



Phase 1

Environmental Assessment Report

Land off Church Bank

Jarrow

South Shields

NE32 3BE

Date: 16th October 2025

Version 1

ENVIROSOLUTION LTD

Suite 53
3a Bridgewater Street
Liverpool
L1 0AB



EnviroSolution Ltd

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Executive Summary

The preliminary environmental site assessment indicates that the site can be classified as moderate risk in terms of contamination and the risks to the identified receptors (e.g., human health, controlled waters and buildings) is moderate.

This classification is due to a number of historic land uses which have taken place within the site boundary which include a lampblack works, barium works, tramway, electrical substation, timber yard and allotment gardens. Made Ground is expected to be present as a result of historic development and demolition, and BGS borehole records indicate up to 2.30m of Made Ground beneath the site. If the Made Ground contains significant amounts of organic material, it could generate ground gases (carbon dioxide and methane).

Additionally, a number of off-site land uses have been identified in the surrounding area with the potential to contaminate the shallow soils. These include an alkali works, engineering works, iron works, tanks, gasometer and historic landfills.

Associated contaminants include heavy metals, asbestos, hydrocarbons, polyaromatic hydrocarbons (PAHs), creosote, solvents, acids/ alkalis, polychlorinated biphenyls (PCBs) and ground gases.

It is recommended a Phase 2 intrusive ground investigation is undertaken prior to site redevelopment to obtain additional information on the ground conditions and the contamination status. The investigation should be carried out by qualified and competent persons. The scope of works for the investigation will need to be submitted and approved by the local authority prior to the commencement of the Phase 2 intrusive works.

It should be noted that at the time of writing this report, the development plans have not been finalised. The conceptual site model should be reassessed once a final development plan has been decided.

Disclaimer

This report has been prepared by EnviroSolution Ltd who has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant experienced in preparing reports of a similar scope.

However, to the extent that the report is based on or relies upon information contained in records, reports or other materials provided to EnviroSolution Ltd, which have not been independently produced or verified, EnviroSolution Ltd, gives no warranty, representation or assurance as to the accuracy or completeness of such information.

The scope of this report is restricted to potential ground contamination and its environmental impact; it does not cover above-ground hazards (e.g., asbestos in buildings), ecological sensitivities (e.g., bats), biological or horticultural hazards (e.g., Japanese Knotweed) or structural hazards (e.g., building stability) unless specifically referred to in the text of this report.

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1.1 Introduction

1.2 Background

EnviroSolution Ltd was commissioned to undertake a Phase 1 Environmental Site Assessment at a site located at land off Church Bank, Jarrow, South Shields, NE32 3BE. This report was commissioned to provide information on the potential contamination status of the site.

1.3 Objectives

The objective of the preliminary environmental site assessment was:

1. To provide a summary of the environmental setting and historical land use of the site and immediate surrounding area.
2. To obtain information on the ground conditions present beneath the site.
3. To develop a conceptual site model and complete a generic quantitative risk assessment to identify any environmental risks and liabilities associated with ground conditions at the site.

1.4 Scope of Work

To achieve the objectives, the following scope of work was completed:

1. A desk-based study of the site comprising a review of available environmental information for the site such as geological and hydrogeological data and historical land use information.
2. A site walkover.
3. Assessment of potential hazards and constraints during construction and longer term.

This work has been devised to generally comply with the relevant principles and requirements of the following legalisation and guidance:

- Part IIA of the Environmental Protection Act, 1990 and Section 57 of the Environmental Act 1995;
- Contaminated Land (England) (Amendment) Regulations 2012 and Contaminated Land Statutory Guidance (DEFRA, April 2012);
- National Planning Policy Framework (Ministry of Housing, Communities and Local Government, July 2021);
- BS10175: 2011 +A2:2017 “Investigation of Potentially Contaminated Sites- Code of Practice”; and
- Environment Agency (2020) Land Contamination Risk Management Report LCRM “How to assess and manage the risks from land contamination”.

1.5 Information Sources

Historical Ordnance Survey maps have been obtained from historical records, ranging from 1862 to 2025. These maps provide high quality information on historical site use.

The British Geological Survey Geoindex database has been used to provide information on geo-environmental aspects of the site and the immediate surrounding area such as geological, hydrogeological and hydrological data.

The Environment Agency website (www.gov.uk/government/organisations/environment-agency) and Magic website (www.magic.gov.uk) was also used to obtain environmental information.

Industry Profiles produced by the Department of the Environment were utilised to obtain information on processes, materials and wastes associated with potential contaminative land uses near the site.

Readily available information sources have been used to produce this desk-based study. Additional information may be requested by the Local Planning Authority (e.g., local authority environmental information request).

2 The Site

2.1 Site Location

The site is located at land off Church Bank, Jarrow, South Shields, NE32 3BE. The British National Grid Reference for the approximate site centre is GR: 369440 411375.

The site location is shown on **Figure 1** in **Appendix A**.

2.2 Site Description

The site description has been prepared following a walkover survey conducted by EnviroSolution Ltd on the 1st of October 2025. The site photographs are included in **Appendix B**.

The existing site plan is shown on **Figure 2** which is included in **Appendix A**.

The site is Irregular in shape and covers an approximate area of 20,900 square metres. The site is generally flat at an approximate elevation of 7m aOD.

The site is located on the eastern side of Church Bank. Access is gained via a gate along the western site boundary along Church Bank.

The majority of the site is covered in concrete hardstanding which has vegetation growing through the gaps in the slabs in some places. The site has recently been cleared of structures with the concrete footings remaining in place and evidence of disconnected pipework. An electrical substation is located near the southern boundary.

It is known from former demolition plans that above ground oil/ fuel tanks were present but were removed in 2022. Only the brick plinths remain. A plan showing the location of the tanks is shown on **Figure 3** in **Appendix A**.

The site boundaries consist of wooden panel fencing, metal fencing and trees. The River Don is located adjacent to the northern site boundary.

2.3 Development Proposals

It is understood that the proposed development plan includes the construction of a Battery Energy Storage System and associated infrastructure. At this stage, final layout plans have not been finalised.

The proposed development plan is shown on **Figure 4** which is included in **Appendix A**.

2.4 Site History

The development site and surrounding area has been reviewed with reference to historical Ordnance Survey (OS) maps. The history of the site and immediate surrounding area is summarised in Table 1. Copies of the historical OS maps are included in **Appendix C**. A search buffer of 250m has been used.

Table 1 - Historic Mapping Review

Date	Scale	On Site	Off Site
1862	1:10,560	A road "the Causeway" runs N-S through central area. Eastern boundary partially intersected by Lampblack Manufacturers. Northern area labelled salt marsh.	The Hive Iron Works 50m southeast. River Don 10m west. Engine house 140m northwest. Slake Chemical Works 100m east. Gasometer 200m east of the site.
1876	1:2,500	No significant change.	No significant change.
1897	1:2,500	Lampblock manufacturers demolished. Two houses built centrally.	Hedworth Barium Works 70m east. Railway line 180m south. St Bede Alkali Works expanded 200m east of the site.
1918	1:2,500	Building of unknown use in southeastern corner (part of barium works). Tramway along western boundary.	Tanks 5m east, 80m east, 100m east, 110m east, 190m east and 205m northeast of the site. Old sand pit 190m northwest. Tramway depot 200m southeast.
1938	1:10,560	No significant change.	Barium works partially demolished.

Date	Scale	On Site	Off Site
1942	1:2,500	Houses and buildings demolished. Allotment gardens on site.	Allotment gardens 10m west, 15m east and 60m southwest. Alkali works demolished.
1956	1:1,250	Southeastern section of the site used as a timber yard.	River Don redirected from 70m east of the site to form timber yard. Engineering works 85m south of the site. Electrical substation 180m south.
1966	1:1:1,250	Tramway in central area. Entire site now labelled as timber yard. Saw mill built in northern area.	Tanks 210m northwest of the site.
1978	1:1,250	Timber sheds built along northern half.	Timber mill 20m east of the site.
1987	1:1,250	Electrical substation built along southern boundary.	No significant change.
2006	1:10,000	No significant change.	No significant change.
2025	1:10,000	Site cleared of buildings to slab level.	No significant change.

3 Environmental Setting

3.1 Geology

The maps indicate that the site is directly underlain by superficial deposits. However, the composition of the deposits beneath the site are unknown. It is likely that the Pelaw Clay Member of the Tyne and Wear Glaciolacustrine Formation is present. The presence of alluvium near the northern boundary is also likely. Local borehole records suggest the superficial thickness is around 30m in the area.

The underlying bedrock is the Pennine Middle Coal Measures Formation, deposited during the Carboniferous Period. The Pennine Middle Coal Measures Formation generally consists of interbedded grey mudstones, siltstones and pale grey sandstones and common coal seams.

The nearest geological fault is located approximately 100m east of the site.

Two BGS borehole logs (Ref: SNZ36SW138/P and NZ36NW14574/1) have been obtained from BGS online records from within or close to the site boundary.

Borehole NZ36SW138/P shows 0.15m of topsoil overlying 2.15m of Made Ground overlying 10.50m of very soft to soft brown/grey silty clay and clayey sandy silt. Very loose to loose grey-brown sand was recorded below this to 14m.

Borehole NZ36NW14574/1 shows 3.20m of Made Ground overlying interbedded soft black silt, very loose silty sands with silt bands and firm brown clays. A possible sandstone boulder was recorded at 11m bgl.

A copy of the geological maps is included in **Appendix D**. A copy of the BGS Borehole is included in **Appendix E**.

3.2 Radon

According to the BGS, the site lies within an elevated band of radon potential where it is estimated that 1-3% of the properties are above the action level (medium probability). According to the UK radon department, radon protective measures are not required for this site in accordance with BR211 Radon: Guidance on protective measures for new buildings (including supplementary advice for extensions, conversions and refurbishment projects).

3.3 Coal Mining Activity

The site falls within a Coal Mining Reporting Area described as having minable coal deposits but does not lie within a 'Development High Risk Area' for coal mining, as defined by the Coal Authority.

The nearest recorded min entry is located some 830m northwest of the site.

As such, it is considered that the risk of coal mining related hazards which could affect the site is low.

A copy of the Mining Remediation Authority map is included in **Appendix F**.

3.4 Hydrogeology

The maps indicate that superficial deposits are designated as an Unproductive Aquifer, defined as; a geological layer (rock or drift deposit) with very low permeability, meaning it has negligible significance for water supply or contributing to river base flow. These unproductive strata are incapable of yielding usable water supplies and typically do not support surface water and wetland ecosystems.

The underlying bedrock of the Pennine Middle Coal Measures Formation is designated as a Secondary A Aquifer, defined as; permeable layers that can support local water supplies, and may form an important source of base flow to rivers.

There are 2 no. groundwater abstraction licences located within a 1km radius of the site. The abstractions are located 830m northeast and 870m northwest of the site and are used for dust suppression and mineral washing respectively.

The site is not located within a Source Protection Zone and there are no Source Protection Zones located within a 1km radius of the site.

A copy of the hydrogeological maps is included in **Appendix G**.

3.5 Hydrology

The River Don is located 18m north of the site which flows towards the east.

The River Tyne is located 780m north of the site and flows towards the east.

3.6 Flood Risk

The site lies within a Flood Zone 1 (low probability), land assessed as having less than a 1 in 1,000 annual probability of river flooding (0.01%) in any year (low risk). The completion of a detailed Flood Risk Assessment is not deemed necessary for this site.

A copy of the flood risk map is included in **Appendix H**.

3.7 Waste Management Facilities

There are 5 no. Environment Agency records of historic landfill sites located within a 1km radius of the site. The landfill information is summarised in Table 2 below:

Table 2 – Historic Landfill Summary

Landfill Site	Operation Dates	Waste Type	Distance from Site
East Jarrow	No Information	No Information	100m NW
Jarrow Slake No.1	1987 – 1994	Inert, Industrial, Commercial, Household	155m NE
Cemetery Road	1894 – 1958	Commercial, Household	505m SW
Mercantile Dock	1989 – 1994	Inert	715m NW
Burnside	1950 – 1973	Industrial, Commercial, Household	825m SW

A copy of the historic landfill map is included in **Appendix I**.

There are no Environment Agency records of currently authorised landfill sites located within a 1km radius of the site.

There is a single Environment Agency record of a site operating under an environmental permit for waste operations within a 1km radius of the site. The permit is held by European Metal Recycling Limited for a metal recycling site located 970m east of the site.

3.8 Environmental Permits, Incidents and Registers

There are a number of records of sites located within a 1km radius of the development site operating under an environmental permit for discharges to water and groundwater. The nearest is held by Northumbrian Water Limited for a storm tank located 470m southeast of the site.

There is a single record of a pollution incident recorded by the Environment Agency having occurred within a 1km radius of the site. The incident occurred 580m southeast of the site and was caused by an atmospheric pollutant.

There are no records of sites located within a 1km radius of the development site operating under an environmental installation permit recorded by the Environment Agency.

3.9 Designated Environmentally Sensitive Sites

There are no records of designated environmentally sensitive sites located within a 1km radius of the site.

4 Preliminary Conceptual Site Model

4.1 Introduction

In order to assess the environmental risks, present, a preliminary conceptual model has been developed for the site. This model has been developed using best practice guidelines in conjunction with the current assessment framework taking into account the development proposals. This preliminary conceptual model is based on the gathered desk-based information (e.g., historical OS data and data sourced from the EA, Geoindex and Magic databases).

The conceptual site model is a representation of the hypothesised relationships between sources, pathways and receptors which allows the identification of potential pollutant linkages and whether these linkages have the potential to comprise significant harm and/or pollution of controlled waters in relation to the site. This model comprises three elements:

Source – the key pollutant hazards associated with the site.

Receptor – the key targets at risk from the sources.

Pathway – the means by which the contaminant can cause harm to the receptor.

If all three elements are present, then a potential pollutant linkage exists, and this may require further assessment.

4.2 Potential Contamination Sources

The site has undergone several phases of industrial redevelopment, and a number of on-site land uses have been identified which could present a risk of contamination. As a result of redevelopment, Made Ground is likely present in the shallow soils. Local borehole records show up to 2.30m of Made Ground beneath the site. Made Ground could contain contaminants including heavy metals, polyaromatic hydrocarbons and asbestos. Additionally, high carbon content could generate ground gases (carbon dioxide and methane).

The on-site land uses and their associated contaminants are summarised in Table 3 below:

Table 3 – On-Site Land Use Summary

Land Use	Potential Contaminants
Lampblack Manufacturers	Polyaromatic hydrocarbons, hydrocarbons, phenols, cresols, sulphur, heavy metals,
Hedworth Barium Works	Heavy metals, hydrocarbons, acids

Land Use	Potential Contaminants
Allotment Gardens	Heavy metals, polyaromatic hydrocarbons
Timber Yard	Heavy metals, creosote, hydrocarbons, polyaromatic hydrocarbons, solvents, paints
Tramway	Heavy metals, polyaromatic hydrocarbons
Electrical Substation	Polychlorinated biphenyls (PCBs)

A number of off-site land uses have been identified in the surrounding area that have the potential to contaminate the shallow soils at the site. The land use and its associated contaminants are summarised in Table 4 below:

Table 4 – Off-Site Land Use Summary

Land Use	Potential Contaminants
Tanks	Hydrocarbons
Alkali Works	Heavy metals, inorganic compounds, acids/alkalis, asbestos, polychlorinated biphenyls (PCBs), organic solvents, halogenated compounds, mineral oils.
Engineering Works/ Warehouses	Heavy metals, inorganic compounds, acids/alkalis, asbestos, polychlorinated biphenyls (PCBs), organic solvents, halogenated compounds, mineral oils.
Iron Works	Heavy metals, hydrocarbons, polyaromatic hydrocarbons (PAHs), solvents.
Chemical Works	Heavy metals, inorganic compounds, hydrocarbons, polyaromatic hydrocarbons (PAHs), solvents.
Historic Landfills	Ground gas (carbon dioxide and methane)
Gasometer	Heavy metals, PAHs, sulphur, hydrocarbons, cyanide,

4.3 Receptors

The potential receptors considered to be at risk from soil and groundwater contamination associated with the site are summarised in Table 5 below:

Table 5 - Receptor Description

Receptor	Details
Human (On Site)	- Construction workers - Future site users - Site visitors
Human (Off Site)	- Adjacent site users
Controlled Waters	- Secondary A Aquifer - River Don - River Tyne - Abstractions
Building/ construction materials	- Foundations - Buried services
Environmental Receptors	- None identified

4.4 Pathways

The potential exposure pathways linking contamination with the receptors identified above are summarised in Table 6 below:

Table 6 - Exposure Pathways Summary

Receptor	Details of Exposure Pathway
Human (on-site)	- Direct ingestion of contaminated soil/groundwater - Dermal contact with soil/groundwater - Inhalation of gases and vapours
Human (off-site)	- Inhalation of fibres and particulates - Inhalation of migrating gases and vapours
Controlled waters	- Vertical and lateral migration of dissolved phase contaminants via preferential pathways to

Receptor	Details of Exposure Pathway
	groundwater aquifers and surface water features - Direct surface water run-off to surface water features
Building/construction	- Buried materials/services - Contact with contaminated soil and/or groundwater

4.5 Potential Pollution Linkages

4.5.1 Human Health

It is understood that the proposed development plan includes the construction of a Battery Energy Storage System and associated infrastructure. At this stage, final layout plans have not been finalised. For the purpose of this report, it has been assumed that the development will include landscaped areas of soft landscaping and small control rooms and welfare. This is considered to be a non-sensitive end-use.

The presence of buildings and hardstanding would eliminate the risk of exposure, via the dermal contact and ingestion pathways to future site users to any ground contamination that may remain following development.

There could be a potential risk of exposure to any ground contamination that remains following redevelopment in any areas of soft landscaping, to future site users, via all possible exposure pathways.

Any ground gases (i.e., methane and carbon dioxide) and vapours that are present within the soils beneath the site could potentially ingress into any proposed buildings through preferential pathways (e.g., service entry points). Therefore, there would be a risk of exposure via inhalation to future site users.

There is the potential for construction workers and adjacent land users to be exposed to soil and groundwater contamination during site redevelopment. However, the use of appropriate PPE and the adoption of suitable Health and Safety methods will help to reduce the risks posed to human health during this work.

4.5.2 Controlled Waters

The site is directly underlain by superficial deposits of unknown composition, but likely to comprise glaciolacustrine deposits which are designated as a Unproductive Aquifer. These

deposits are generally of low permeability and will act as an impermeable barrier, preventing any migration of potential contaminants to the Secondary A bedrock aquifer below.

Two groundwater abstraction licences have been identified within a 1km radius of the site. However, these are located >830m from the site boundary and are used for low sensitivity industrial purposes.

The site is not located within a Source Protection Zone.

The River Don is located 18m north of the site boundary. At this distance, direct surface water run-off cannot be ruled out.

Direct contamination to the River Tyne is considered unlikely at a distance of 780m from the site.

Overall, the risk to controlled waters is deemed to be moderate.

4.5.3 Building/Construction Materials/Buried Services

The presence of any soil and groundwater contaminants beneath the site could potentially impact on construction materials for future new developments, such as below ground structures and services. Concrete foundations are particularly sensitive to aggressive ground conditions, i.e., sulphate attack.

If ground gases and vapour are present in the soil beneath the site, then there would be the potential risk of ingress into the properties which could present a risk of explosion.

4.6 Environmental Designations

The proposed development is not considered to pose a risk to the identified environmental receptor.

4.7 Preliminary Hazard Assessment

A preliminary hazard assessment is presented in Table 7. The preliminary hazard assessment is a qualitative assessment of the risks posed by each potential pollutant linkage described above and is used to identify the requirement for additional work (e.g., intrusive ground investigation).

Table 7 – Preliminary Hazard Assessment

Source 1	Pathway	Receptor	Likelihood	Effect	Risk	Assessment
Contaminated soil/groundwater	Ingestion (via soil dust), inhalation (via soil dust and particulates), Ingestion through dirty hands, dermal contact with soil/water.	Future site users Adjacent site users Construction workers	2	3	Moderate	On site contamination source identified from historic on-site and off-site uses. Areas of soft landscaping provide exposure pathway to sensitive receptors. Exposure to construction workers.
Contaminated soil groundwater	Direct contact	Buildings/services	2	3	Moderate	On-site contamination source potential identified. Foundations and services in direct contact with potentially contaminated soils.
Contaminated groundwater	Downward or lateral migration Surface water run-off	Secondary A Aquifer River Don River Tyne Abstractions	3	3	Moderate	Impermeable superficial deposits will act as an impermeable barrier, preventing migration of any potential contaminants at the surface to the below aquifer receptors. There are no sensitive groundwater abstraction licences located nearby. Non-sensitive abstractions located some 830m away. The site is not located within a Source Protection Zone. Direct surface water run-off to River Don (18m north) deemed possible.

Source 1	Pathway	Receptor	Likelihood	Effect	Risk	Assessment
Ground gas / vapours Radon	Inhalation, ingress into buildings	Buildings / services Future site users Adjacent site users Construction workers	2	4	Moderate	Potential ground gas source identified from Made Ground and off-site historic landfills. Site is located within a medium probability area for radon.

Using Risk Matrix (Table 8) Degree of Risk (R) = Likelihood (L) x Effect (E)

Table 8 - Risk Matrix, Degree of Risk (R) = Likelihood (L) x Effect (E)

Likelihood	Description	Probability	Effect (E)	Description
5	Almost certain	>70%		
4	Probable	50-70%	4	Severe
3	Likely	30-50%	3	Medium
2	Unlikely	10-30%	2	Mild
1	Negligible	<10%	1	Minor
Risk (R)	Risk Level	Action		
1-5	Low	None required		
6-10	Moderate	Further assessment via Phase 2 intrusive ground investigation.		
>10	High	Further assessment via Phase 2 intrusive ground investigation.		

5 Conclusions and Recommendations

The preliminary environmental site assessment indicates that the site can be classified as moderate risk in terms of contamination and the risks to the identified receptors (e.g., human health, controlled waters and buildings) is moderate.

This classification is due to a number of historic land uses which have taken place within the site boundary which include a lampblack works, barium works, tramway, electrical substation, timber yard and allotment gardens. Made Ground is expected to be present as a result of historic development and demolition, and BGS borehole records indicate up to 2.30m of Made Ground beneath the site. If the Made Ground contains significant amounts of organic material, it could generate ground gases (carbon dioxide and methane).

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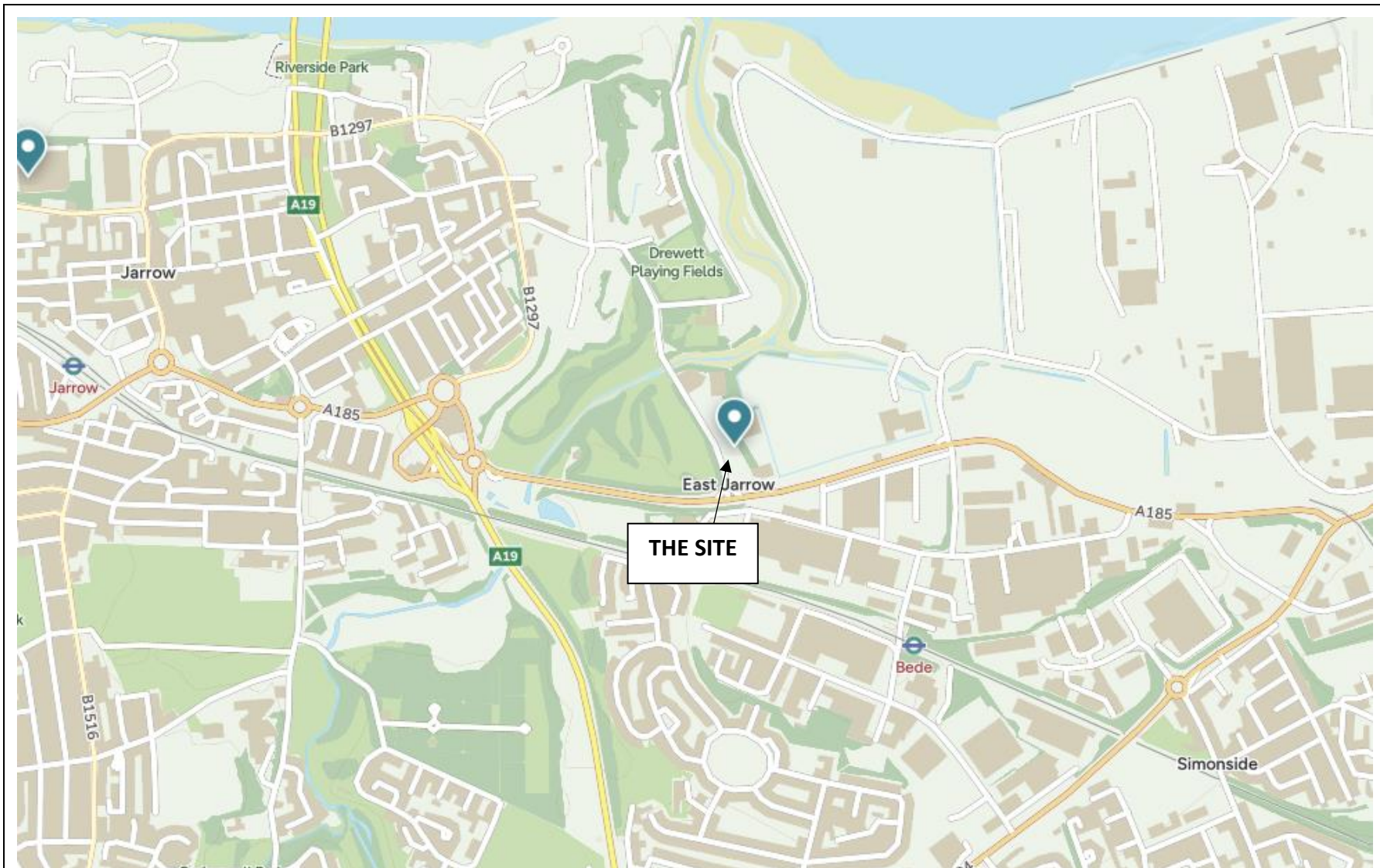
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It should be noted that at the time of writing this report, the development plans have not been finalised. The conceptual site model should be reassessed once a final development plan has been decided.

APPENDICES

Appendix A – Site Location and Site Plan



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Site Location Map

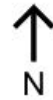
Figure 1



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Existing Site Plan

Figure 2



Phase 1 Demolition (highlighted red)

- 1- OFFICE - prefabricated office building - contains brown asbestos wall and ceiling boards in rooms 11 & 12
- 1b- OIL TANK - tank within brick bund containing oil residue
- 6 - OFFICE - timber construction
- 12- SHED - steel frame, timber clad, dado block wall (damaged), insulated lining, polished concrete floor, large door openings on South side but no roller shutters, milling machine and dust extraction duct
- 14- TREATMENT TANK - small brick control building with steel framed and clad annex, asbestos gaskets in pipework, deep sump filled with water
- 16- SHED - timber frame, steel roof sheets, partially timber clad (mid-height upwards), partial concrete floor in strips
- 19- FUEL TANKS - brick base and steel clad building containing two DERV tanks
- 20- OIL TANKS 1 AND 2
- 21- Garage/ storage shed- Brick built shed with shutter door



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Port of Tyne Demolition Plan (2022)

Figure 3

Appendix B – Site Photographs



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**View along western site boundary
looking south along Church Bank**



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View looking east to eastern site boundary



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Electrical substation along southern
boundary



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View of site looking north



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View looking west to western site
boundary



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Relic pipework



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Relic pipework and concrete foundation



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Timber and metal waste



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Concrete and disconnected pipework



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View of northern boundary



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Site entrance along Church Bank



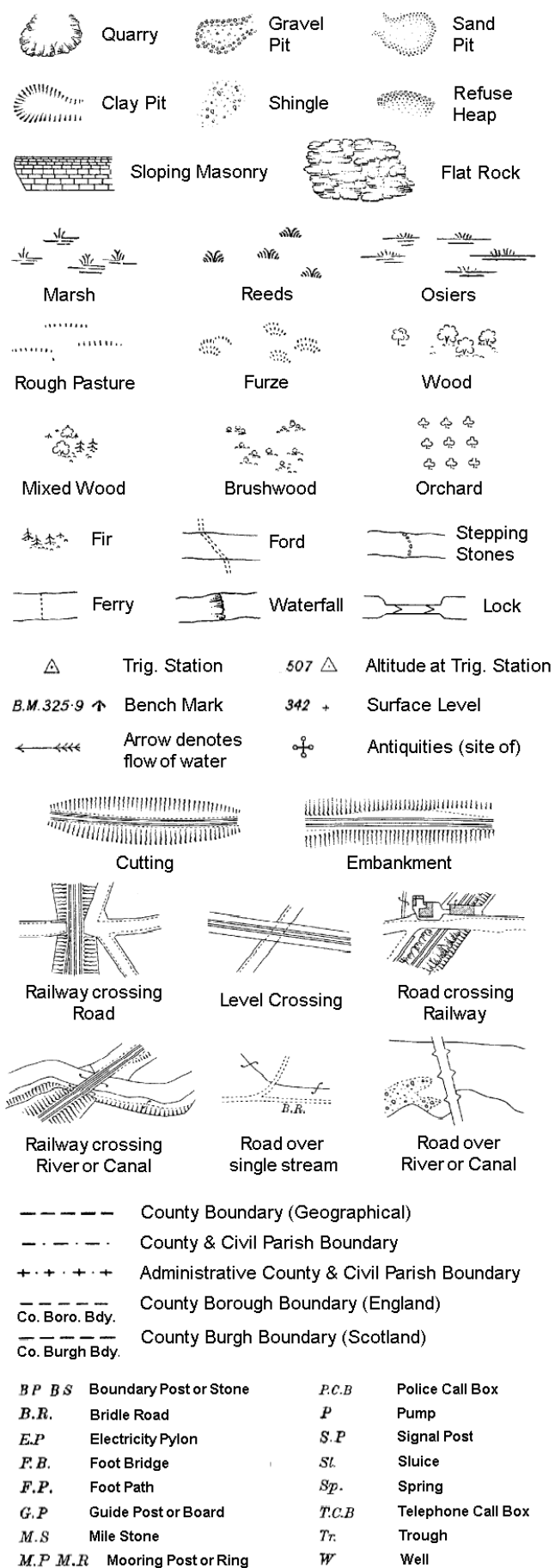
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View of site looking south

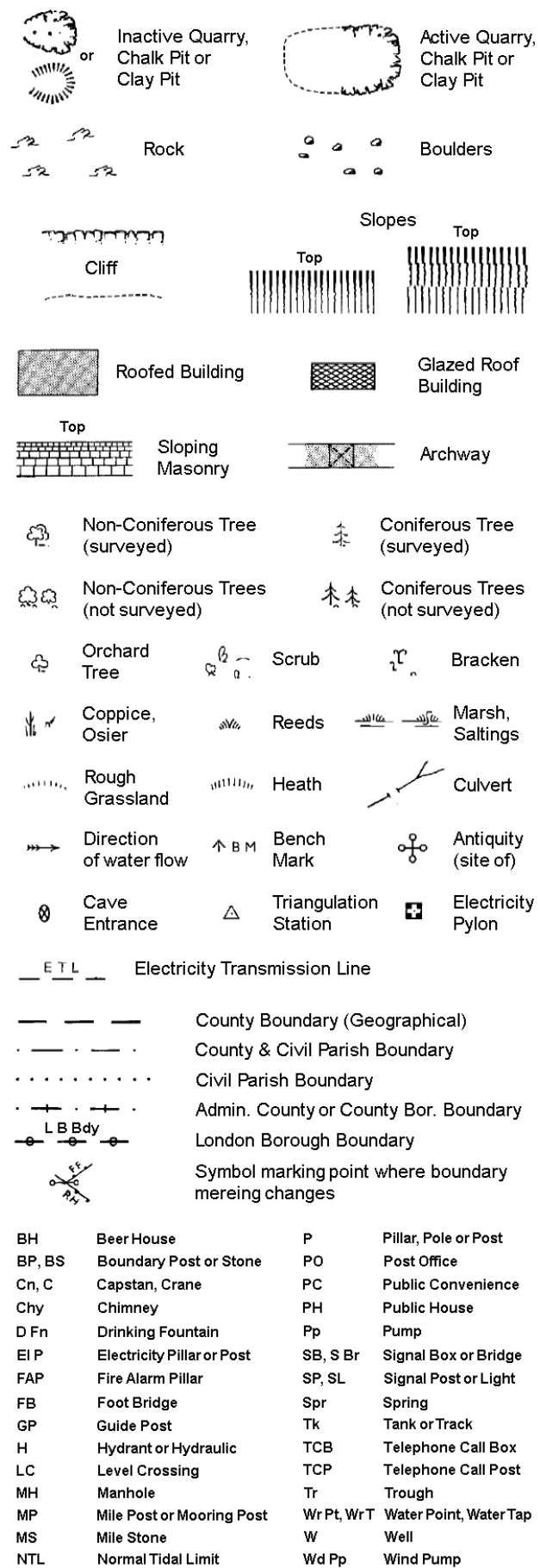
Appendix C - Historical Maps

Historical Mapping Legends

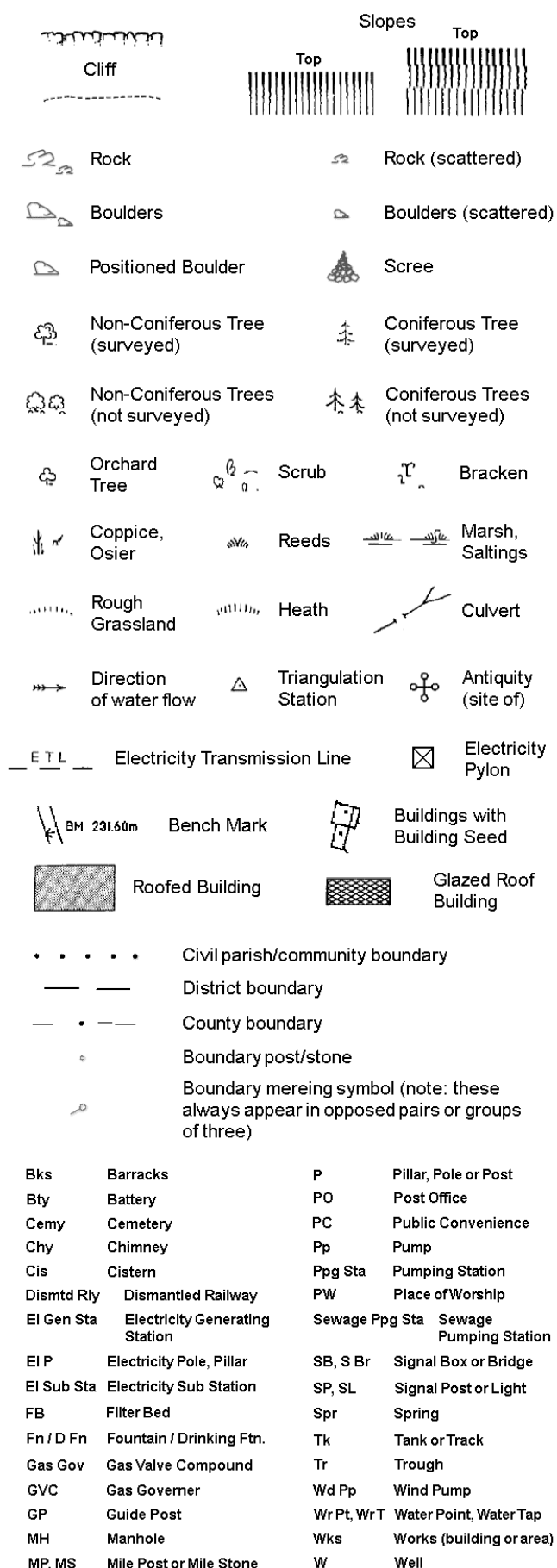
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordinance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



Large-Scale National Grid Data 1:2,500 and 1:1,250



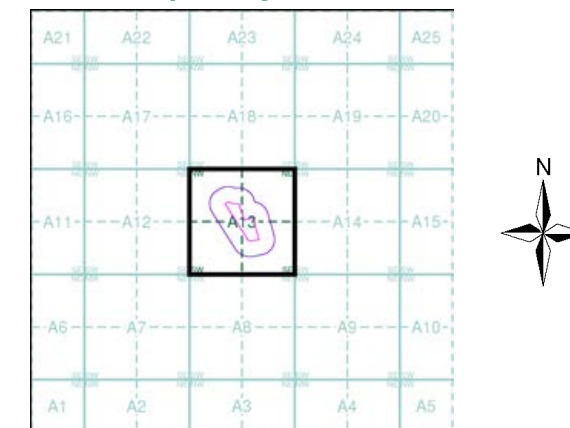
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northumberland	1:2,500	1859	2
Northumberland	1:2,500	1861	3
Durham	1:2,500	1876	4
Durham	1:2,500	1897	5
Durham	1:2,500	1918	6
Durham	1:2,500	1942	7
Ordnance Survey Plan	1:1,250	1956 - 1958	8
Ordnance Survey Plan	1:2,500	1958 - 1959	9
Ordnance Survey Plan	1:1,250	1966 - 1971	10
Ordnance Survey Plan	1:2,500	1970	11
Supply of Unpublished Survey Information	1:1,250	1973 - 1975	12
Additional SIMs	1:1,250	1978 - 1982	13
Additional SIMs	1:1,250	1982 - 1985	14
Additional SIMs	1:1,250	1987 - 1990	15
Ordnance Survey Plan	1:1,250	1989	16
Large-Scale National Grid Data	1:1,250	1993	17
Large-Scale National Grid Data	1:1,250	1994	18
Historical Aerial Photography	1:2,500	1999	19

Historical Map - Segment A13



Order Details

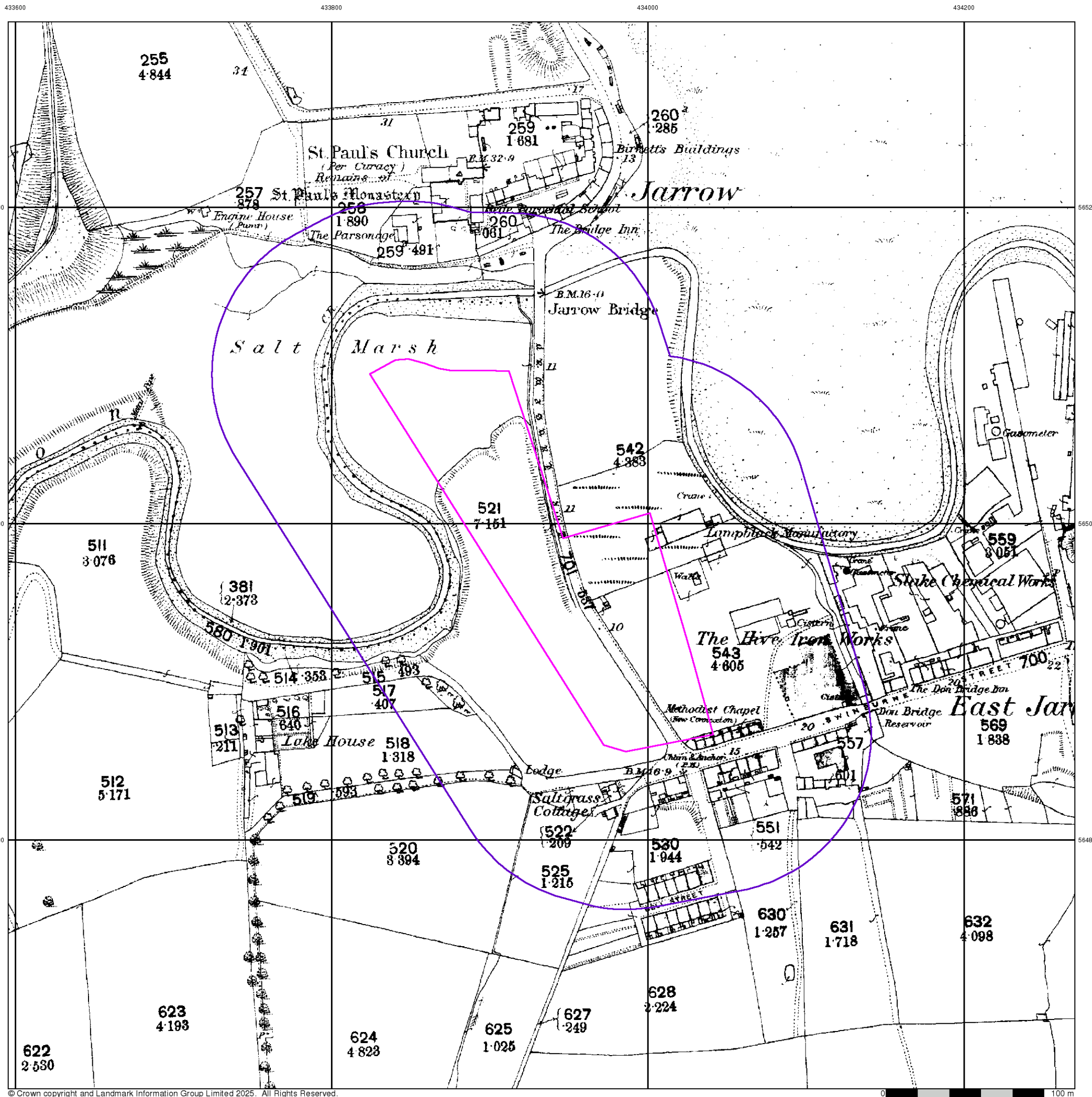
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

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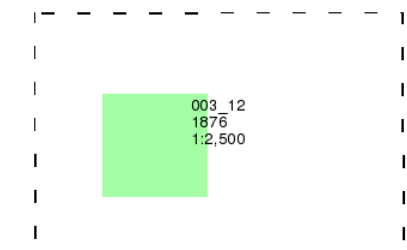
Durham

Published 1876

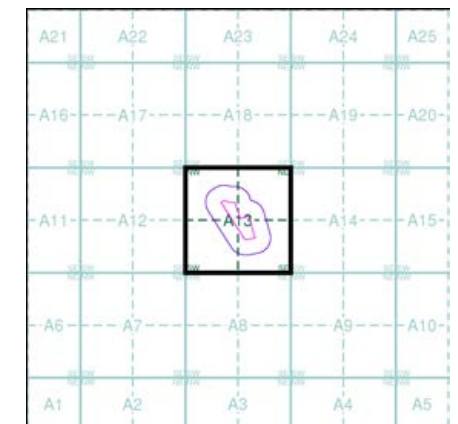
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13

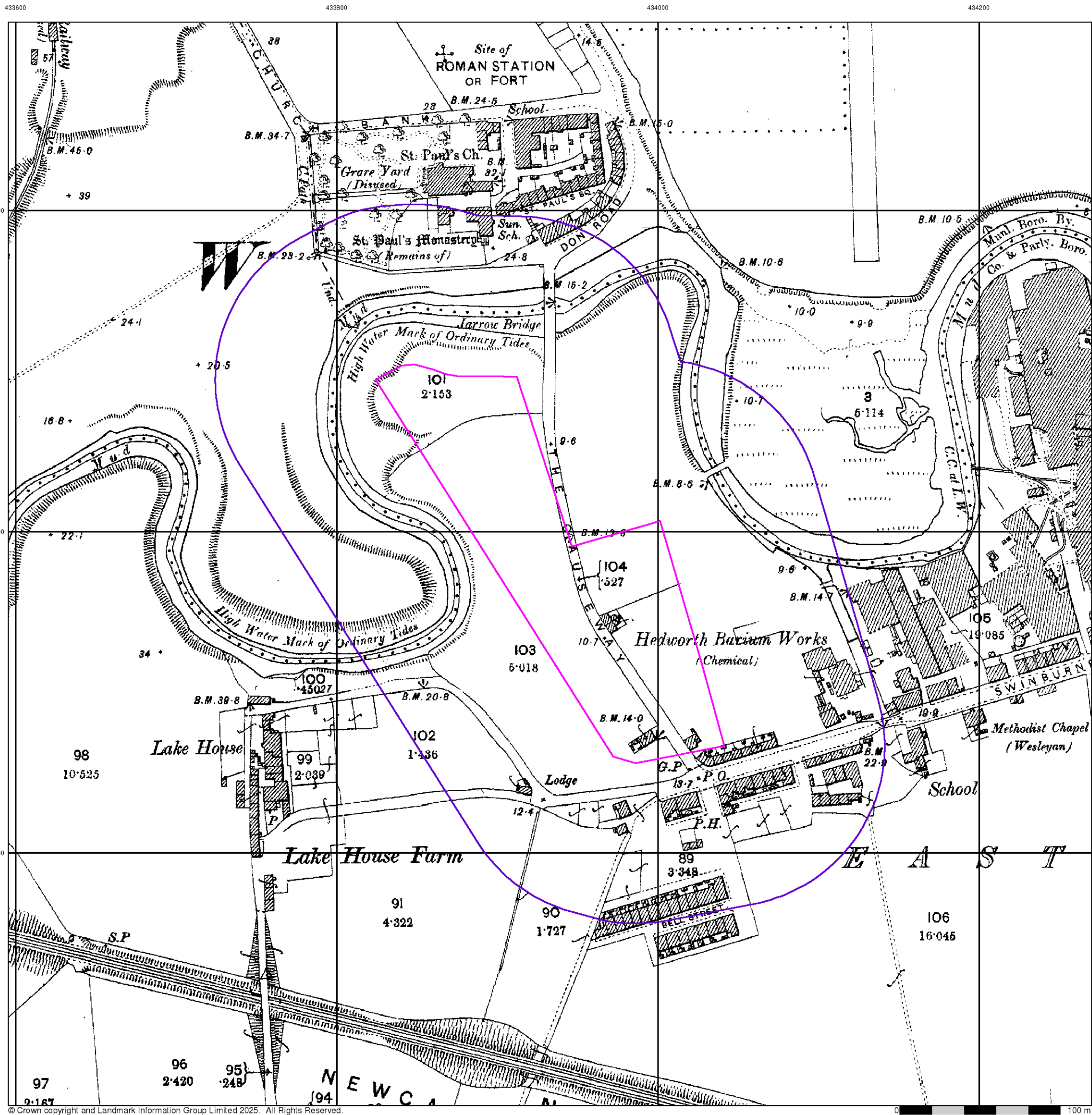


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



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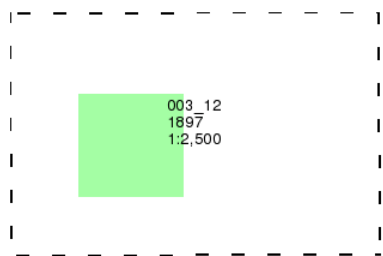
Durham

Published 1897

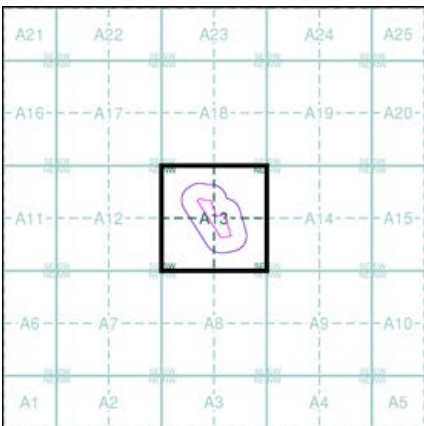
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

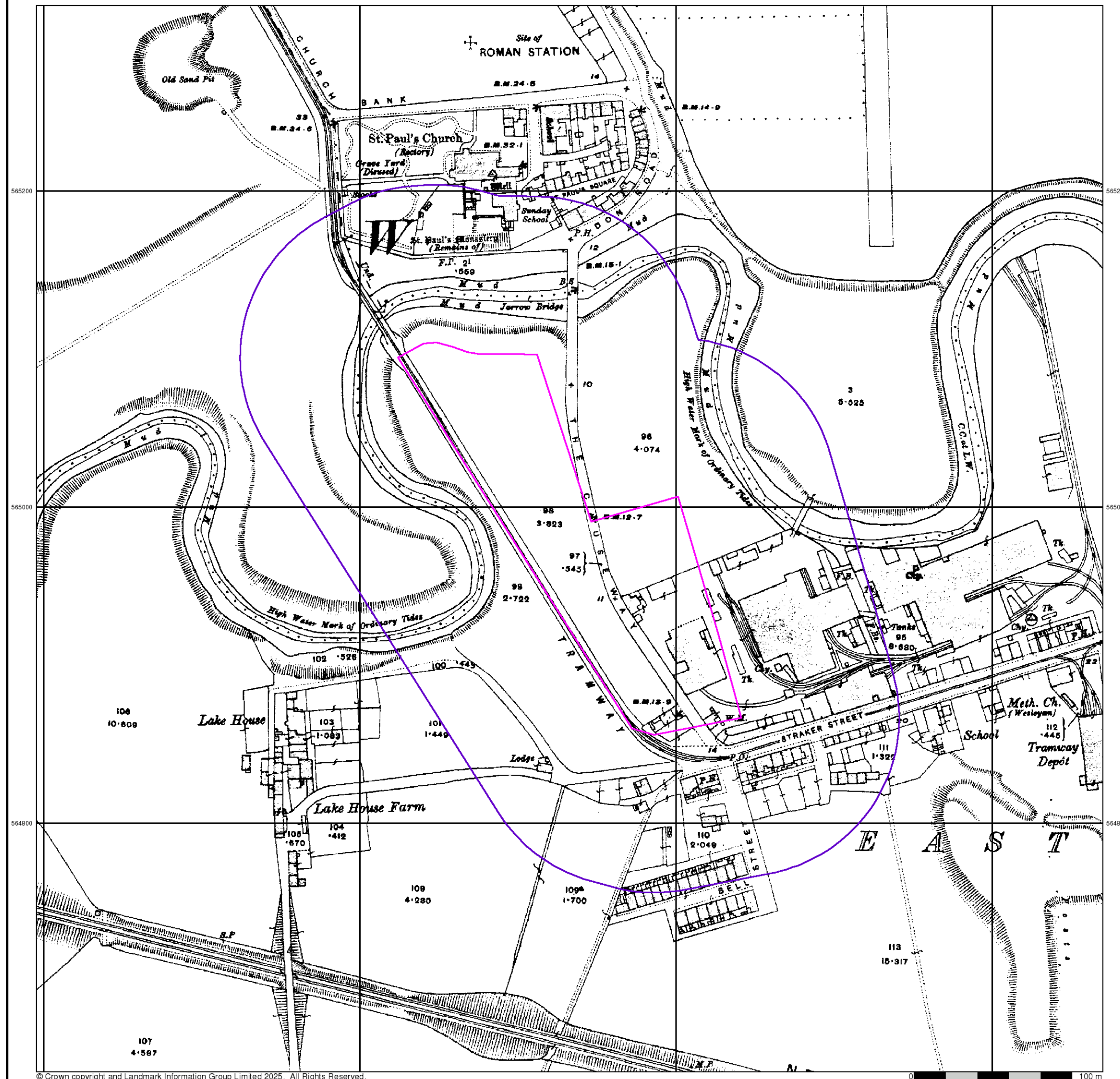
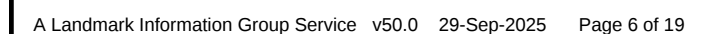
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

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Ordnance Survey Plan

Published 1956 - 1958

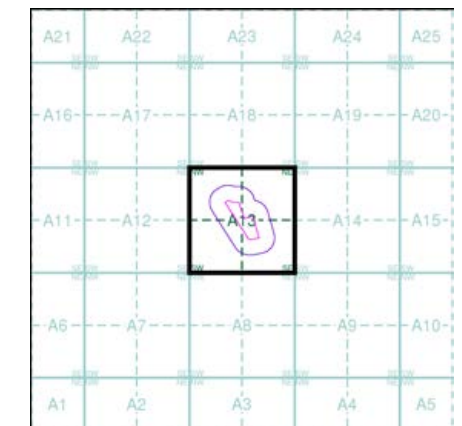
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3385SE	NZ3485SW
1958	1958
1:1,250	1:1,250
NZ3384NE	NZ3484NW
1958	1958
1:1,250	1:1,250

Historical Map - Segment A13

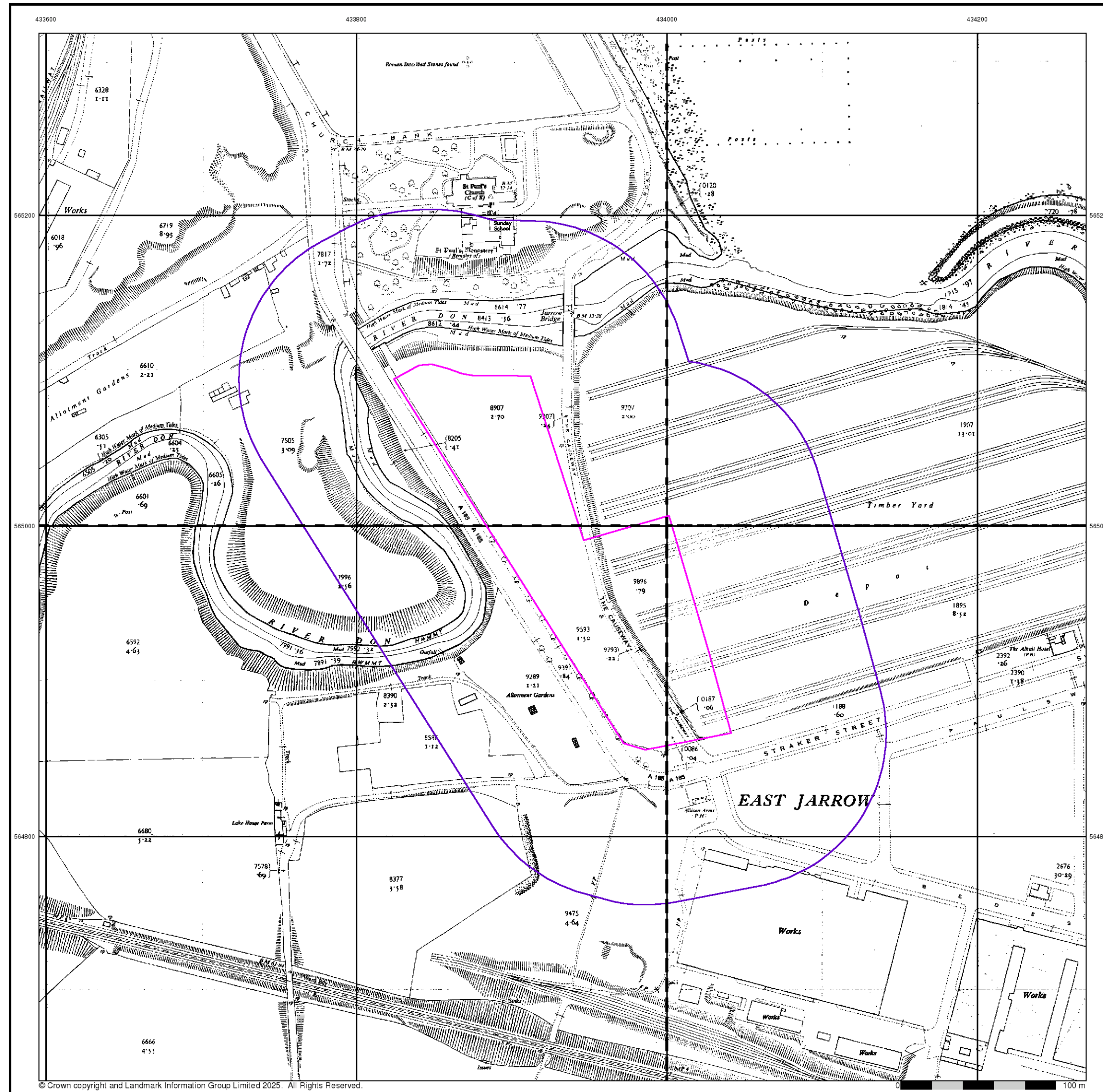


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



Ordnance Survey Plan

Published 1958 - 1959

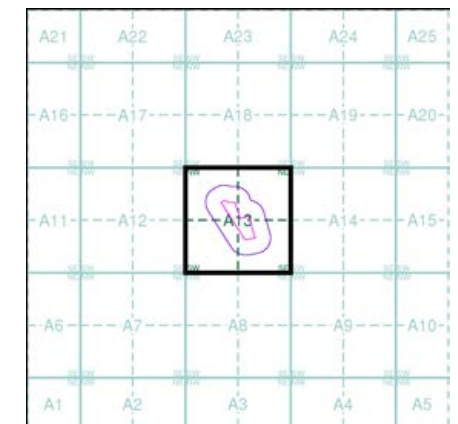
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

NZ3365	NZ3465
1959	1958
12,500	12,500
NZ3364	NZ3464
1958	1959
12,500	12,500

Historical Map - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



Ordnance Survey Plan

Published 1966 - 1971

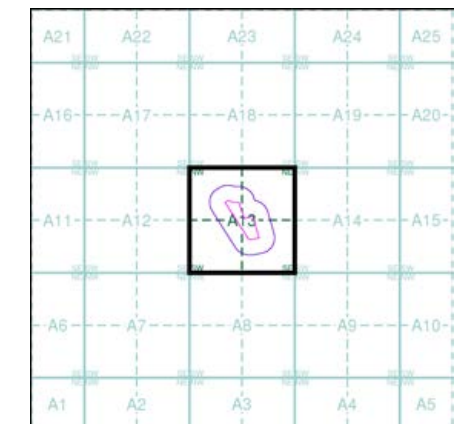
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3385SE	NZ3485SW
1966	1971
1:1,250	1:1,250
NZ3384NE	NZ3484NW
1969	1969
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



Ordnance Survey Plan

Published 1970

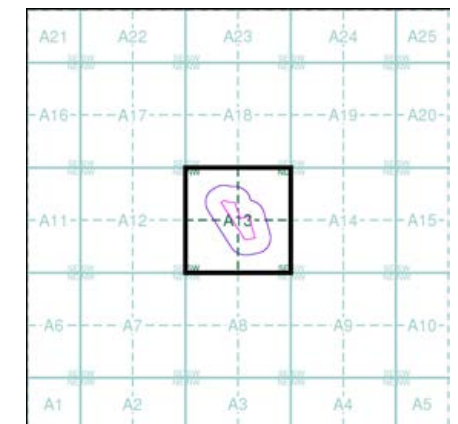
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

NZ3365	1970	12,500
NZ3364	1970	12,500
NZ3464	1970	12,500

Historical Map - Segment A13

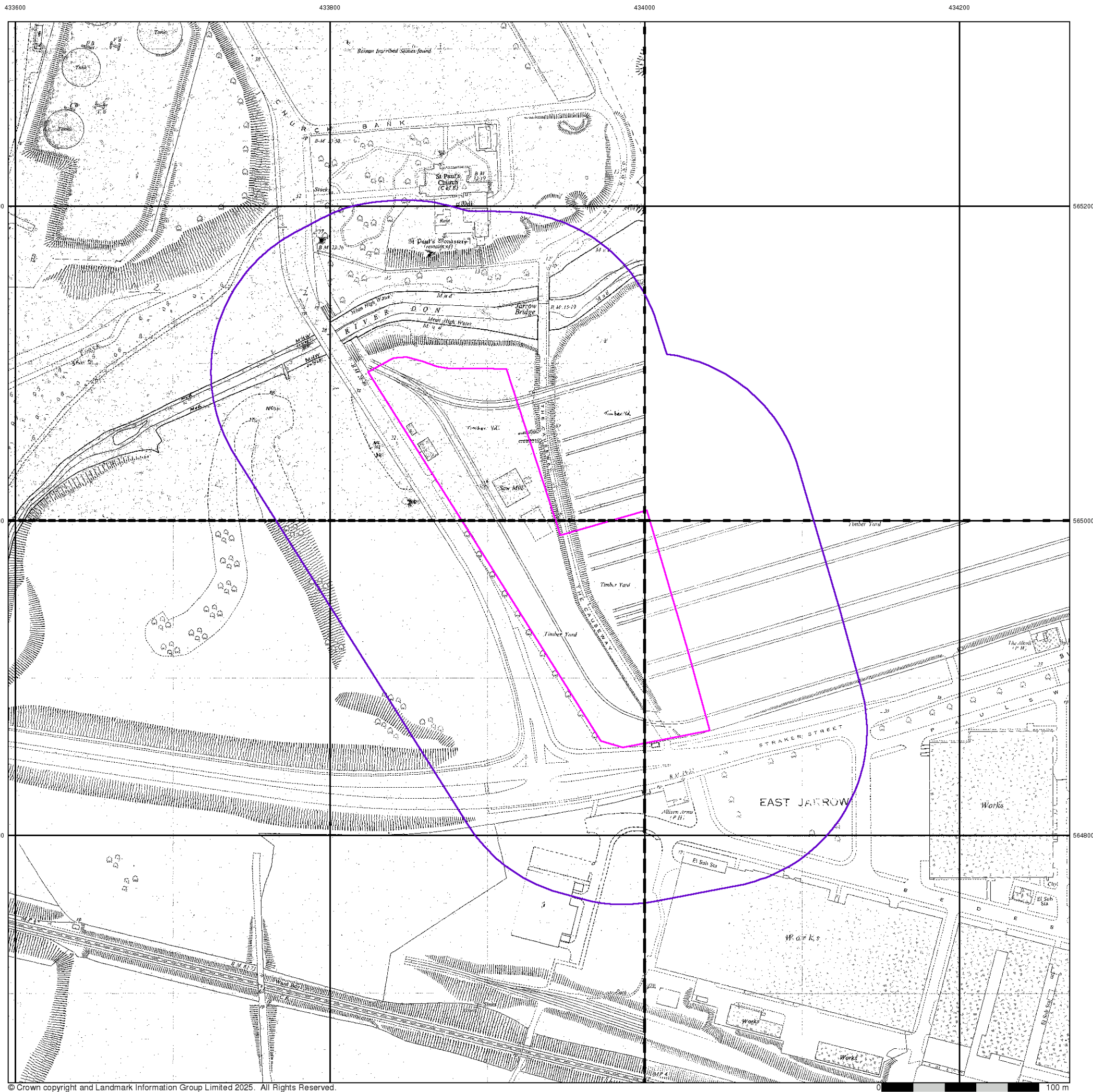


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



Supply of Unpublished Survey Information

Published 1973 - 1975

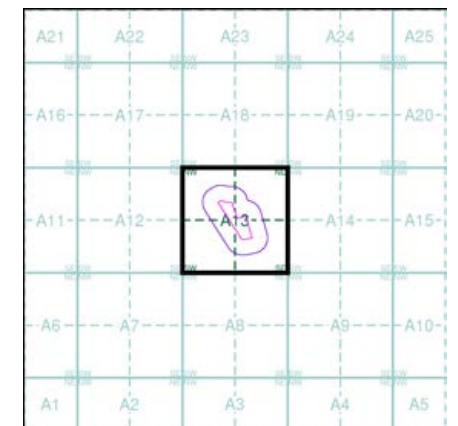
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3385SE	1975	1:1,250
NZ3364NE	1974	1:1,250
NZ3464NW	1973	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

433600

433800

434000

434200

Additional SIMs

Published 1978 - 1982

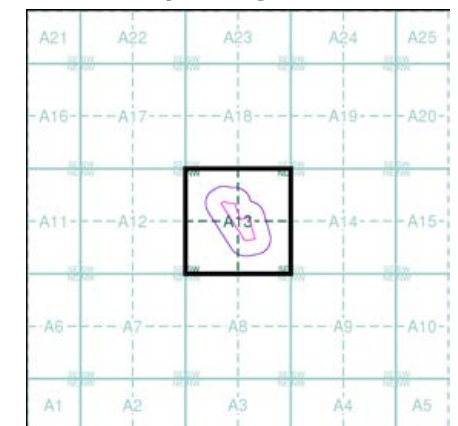
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3365SE 1981 1:1,250	NZ3465SW 1982 1:1,250
NZ3364NE 1978 1:1,250	NZ3464NW 1982 1:1,250

Historical Map - Segment A13

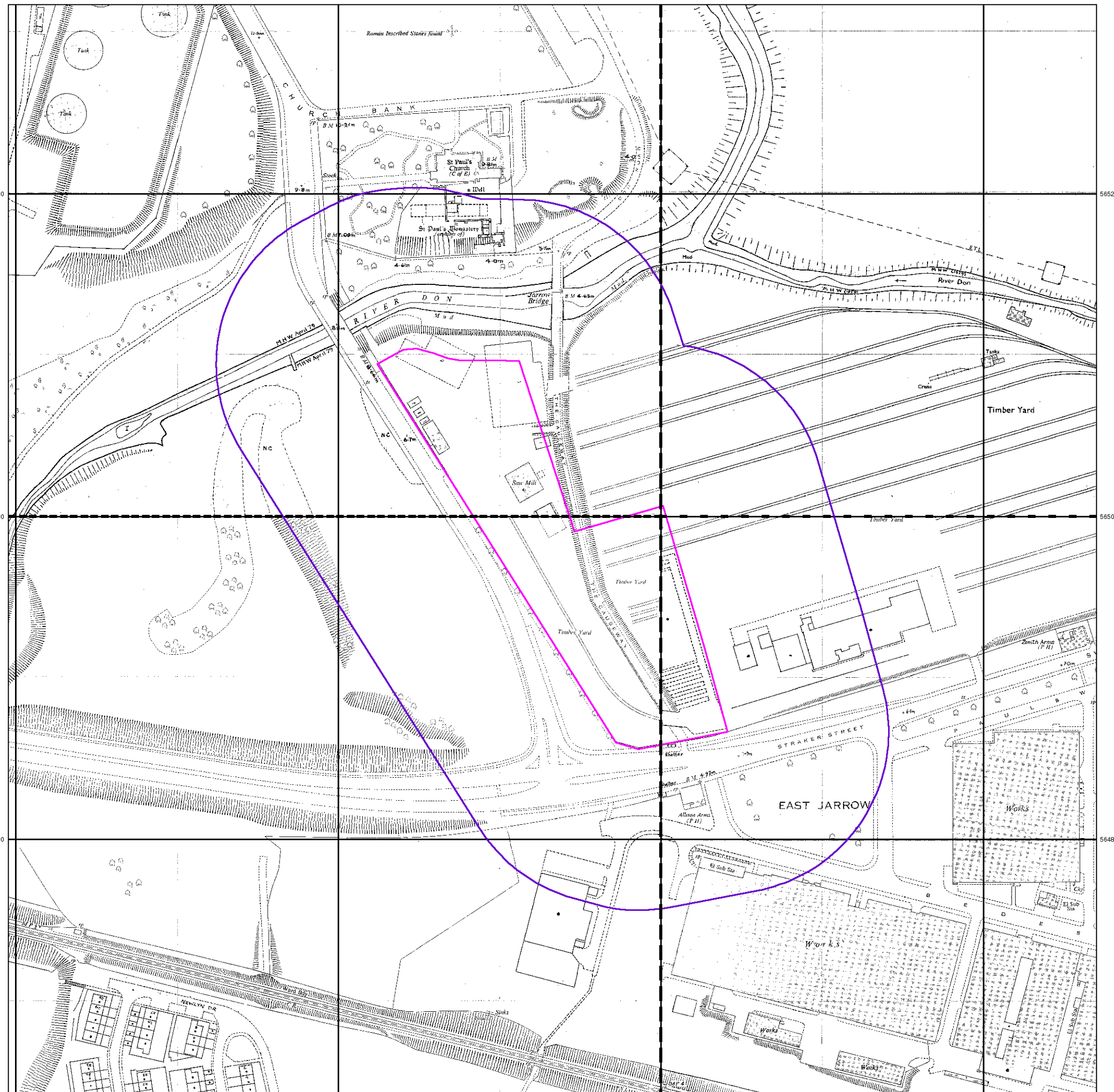


Order Details

Order Number: 386713107_1_1
 Customer Ref: ES290925
 National Grid Reference: 433940, 564980
 Slice: A
 Site Area (Ha): 2.06
 Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE





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Additional SIMs
Published 1982 - 1985
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3364NE 1982 1:1,250	NZ3464NW 1985 1:1,250
-----------------------------	-----------------------------

Historical Map - Segment A13

N

Order Details

Order Number:	386713107_1_1
Customer Ref:	ES290925
National Grid Reference:	433940, 564980
Slice:	A
Site Area (Ha):	2.06
Search Buffer (m):	100

Site Details
Church Bank, JARROW, NE32 3BE



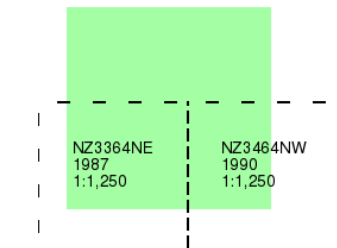
Additional SIMs

Published 1987 - 1990

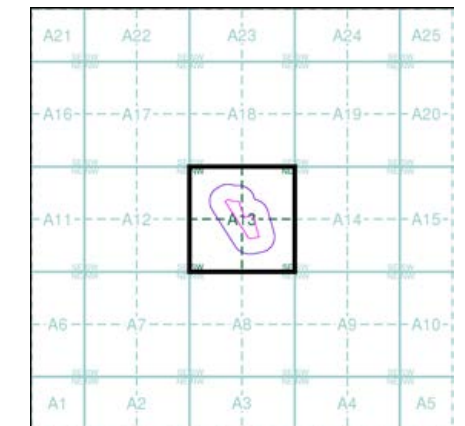
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE



Ordnance Survey Plan

Published 1989

Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3365SE

1989

1:1,250

Historical Map - Segment A13

A21A22A23A24A25

A16A17A18A19A20

A11A12A13A14A15

A6A7A8A9A10

A1A2A3A4A5

N

Order Details

Order Number: 386713107_1_1

Customer Ref: ES290925

National Grid Reference: 433940, 564980

Slice: A

Site Area (Ha): 2.06

Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

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Large-Scale National Grid Data

Published 1993

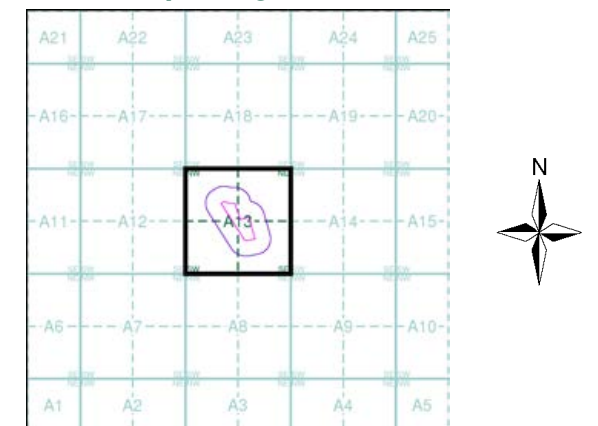
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3365SE	NZ3465SW
1993	1993
1:1,250	1:1,250
NZ3364NE	NZ3464NW
1993	1993
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

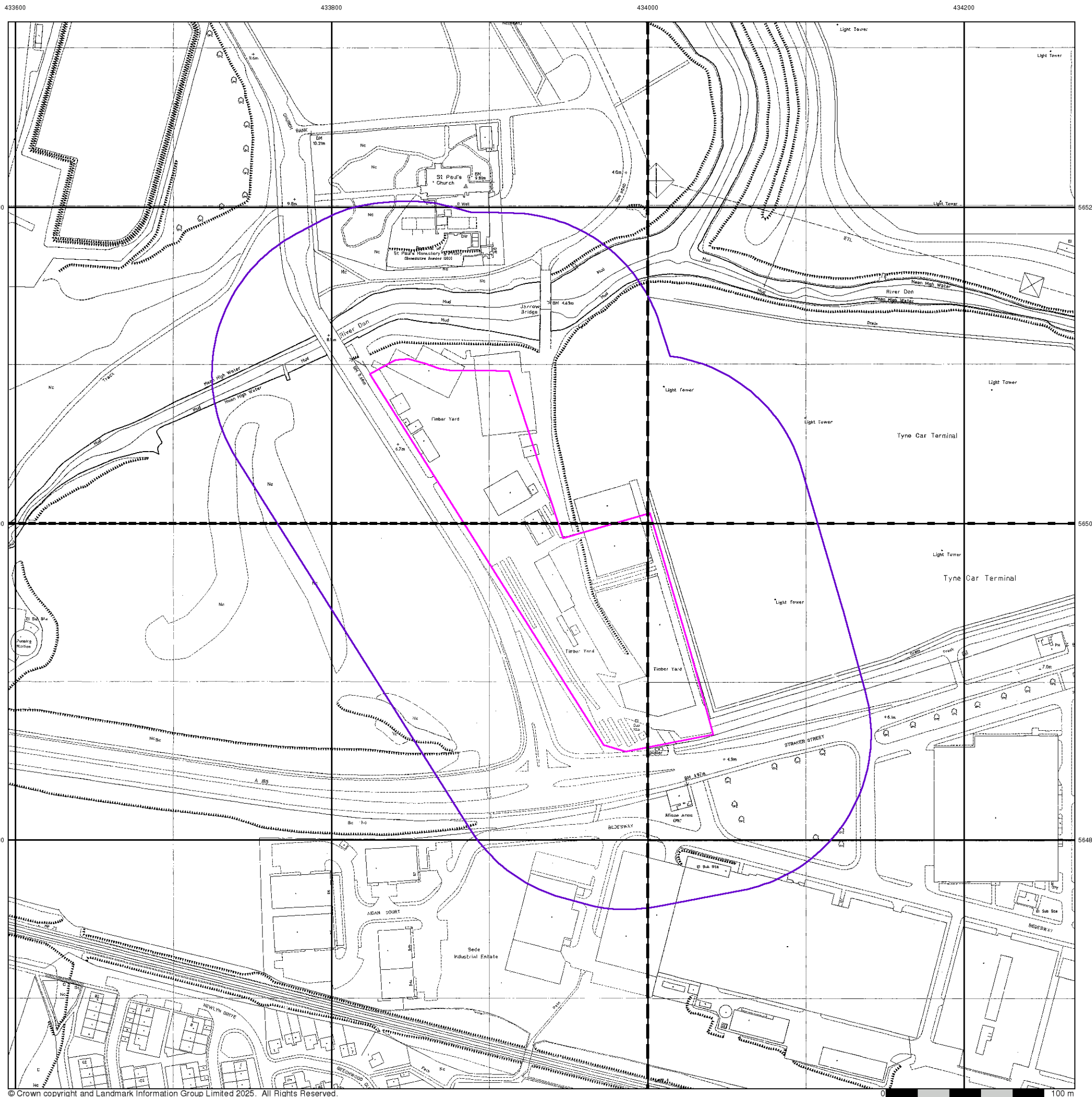
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

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Large-Scale National Grid Data

Published 1994

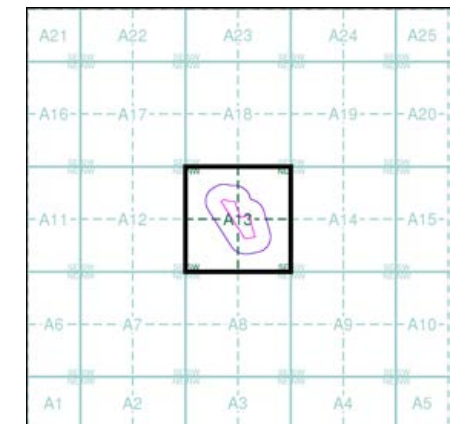
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

NZ3365SE	NZ3465SW
1994	1994
1:1,250	1:1,250
NZ3364NE	NZ3464NW
1994	1994
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

433600

433800

434000

434200

Envirocheck[®]

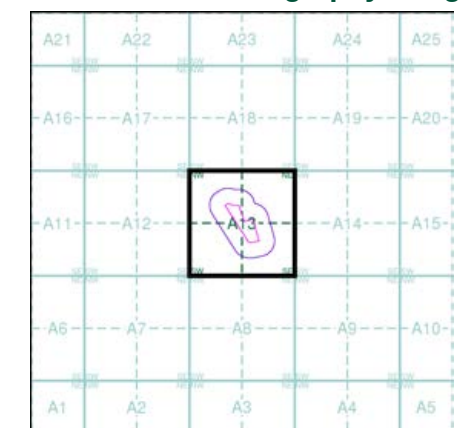
LANDMARK INFORMATION GROUP[®]

Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 100

Site Details

Church Bank, JARROW, NE32 3BE

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433600

433800

434000

434200

565200

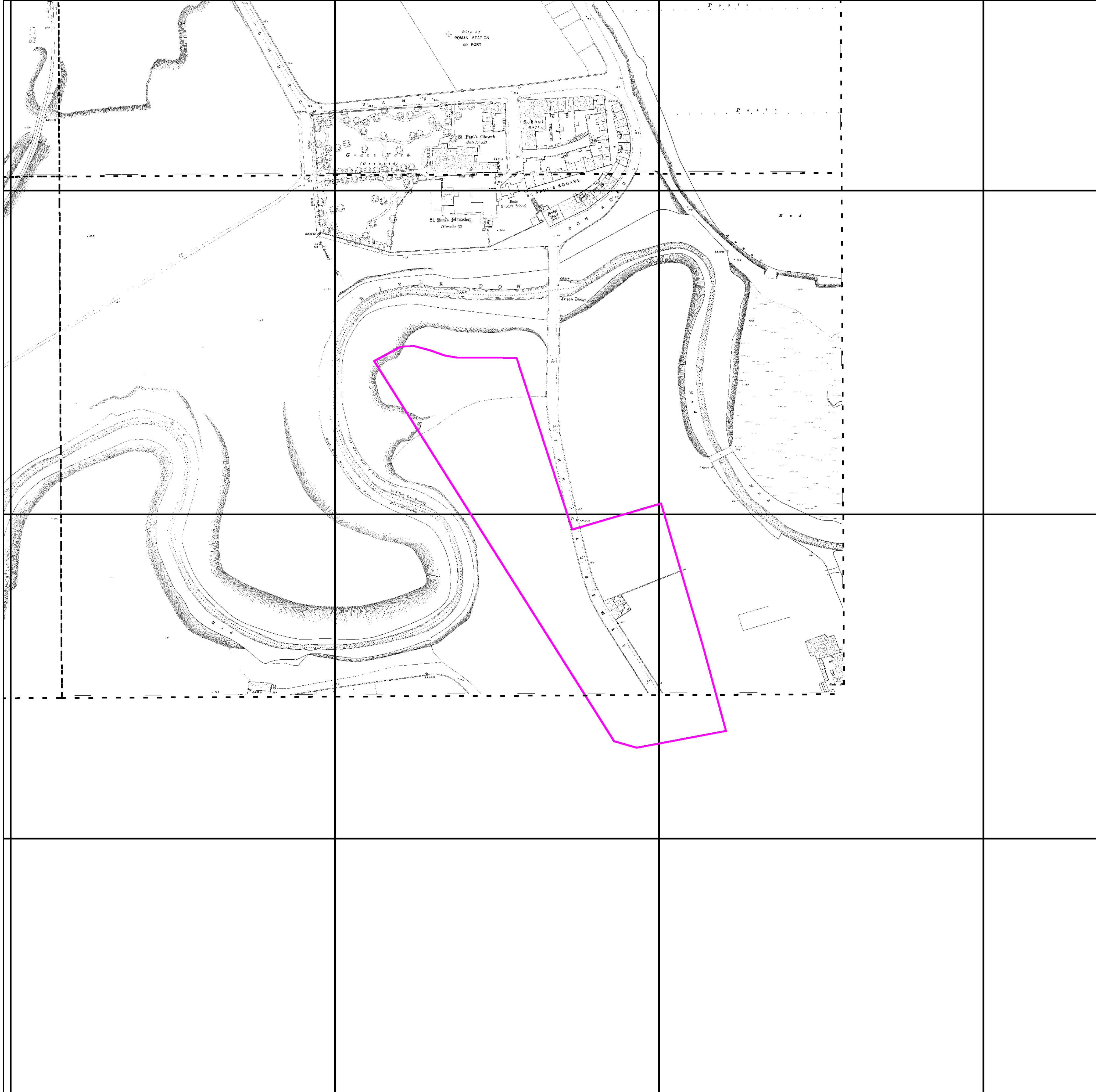
565200

565000

565000

564800

564800



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0 100 m

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Northumberland

Published 1896

Source map scale - 1:500

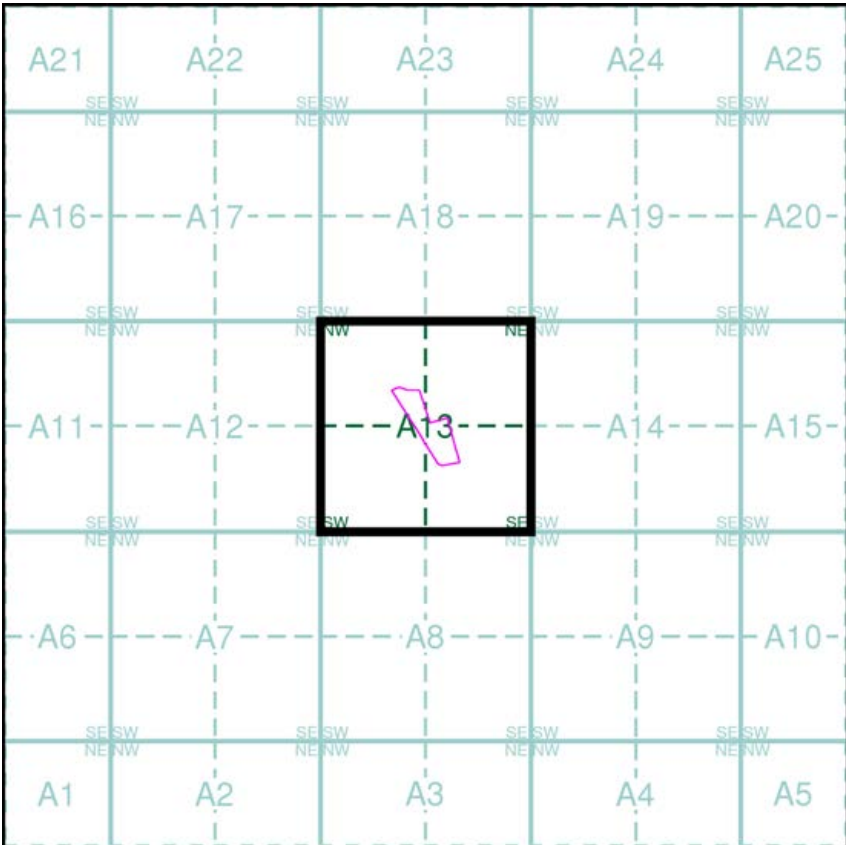
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to compliment the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

008_12_006	008_12_007
1896	1896
1:500	1:500
008_12_011	008_12_012
1896	1896
1:500	1:500

Historical Town Plan - Segment A13



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 0

Site Details

Church Bank, JARROW, NE32 3BE

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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
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	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		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

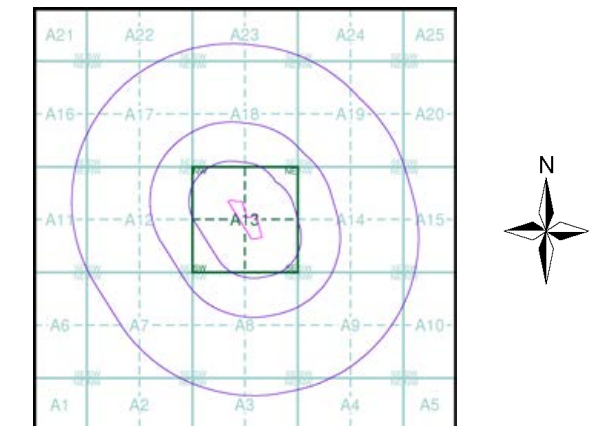
1:10,000 Raster Mapping

	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
	Mean high water (springs)		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
Durham	1:10,560	1862	3
Northumberland	1:10,560	1864	4
Durham	1:10,560	1898	5
Northumberland	1:10,560	1899	6
Durham	1:10,560	1921	7
Durham	1:10,560	1938	8
Ordnance Survey Plan	1:10,000	1951 - 1952	9
Ordnance Survey Plan	1:10,000	1957	10
Ordnance Survey Plan	1:10,000	1967 - 1968	11
Ordnance Survey Plan	1:10,000	1973 - 1977	12
Sunderland	1:10,000	1976	13
Newcastle-upon-Tyne	1:25,000	1977	14
Ordnance Survey Plan	1:10,000	1982 - 1987	15
Ordnance Survey Plan	1:10,000	1992 - 1995	16
10K Raster Mapping	1:10,000	2000	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2025	19

Historical Map - Slice A



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

Church Bank, JARROW, NE32 3BE

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

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

Telegraph/Telephone Lines

Main Highway

Highway under Construction

Improved Dirt Road (former truck road)

Double-track Railroad with First Class Station

Railroad Under Construction

Shore Embankment

River or Ditch with Embankment

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

NZ36_Newcastle

No.	Description
16	Factories (Including Radio Technical)
68	Factory (Ship Repairs)
136	Storage (Flammable And Lubricant Materials)
165	Tunnel

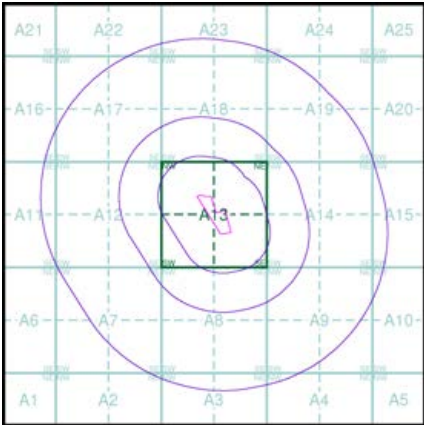
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Durham	1:10,560	1862	3
Northumberland	1:10,560	1864	4
Durham	1:10,560	1898	5
Northumberland	1:10,560	1899	6
Durham	1:10,560	1921	7
Durham	1:10,560	1938	8
Ordnance Survey Plan	1:10,000	1951 - 1952	9
Ordnance Survey Plan	1:10,000	1957	10
Ordnance Survey Plan	1:10,000	1967 - 1968	11
Ordnance Survey Plan	1:10,000	1973 - 1977	12
Sunderland	1:10,000	1976	13
Newcastle-upon-Tyne	1:25,000	1977	14
Ordnance Survey Plan	1:10,000	1982 - 1987	15
Ordnance Survey Plan	1:10,000	1992 - 1995	16
10K Raster Mapping	1:10,000	2000	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2025	19

Russian Map - Slice A



Order Details

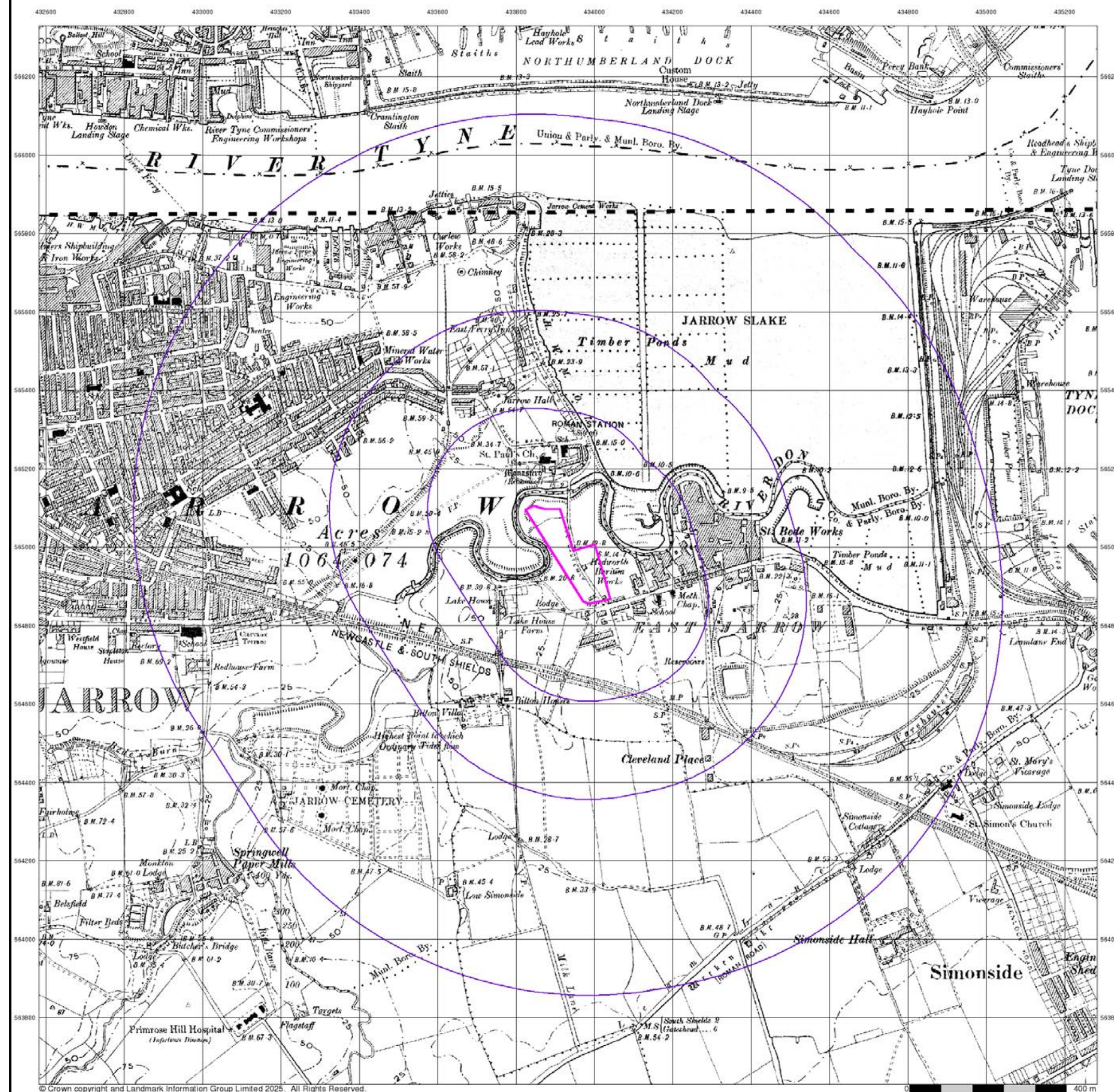
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

Church Bank, JARROW, NE32 3BE

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Durham

Published 1898

Source map scale - 1:10,560

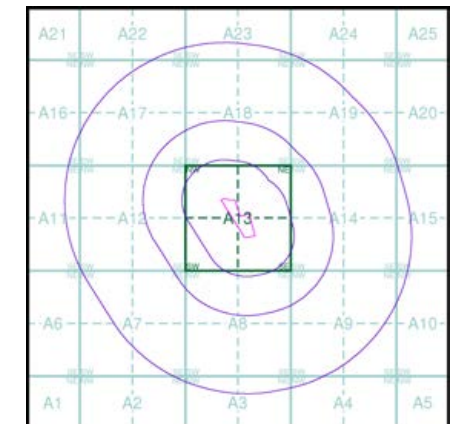
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

003NE
1898
1:10,560

003SE
1898
1:10,560

Historical Map - Slice A

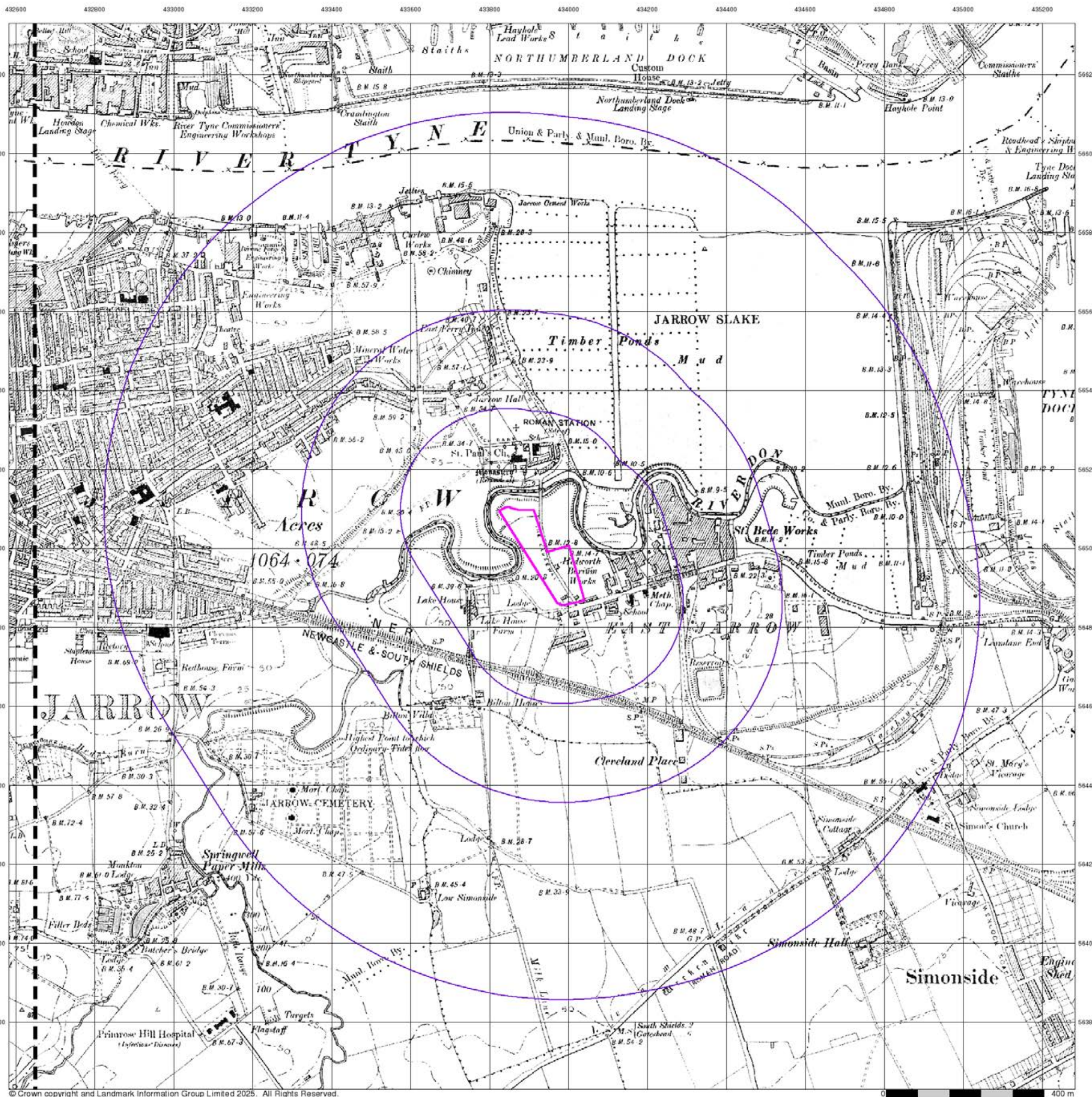


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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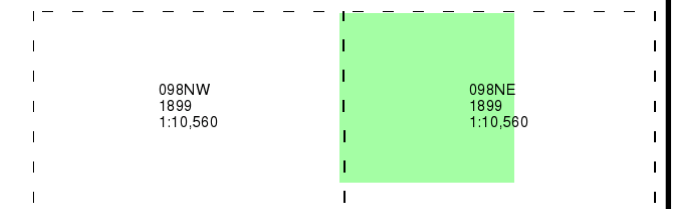
Northumberland

Published 1899

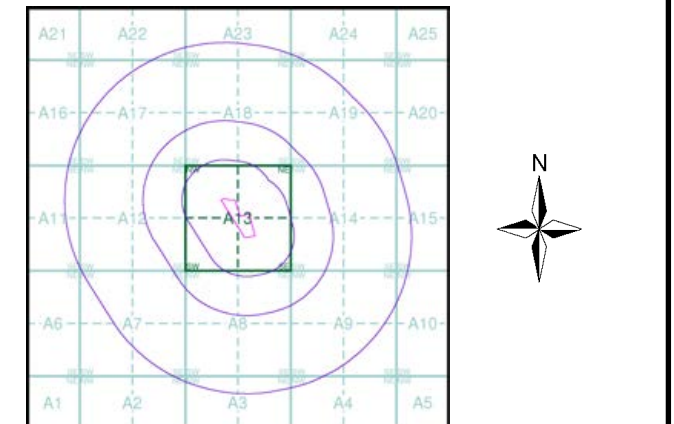
Source map scale - 1:10,560

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: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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Durham

Published 1921

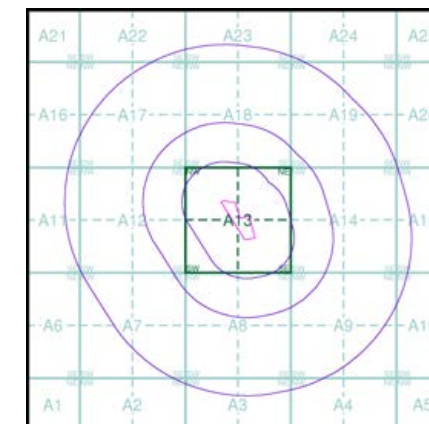
Source map scale - 1:10,560

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)

003NE
1921
1:10,560
003SE
1921
1:10,560

Historical Map - Slice A



Order Details

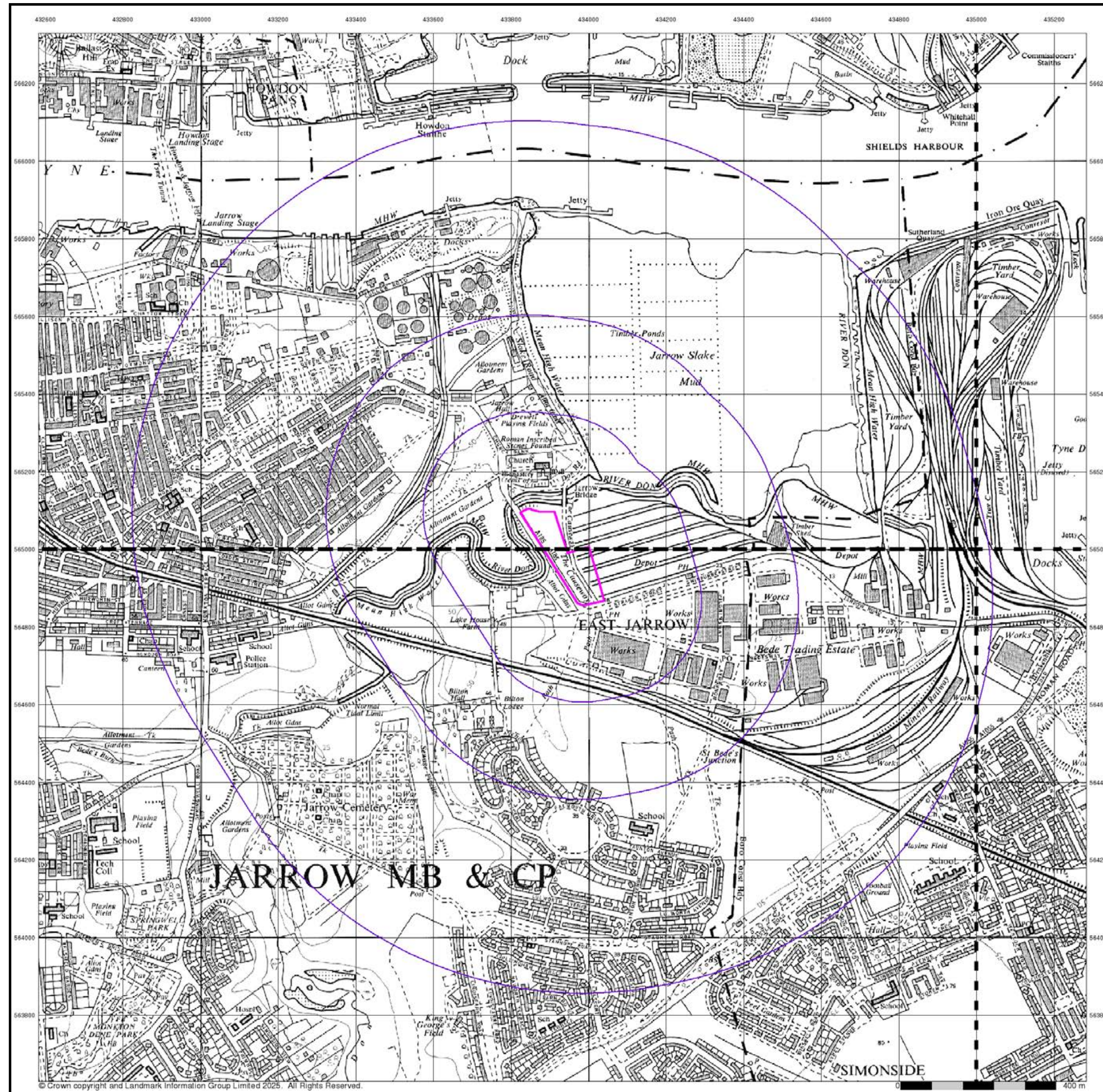
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1967 - 1968

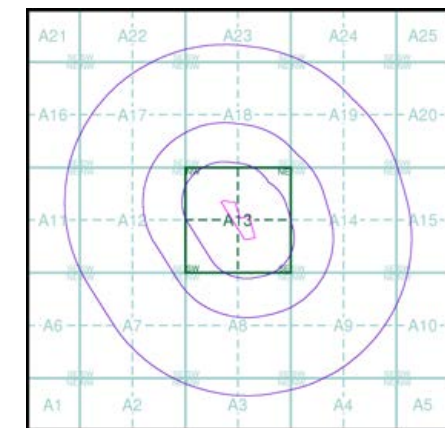
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
1967	1967
1:10,560	1:10,560
NZ36SW	NZ36SE
1967	1968
1:10,560	1:10,560

Historical Map - Slice A



Order Details

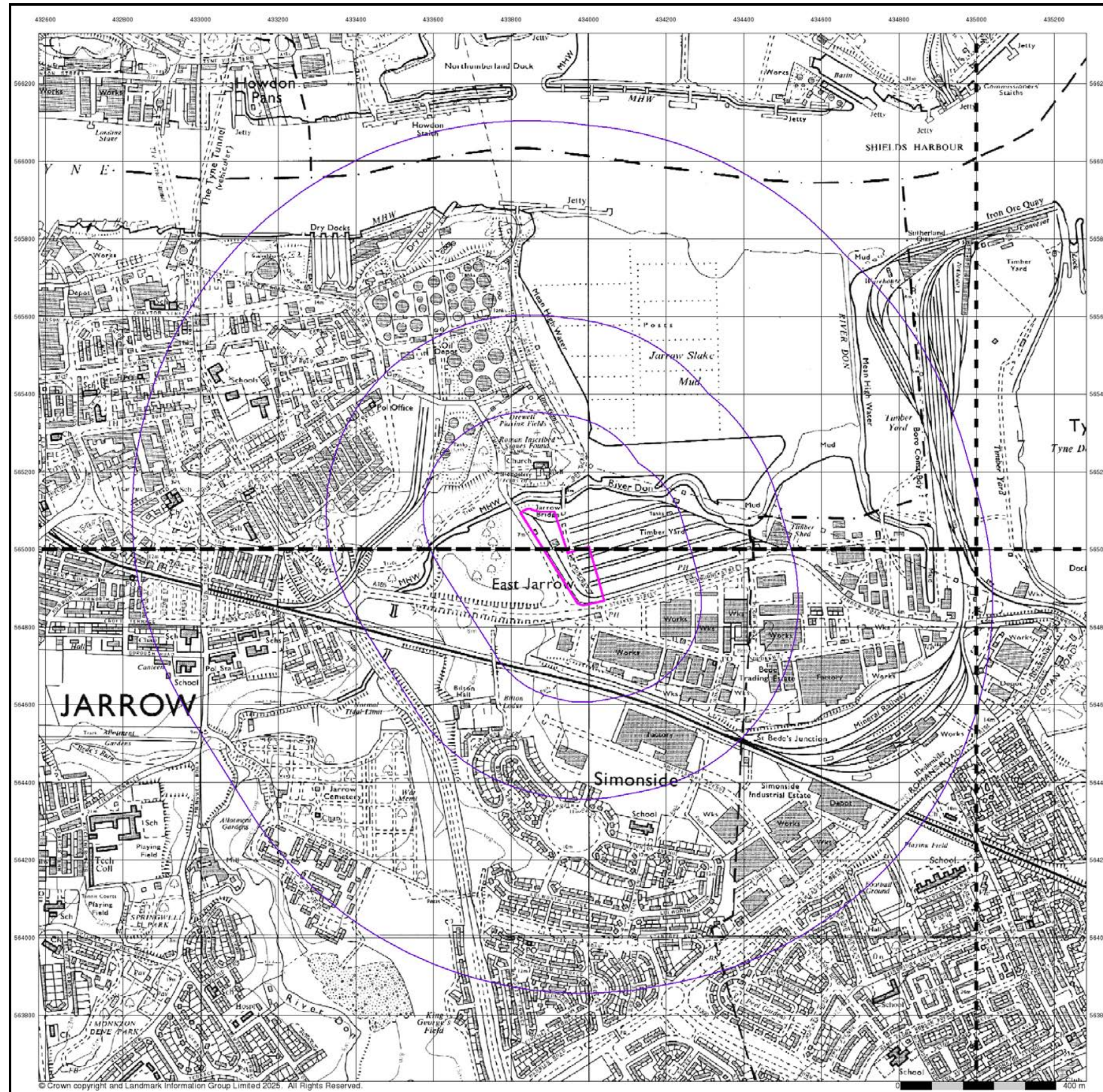
Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1973 - 1977

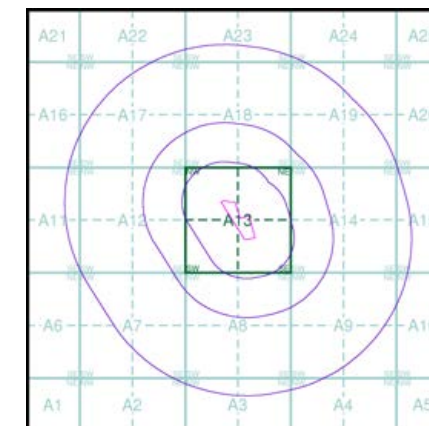
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
1973	1976
1:10,000	1:10,000
NZ36SW	NZ36SE
1975	1977
1:10,000	1:10,000

Historical Map - Slice A



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

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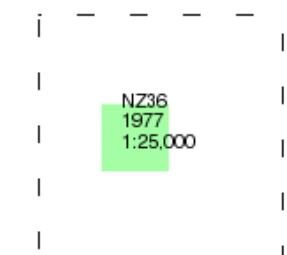
Newcastle-upon-Tyne

Published 1977

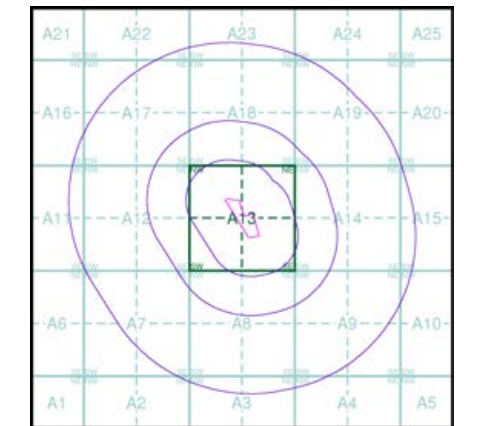
Source map scale - 1:25,000

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: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1982 - 1987

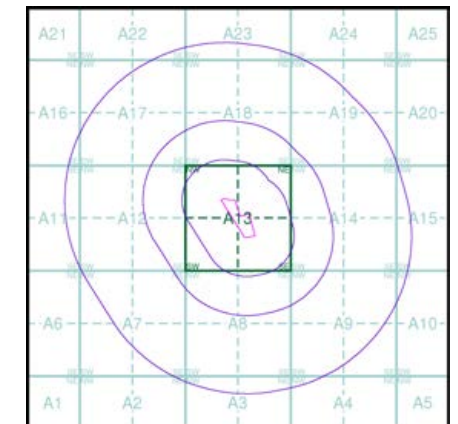
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
1982	1986
1:10,000	1:10,000
	NZ36SE
	1987
	1:10,000

Historical Map - Slice A



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

Church Bank, JARROW, NE32 3BE



Ordnance Survey Plan

Published 1992 - 1995

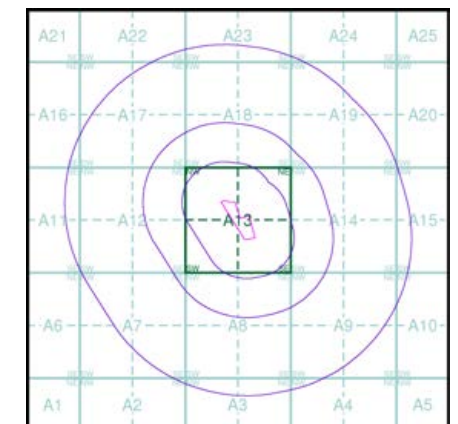
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
1995	1993
1:10,000	1:10,000
NZ36SW	
1992	
1:10,000	

Historical Map - Slice A

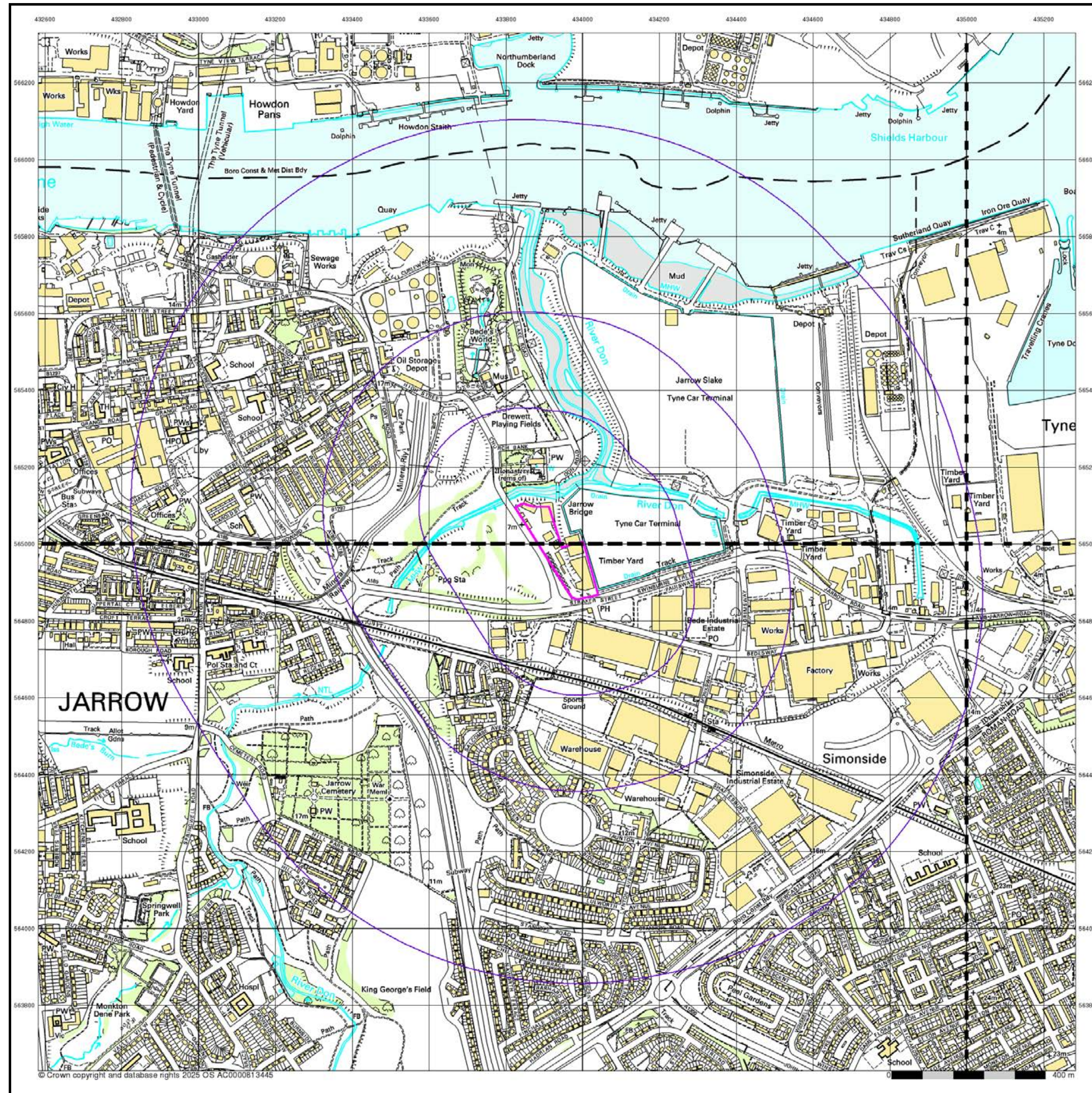


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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10k Raster Mapping

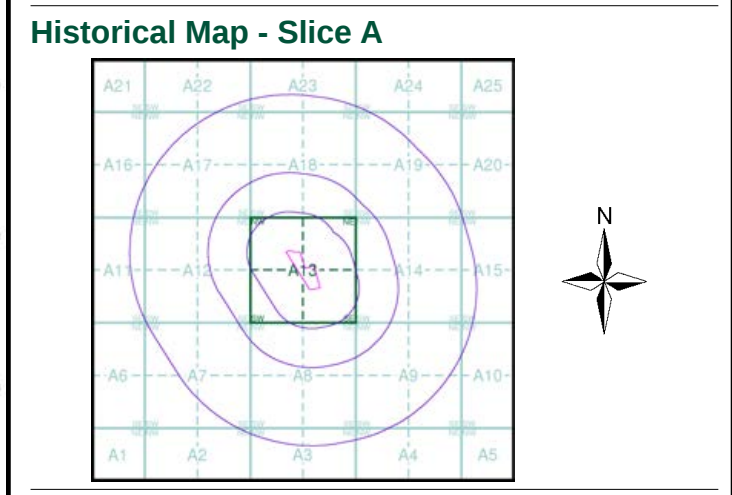
Published 2000

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)

NZ36NW	NZ36NE
2000	2000
1:10,000	1:10,000
NZ36SW	NZ36SE
2000	2000
1:10,000	1:10,000



Order Details

Order Number: 386713107_1_1

Customer Ref: ES290925

National Grid Reference: 433940, 564980

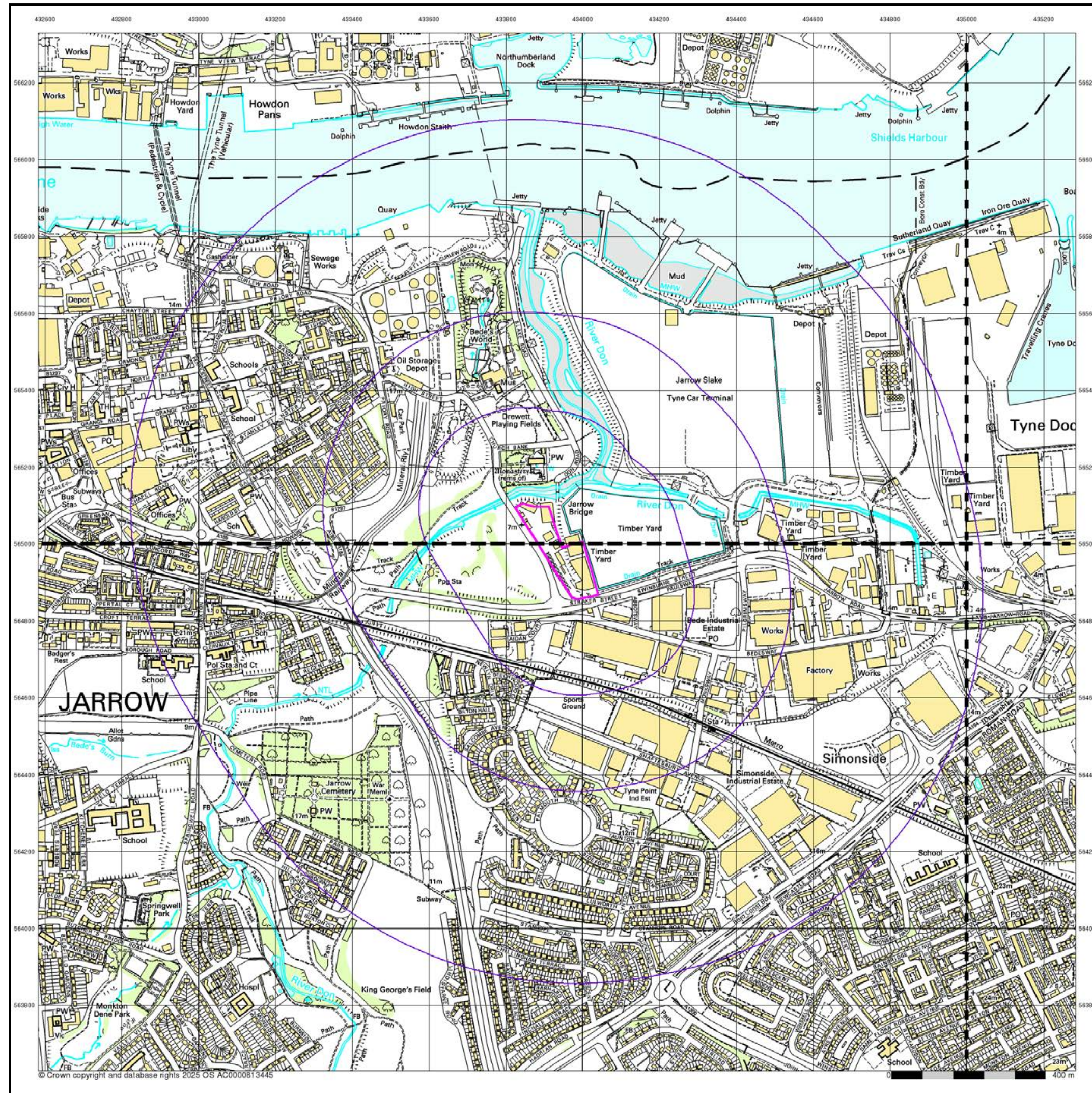
Slice: A

Site Area (Ha): 2.06

Search Buffer (m): 1000

Site Details

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10k Raster Mapping

Published 2006

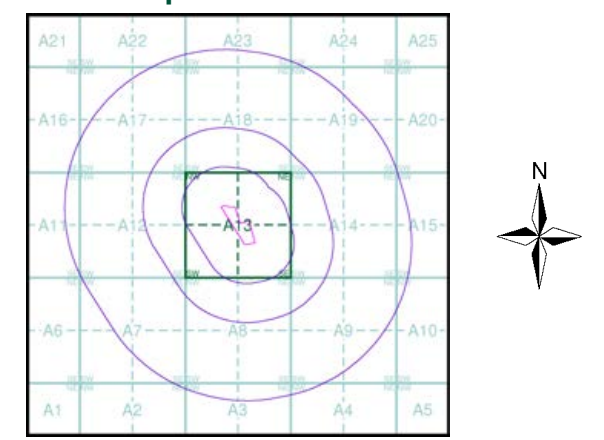
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
2006	2006
1:10,000	1:10,000
NZ36SW	NZ36SE
2006	2006
1:10,000	1:10,000

Historical Map - Slice A

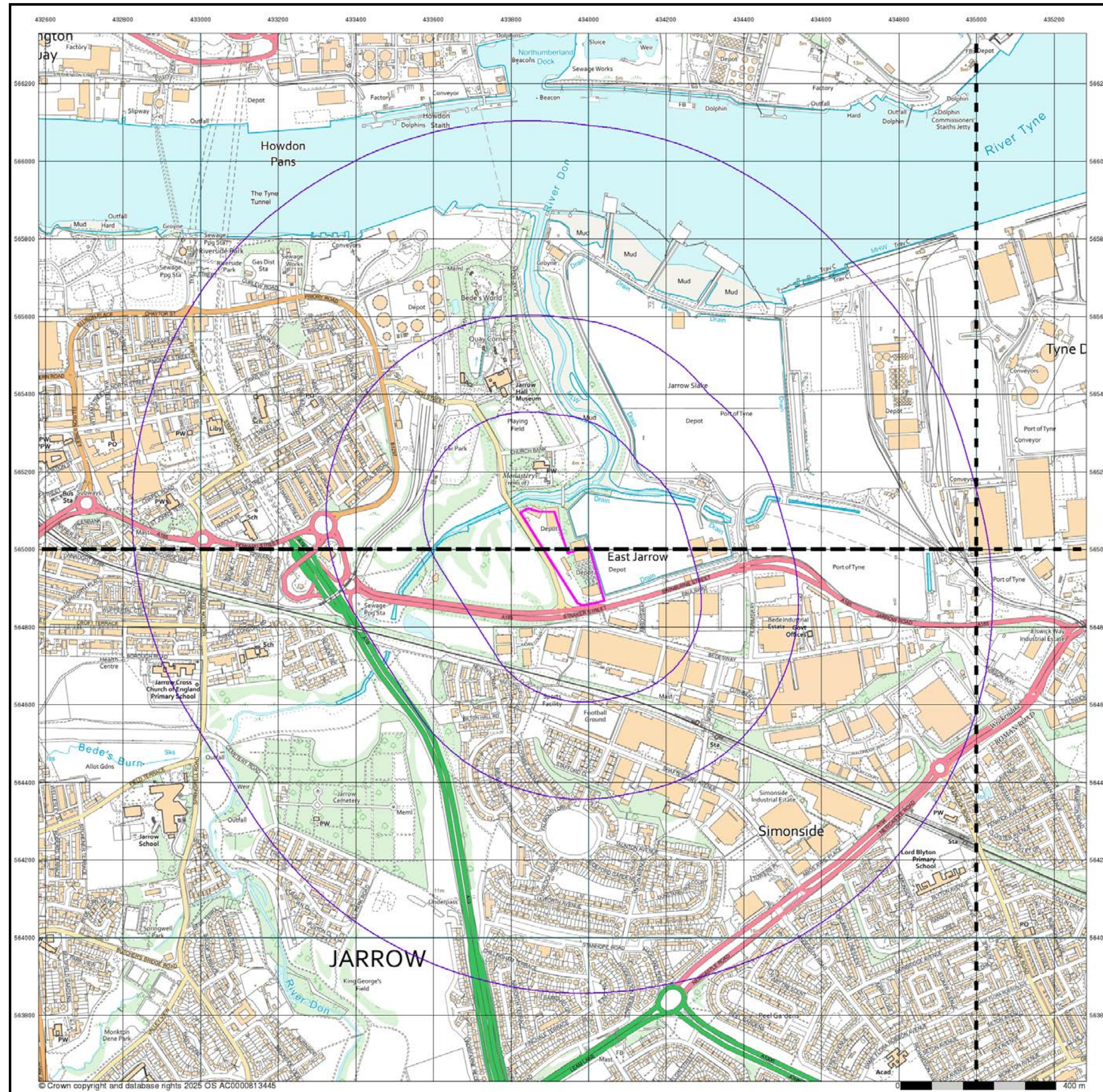


Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

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VectorMap Local

Published 2025

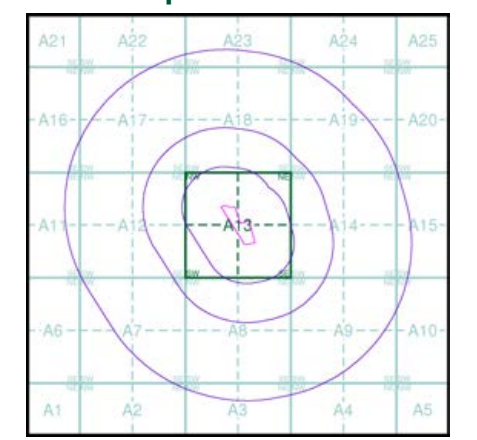
Source map scale - 1:10,000

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)

NZ36NW	NZ36NE
2025	2025
Variable	Variable
NZ36SW	NZ36SE
2025	2025
Variable	Variable

Historical Map - Slice A



Order Details

Order Number: 386713107_1_1
Customer Ref: ES290925
National Grid Reference: 433940, 564980
Slice: A
Site Area (Ha): 2.06
Search Buffer (m): 1000

Site Details

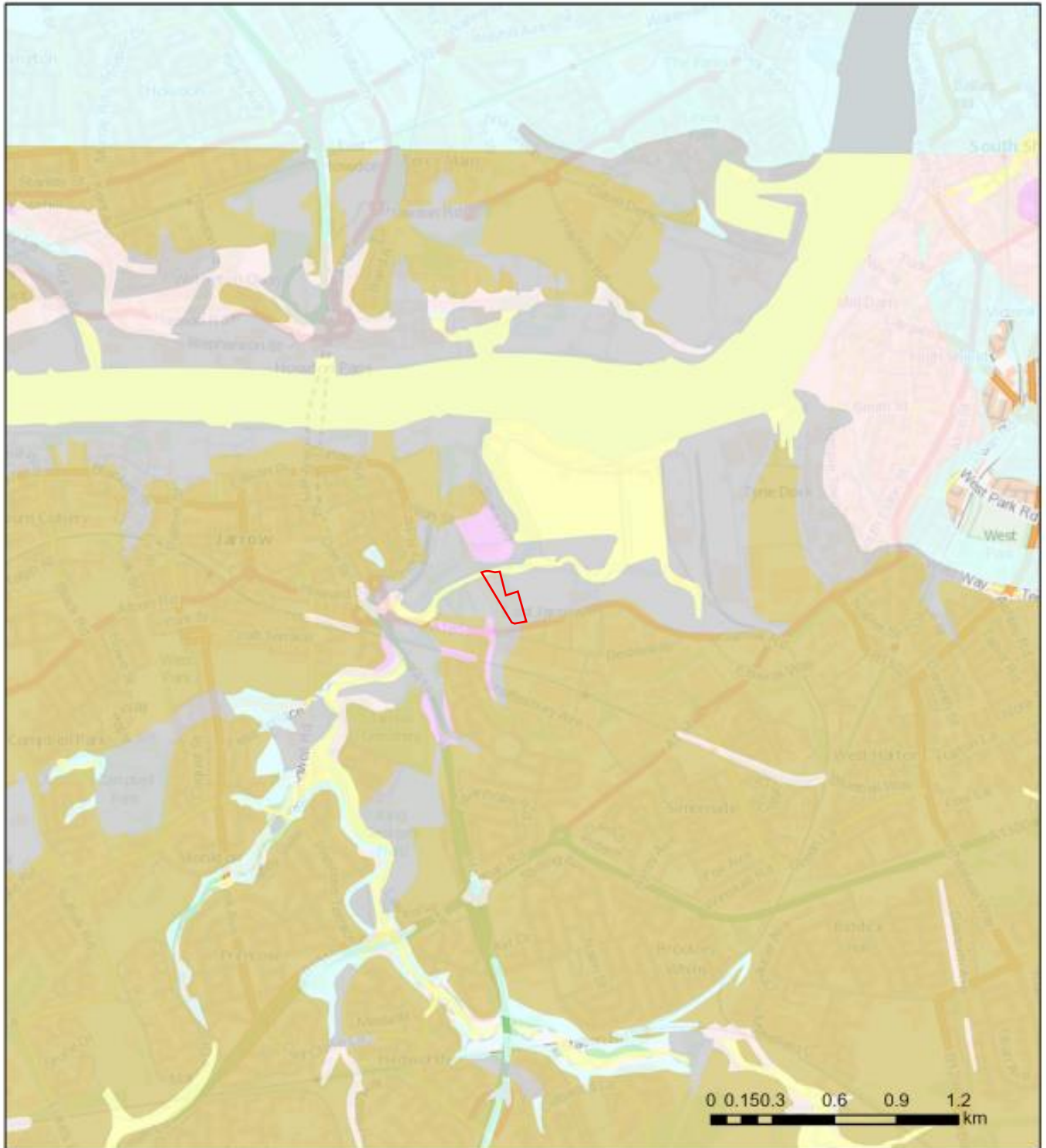
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Web: www.envirocheck.co.uk

Appendix D – Geological Maps

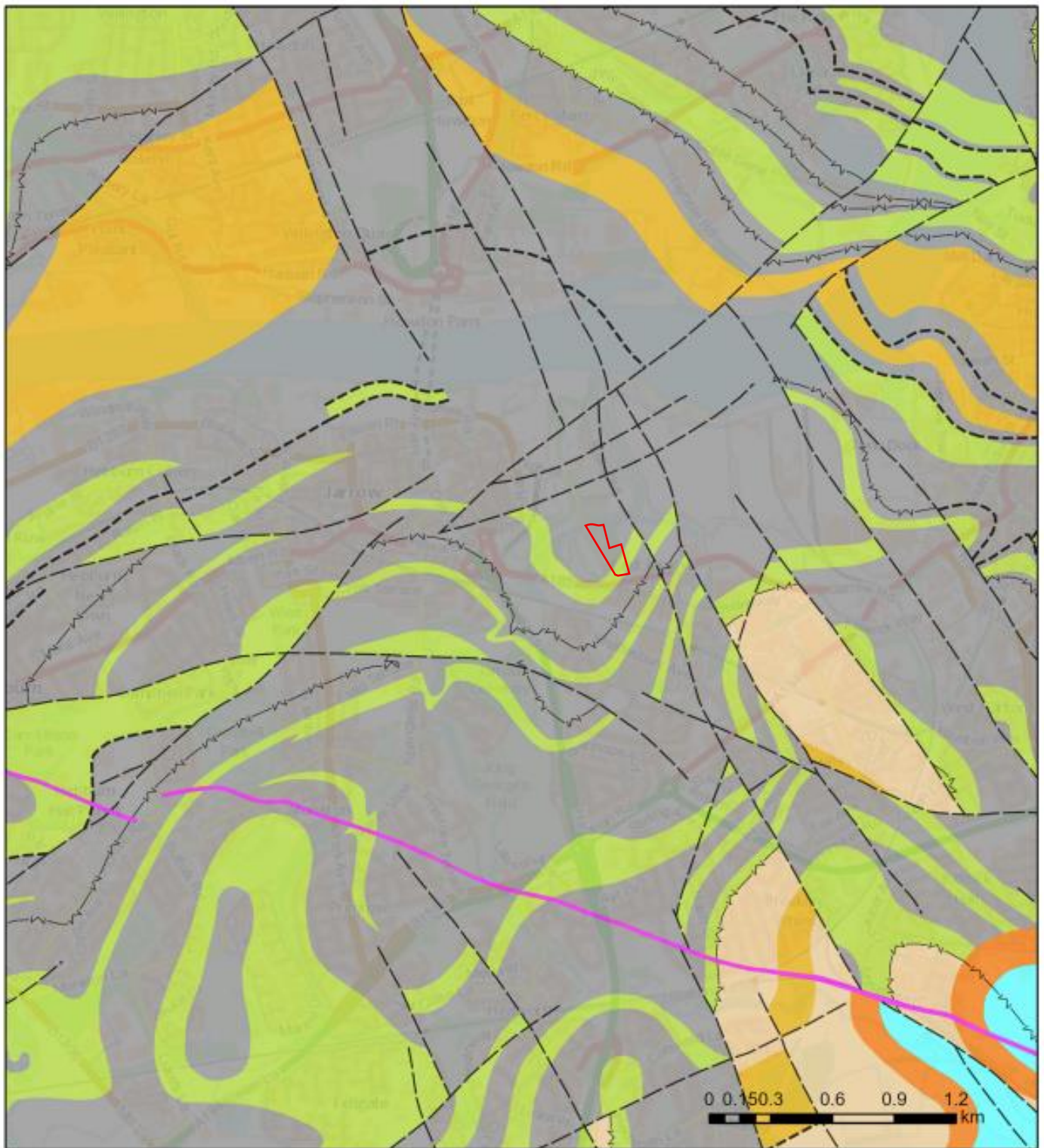
Superficial Geology



Superficial deposits 1:50,000 scale

- [GLACIOFLUVIAL DEPOSITS, DEVENSIAN - SAND AND GRAVEL](#)
- [TILL, DEVENSIAN - DIAMICTON](#)
- [GLACIOLACUSTRINE DEPOSITS, DEVENSIAN - CLAY AND SILT](#)
- [ALLUVIUM - CLAY, SILT, SAND AND GRAVEL](#)
- [TIDAL RIVER OR CREEK DEPOSITS - CLAY, SILT AND SAND](#)
- [BLOWN SAND - SAND](#)
- [MARINE BEACH DEPOSITS - SAND AND GRAVEL](#)
- [PELAW CLAY MEMBER - CLAY](#)
- [SUPERFICIAL THEME NOT MAPPED \(FOR DIGITAL MAP USE ONLY\) - UNKNOWN/UNCLASSIFIED ENTRY](#)

Bedrock Geology



Bedrock geology 1:50,000 scale

- [HEBBURN DYKE - MICROGABBRO](#)
- [RAISBY FORMATION - DOLOSTONE](#)
- [ROKER FORMATION - DOLOSTONE](#)
- [FORD FORMATION - DOLOSTONE](#)
- [PENNINE UPPER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE](#)
- [PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE](#)
- [PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE](#)
- [SEVENTY FATHOM POST MEMBER - SANDSTONE](#)
- [YELLOW SANDS FORMATION - SANDSTONE](#)
- [GRINDSTONE POST MEMBER - SANDSTONE](#)
- [PENNINE UPPER COAL MEASURES FORMATION - SANDSTONE](#)

Linear features 1:50,000 scale

- Coal_seam_Inf
- Fault_Inf_Downthrow_unspecified
- Marine_band

Appendix E – BGS Borehole Records

Ref: NZ36SW138/P

RECORD OF BOREHOLE NO. S8A

B 8A

Co-ords. 33964 64868.

Ground level: 15.1ft above O.D.

Dia. of boring: 6in to 34ft 6in
6in to 47ft

Type of boring: Shell and Auger

Lining tubes: 6in to 14ft 6in
6in to 43ft 6in

Daily Progress	Samples		Change of Strata			Description of Strata
	Depth	Type	Legend	Depth	O.D. level	
				0'6"	14.6	TOPSOIL
	5'0" - 6'6"	U(4) D		7'6"	7.6	FILL (brick rubble, ash, sandy silty clay)
	7'6" - 8'6"	BD				
	9'6" - 11'0"	U(4) D				Very soft to soft brown, occasionally black, organic sandy silty CLAY
	13'0"	D		15'6"	1.6	
	14'6" - 16'0"	U(4) D				BGS REGISTRATION NO NZ 36 SW / 138-p PAGE NO. 1
	18'0"	D				
	19'6" - 21'0"	U(4) D				Very soft to soft, occasionally firm to stiff, grey clayey sandy SILT, becoming sandy silty CLAY in places with traces of organic matter
	23'0"	D				
	24'6" - 26'0"	U(4) D				
	28'0"	D				
	29'6" - 31'0"	U(4) D				
	33'0"	D				
	34'0"	D		34'6"	-19.6	
	35'0" - 41'0"	S(D)				Very loose to loose grey-brown medium to coarse SAND with occasional coal fragments
3.7.68	44'0" - 45'10"	S(D)				
	45'10" - 46'10"	S(9)		47'0"	-31.9	

Key to type of sample:

U (4) — 4 in. dia. undisturbed sample.
 U (1 1/2) — 1 1/2 in. dia. " "
 D — disturbed sample.
 BD — bulk disturbed sample.
 V — vane test.
 S () — standard penetration test.
 C () — dynamic cone penetration test.
Figures in brackets in title of items for penetration given in depth column (see Notes, page 1)

Remarks: (Observations on ground-water, etc.)

Ground-water was first encountered at 5ft 3in below ground level and again at 34ft and stood at 27ft below ground level on completion. A sample was taken. Standard penetration tests were attempted at 35ft and 46ft below ground level but the equipment sank under its own weight at 41ft and 45ft 10in respectively. This was possibly due to artesian ground-water conditions.

TYNESIDE SEWERAGE - SOUTH SHIELDS INTERCEPTOR

Lab Ref No.
S/4586/3

FIG. 16

SE 14574

Norwest Holst Soil Engineering Ltd.

BOREHOLE LOG

Contract No. F8089 Sheet 1 of 2

Location Jarrow - River Don Weir Chainage

Client Borough of South Tyneside Ground Level m.A.O.D.

Method of Boring Percussion Date 31.10.84

Diameter of Borehole 150mm

Borehole No. **1**

Description of Strata	Legend	Depth Below G.L. (m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/ R.O.D. %	Daily Progress
MADE GROUND: loose dark grey topsoil, gravel, coal fragments etc.		2.35			0.55	9	
					1.55	2	
MADE GROUND: very loose grey silty sand with sandstone gravel.		3.20			2.55	2	
Soft grey/black SILT		3.80			3.55 (14)		
Very soft brown and grey very silty CLAY.		4.60			4.60	2	
Very loose to loose brown very silty fine to medium SAND with silt bands.					5.60	6	
					6.55	5	
					7.55	8	
					8.55	9	
					9.55	9	

Type of Sample

S.P.T. Undisturbed

C.P.T. Vane

Jar Water

Bulk Piezometer

Remarks (Observations of Ground Water etc.) () U100 blows

Water struck at 2.60m

Level rose after 20 minutes to 2.30m

Water levels are subject to seasonal or tidal variations and should not be taken as constant

Norwest Holst Soil Engineering Ltd.

Borehole No.

1

Contract No. F6089

BOREHOLE LOG

Sheet 2 of 2

Location Jarrow - River Don Weir

Client Borough of South Tyneside

Method of Boring Percussion

Diameter of Borehole 150mm

Chainage

Ground Level m.A.O.D.

Date 31.10.64

Description of Strata	Legend	Depth Below G.L. (m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/ R.Q.D. %	Daily Progress
Very loose to loose brown very silty fine to medium SAND with silt bands.		10.40					
Firm brown very silty CLAY		10.50			10.55	50 for 12mm*	
		11.00			10.95	50 for 12mm*	
Weathered brown SANDSTONE (? boulder)							

Type of Sample

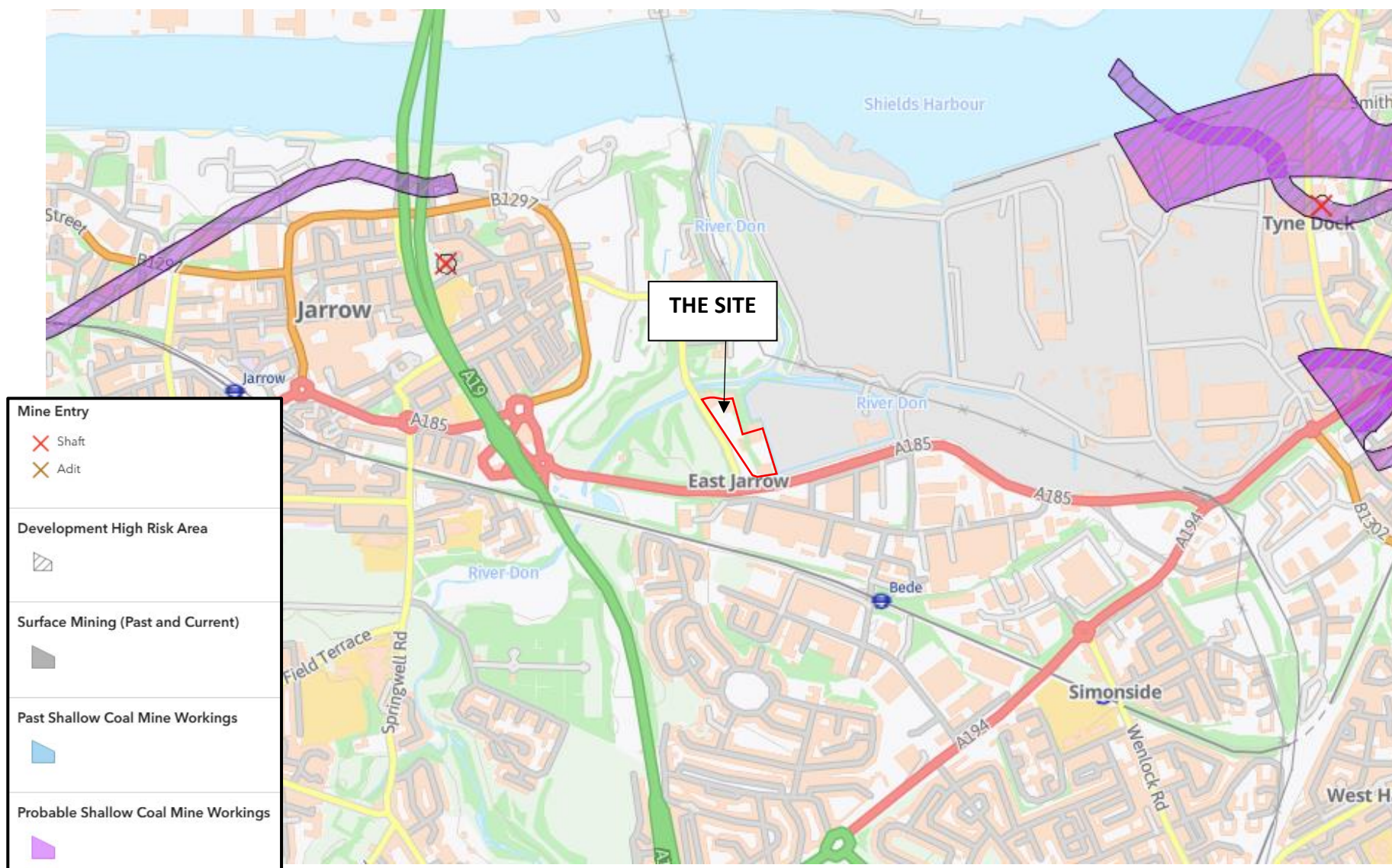
- ☐ S.P.T. ☐ Undisturbed
☐ C.P.T. ☐ Vane
☐ Jar ☐ Water
☐ Bulk ☐ Piezometer

Remarks (Observations of Ground Water etc.)

*Seating blows only.

Water levels are subject to seasonal or tidal variations and should not be taken as constant

Appendix F – Coal Mining Summary Map

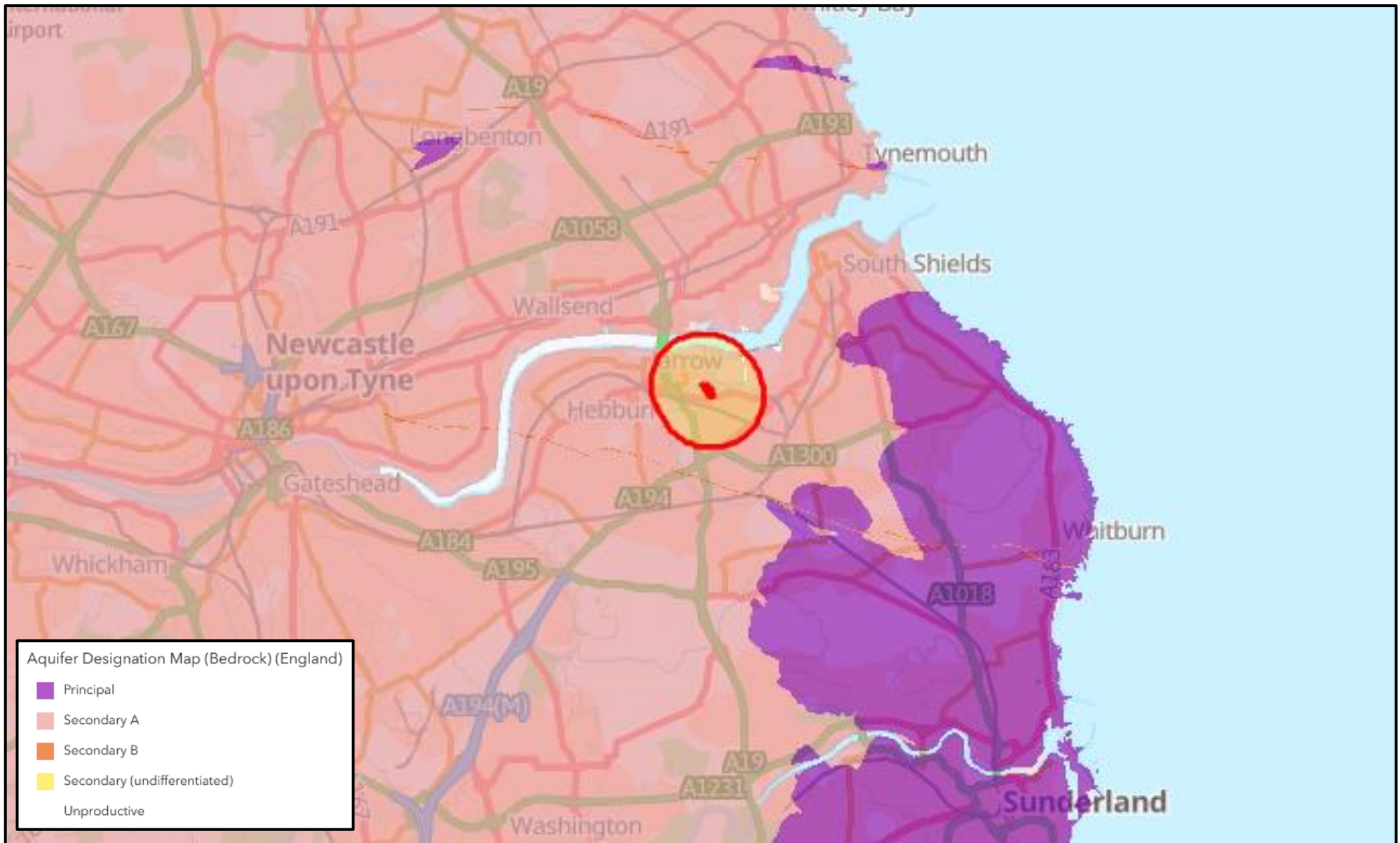


Appendix G – Hydrogeology Maps

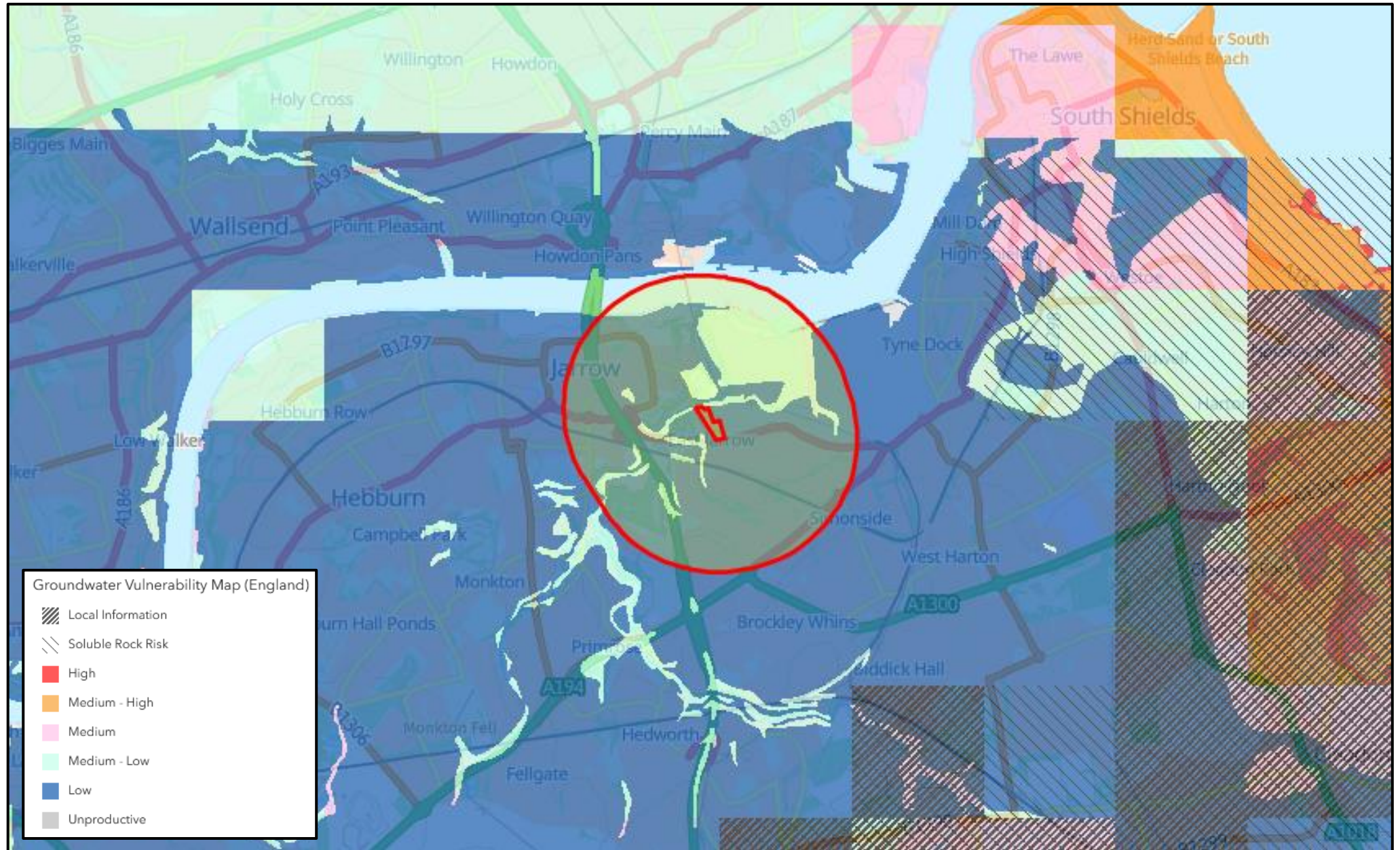
Superficial Aquifer



Bedrock Aquifer



Groundwater Vulnerability



Appendix H – Flood Risk Map



Appendix I – Historic Landfill Map



