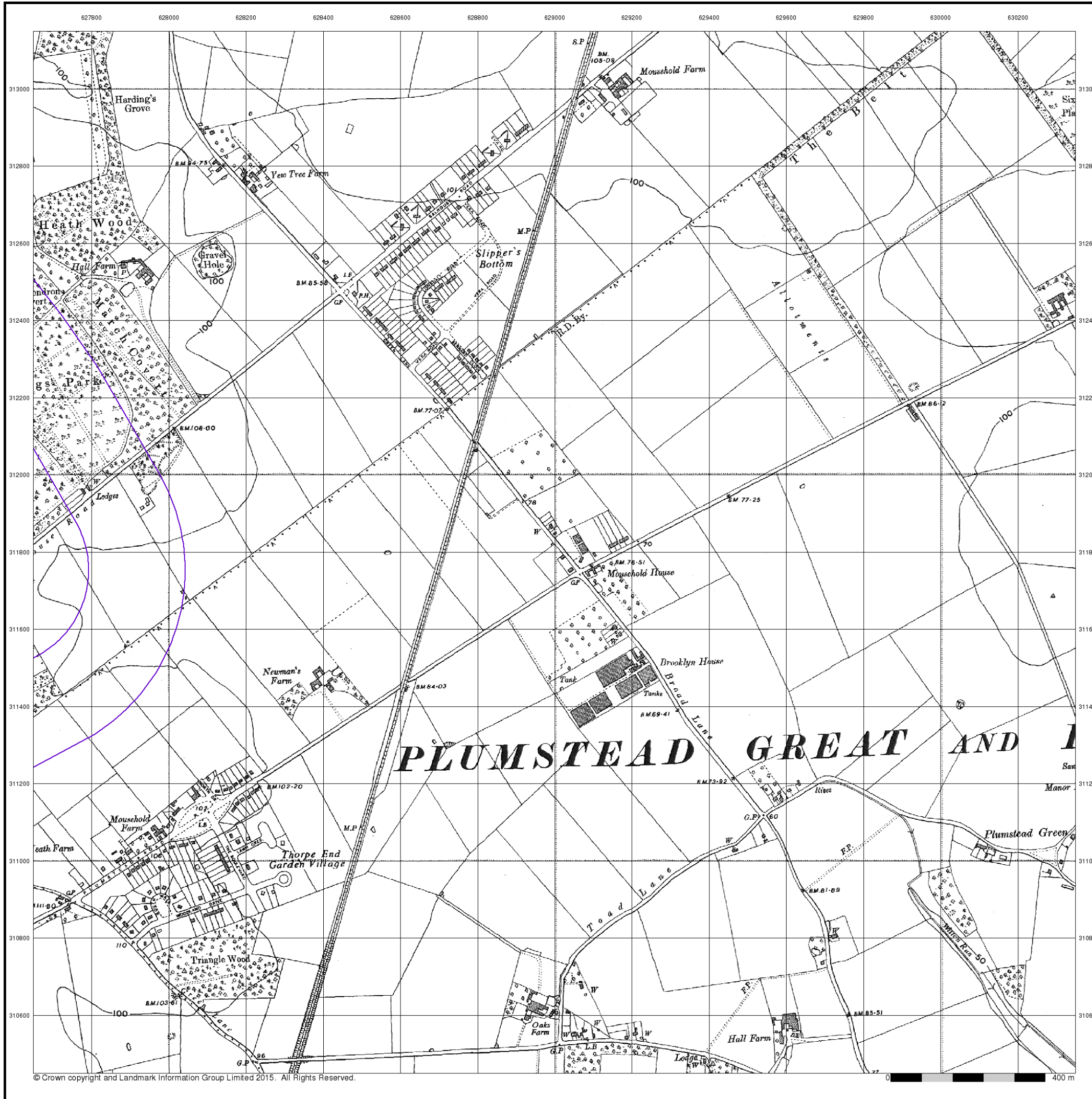


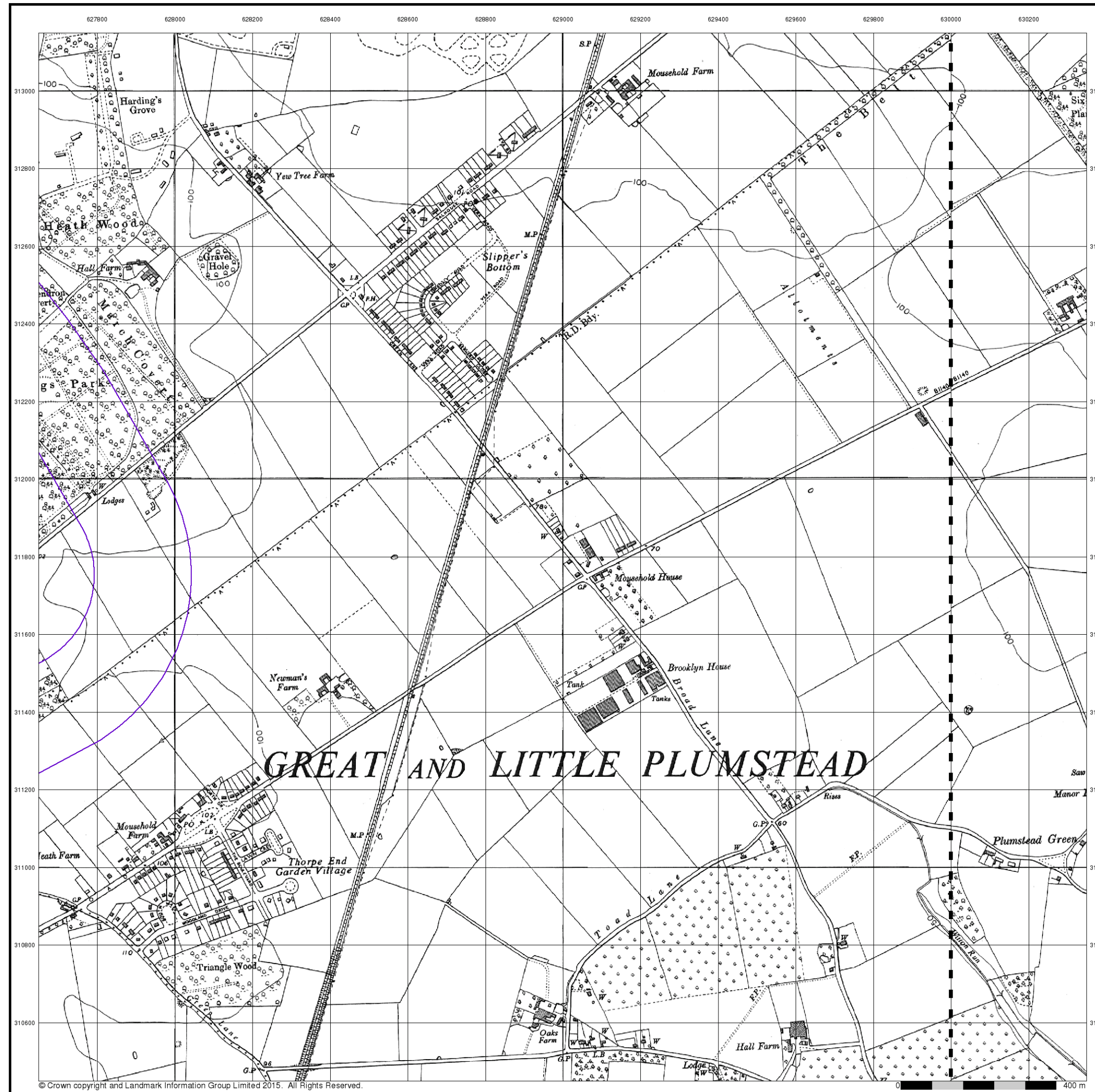
Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
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 Site Area (Ha): 65.82
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Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

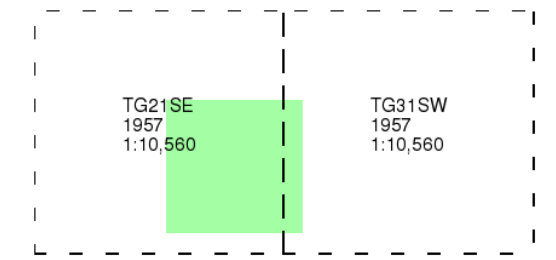




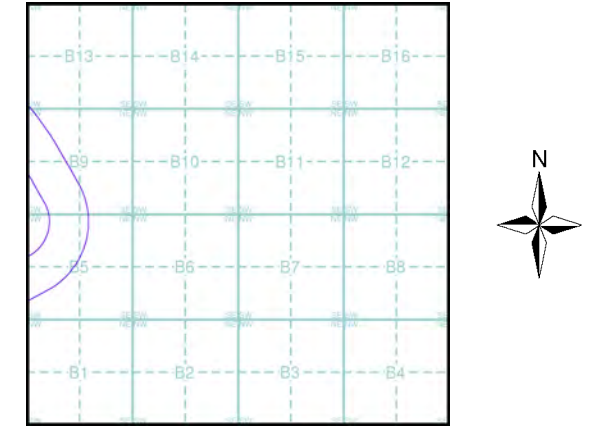
Ordnance Survey Plan
Published 1957
Source map scale - 1:10,000

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 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 B



Order Details

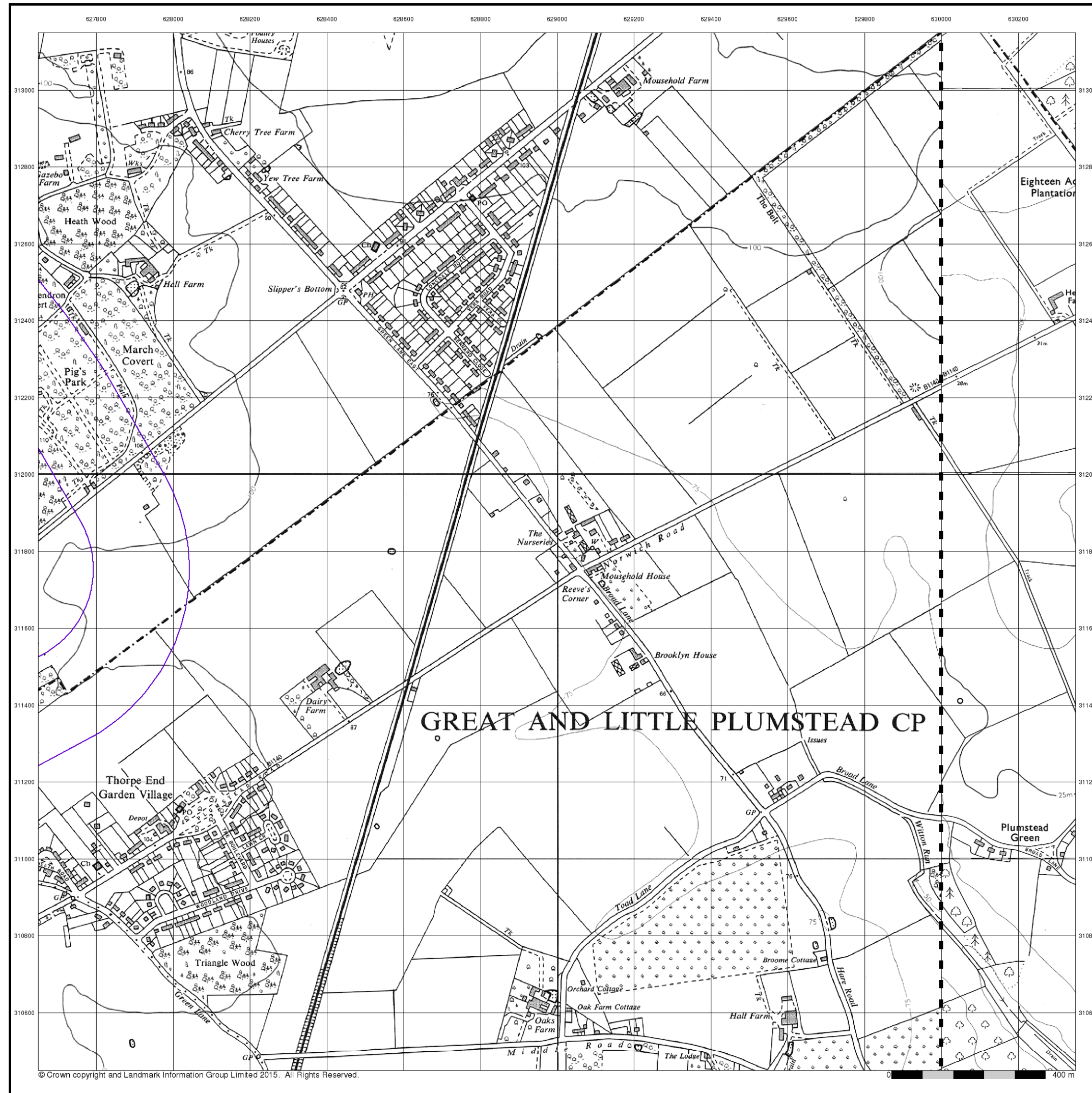
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 Customer Ref: 17-0337.01
 National Grid Reference: 628010, 311880
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 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



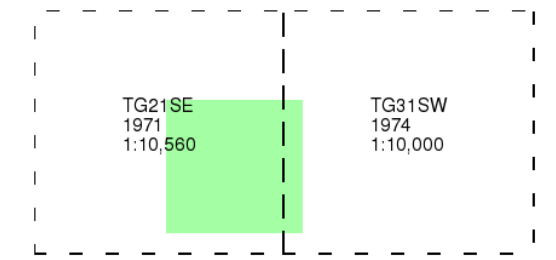
Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



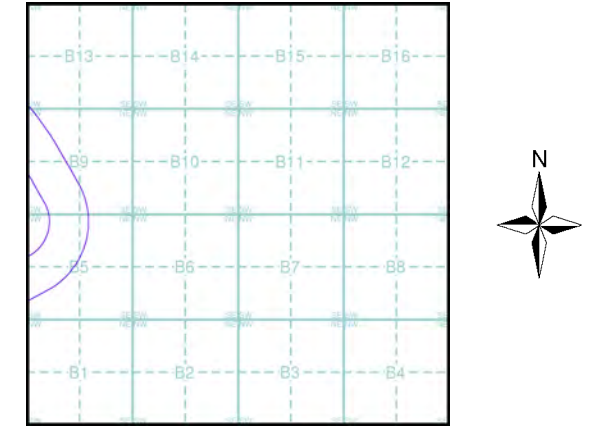
Ordnance Survey Plan
Published 1971 - 1974
Source map scale - 1:10,000

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 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 B



Order Details

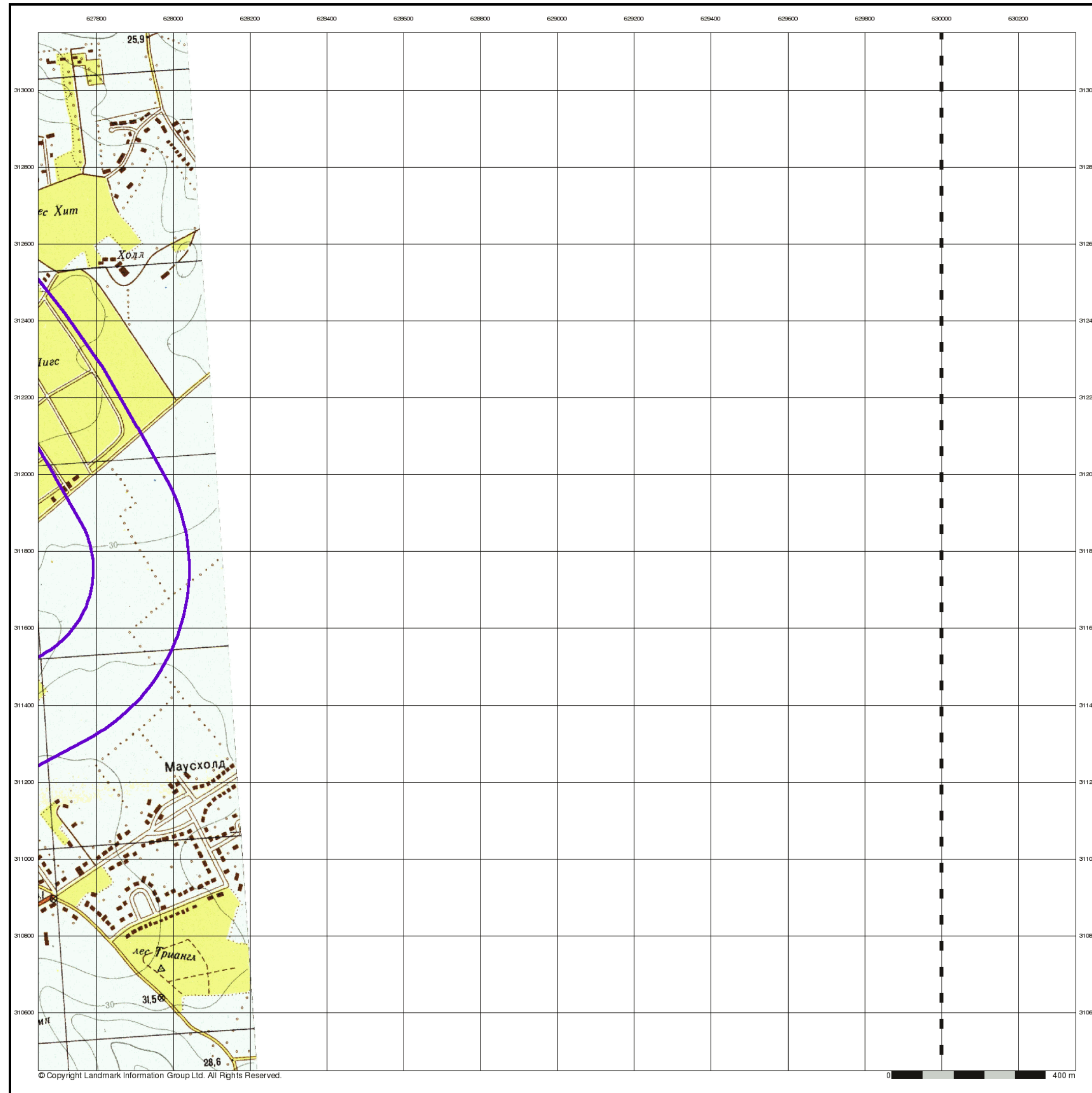
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Site Details

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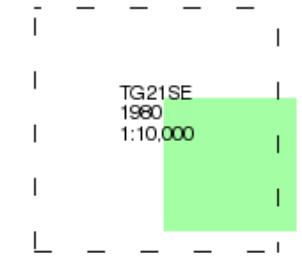
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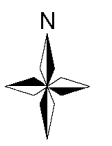
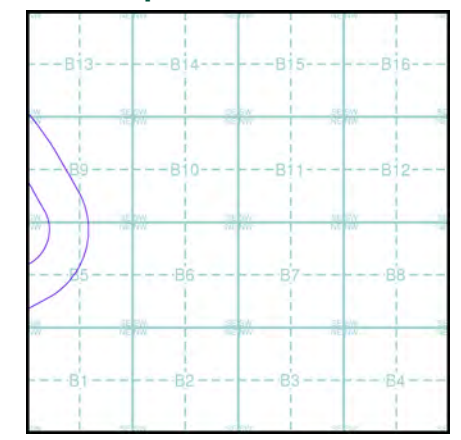
Norwich
Published 1980
Source map scale - 1:10,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use. They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)



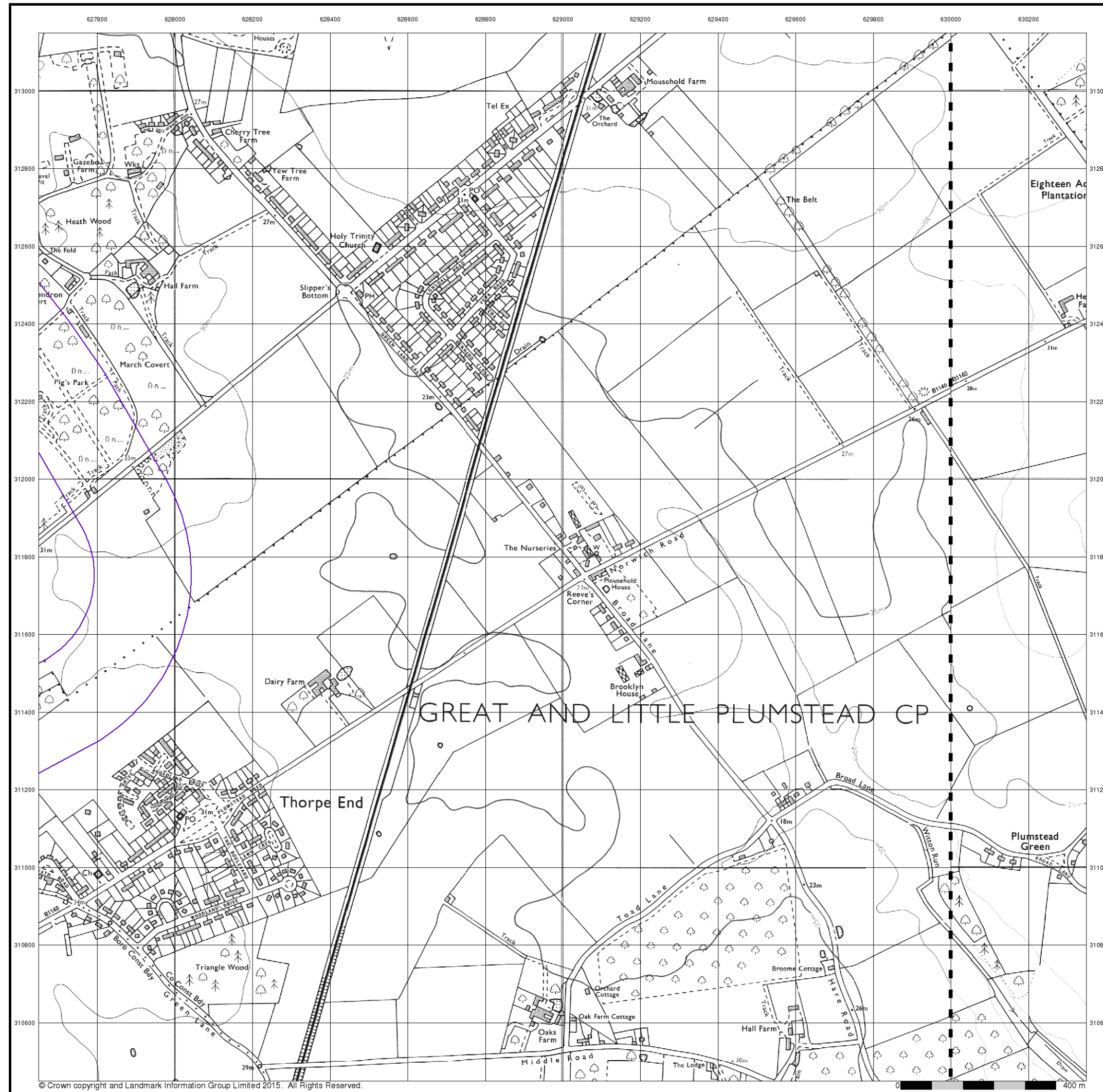
Russian Map - Slice B



Order Details
 Order Number: 123227967_1_1
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 Slice: B
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details
 White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

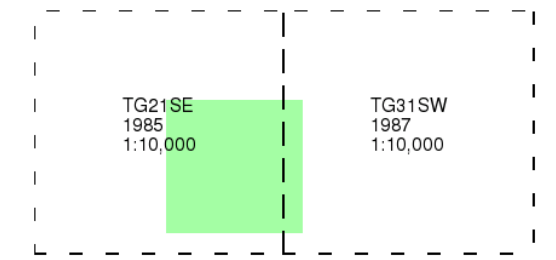
Landmark
 INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



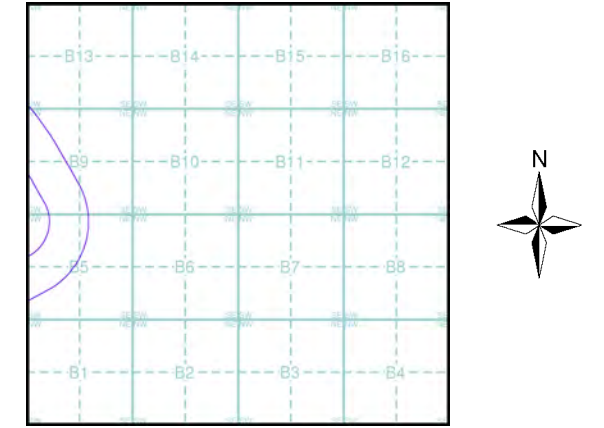
Ordnance Survey Plan
Published 1985 - 1987
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice B



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 Customer Ref: 17-0337.01
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 Slice: B
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Site Details
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Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

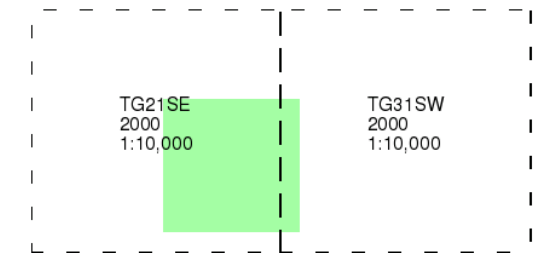
10k Raster Mapping

Published 2000

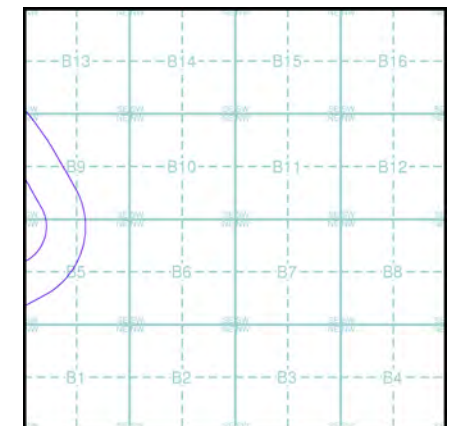
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice B



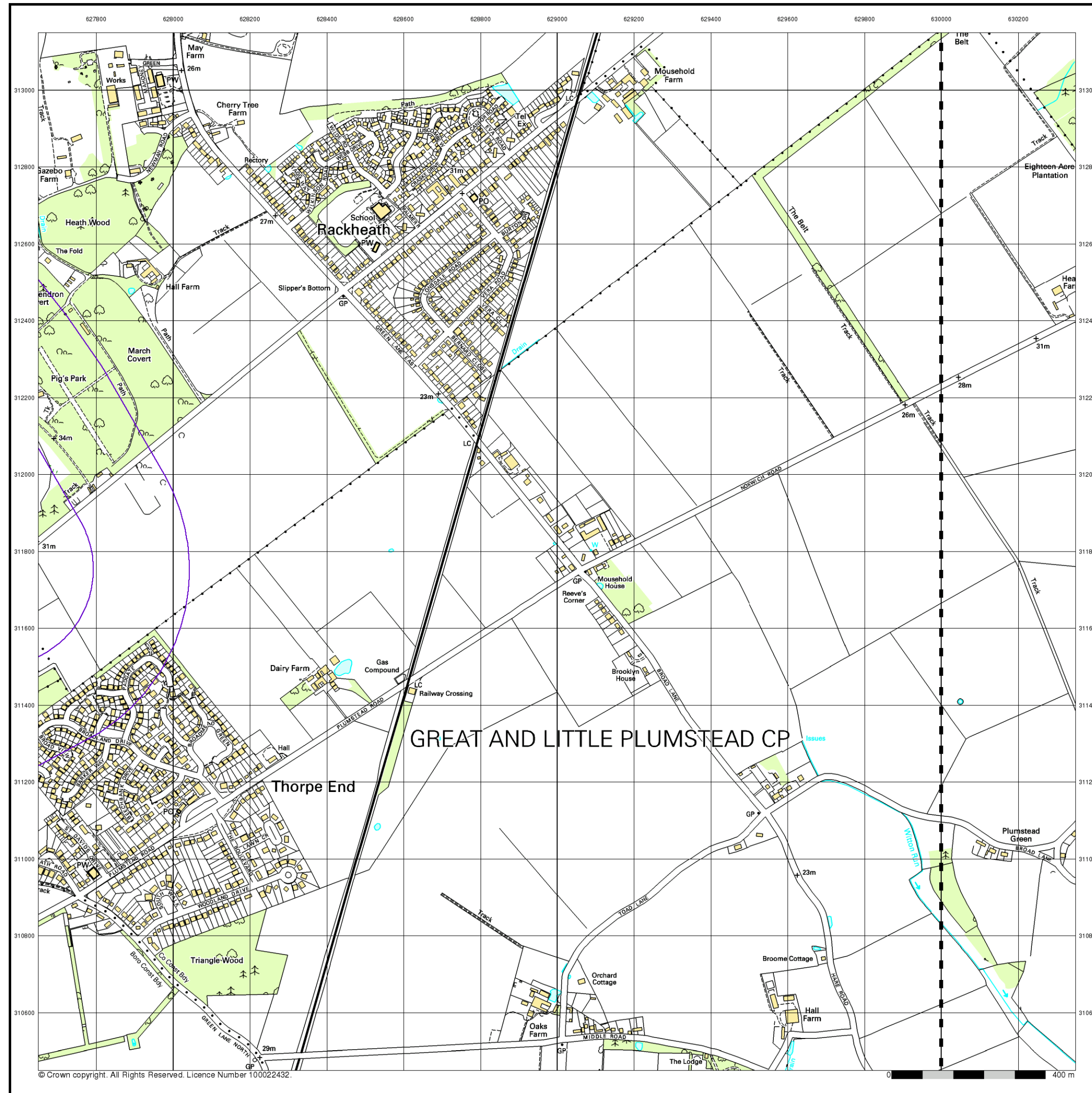
Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 628010, 311880
 Slice: B
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

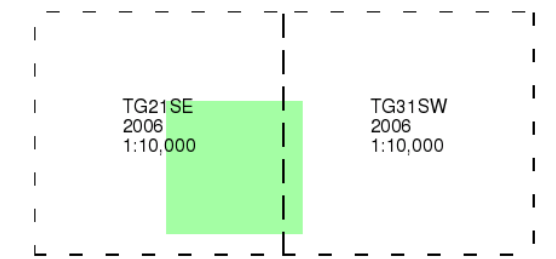




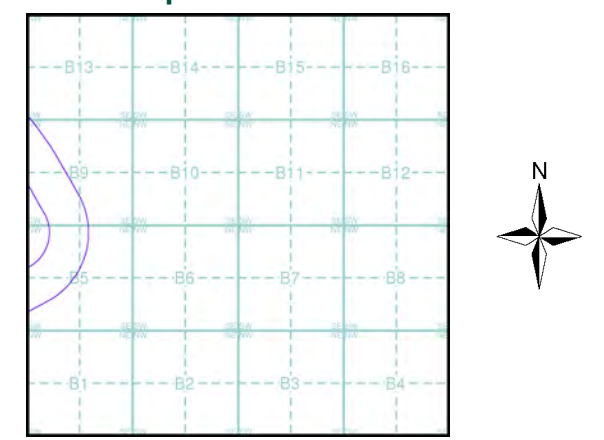
10k Raster Mapping
Published 2006
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice B



Order Details
 Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 628010, 311880
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Site Details
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Landmark
 INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

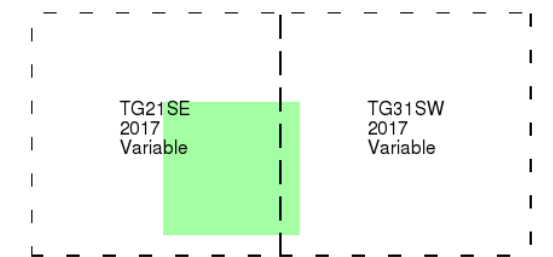
VectorMap Local

Published 2017

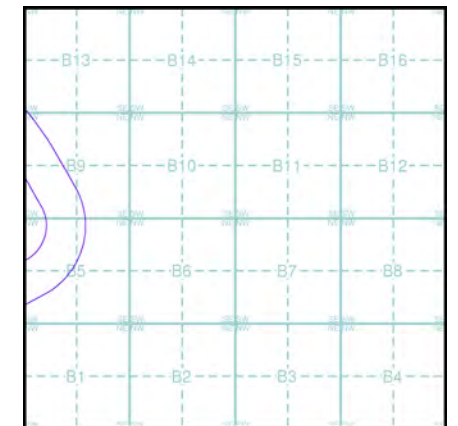
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' 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, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Historical Map - Slice B

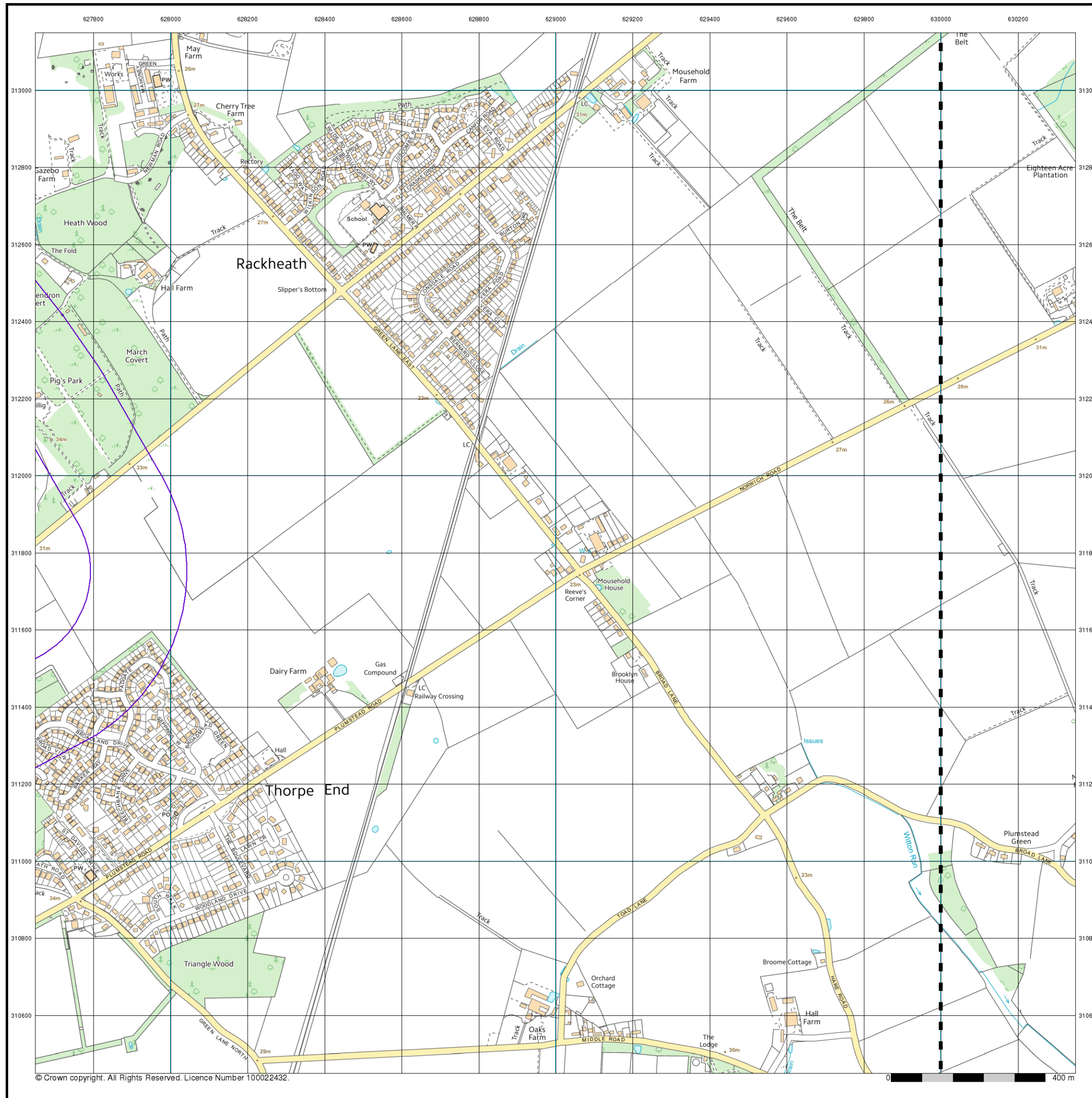


Order Details

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 Slice: B
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



Historical Mapping Legends

Ordnance Survey County Series 1:10,560

- Gravel Pit
- Sand Pit
- Other Pits
- Quarry
- Shingle
- Orchard
- Osiers
- Reeds
- Marsh
- Mixed Wood
- Deciduous
- Brushwood
- Fir
- Furze
- Rough Pasture
- Arrow denotes flow of water
- Trigonometrical Station
- Site of Antiquities
- Bench Mark
- Pump, Guide Post, Signal Post
- Well, Spring, Boundary Post
- 285** Surface Level
- Sketched Contour
- Instrumental Contour
- Main Roads
- Minor Roads
- Sunken Road
- Raised Road
- Road over Railway
- Railway over River
- Railway over Road
- Level Crossing
- Road over River or Canal
- Road over Stream
- Road over Stream
- County Boundary (Geographical)
- County & Civil Parish Boundary
- Administrative County & Civil Parish Boundary
- County Borough Boundary (England)
- County Burgh Boundary (Scotland)
- Rural District Boundary
- Civil Parish Boundary

Ordnance Survey Plan 1:10,000

- Chalk Pit, Clay Pit or Quarry
- Gravel Pit
- Sand Pit
- Disused Pit or Quarry
- Refuse or Slag Heap
- Lake, Loch or Pond
- Dunes
- Boulders
- Coniferous Trees
- Non-Coniferous Trees
- Orchard
- Scrub
- Coppice
- Bracken
- Heath
- Rough Grassland
- Marsh
- Reeds
- Saltings
- Building
- Glasshouse
- Sloping Masonry
- Pylon
- Electricity Transmission Line
- Pole
- Cutting
- Embankment
- Standard Gauge Multiple Track
- Standard Gauge Single Track
- Siding, Tramway or Mineral Line
- Narrow Gauge
- Geographical County
- Administrative County, County Borough or County of City
- Municipal Borough, Urban or Rural District, Burgh or District Council
- Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
- Civil Parish
Shown alternately when coincidence of boundaries occurs
- BP, BS Boundary Post or Stone
- Ch Church
- CH Club House
- F E Sta Fire Engine Station
- FB Foot Bridge
- Fn Fountain
- GP Guide Post
- MP Mile Post
- MS Mile Stone
- Pol Sta Police Station
- PO Post Office
- PC Public Convenience
- PH Public House
- SB Signal Box
- Spr Spring
- TCB Telephone Call Box
- TCP Telephone Call Post
- W Well

1:10,000 Raster Mapping

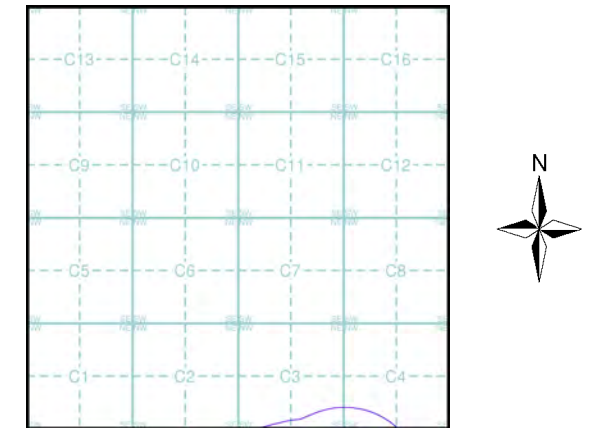
- Gravel Pit
- Rock
- Boulders
- Shingle
- Sand
- Slopes
- Refuse tip or slag heap
- Rock (scattered)
- Boulders (scattered)
- Mud
- Sand Pit
- Top of cliff
- General detail
- Overhead detail
- Multi-track railway
- County boundary (England only)
- District, Unitary, Metropolitan, London Borough boundary
- Underground detail
- Narrow gauge railway
- Single track railway
- Civil, parish or community boundary
- Constituency boundary
- Area of wooded vegetation
- Non-coniferous trees
- Coniferous trees
- Positioned tree
- Coppice or Osiers
- Orchard
- Rough Grassland
- Scrub
- Water feature
- MHW(S) Mean high water (springs)
- Telephone line (where shown)
- Bench mark (where shown)
- Point feature (e.g. Guide Post or Mile Stone)
- Site of (antiquity)
- General Building
- Non-coniferous trees
- Coniferous trees
- Marsh, Salt Marsh or Reeds
- Flow arrows
- MLW(S) Mean low water (springs)
- Electricity transmission line (with poles)
- Triangulation station
- Pylon, flare stack or lighting tower
- Glasshouse
- Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1885 - 1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950 - 1951	8
Ordnance Survey Plan	1:10,000	1957 - 1958	9
Ordnance Survey Plan	1:10,000	1971 - 1979	10
Ordnance Survey Plan	1:10,000	1975	11
Norwich	1:10,000	1980	12
Ordnance Survey Plan	1:10,000	1985 - 1987	13
10K Raster Mapping	1:10,000	2000	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2017	16

Historical Map - Slice C



Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



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Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings
Military and Industrial Buildings
Military and Communication Areas
Fireproof Building
Non-fireproof Building
Factory, mill, and flour mill, with chimneys
Power Station, drawn to scale
Radio Station, drawn to scale
Abandoned Open-pit Mine or Quarry
Pit
Tailings Pile
Bench Mark
Drill Hole
Burial Mound
Triangulation Point on Burial Mound
Single-track Railroad
Double-track Railroad and Station Building
Coniferous Forest
Deciduous Forest
Mixed Forest
Lawns
Citrus Orchard
Wet Ground
Scattered Vegetation

243,8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0,2 Velocity of the current, width of river bed, depth of river
180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings
Military and Industrial Buildings
Military and Communication Areas
Subway Entrance
Partly Demolished Buildings
Demolished Buildings
Built-Up Area with Fireproof Buildings Predominant
Built-Up Area with Non-Fireproof Buildings Predominant
Individual Fireproof Building
Prominent Industrial Building
Individual Dwelling, Fireproof
Ruins of an Individual Dwelling
Factory or Mill Chimney
Factory or Mill with Chimney
Factory or Mill without Chimney
Mine or Open Pit Mine
Operating Shaft or Mine
Non-Operating Shaft or Mine
Salt Mine
Tailings Pile
Pit
Stone Quarry
Gas Pump or Service Station
Fuel Storage or Natural Gas Tank
Oil or Natural Gas Derrick
Small Hydroelectric Power Station
Power Station
Transformer Station
Cemetery
Burial Mound (height in metres)
Triangulation Point on Burial Mound
Triangulation Point
Bench Mark
Bench Mark (monumented)
Telegraph Office
Telephone Station
Radio Station
Radio Tower
Airfield or Seaplane Base
Landing Strip
Small Bridge
Pipe (Culvert)
Tunnel
Double-track Railroad with First Class Station
Dismantled Railroad
Railroad Under Construction
Shore Embankment
River or Ditch with Embankment
Water Reservoir or Rain Water Pit
Spring
Isobath with value
Well
Water Reservoir or Rain Water Pit
Spring
Isobath with value
Heavy (Index) Contour Line
Contour Line and Value
Half Contour Line
Spot Elevation Value
Coniferous
Deciduous
Mixed
Scrub

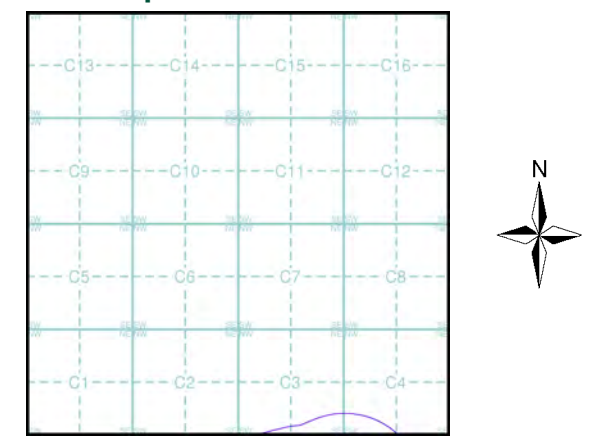
Key to Numbers on Mapping



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1885 - 1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950 - 1951	8
Ordnance Survey Plan	1:10,000	1957 - 1958	9
Ordnance Survey Plan	1:10,000	1971 - 1979	10
Ordnance Survey Plan	1:10,000	1975	11
Norwich	1:10,000	1980	12
Ordnance Survey Plan	1:10,000	1985 - 1987	13
10K Raster Mapping	1:10,000	2000	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2017	16

Russian Map - Slice C



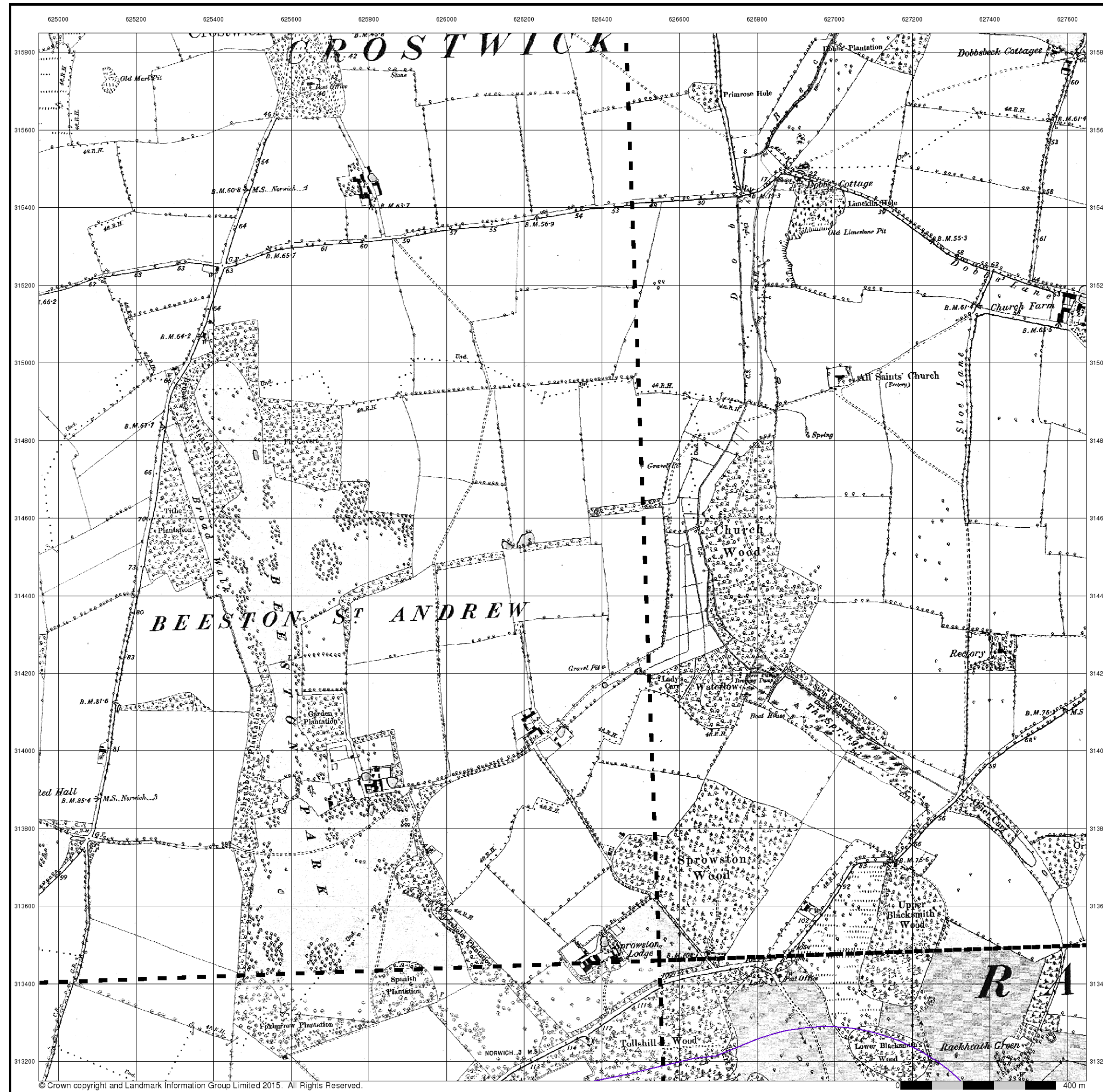
Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



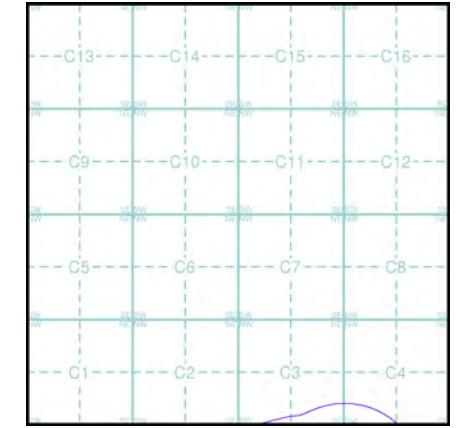
Norfolk
Published 1885 - 1887
Source map scale - 1:10,560

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 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 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)

051SE 1887 1:10,560	052SW 1887 1:10,560
063NE 1885 1:10,560	064NW 1887 1:10,560

Historical Map - Slice C



Order Details

Order Number: 123227967_1_1
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Norfolk

Published 1908

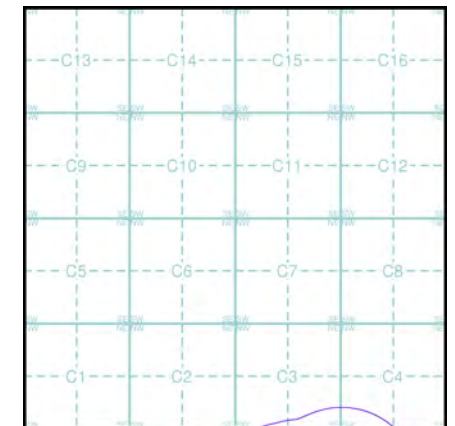
Source map scale - 1:10,560

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 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 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)

051SE 1908 1:10,560	052SW 1908 1:10,560
063NE 1908 1:10,560	064NW 1908 1:10,560

Historical Map - Slice C



Order Details

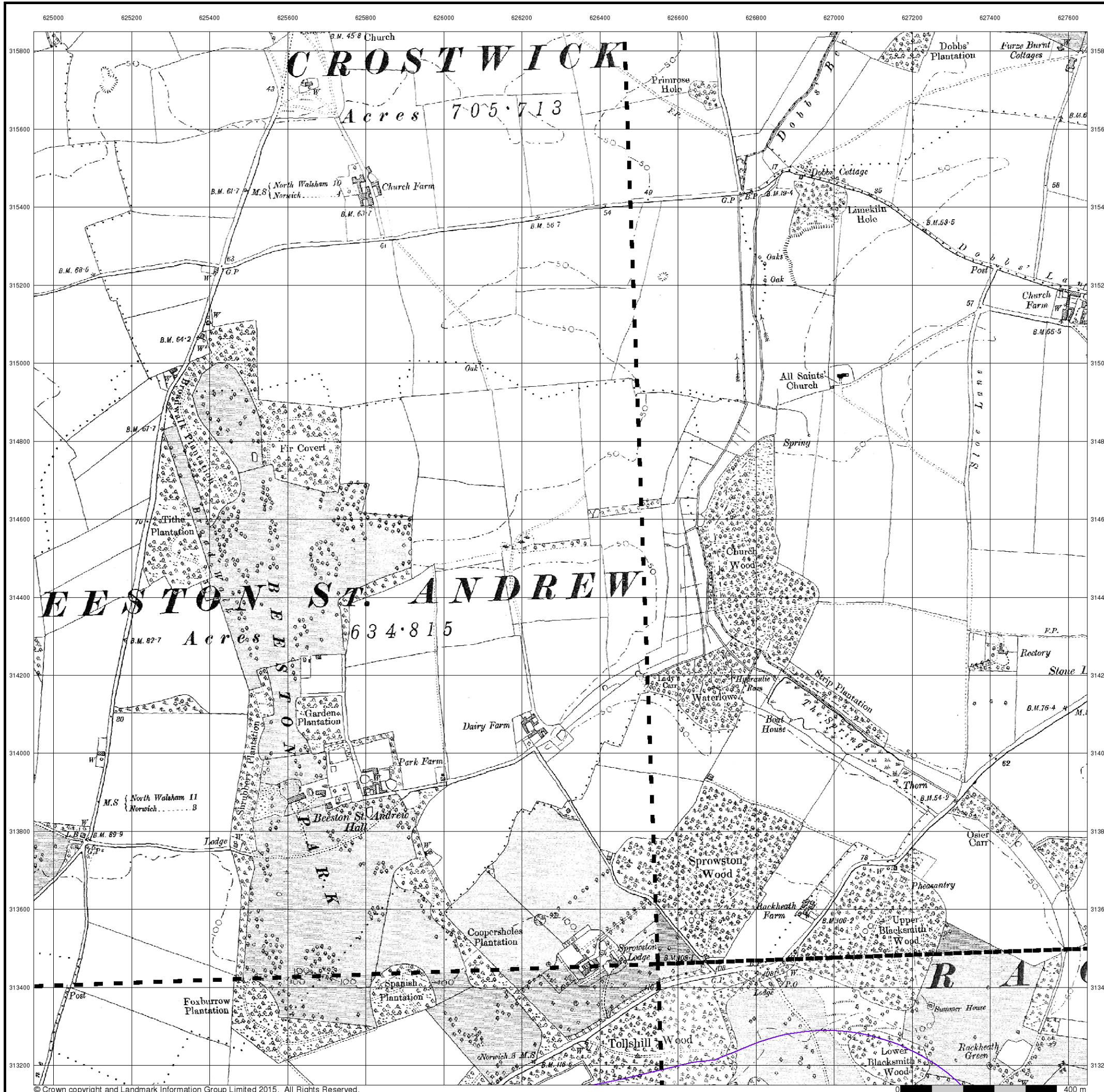
Order Number: 123227967_1_1
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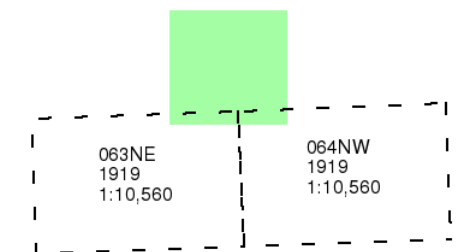
Norfolk

Published 1919

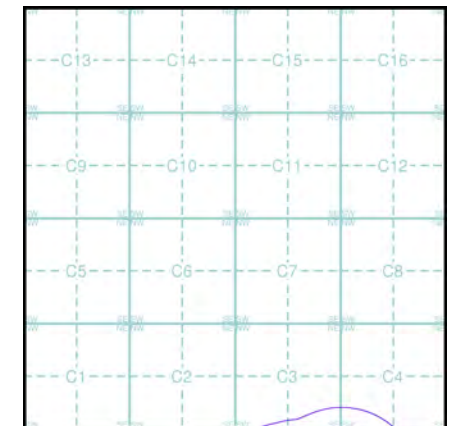
Source map scale - 1:10,560

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 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 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 C



Order Details

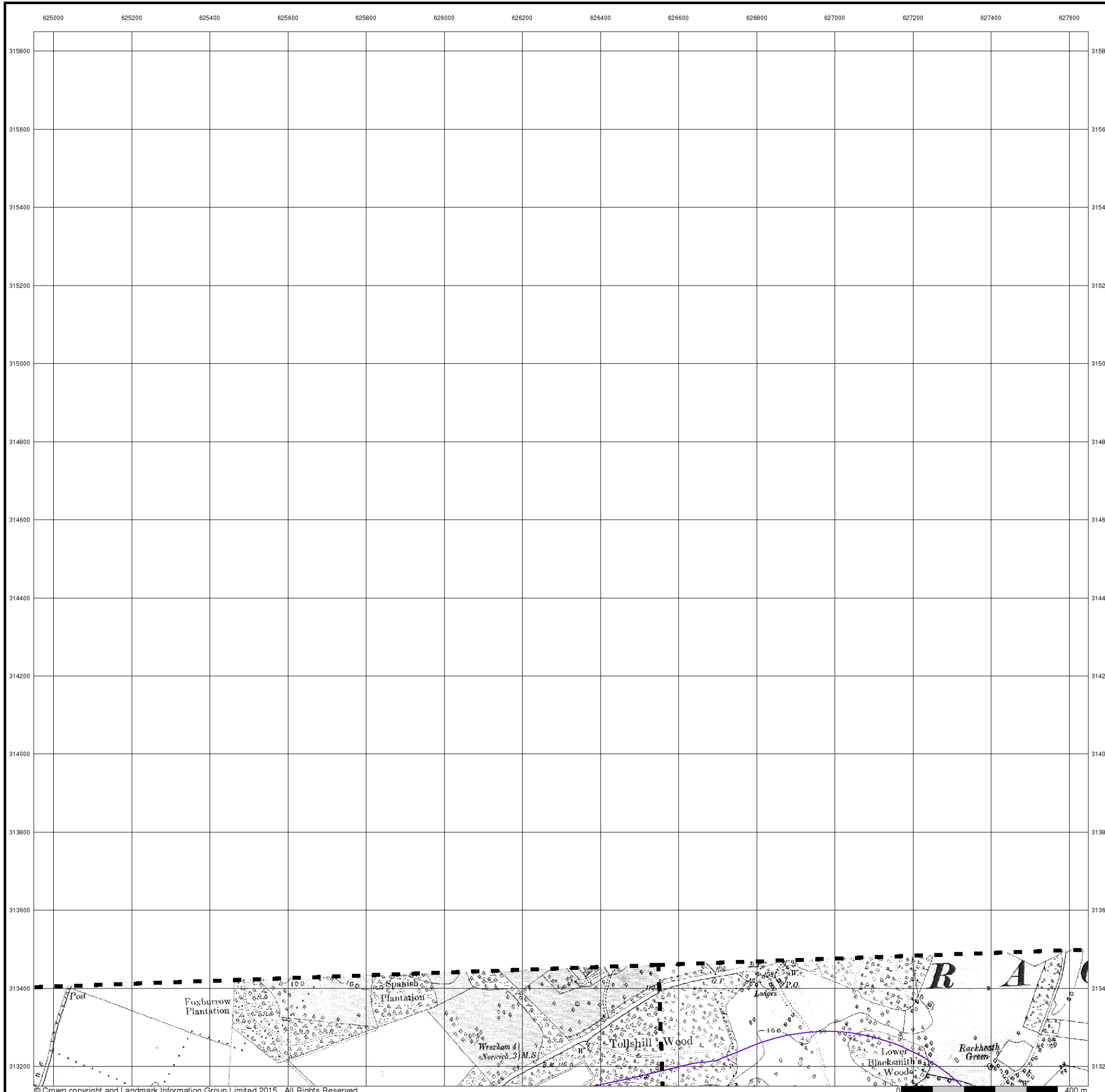
Order Number: 123227967_1_1
Customer Ref: 17-0337.01.
National Grid Reference: 626730, 313410
Slice: C
Site Area (Ha): 65.82
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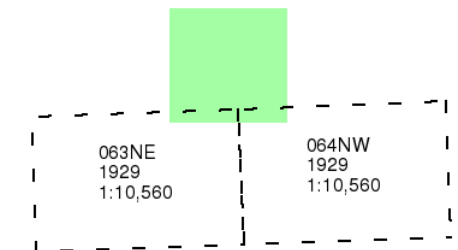
Norfolk

Published 1929

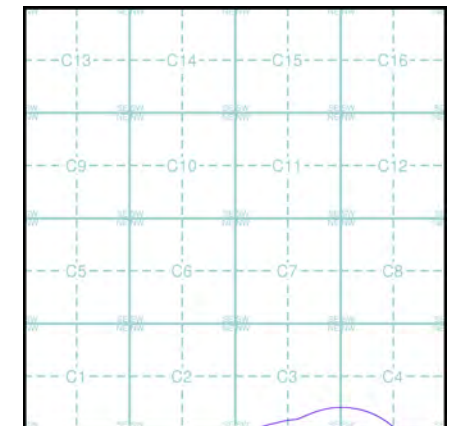
Source map scale - 1:10,560

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 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 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 C



Order Details

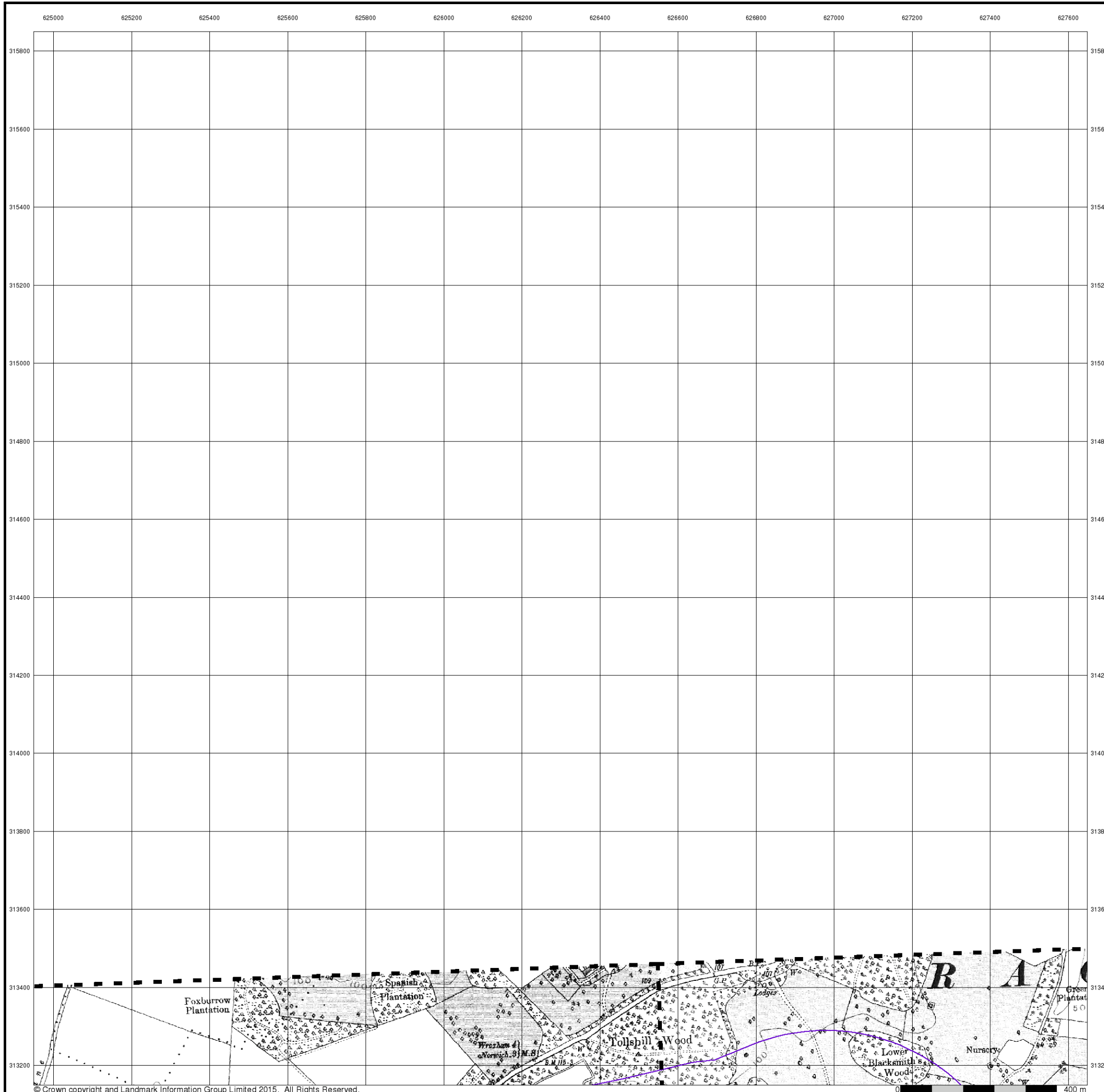
Order Number: 123227967_1_1
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 National Grid Reference: 626730, 313410
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Norfolk

Published 1938

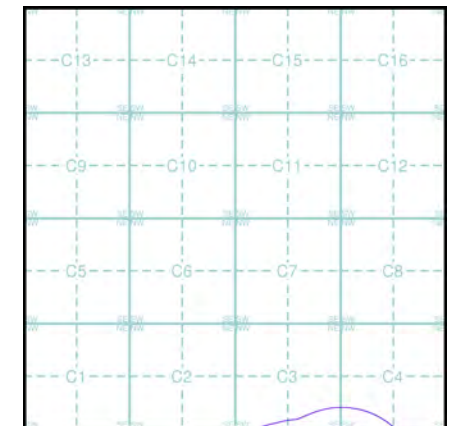
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 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 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)

051SE 1938 1:10,560	052SW 1938 1:10,560
063NE 1938 1:10,560	064NW 1938 1:10,560

Historical Map - Slice C



Order Details

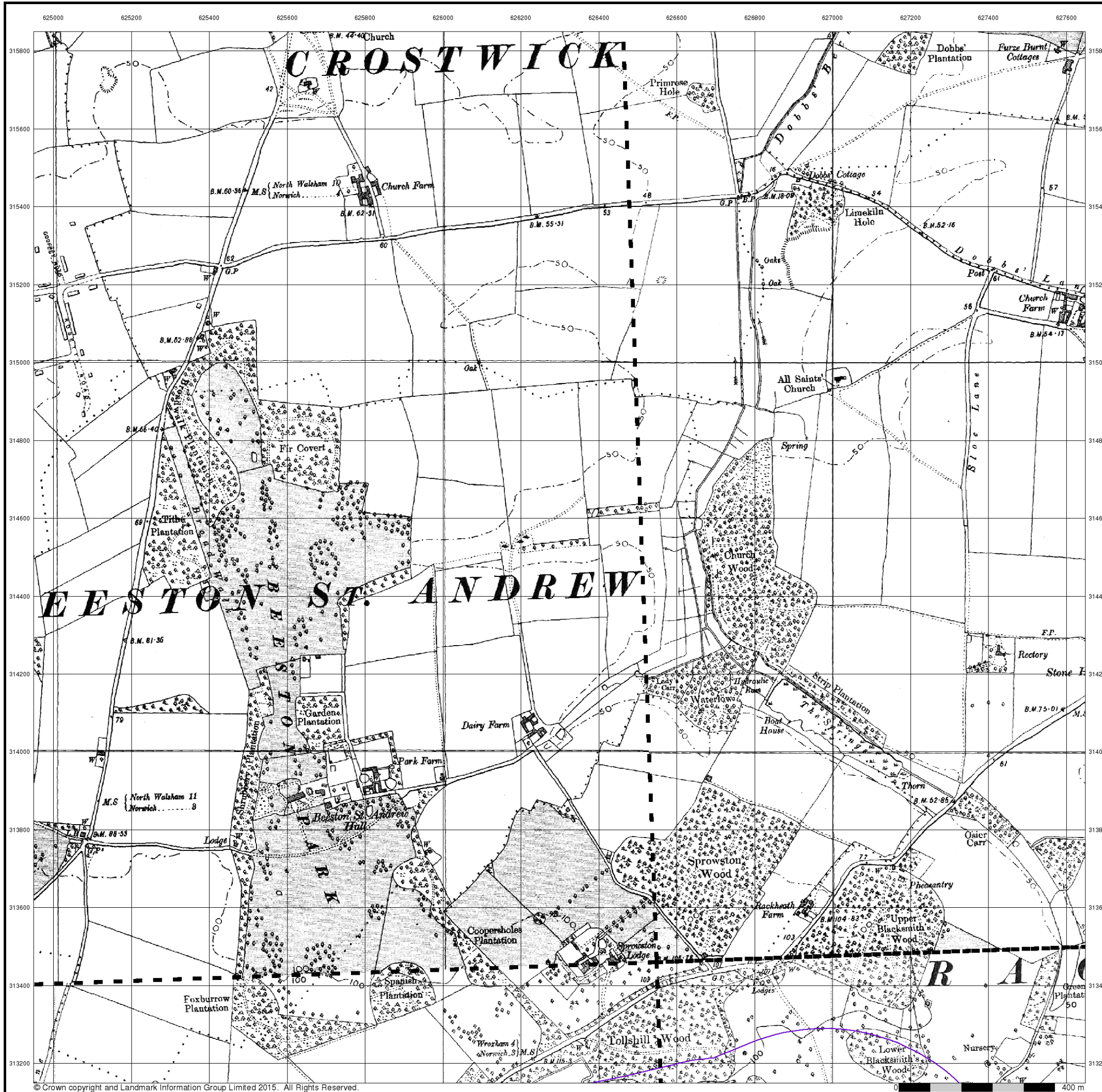
Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
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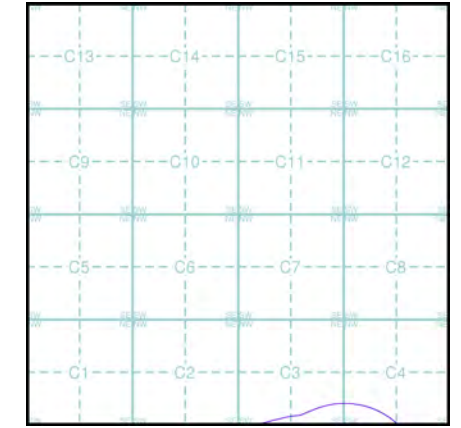
Norfolk
Published 1950 - 1951
Source map scale - 1:10,560

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 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 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)

051SE 1951 1:10,560	052SW 1951 1:10,560
063NE 1950 1:10,560	064NW 1950 1:10,560

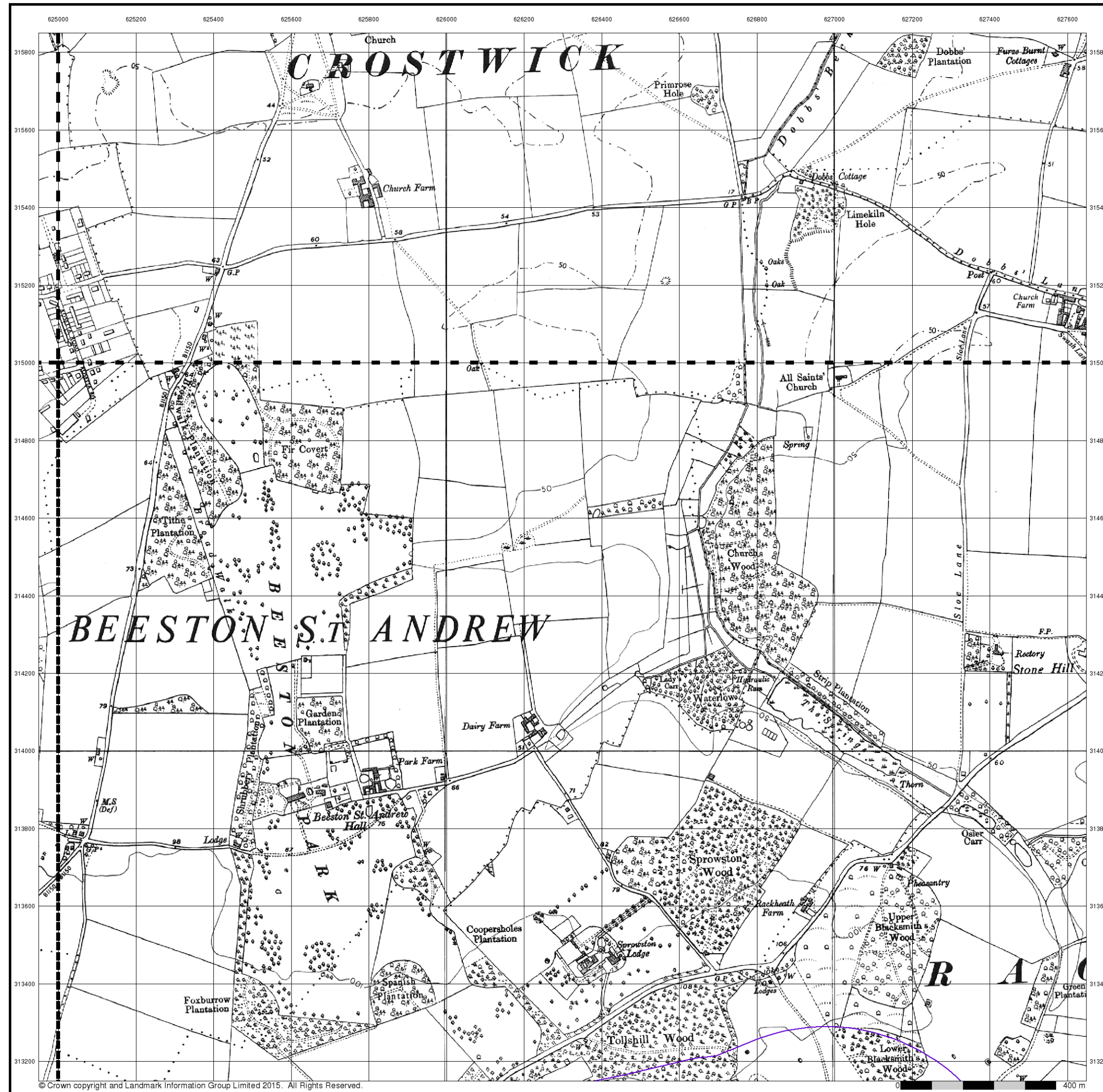
Historical Map - Slice C



Order Details
 Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
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Site Details
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Landmark INFORMATION GROUP
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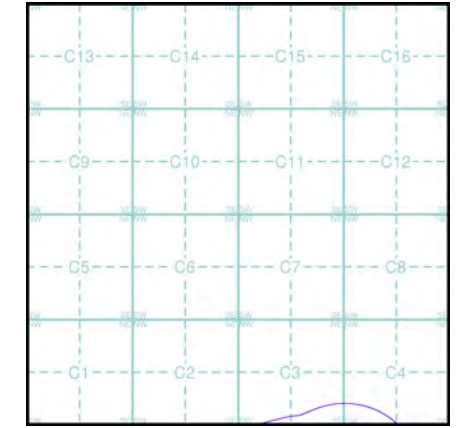
Ordnance Survey Plan
Published 1957 - 1958
Source map scale - 1:10,000

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 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)

TG21NW	TG21NE
1957	1957
1:10,560	1:10,560
TG21SW	TG21SE
1958	1957
1:10,560	1:10,560

Historical Map - Slice C



Order Details

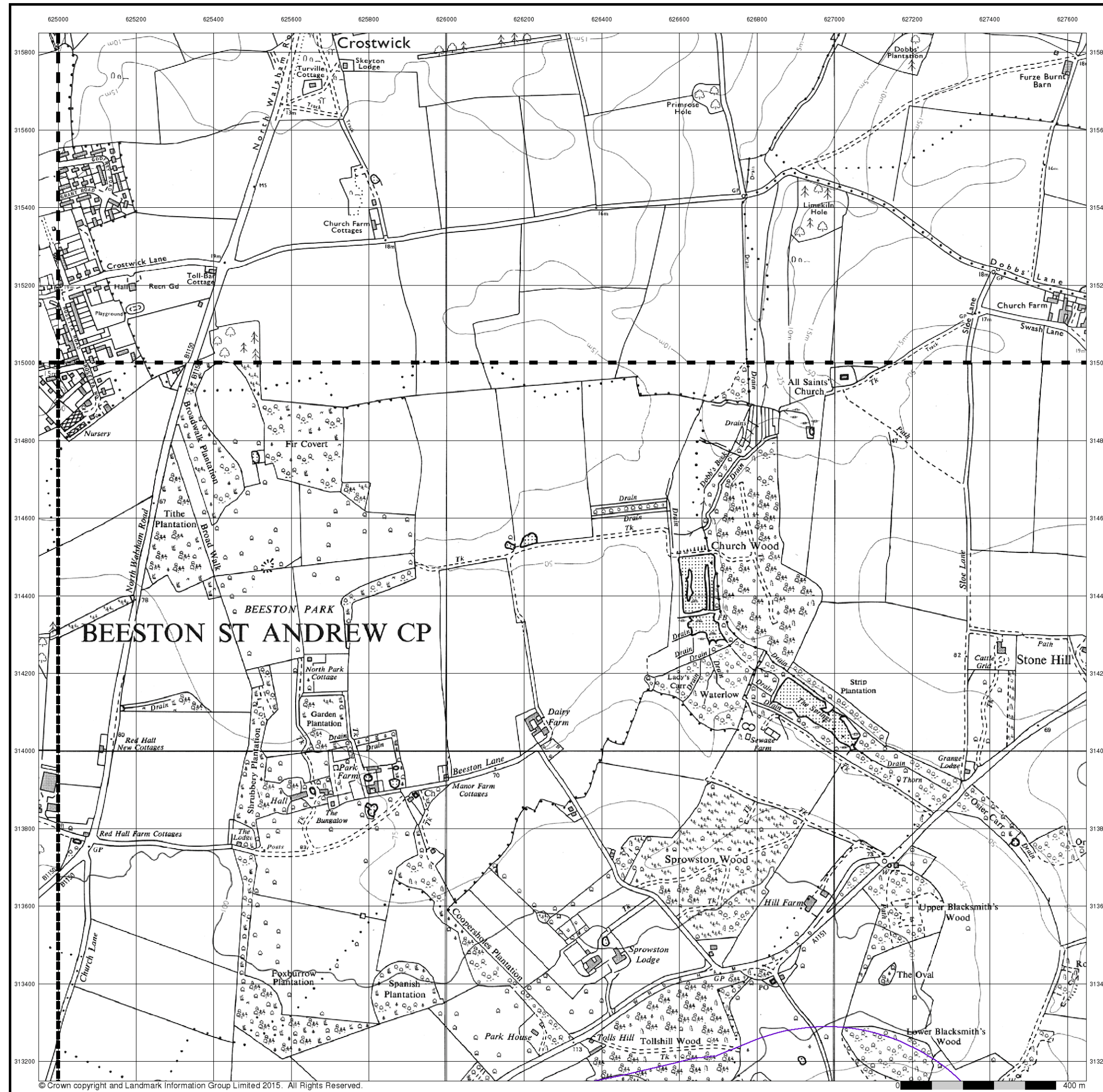
Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



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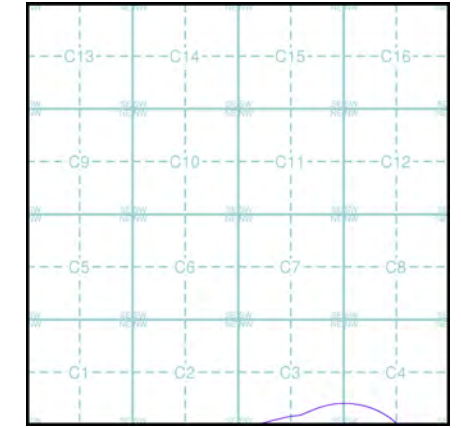
Ordnance Survey Plan
Published 1971 - 1979
Source map scale - 1:10,000

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 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)

TG21NW	TG21NE
1971	1976
1:10,560	1:10,000
TG21SW	TG21SE
1979	1971
1:10,000	1:10,560

Historical Map - Slice C



Order Details
 Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
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Site Details
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Ordnance Survey Plan

Published 1975

Source map scale - 1:10,000

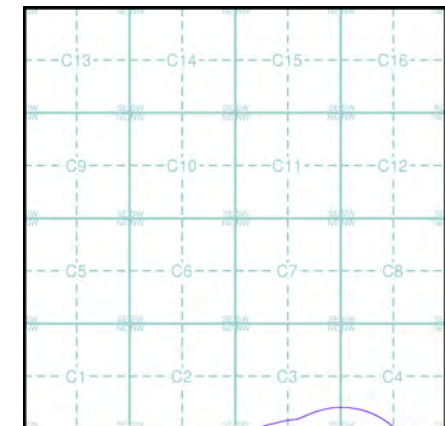
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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 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)

TG21NW
1975
1:10,000



Historical Map - Slice C



Order Details

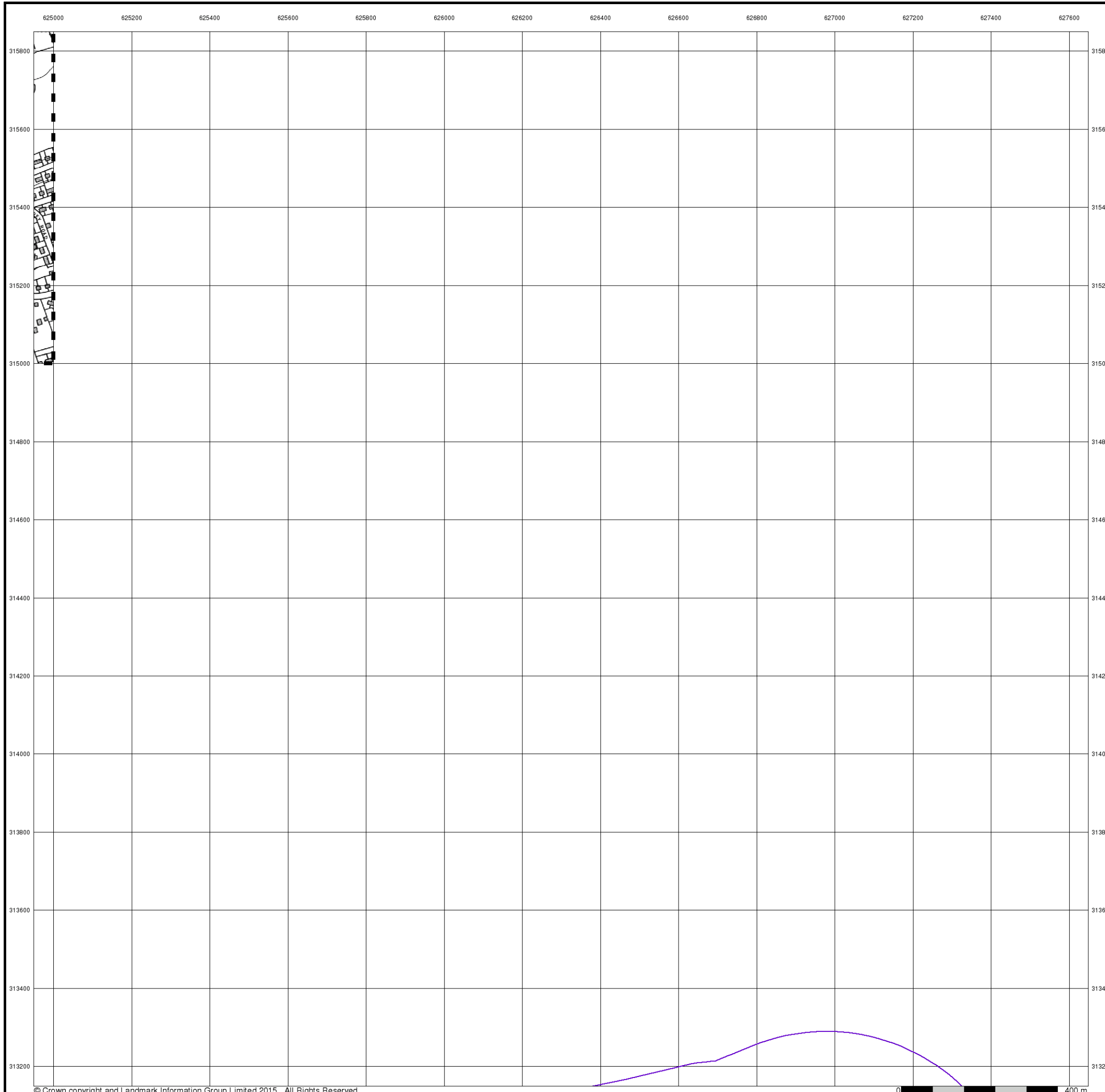
Order Number: 123227967_1_1
Customer Ref: 17-0337.01.
National Grid Reference: 626730, 313410
Slice: C
Site Area (Ha): 65.82
Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



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Norwich

Published 1980

Source map scale - 1:10,000

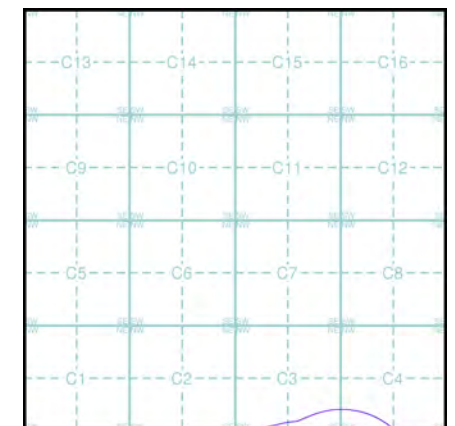
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.

They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

TG21NW 1960 1:10,000	TG21NE 1960 1:10,000
TG21SW 1960 1:10,000	TG21SE 1980 1:10,000

Russian Map - Slice C



Order Details

Order Number: 123227967_1_1
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 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



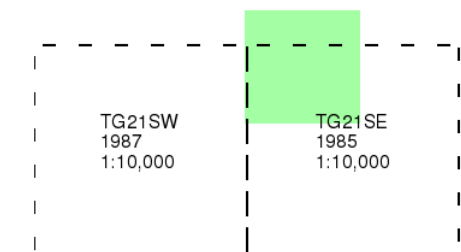
Ordnance Survey Plan

Published 1985 - 1987

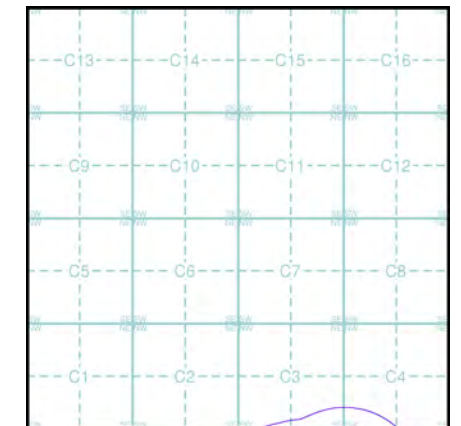
Source map scale - 1:10,000

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 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 C

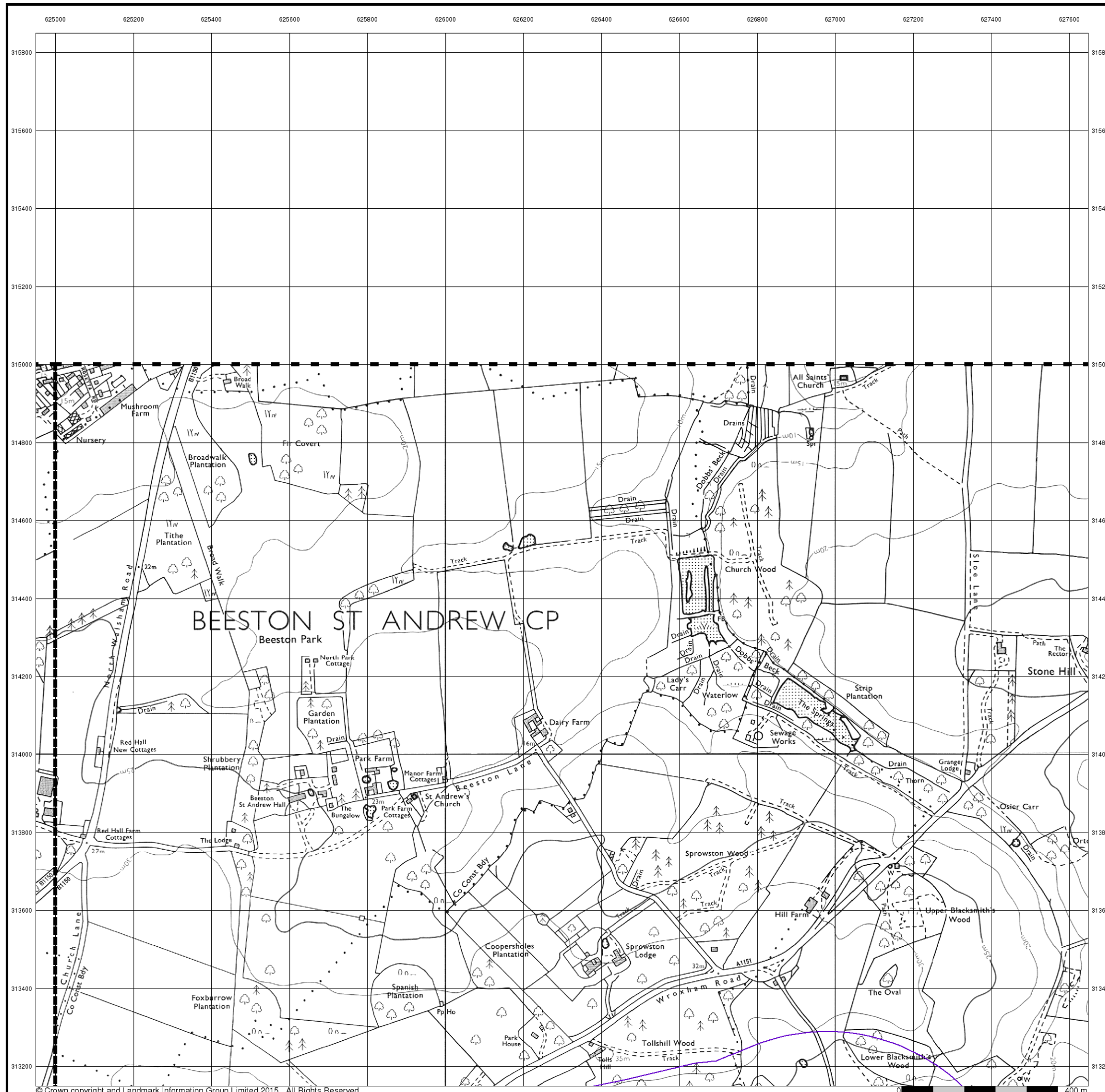


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS





10k Raster Mapping

Published 2000

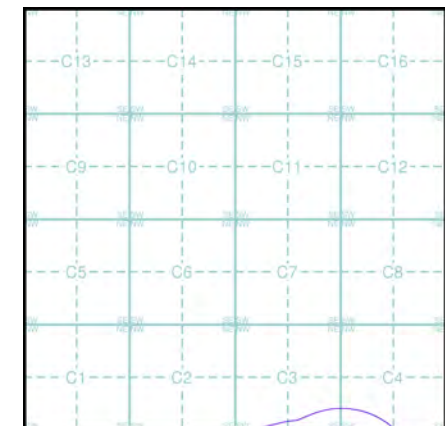
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TG21NW 2000 1:10,000	TG21NE 2000 1:10,000
TG21SW 2000 1:10,000	TG21SE 2000 1:10,000

Historical Map - Slice C



Order Details

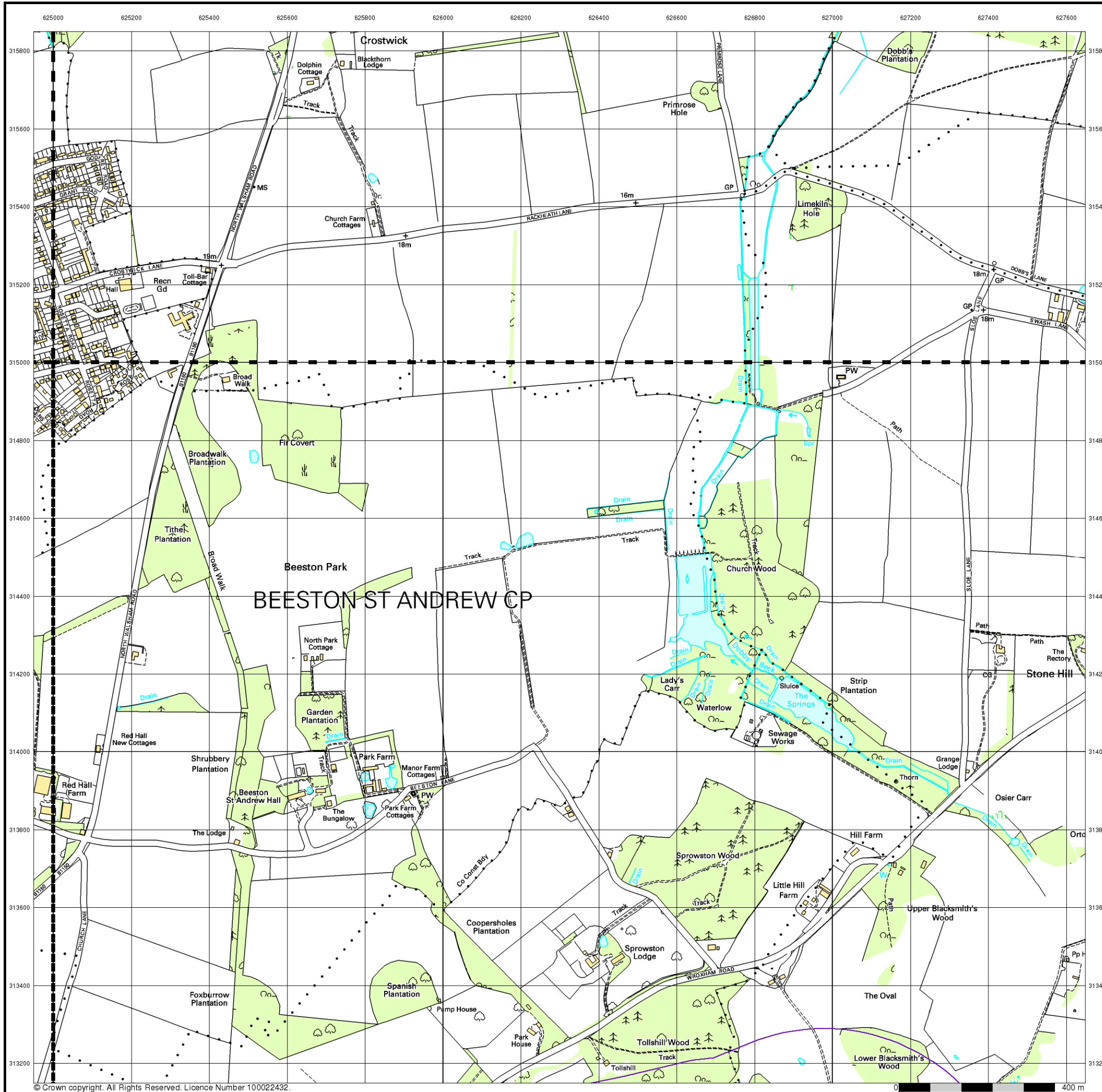
Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

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10k Raster Mapping

Published 2006

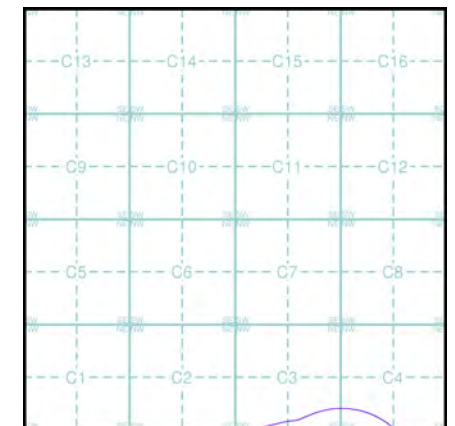
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TG21NW 2006 1:10,000	TG21NE 2006 1:10,000
TG21SW 2006 1:10,000	TG21SE 2006 1:10,000

Historical Map - Slice C



Order Details

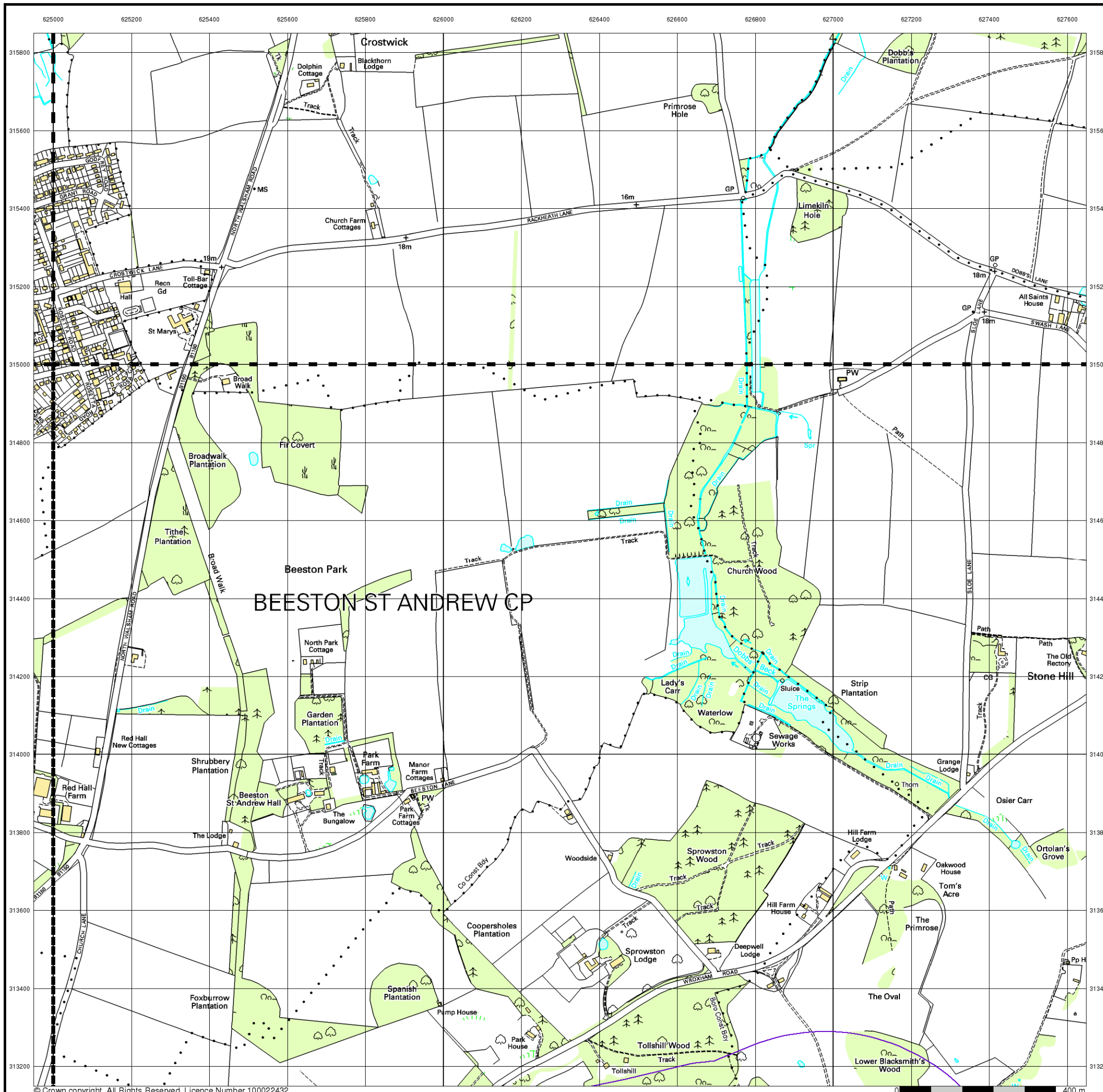
Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

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VectorMap Local

Published 2017

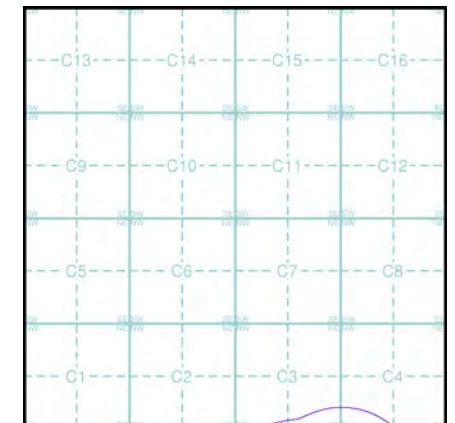
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' 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, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

TG21NW 2017 Variable	TG21NE 2017 Variable
TG21SW 2017 Variable	TG21SE 2017 Variable

Historical Map - Slice C

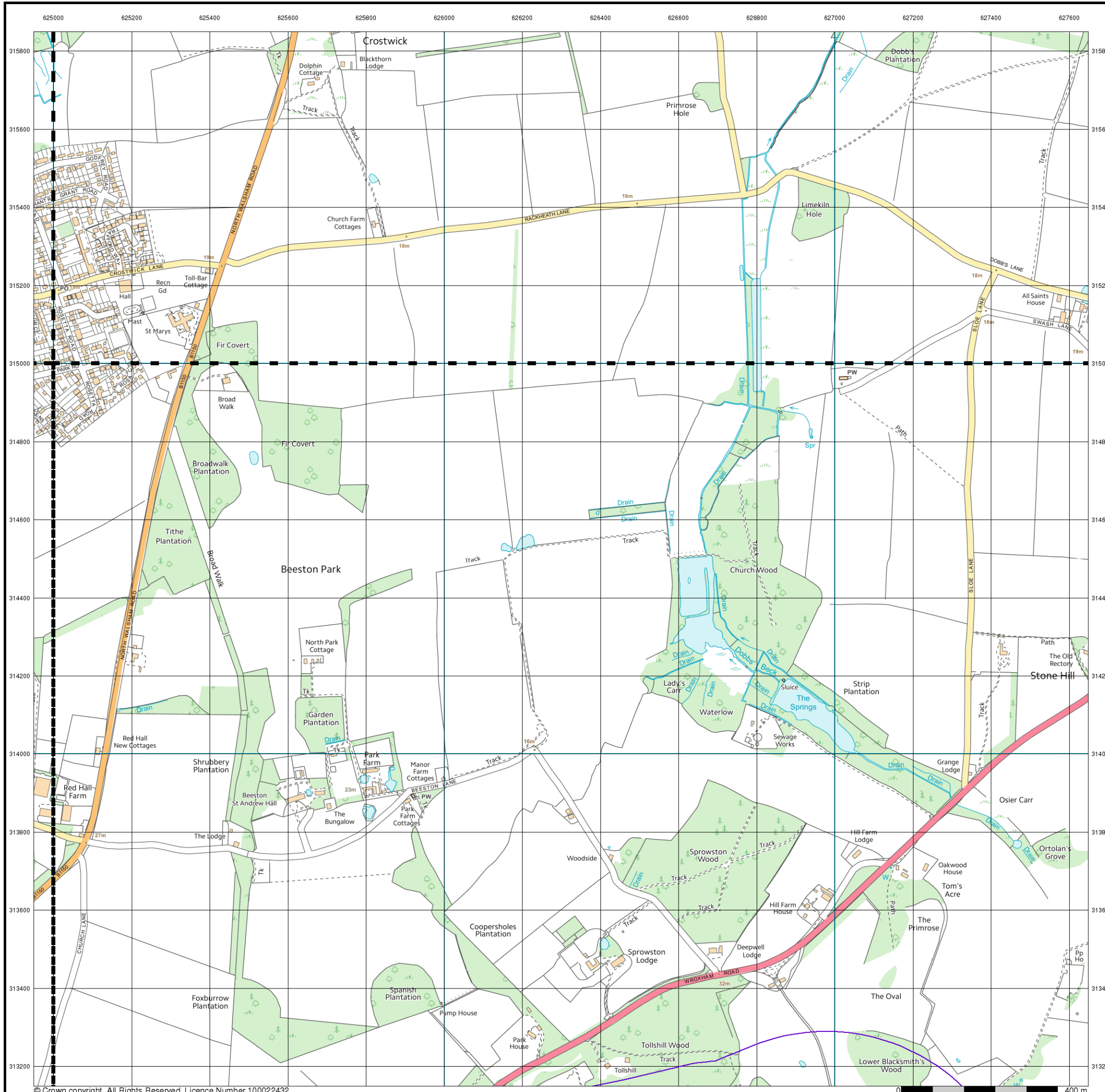


Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01
 National Grid Reference: 626730, 313410
 Slice: C
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



Historical Mapping Legends

Ordnance Survey County Series 1:10,560

- Gravel Pit
- Sand Pit
- Other Pits
- Quarry
- Shingle
- Orchard
- Osiers
- Reeds
- Marsh
- Mixed Wood
- Deciduous
- Brushwood
- Fir
- Furze
- Rough Pasture
- Arrow denotes flow of water
- Trigonometrical Station
- Site of Antiquities
- Bench Mark
- Pump, Guide Post, Signal Post
- Well, Spring, Boundary Post
- 285** Surface Level
- Sketched Contour
- Instrumental Contour
- Main Roads
- Minor Roads
- Sunken Road
- Raised Road
- Road over Railway
- Railway over River
- Railway over Road
- Level Crossing
- Road over River or Canal
- Road over Stream
- Road over Stream
- County Boundary (Geographical)
- County & Civil Parish Boundary
- Administrative County & Civil Parish Boundary
- County Borough Boundary (England)
- County Burgh Boundary (Scotland)
- Rural District Boundary
- Civil Parish Boundary

Ordnance Survey Plan 1:10,000

- Chalk Pit, Clay Pit or Quarry
- Gravel Pit
- Sand Pit
- Disused Pit or Quarry
- Refuse or Slag Heap
- Lake, Loch or Pond
- Dunes
- Boulders
- Coniferous Trees
- Non-Coniferous Trees
- Orchard
- Scrub
- Coppice
- Bracken
- Heath
- Rough Grassland
- Marsh
- Reeds
- Saltings
- Building
- Glasshouse
- Sloping Masonry
- Pylon
- Electricity Transmission Line
- Pole
- Cutting
- Embankment
- Standard Gauge Multiple Track
- Standard Gauge Single Track
- Siding, Tramway or Mineral Line
- Narrow Gauge
- Geographical County
- Administrative County, County Borough or County of City
- Municipal Borough, Urban or Rural District, Burgh or District Council
- Borough, Burgh or County Constituency
- Civil Parish
- BP, BS Boundary Post or Stone
- Ch Church
- CH Club House
- F E Sta Fire Engine Station
- FB Foot Bridge
- Fn Fountain
- GP Guide Post
- MP Mile Post
- MS Mile Stone
- Pol Sta Police Station
- PO Post Office
- PC Public Convenience
- PH Public House
- SB Signal Box
- Spr Spring
- TCB Telephone Call Box
- TCP Telephone Call Post
- W Well

1:10,000 Raster Mapping

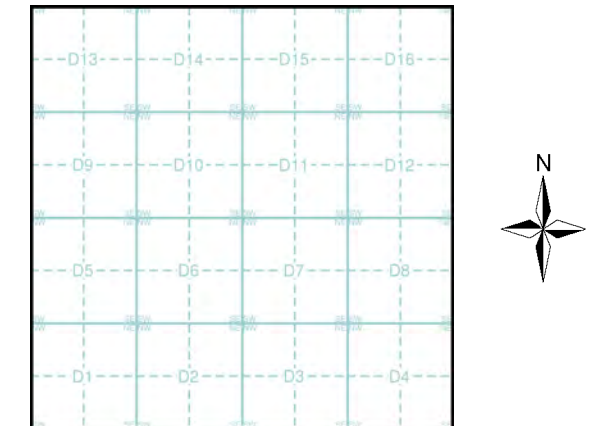
- Gravel Pit
- Rock
- Boulders
- Shingle
- Sand
- Slopes
- General detail
- Overhead detail
- Multi-track railway
- County boundary (England only)
- District, Unitary, Metropolitan, London Borough boundary
- Area of wooded vegetation
- Non-coniferous trees (scattered)
- Coniferous trees (scattered)
- Orchard
- Rough Grassland
- Scrub
- Water feature
- MHW(S) Mean high water (springs)
- Bench mark (where shown)
- Point feature (e.g. Guide Post or Mile Stone)
- Site of (antiquity)
- General Building
- Refuse tip or slag heap
- Rock (scattered)
- Boulders (scattered)
- Mud
- Sand Pit
- Top of cliff
- Underground detail
- Narrow gauge railway
- Single track railway
- Civil, parish or community boundary
- Constituency boundary
- Non-coniferous trees
- Coniferous trees
- Positioned tree
- Coppice or Osiers
- Heath
- Marsh, Salt Marsh or Reeds
- Flow arrows
- MLW(S) Mean low water (springs)
- Triangulation station
- Pylon, flare stack or lighting tower
- Glasshouse
- Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
Norfolk	1:10,560	1950 - 1951	8
Ordnance Survey Plan	1:10,000	1957	9
Ordnance Survey Plan	1:10,000	1971 - 1976	10
Norwich	1:10,000	1980	11
Ordnance Survey Plan	1:10,000	1985 - 1987	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Historical Map - Slice D



Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 627740, 313290
 Slice: D
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS



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Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings
Military and Industrial Buildings
Military and Communication Areas
Fireproof Building
Non-fireproof Building
Factory, mill, and flour mill, with chimneys
Power Station, drawn to scale
Radio Station, drawn to scale
Abandoned Open-pit Mine or Quarry
Pit
Tailings Pile
Bench Mark
Fill
Cut
Single-track Railroad
Coniferous Forest
Deciduous Forest
Mixed Forest
Lawns
Citrus Orchard
Wet Ground
Scattered Vegetation

243,8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0,2 Velocity of the current, width of river bed, depth of river
180 / 12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings
Military and Industrial Buildings
Military and Communication Areas
Partly Demolished Buildings
Built-Up Area with Fireproof Buildings Predominant
Built-Up Area with Non-Fireproof Buildings Predominant
Individual Fireproof Building
Individual Dwelling, Fireproof
Factory or Mill Chimney
Operating Shaft or Mine
Pit
Oil or Natural Gas Derrick
Cemetery
Bench Mark
Radio Station
Small Bridge
Double-track Railroad with First Class Station
Shore Embankment
Well
Heavy (Index) Contour Line
Coniferous

Military and Industrial Buildings
Subway Entrance
Demolished Buildings
Built-Up Area with Non-Fireproof Buildings Predominant
Prominent Industrial Building
Ruins of an Individual Dwelling
Factory or Mill with Chimney
Non-Operating Shaft or Mine
Stone Quarry
Gas Pump or Service Station
Fuel Storage or Natural Gas Tank
Small Hydroelectric Power Station
Power Station
Transformer Station
Burial Mound (height in metres)
Triangulation Point on Burial Mound
Triangulation Point
Bench Mark (monumented)
Telegraph Office
Telephone Station
Airfield or Seaplane Base
Landing Strip
Highway under Construction
Improved Dirt Road (former truck road)
Dismantled Railroad
Railroad Under Construction
River or Ditch with Embankment
Water Reservoir or Rain Water Pit
Spring
Isobath with value
Contour Line and Value
Half Contour Line
Spot Elevation Value
Deciduous
Mixed
Scrub

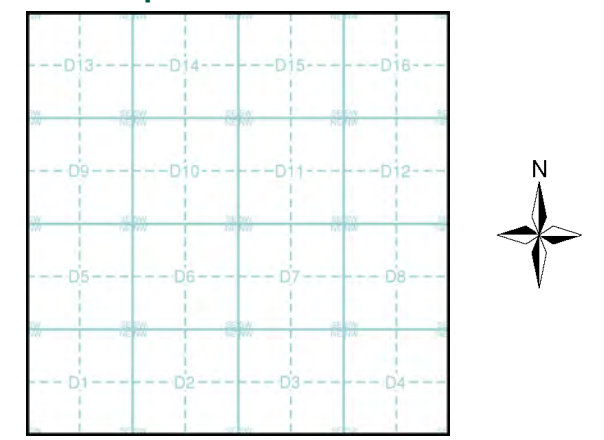
Key to Numbers on Mapping



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Norfolk	1:10,560	1887	3
Norfolk	1:10,560	1908	4
Norfolk	1:10,560	1919	5
Norfolk	1:10,560	1929	6
Norfolk	1:10,560	1938	7
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Ordnance Survey Plan	1:10,000	1971 - 1976	10
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Ordnance Survey Plan	1:10,000	1985 - 1987	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Russian Map - Slice D



Order Details

Order Number: 123227967_1_1
 Customer Ref: 17-0337.01.
 National Grid Reference: 627740, 313290
 Slice: D
 Site Area (Ha): 65.82
 Search Buffer (m): 500

Site Details

White Land Parcels R5-R10, Sprowston, Norwich, NR7 8RS

Landmark INFORMATION GROUP
 Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



Norfolk

Published 1887

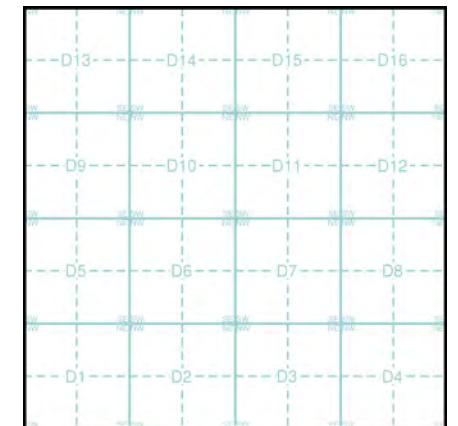
Source map scale - 1:10,560

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 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 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)

052SW
1887
1:10,560
064NW
1887
1:10,560

Historical Map - Slice D



Order Details

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